



Hampton Roads Alliance

Board of Directors

September 20, 2024



Agenda

1. Call to Order and Welcome – Keith Vander Vennet, Chairman
2. Consideration of April 19, 2024, Minutes – Keith Vander Vennet
3. Financial Report – Sylvia Haines
4. Review & Approve Audit – Kathleen Davanzo
5. President’s Report – Doug Smith
6. Upcoming Meetings & Events – Keith Vander Vennet
7. General Discussion – Keith Vander Vennet
8. Adjournment – Keith Vander Vennet



Call to Order & Welcome

Keith Vander Vennet
Chairman



Consideration of April Meeting Minutes

Keith Vander Vennet
Chairman



Financial Report

Sylvia Haines
Hampton Roads Chamber



**Hampton Roads Alliance
Balance Sheet
June 30, 2024**

	This Year	Last Year
ASSETS		
CURRENT ASSETS		
Cash & Equivalents	1,454,890	1,726,639
Investments	1,806,447	1,777,893
Other Receivables	19,121	87
Prepaid Expenses	97,526	71,924
	3,377,984	3,576,544
 FIXED ASSETS		
Office Furniture & Equipment	143,599	111,266
Automobiles	71,453	71,453
	215,052	182,719
Less Accumulated Depreciation	(95,510)	(56,441)
Net Fixed Assets	119,542	126,279
 TOTAL ASSETS	 3,497,527	 3,702,823
 LIABILITIES & EQUITY		
CURRENT LIABILITIES		
Accounts Payable & Accrued Expenses	277,440	243,190
	277,440	243,190
Fund Balance (Deficit)	3,835,250	4,405,125
Fund Balance - Current Portion	(615,164)	(945,492)
	3,220,087	3,459,633
 TOTAL LIABILITIES & FUND BALANCE	 3,497,527	 3,702,823

**Hampton Roads Alliance
Statement of Activity
For the Six Months Ending June 30, 2024**

	This Year	Budget	Variance	Annual Budget
Support & Revenue				
Corporate Investment	610,000	752,000	(142,000)	1,798,420
Municipal Investment	629,458	668,885	(39,427)	1,890,100
Grant Revenue	0	0	0	100,000
Grant Revenue - Match	0	0	0	50,000
Interest	17,424	13,200	4,224	26,400
Other Income	46,098	10,000	36,098	25,000
	<u>1,302,980</u>	<u>1,444,085</u>	<u>(141,105)</u>	<u>3,889,920</u>
Total Support & Revenue				
Expenses				
Marketing	322,695	325,205	(2,510)	637,255
Business Intelligence	284,229	340,345	(56,116)	689,890
Investor Relations	204,902	208,290	(3,388)	380,950
Administration	208,333	236,235	(27,902)	464,730
Business Development	897,984	979,745	(81,761)	1,917,095
	<u>1,918,144</u>	<u>2,089,820</u>	<u>(171,676)</u>	<u>4,089,920</u>
Total Expenses				
Excess of Revenue over Expense	<u>(615,164)</u>	<u>(645,735)</u>	<u>30,571</u>	<u>(200,000)</u>

**Hampton Roads Alliance
Expenses By Department
As of June 30, 2024**

	Marketing		Business Intelligence		Investor Relations		Administration		Business Development		757 Recovery		Total	
	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget
Administration Services	0	0	0	0	0	0	22,800	22,800	0	0	0	0	22,800	22,800
Auditing & Accounting	0	0	0	0	0	0	3,500	12,000	0	0	0	0	3,500	12,000
Auto Maintenance	0	0	0	0	0	0	0	0	64	500	0	0	64	500
Consulting Services	0	0	0	0	0	0	0	0	50,000	25,000	0	0	50,000	25,000
Depreciation	2,661	2,700	4,022	4,080	1,774	1,800	3,292	3,340	8,820	8,075	0	0	20,570	19,995
Dues & Subscription	445	665	1,360	1,610	0	595	464	720	16,152	11,120	0	0	18,421	14,710
Equipment Services	5,075	5,115	7,668	7,440	3,383	3,280	7,852	6,090	15,218	14,730	0	0	39,196	36,655
MIS Services	4,579	2,080	2,445	1,480	751	445	2,936	3,995	3,080	3,395	0	0	13,791	11,395
Insurance	0	0	0	0	0	0	4,342	3,240	1,999	1,905	0	0	6,341	5,145
Legal Fees	0	0	0	0	0	0	288	2,500	0	0	0	0	288	2,500
Meetings	0	0	0	0	0	0	474	1,000	261	1,500	0	0	735	2,500
Office Supplies	783	1,500	830	900	519	750	964	2,750	1,954	1,750	0	0	5,050	7,650
Postage	0	110	0	90	51	50	111	90	0	110	0	0	162	450
Printing	6,830	1,500	0	250	0	900	0	500	0	750	0	0	6,830	3,900
Professional Development	45	1,250	1,481	1,250	0	0	0	1,000	2,725	10,000	0	0	4,250	13,500
Programs	109,248	108,750	61,460	70,000	48,163	47,500	0	0	270,317	319,500	0	0	489,187	545,750
Rent	9,220	9,130	13,932	13,795	6,147	6,085	11,405	11,295	27,592	27,320	0	0	68,296	67,625
Staff	180,082	188,850	184,592	234,970	139,123	143,645	141,773	155,685	469,721	532,255	0	0	1,115,291	1,255,405
Taxes	0	0	0	0	0	0	2,309	3,700	0	0	0	0	2,309	3,700
Telephone	2,273	1,680	3,311	2,680	1,682	1,230	2,663	2,205	12,019	11,790	0	0	21,948	19,585
Travel	1,454	1,625	3,035	1,550	3,283	1,760	2,482	3,075	18,023	9,545	0	0	28,276	17,555
Miscellaneous	0	250	92	250	27	250	678	250	41	500	0	0	838	1,500
TOTAL EXPENSES	322,695	325,205	284,229	340,345	204,902	208,290	208,333	236,235	897,984	979,745	0	0	1,918,144	2,089,820

Financial Audit

Kathleen Davanzo, Auditor
Jones CPA





President's Report

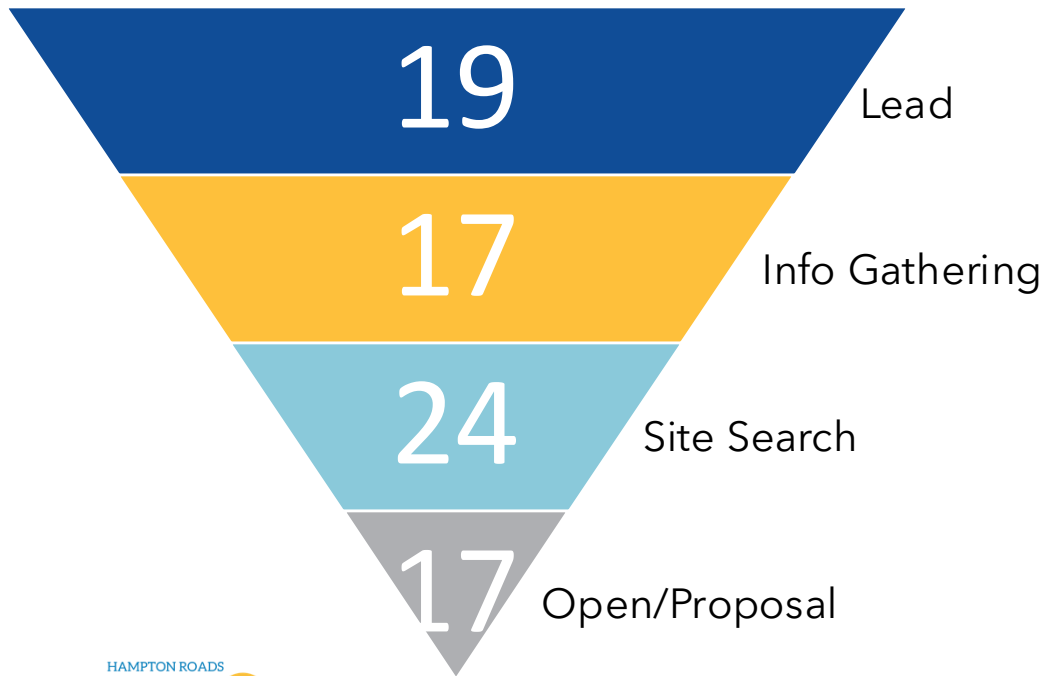
Doug Smith

Hampton Roads Alliance

2024

YEAR TO DATE

Projects By Stage (79)



11

Project Announcements (2024 Goal: 8)

\$856M

In Capital Investment

1,024

Jobs Created (2024 Goal: 1,309)

Mega Project Activity

Unprecedented activity in the energy and defense sectors

Project Code Name	Industry	Expected Jobs	Expected Capital Investment
Genesis (Announced)	OSW Cable Manufacturing	336	\$666 Million
Atlas	Aerospace Manufacturing	10,000	\$3 Billion
Thor	Military Drone Manufacturing	4,008	\$910 Million
Hurricane	OSW Cable Manufacturing	666	\$1.1 Billion
Tower	OSW Manufacturing	612	\$500 Million

- Submarine & Aircraft Carrier Industrial Base Development

Investor Revenue and Sponsorships Projection 2023-2027

	2023	2024	2025	2026	2027
Total	\$ 1,699,900	\$ 1,619,400	\$ 1,464,500	\$ 1,404,500	\$ 1,304,500
Optimistic	\$ 1,699,900	\$ 1,689,500	\$ 1,700,000	\$ 1,800,000	\$ 1,900,000
Sponsorships					
Annual Meeting	\$ 15,000	\$ 7,500	\$ 10,000	\$ 10,000	\$ 10,000
Special Investor Event		\$ 7,500	\$ 7,500	\$ 7,500	\$ 7,500
Mid-Year Event	\$ 3,500	\$ 6,000	\$ 7,500	\$ 7,500	\$ 7,500
Fall Investor Event Holiday Reception			\$ 5,000	\$ 5,000	\$ 5,000
Sponsorships Total	\$ 18,500	\$ 21,000	\$ 30,000	\$ 30,000	\$ 30,000
Grand Total	\$ 1,718,400	\$ 1,710,500	\$ 1,730,000	\$ 1,830,000	\$ 1,930,000

Strategic Plan Discussion

Doug Smith

Hampton Roads Alliance



Regional Investment Playbook

Bruce Katz



Hampton Roads Investment Playbook (Phase I)

September, 2024

Hampton Roads Investment Playbook - Executive Summary

- **Mega forces are creating a new economic order, where reshoring, decarbonization, and remilitarization gain renewed importance, catalyzed by unprecedented federal spending.** Our goal is to understand how Hampton Roads' strengths and opportunities can be leveraged in this context.
- **The Hampton Roads metro benefits from its strong, oversized relationship with the federal government.** The metro is a major recipient of federal procurement and grant spending, averaging \$15.5 billion annually over the past four years. The region's federal procurement and grant spending is largely driven by its numerous military installations, a strong shipbuilding and repair industry, and the presence of federal agencies such as the NASA Langley Research Center and Jefferson Lab.
- **Hampton Roads hosts 25% of U.S. shipbuilding and repair capacity, which can be further leveraged for supplier, workforce, and R&D growth.** Driven by Huntington Ingalls Industries, Norfolk Naval Shipyard (NNSY), and Naval Station Norfolk (NAVSTA), Hampton Roads is a leader in shipbuilding and repair. However, there may be opportunities to expand the economic footprint of the supply chain.
- **Hampton Roads can capitalize on the growing importance of green supply chains, particularly in wind energy and nuclear power.** Nuclear power generation and industrial applications create a strong market in the region for various activities within the nuclear supply chain, primarily around technology applications. At the same time, major wind energy projects are generating momentum in the region. These developments present opportunities to expand the local supplier network, while also highlighting the need to strengthen the local innovation ecosystem and enhance the pipeline of engineering graduates.
- **Increased co-location and connectivity would unlock knowledge spillovers, innovation, and sector growth.** Key logistics, corporate, university, and research assets are highly distributed across multiple municipalities. In many respects, the metro area has a constellation of nodes and assets which, if better connected, could boost business formation, expansion, attraction, and quality job growth.
- **Hampton Roads has the potential to excel in technology areas such as cybersecurity, advanced manufacturing (including uncrewed systems), and energy efficiency, all crucial for national security and supply chain resilience.** The region's large military presence, port, innovation centers like NASA Langley, and sophisticated government contractors in sectors such as wind energy and shipbuilding drive demand for these technologies, providing a platform for innovation and testing.

Hampton Roads Investment Playbook - Phase I



Goal

- ❑ Assess the positioning of the region in the new economic order
- ❑ Identify strengths and areas of opportunity



Areas of

Initial assessment of regional trends and strengths, then focus on three specialized areas:

- ❑ Federal Procurement & Grant Spending
- ❑ Green Supply Chains
- ❑ Key Technology Focus Areas



Our approach

- ❑ Combine quantitative and qualitative information
- ❑ Identify distinctive assets in the new economic order
- ❑ Assess strengths and weak links in the ecosystem



Timeline

- ❑ **May:** kick-off, literature review and data gathering
- ❑ **June:** early version of the diagnostic and in-person visit
- ❑ **July:** deep dives into priority areas and final Playbook (Phase I)
- ❑ **August-September:** feedback and updates to the presentation



Geography

- ❑ Hampton Roads region, comprising the Virginia Beach-Norfolk-Newport News, VA/NC MSA



Interviews conducted

- ❑ Huntington Ingalls Industries, NASA Langley, SURA (Jefferson Lab). Port of Virginia, Virginia Tech, US Navy (See complete list on the Appendix)

[See complete list of interviews in Appendix](#)

Hampton Roads Investment Playbook - Context

Mega forces are creating a new economic order

This shift is being catalyzed by unprecedented federal spending

A handful of metros are making the most by leveraging their position

Cities and metros can strengthen their position by developing Investment Playbooks



Remilitarization



Reshoring



Decarbonization

- \$1.9T**
American Rescue Plan
- \$1.2T**
Bipartisan Infrastructure Law (BIL)
- \$280B**
CHIPS and Science Act
- \$437B**
Inflation Reduction Act (IRA)
- \$850B+**
DOD's FY 2025 Appropriations



New Tech Hubs



Climate 1st Movers



Trading Powerhouses



Military Metros

Playbook Phase I:

A Diagnostics: Assess position in the changing economy

Playbook Phase II:

B Project Identification: Conduct interviews across key sectors

C Project Capitalization: Identify public/ private/ civic investments for capital stacks

Hampton Roads Investment Playbook - Playbook Process & Components

Playbook Phase I

A

Diagnostics

Assess position in the changing economy

- ❑ **Month 1:** kick-off, literature review and data gathering
- ❑ **Month 2:** early version of the diagnostic and in-person visit
- ❑ **Month 3:** deep dives into priority areas and final Playbook (Phase I)



Playbook Phase II

B

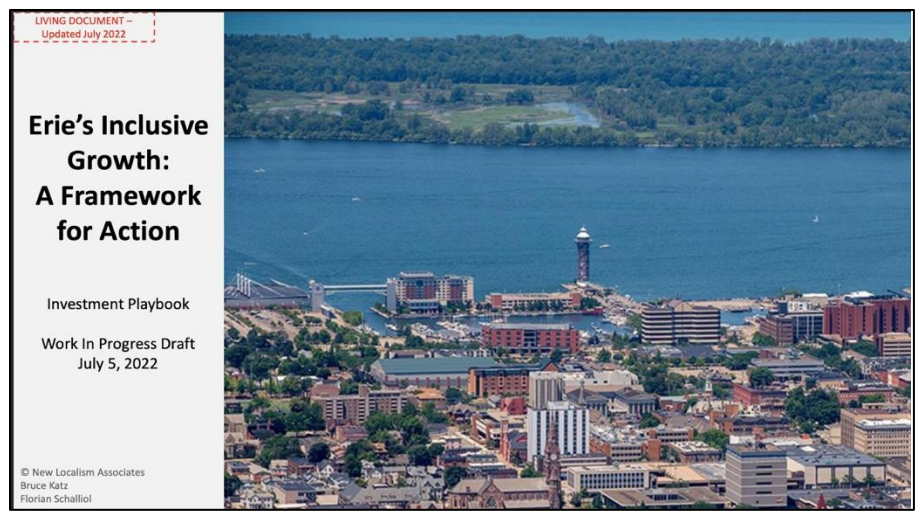
Project identification

Conduct interviews across key sectors

C

Project capitalization

Identify public/private/civic investments for capital stacks



Hampton Roads Investment Playbook - Key Findings

1	Creation of a DOD backed AUKUS Center of Excellence , with a consortium of researchers in submarine related innovation and production from Australia, the UK and the US. This Center could build on the globally recognized Advanced Manufacturing Research Centre in Sheffield, England, which features integrated efforts around applied R&D, workforce training and entrepreneurial growth.
2	Creation of an Innovation Constellation to bring greater coherence and collaboration between related anchor corporations, universities and federal research labs located in the metro area. The key is to work with multiple stakeholders to design a clear set of projects to advance innovation capabilities in a largely production-oriented economy.
3	A concerted Choose Hampton Roads effort to recruit and attract key supply chain firms in leading industries like shipbuilding and repair, nuclear power and wind energy. Such an effort would naturally involve the identification of suitable sites for firms as well as integrated approaches to workforce development. To the greatest extent possible, the location of firms should occur in a way that fills out existing areas with a greater density of industry actors.
4	Creation of a Hampton Roads Consortium of Talent to upgrade the offerings of engineering degrees at ODU and other four-year universities to support the region's production economy and upgrade the skills of workers in close collaboration with high schools, skills providers and community colleges. Metros like Kansas City are also contemplating the creation of an Instructor Corps to ensure that the supply of teachers for technical trades matches the manufacturing demand.
5	New contractual relationships with major defense installations and research laboratories to pioneer the rapid transition to reliable and resilient energy sources and load management.
6	Maximized use of the Inflation Reduction Act to accelerate the energy transition and advance climate resilience, particularly around government and university campuses and a city-wide building upgrade program to modernize and climate-proof homes.
7	Discrete projects focused on enabling companies to move ideas to market , from R&D to testing and commercialization of these technologies, taking full advantage of federal resources (e.g., SBIR, STTR awards). This could entail developing an accelerator on specific technologies needed for this region

Hampton Roads Investment Playbook - Four Areas of Analysis



Initial Assessment

We analyze the region's economic structure and sectoral employment patterns to offer context to Hampton Roads' trends. Additionally, we conduct a geographic assessment of the region's assets.

Playbook section: **"The Hampton Roads Region"**



Federal Spending

We assess federal spending in Hampton Roads through grants and contracts, identifying relevant agencies, companies and universities within the region.

Playbook section: **"Federal Procurement & Grant Spending"**



Green Supply Chains

We conduct a multi-dimensional analysis to assess the positioning of 10 supply chains relevant to the US energy transition, identifying a set of opportunity areas that Hampton Roads can leverage for further growth.

Playbook section: **"Green Supply Chains"**



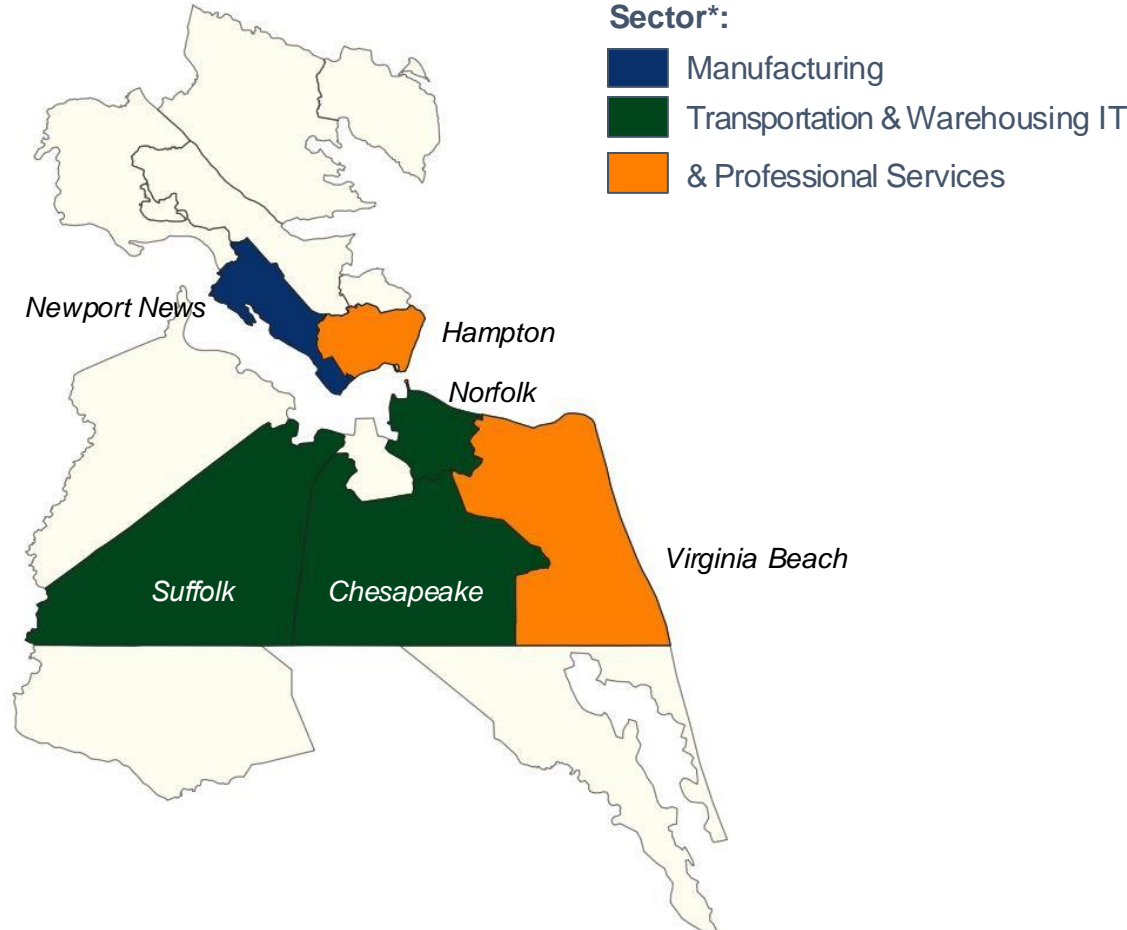
Key Technology Areas

We conduct a multi-dimensional analysis to assess the positioning of Hampton Roads across 10 critical and emerging technology areas prioritized by the federal government, highlighting key opportunities for Hampton Roads.

Playbook section: **"Key Technology Areas"**

The Hampton Roads Region - Highly Distributed Assets

Industry Footprint in the Hampton Roads MSA. Employment by Municipality, 2023.*



Industry Footprint in Hampton Roads:

IT & Professional Services

Hampton is a center for cutting-edge research and innovation, particularly in aerospace due to NASA Langley's significant role. Virginia Beach excels in innovation and professional services, benefiting from its proximity to major universities, including ECPI University; research centers such as the Tech Center Research Park**; and firms such as WR Systems and QED Systems, among others.

Manufacturing

In Newport News, Huntington Ingalls Industries is Virginia's largest industrial employer and the top shipbuilder in the U.S., with over 24,000 employees.

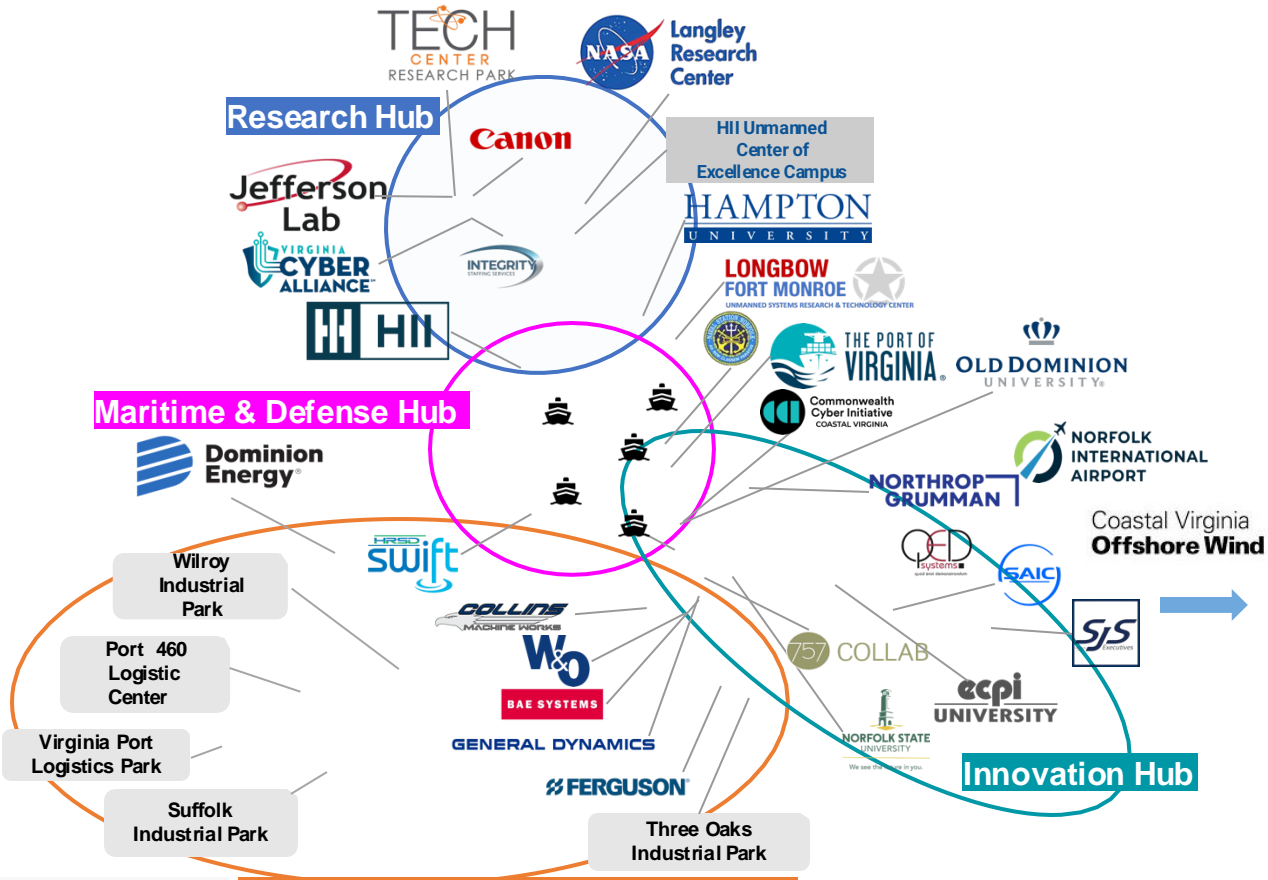
Transportation & Warehousing

Suffolk and Chesapeake cities have a high concentration of transportation and logistics companies, strategically located along major highways that connect to the Port of Virginia. Meanwhile, Norfolk is home to Norfolk Naval Shipyard (ship repair activities) and Naval Station Norfolk (operations and logistics).

Notes: (†) The region is determined according to the MSA definition in the main data source (CBP/ZBP). Due to the significant range in sector size, we have set threshold levels for identifying main sectors within municipalities. For the manufacturing sector, the cutoff is 20k employees, 6k for transportation and warehousing, and 15k for professional services and IT. Suffolk and Hampton municipalities color code is assigned based on the sector's relative representativeness, regardless of employment level. (**) The Tech Center Research Park, located in Newport News, is part of the VTCRC. The Corporate Research Center, a subsidiary of the Virginia Tech Foundation, oversees Tech Center Research Park in Newport News, where \$1.6 million in GO Virginia funds will be used to develop a 5,000- to 10,000-square-foot demonstration lab for the production of green hydrogen. **Source:** The New Localism (2024) based on CBP.

The Hampton Roads Region - Need for Increased Co-location and Connectivity

Hampton Roads: Assets in Selected Areas***.



Research Hub

Some important research facilities such as Jefferson Lab, NASA Langley Research Center, Tech Center Research Park, and Virginia Cyber Alliance are concentrated in the northern part of the region, primarily in Hampton and Newport News cities

Innovation Hub

Virginia Beach and Norfolk function as an innovation hub, with universities such as Old Dominion, ECPI, and HU; and innovative companies such as WR Systems, Mythics, Northrop Grumman, Booz Allen, and several others located in this region.

Manufacturing & Transportation Hub

Most supplier companies specializing in the shipbuilding and repair industry, and transportation equipment are concentrated in Chesapeake and Suffolk, along with industrial and logistics parks. Additionally, the Coastal Virginia Offshore Wind project is under development along this region's coasts.

Maritime & Defense Hub

Defense facilities, international marine terminals and specialized shipbuilding and repair centers like Huntington Ingalls Industries are concentrated around the Port of Virginia.

Notes: (†) This category includes the largest suppliers of Newport News Shipbuilding. (**) This category includes incubators, accelerators, and other economic development organizations that are located in HR. (***) The list of assets considered is not exhaustive **Source:** The New Localism (2024) based on research and insights gathered from stakeholders.

Federal Procurement & Grant Spending - A Remarkably Robust Economy



Opportunity Size

~\$15.5 billion in contracts and grants are allocated for the Hampton Roads region every year. Of this amount, 96% were contracts, with 90% awarded by the DoD.

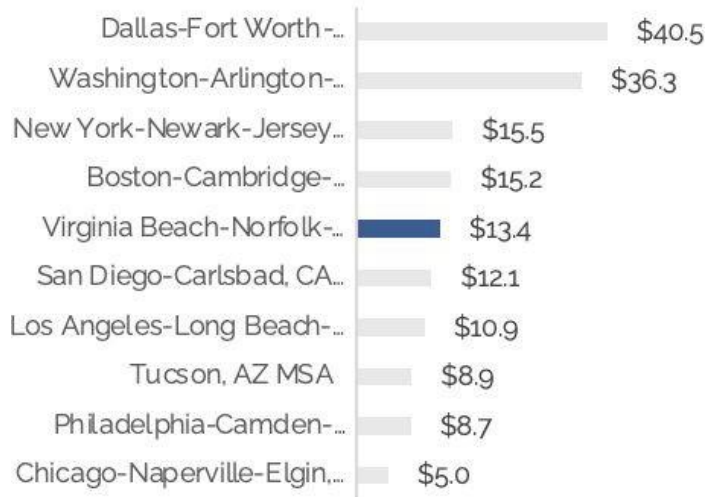
Hampton Roads Federal Procurement & Grant Spending by Agency and Type (4-Year Avg, \$B)



National Positioning*

The region's average annual intake of **\$13.4 billion** in DoD contracts and grants makes it the **fifth largest U.S. metro for DoD spending**.
Note: We are developing the first-ever U.S. metro ranking by DoD spending.

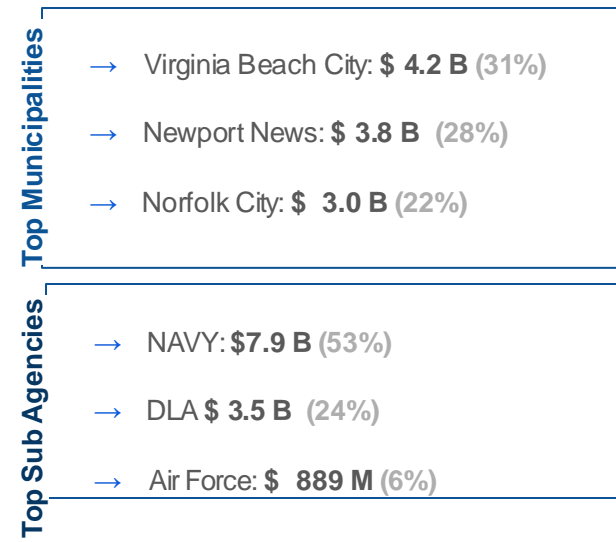
Top 10 US Metros with Highest DoD Contract Spending (4-Year Avg, \$B)*



Spending Characterization

The bulk of DoD expenditure in Hampton Roads is concentrated within three municipalities: Virginia Beach, Norfolk City and Newport News City and three sub agencies.

HR DoD Procurement Spending by Top Municipalities and sub agencies (4-Year Avg, \$B)



Note: (*) We are using data on all contracts and grants awarded by the DoD from 2020-2024. The ranking depicts the top metros with the most annual average spending. Specifically, we calculated the total obligated amount across contracts and grants where the primary place of performance was a specific metro, and we ranked them accordingly. We also provided rankings based on specific sectors such as manufacturing, professional services, and administrative services. **Source:** The New Localism (2024) based on [USASpending](#).

Federal Procurement & Grant Spending - Four Areas of Spending



Ship Building & Repairing

Total Spending:
\$4.5 B (33%)

Top Contracts:
maintenance, repair, overhaul, and planning services for naval vessels and submarines

Top Vendors:

- Ship Building**
Huntington Ingalls
70% (\$3.1B)
- Repairing**
- BAE** Bae Systems & Ship Repair 8% (\$361 M)
- METRO** Metro Machine Corp 7% (\$333M)

Top contractors in these two sectors are primarily located in Hampton Roads, highlighting how businesses collocate near federal facilities.

Military Equipment + Supplies



Total Spending:
\$31 B (23%)

Top Contracts:
communication equipment, tactical gear, power control systems, and force protection assemblies for military use..

Top Vendors:

- ADS**
Atlantic Diving Supply
98% (\$3.1B)

Air Transportation

Total Spending:
\$2.5B (19%)

Top Contracts: engineering and cyber security services, R&D for fleet training, operational maintenance, and core support services for Navy and military programs.

Top Vendors:

- Leidos Inc.
6% (\$168M)
- ALION** Alion Science & Tech
5% (\$154M)
- Peraton** Peraton Enterprises
4% (\$123M)

Local Vendors

Construction

Total Spending:
\$949 M (7%)

Top Contracts: construction and repair projects for piers, dry docks, operations buildings, berths, harbor deepening, ordnance facilities, and a repair facility.

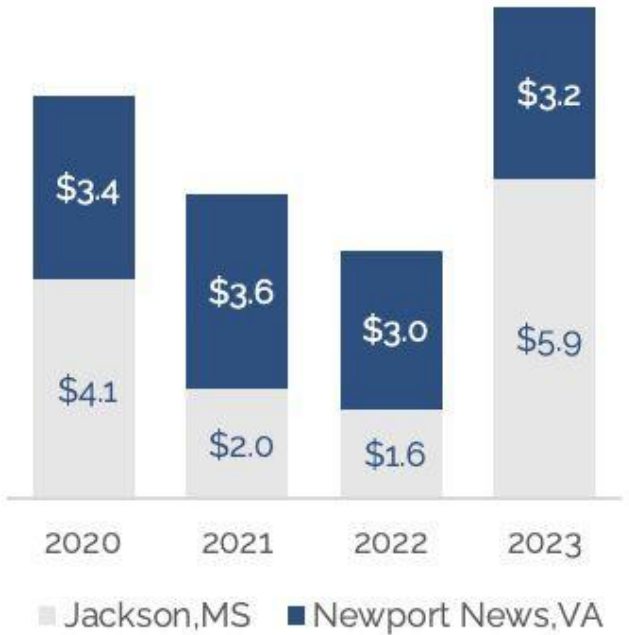
Top Vendors:

- RQC** RQ- Construction
14% (\$182 M)
- AECOM** AECOM Technical SVSC
4% (\$47M)
- J&J** J&J Maintenance
3% (\$39M)



Federal Procurement & Grant Spending - Pressure on the Region's Top Suppliers

Huntington Ingalls Direct Federal Contracts
by Year and Recipient Location
(2020-2023, \$B)



DoD FY 2025 Budget Highlights for
Submarine Production

\$48.1B

SEA POWER INVESTMENTS

Including the construction of a Virginia-class submarine

\$9.9B

NUCLEAR POWERED SUBMARINES

Part of Nuclear Enterprise Modernization Strategy

\$143.2B

RDT&E

Part of which will be focused on submarine technology

Key Insights:

Steady Production: Newport News has maintained consistent DoD spending, averaging \$3.3 billion annually, indicating a stable base for future growth.

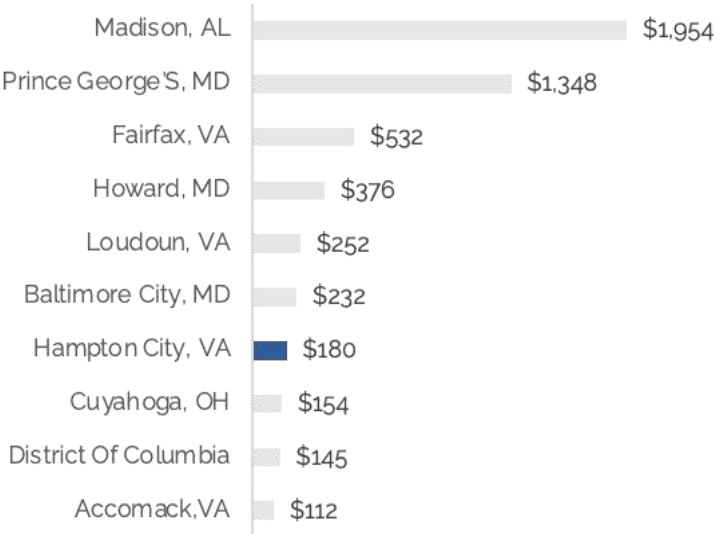
Jackson Surge: HII Jackson location's contract funding surged to \$5.9 billion in 2023, driven by major DoD contracts for DDG 51 destroyers and LPD 30 amphibious transport docks, signaling potential growth opportunities for Newport News.

Huntington Ingalls' Newport News location faces significant delays in expanding its supplier base, which is a major obstacle to fully meeting the rising demand for submarines.

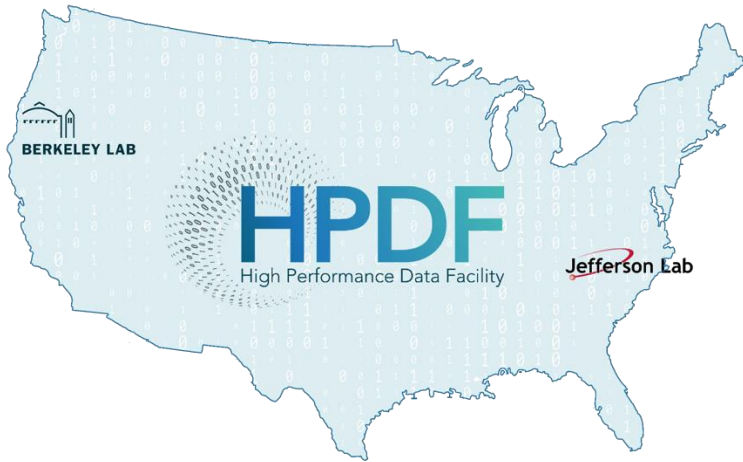
The 2025 DoD budget places significant emphasis on submarine production, intensifying the pressure on HII to not only meet this demand but also to **expand its supplier base accordingly.**

Federal Procurement & Grant Spending - Demand for Skilled Workers

Top Municipalities in the US receiving NASA direct Spending by place of performance (4-Year Avg, \$M)



Locations of DOE High Performance Data Facilities



Key Insights:

NASA Langley and Jefferson Lab drive significant spending in the region, creating workforce pressure from high demand for skilled workers.

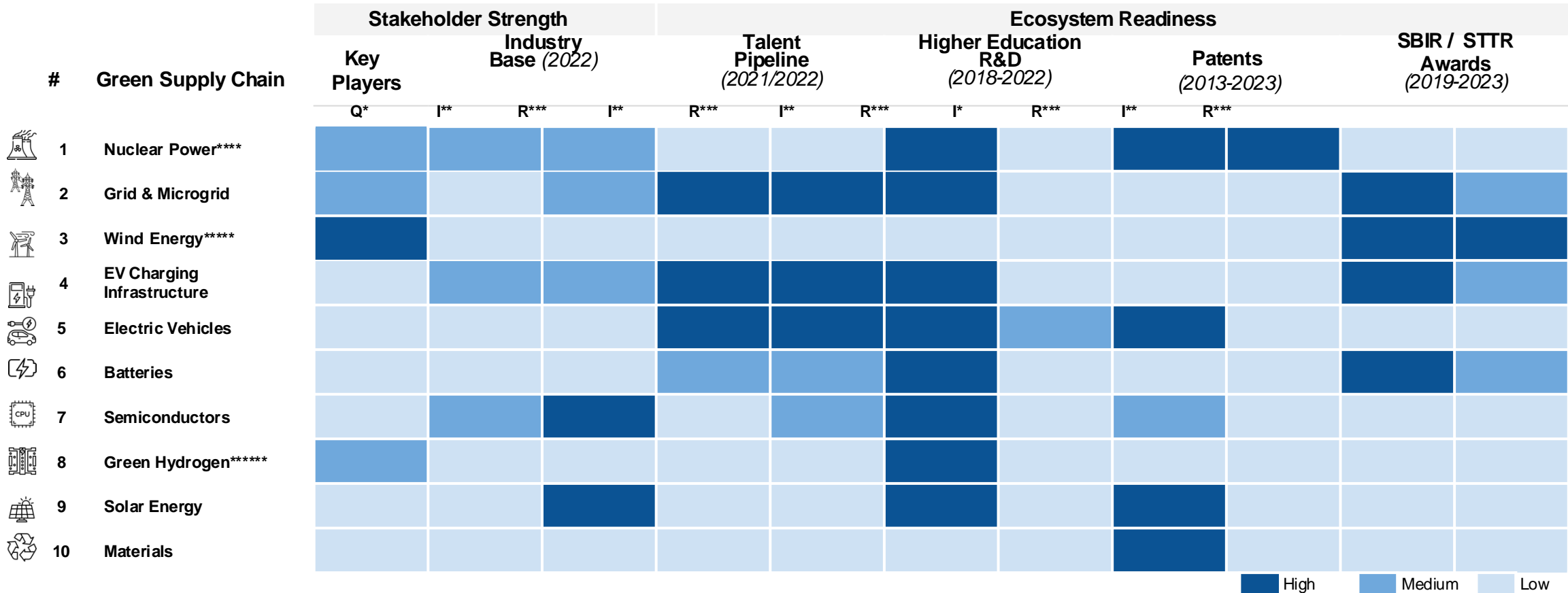
Langley Research Center: Hampton City, where Langley Research Center is located, ranks 7th nationwide in terms of receiving the highest amount of NASA federal procurement spending.

Jefferson Lab: In October 2023, DoE chose Jefferson Lab to lead the new \$300-500 million High Performance Data Facility Hub. Partnering with Lawrence Berkeley National Laboratory*, Jefferson Lab will develop advanced infrastructure for data analysis, networking, and storage, providing researchers with cutting-edge tools to enhance scientific research.

- The influx of funding and projects creates a high demand for skilled workers in the region, which currently faces a shortage of such talent.
- Integrating research centers like Langley and JLAB into innovation ecosystems is key, with co-location and connectivity crucial for effective collaboration.

Green Supply Chains - Multi-Dimensional Analysis

Hampton Roads: Positioning of Selected Green Supply Chains. By dimension and metric.

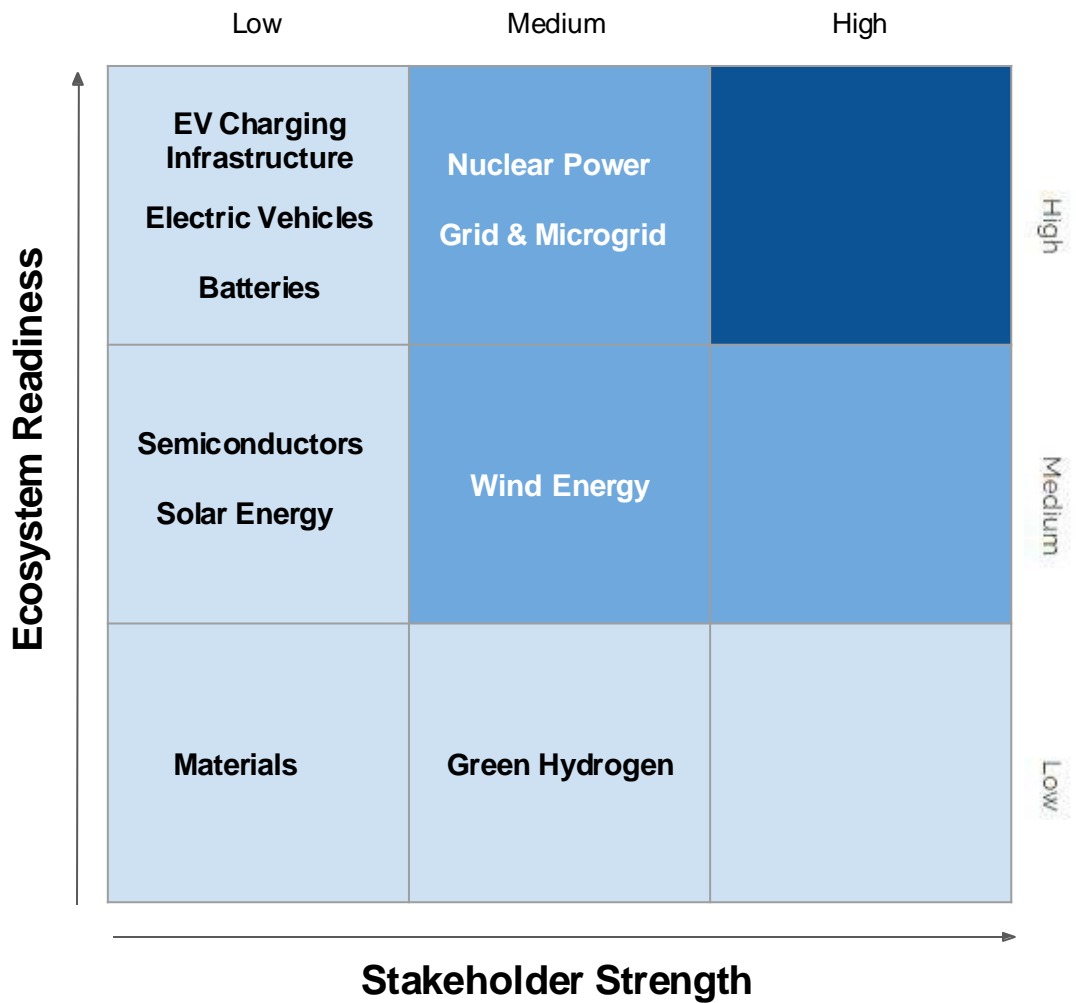


High Medium Low

Notes: (*)Q =qualitative research. (**)I =Intensity metric corresponds to the location quotients of the MSA in the corresponding category. When Intensity > 1.1, it is considered high; 0.9 < Intensity < 1.1 it is moderate; and Intensity < 0.9 signifies low intensity. (***)R =Corresponds to the US Ranking. When Hampton Roads ranks between 1 and 40 among US MSAs, it is considered high; between 41 and 54, it is moderate; and 55 and below, it is low. For reference, Hampton Roads ranks 47th in GDP. (****)In assessing the nuclear power industry base, quantitative analysis was complemented by qualitative research to provide a broader view of the supply chain. This approach acknowledges that the data reflects only nuclear energy generation, without capturing innovation, supply chain, and deployment activities related to nuclear power. (****)As the wind energy-related projects in the region are currently under construction and scheduled to be operational in 2026, the data does not show industry presence up to 2022. (****)Its positioning is low because the ecosystem is not yet fully developed. However, a demonstration project in green hydrogen is underway, with an investment of \$1.5 M. **Source:** The New Localism (2024) based on [CBP](#), [National Census for Educational Statistics \(NCES\)](#) and [National Science Foundation \(NSF\)](#).


Green Supply Chains - Opportunity Areas

Hampton Roads: Positioning of Selected Green Supply Chains.




Opportunity Areas*:


We identified three green supply chains where Hampton Roads has a strong position that could be further leveraged.

Nuclear Power 

Dominion Energy is a key player in the large-scale generation of nuclear power in the state and region. The area's strong maritime and defense industries drive industry applications, yet the supply chain footprint is mostly concentrated in power generation. There may be opportunities for further innovation around nuclear power applications.

Grid & Microgrid 

Dominion Energy plays a pivotal role in advancing the grid through innovative technologies like unmanned systems. Additionally, institutions such as Old Dominion University and the Department of Energy are involved in research initiatives for microgrid technologies. The region needs to strengthen its innovation ecosystem and foster collaboration among key stakeholders.

Wind Energy 

The region is at a turning point in its efforts to become a wind energy leader. While local colleges have been instrumental in developing specialized talent, the forecasted creation of over 1,100 jobs through the CVOW project will require further efforts to build a skilled workforce. Additionally, the region must address its reliance on international suppliers.

Green Supply Chains - Talent as a Constraint (example for Wind Energy)

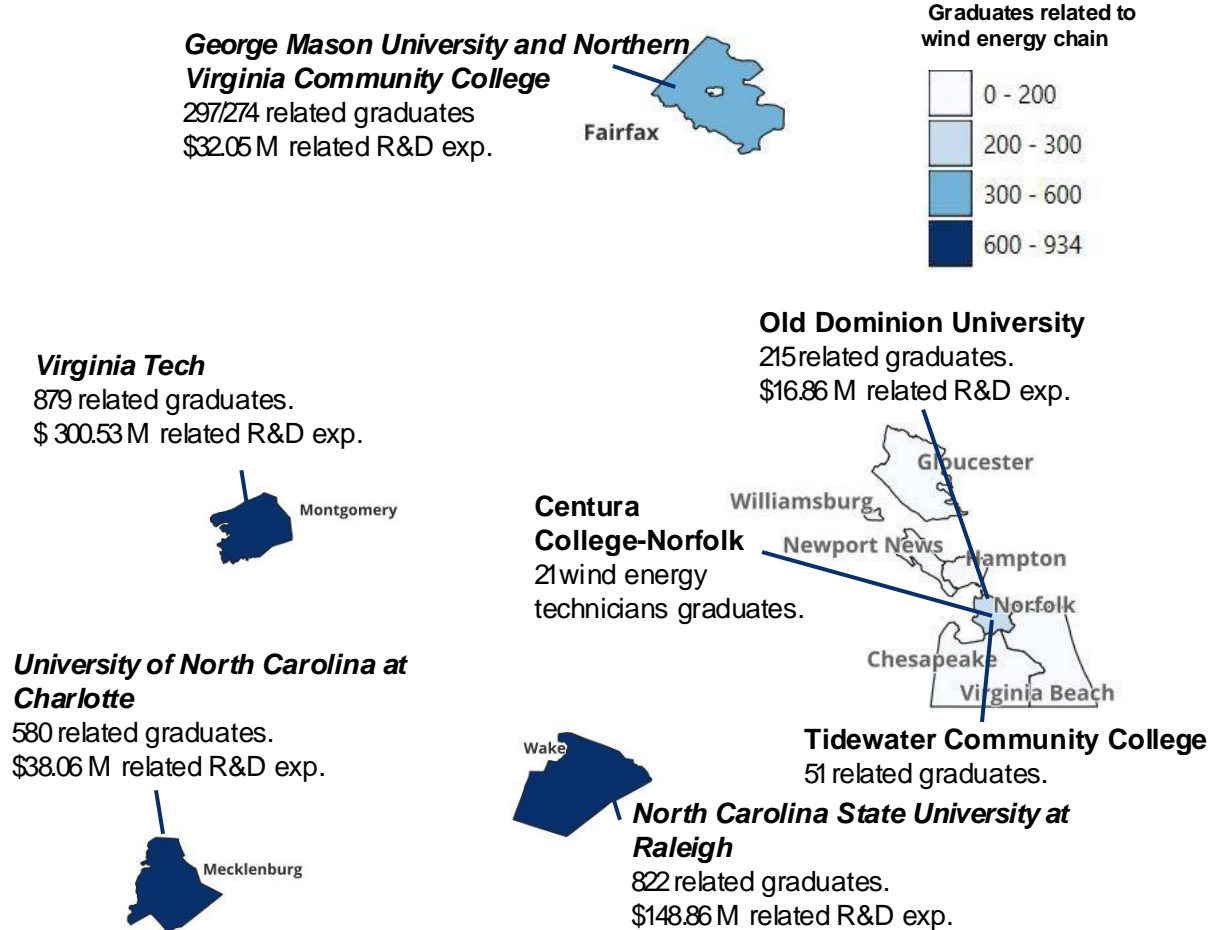
Hampton Roads: Graduates Related to Wind Energy.
By Institution and degree, 2022.

Institution	Degree	Graduates	Intensity*	Ranking**
College	Electrical, Electronic Technician	73	High	#10
	Civil Engineering Technician	20	High	#8
	Wind Energy Technician	21	Medium	#1
University	Mechanical Engineering	114	Medium	#97
	Mechanical Eng. Technician	91	High	#3
	Electrical, Electronic Engineering	77	Medium	#68
	Civil Engineering, General	50	Medium	#98
	Electrical, Electronic, and Commss Engineering Technician	4	Medium	#46

High
 Medium
 Low

26,722 graduates in HR
457 graduates in HR related to wind energy

Talent Pipeline and R&D Related to Wind Energy.
By municipality in HR and surrounding municipalities***, 2022.



Notes: (*) Intensity metric. When Intensity > 1.1, it is considered high; 0.9 < Intensity < 1.1 it is moderate; and Intensity < 0.9 signifies low intensity. (**) US Ranking metric. When Hampton Roads ranks between 1 and 40 among all US MSAs in that field, it is considered high; between 41 and 54, it is moderate; and 55 and below, it is low. For reference, Hampton Roads ranks 47th in GDP. (***) The R&D spending shown corresponds to the period 2018-2022. Municipalities displayed are those with 600+ graduates related to the wind energy supply chain in 2022. For each of these municipalities, the map displays detailed information for the main university. **Source:** The New Localism (2024) based on [NCES](#) and [NSF](#).

Key Technology Areas - Multi-Dimensional Analysis

Hampton Roads: Positioning of Selected Key Technologies. By dimension and metric.

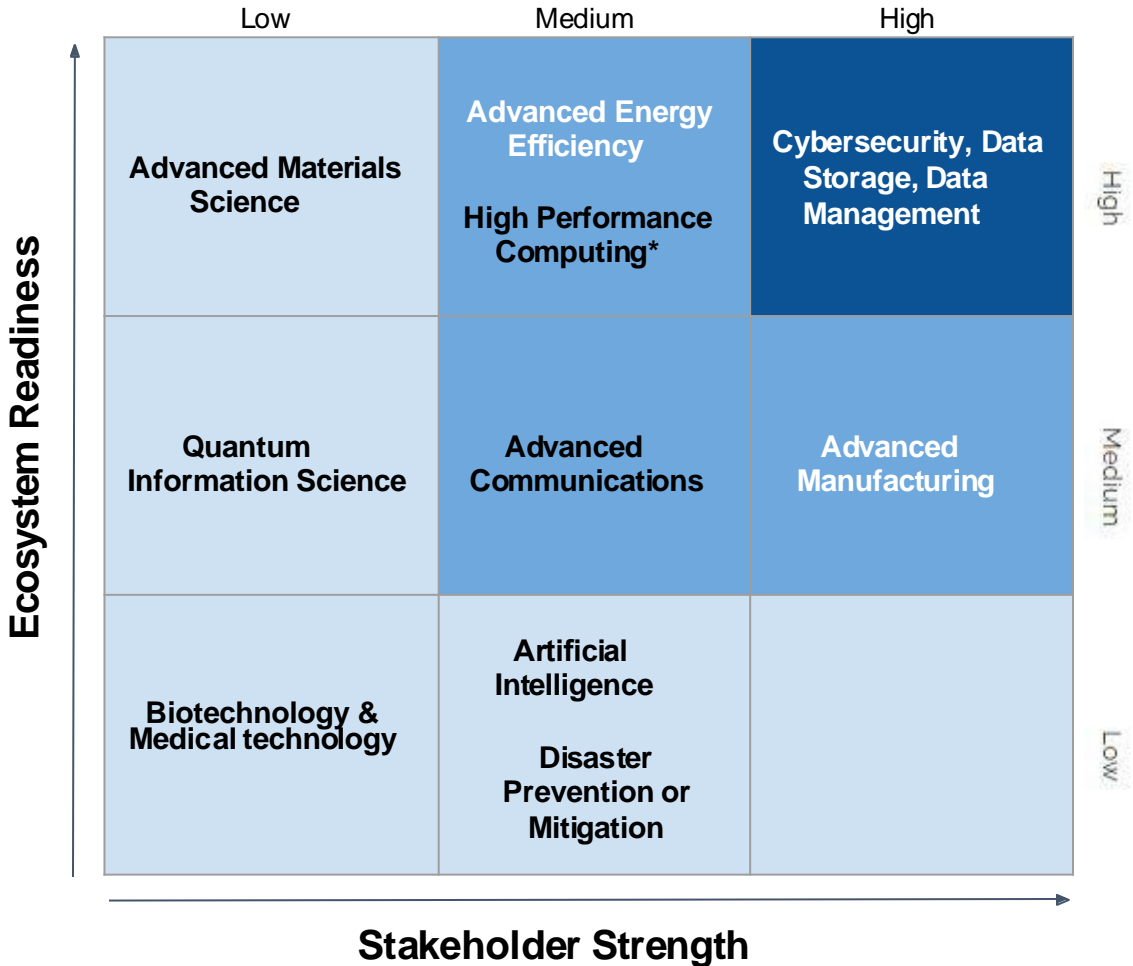
#	Key Technology	Stakeholder strength			Ecosystem readiness							
		Key Players	Potential Applications (2022)		Talent Pipeline (2022/2023)		Higher Education R&D (2018-2022)		Patents (2013-2023)		SBIR / STTR Awards (2019-2023)	
			Q*	I**	R***	I**	R***	I**	R***	I**	R***	I**
1	Cybersecurity, Data Storage, Data Management	High	High	High	High	High	High	Low	Low	Low	High	High
2	Advanced Mfg. (includes Unmanned Systems)	High	High	High	Medium	Medium	High	Medium	Low	Low	Low	Low
3	Advanced Energy Efficiency	Medium	High	High	High	High	High	Low	Medium	Low	High	Medium
4	High Performance Computing	Low	High	High	High	Medium	High	Low	Low	Low	Low	High
5	Advanced Communications	Low	High	High	High	High	Low	Low	Low	Low	High	High
6	Advanced Materials Science	Low	Low	Medium	High	Medium	High	Low	High	Low	Medium	Medium
7	Artificial Intelligence	Low	High	High	Low	Medium	High	Low	Low	Low	Medium	Medium
8	Disaster Prevention or Mitigation	Medium	Medium	High	Low	Low	Low	Low	High	Medium	High	High
9	Quantum Information Science	Medium	Low	Low	Low	Medium	High	Low	Low	Low	High	High
10	Biotechnology & Medical technology	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low

High Medium Low

Notes: (Q) = qualitative research. (I) = Intensity metric corresponds to the location quotients of the MSA in the corresponding category. When Intensity > 1.1, it is considered high; 0.9 < Intensity < 1.1 it is moderate; and Intensity < 0.9 signifies low intensity. (R) = Corresponds to the US Ranking. When Hampton Roads ranks between 1 and 40 among all US MSAs, it is considered high; between 41 and 54, it is moderate; and 55 and below, it is low. For reference, Hampton Roads ranks 51th in GDP. Source: The New Localism (2024), CBP, NCES and NSF.

Key Technology Areas - Opportunity Areas

Hampton Roads: Positioning of Selected Technologies.



Opportunity Areas:**

We identified 3 technologies where HR has a strong position that could be further leveraged for use in both civilian and defense sectors

Cybersecurity, Data Storage, Data Mgmt.

The region has a strong military presence, a vibrant shipbuilding industry, and a growing wind energy sector that fuels demand for technology applications. However, there is a need to develop a platform that strengthens connections between academia and industry and provides capital to move ideas to market.

Advanced Energy

The region offers a favorable environment for advancing energy efficiency technologies, particularly those related to wind energy and nuclear power. Colleges are leading the way in generating specialized talent, but there is still a need to enhance R&D and innovation given the growing market for these technologies in the region.

Advanced Mfg. (includes Unmanned Systems)

Advanced mfg. technologies benefit from a prosperous ecosystem for testing and innovation, due to both the presence of key players and the demand for these technologies. Hampton Roads is particularly well positioned to advance technology applications in autonomous systems, with organizations such as NASA Langley (which has strong research capabilities in unmanned systems and hypersonics), Huntington Ingalls, DroneUp, Dominion Energy, and ODU driving innovation in these areas.

Notes: (*)There is considerable scope for the application of artificial intelligence in the region, although the level of current activity is relatively limited. (**)To identify a subset of Key Technologies that offer opportunities for the region, additional qualitative analyses were conducted. **Source:** The New Localism (2024) based on research.

Hampton Roads Investment Playbook - What's Next?

Phase I:



Research context and identify opportunities



Key activities:

- Conduct rigorous quantitative economic analysis (industry analysis, small business ecosystem, workforce profile etc.)
- Conduct 1:1 interviews with local stakeholders to identify investments



Timeline:

25 months

Phase II:



Refine opportunities and draft Playbook



Key activities:

- Hold working sessions with key local stakeholders to refine project ideas
- Determine project costs and potential funding sources
- Conduct site visits to other cities to learn best practices



Estimated Timeline:

15 months

Phase II:



Project implementation



Key activities:

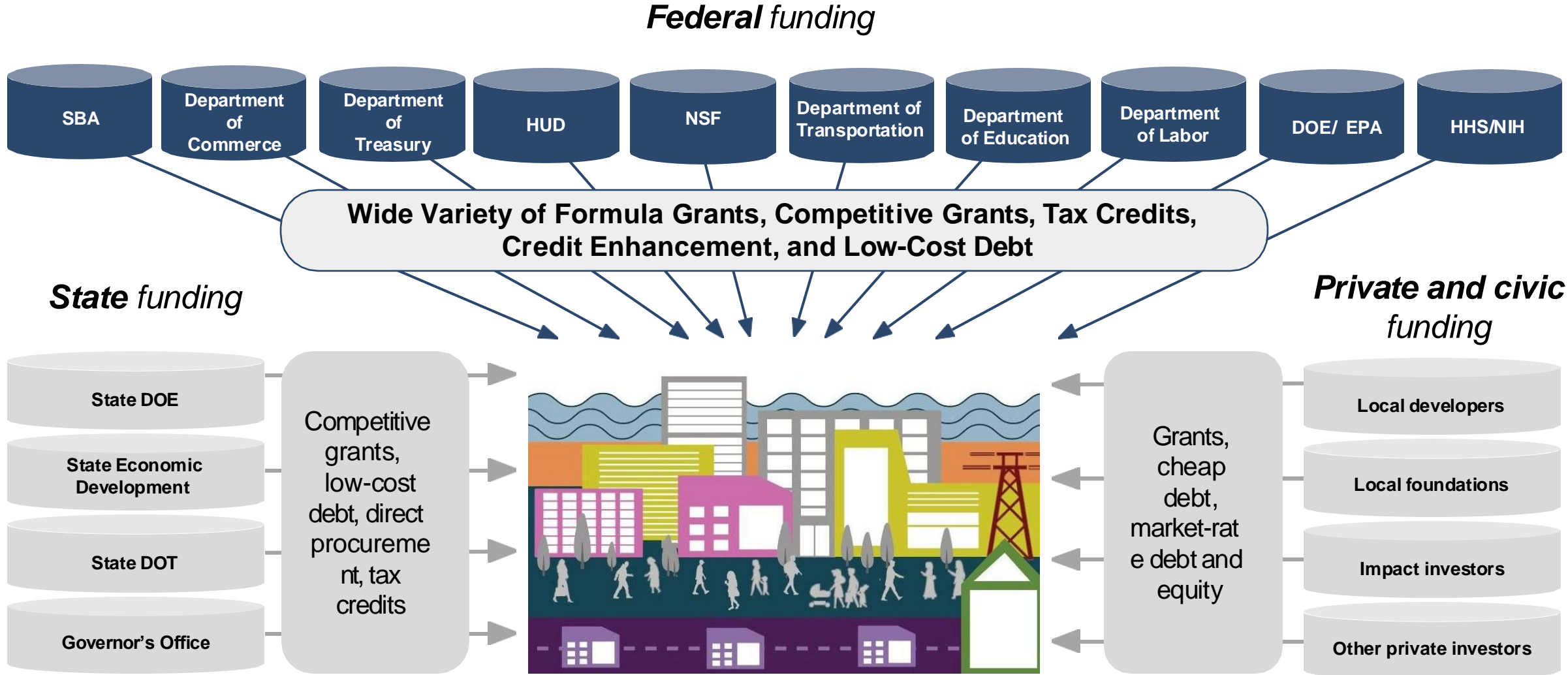
- Raise capital from identified funding sources
- Identify local leaders and practitioners to drive projects forward



Estimated Timeline:

1 month

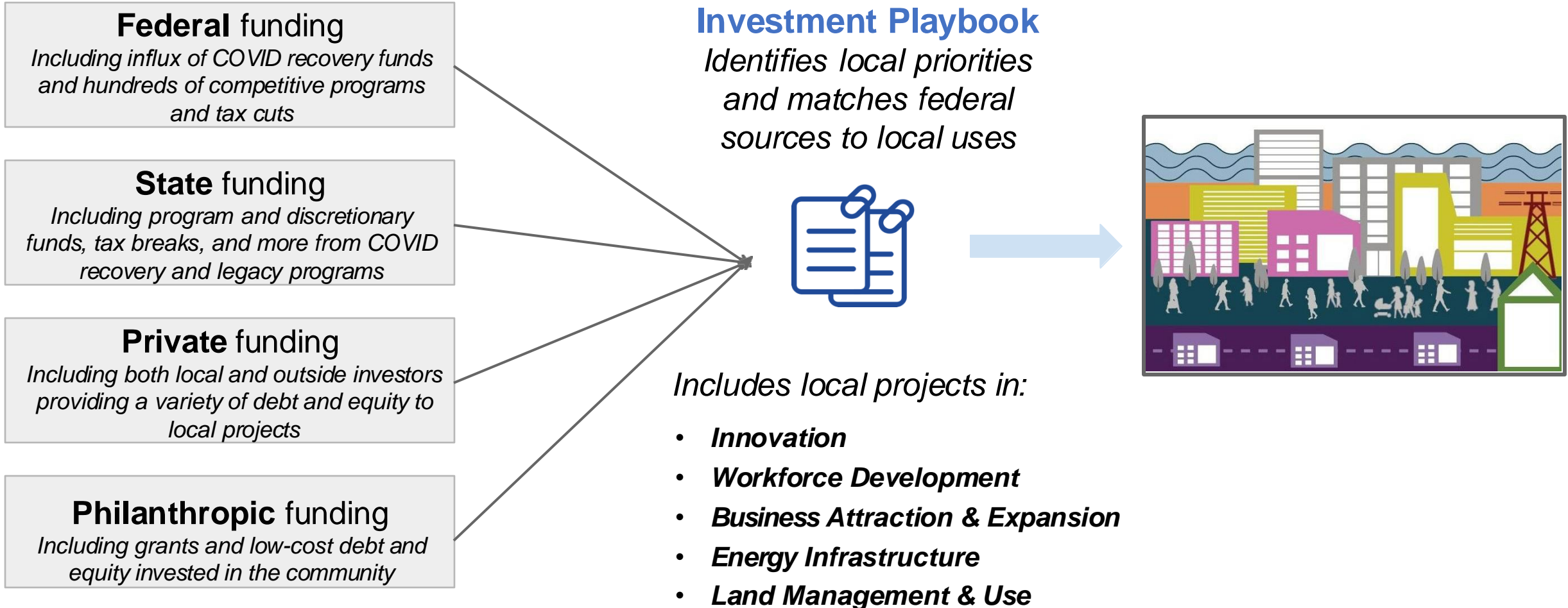
Hampton Roads Investment Playbook - The Capital Stack



Source: The New Localism (2024).

Hampton Roads Playbook - Translating Diverse Funds into Local Priorities

Investment Playbooks identify needed investments and match them to federal, state, and civic sources that can maximize the cumulative local effect of the investments.



Hampton Roads Investment Playbook - Key Findings

1	Creation of a DOD backed AUKUS Center of Excellence , with a consortium of researchers in submarine related innovation and production from Australia, the UK and the US. This Center could build on the globally recognized Advanced Manufacturing Research Centre in Sheffield, England, which features integrated efforts around applied R&D, workforce training and entrepreneurial growth.
2	Creation of an Innovation Constellation to bring greater coherence and collaboration between related anchor corporations, universities and federal research labs located in the metro area. The key is to work with multiple stakeholders to design a clear set of projects to advance innovation capabilities in a largely production-oriented economy.
3	A concerted Choose Hampton Roads effort to recruit and attract key supply chain firms in leading industries like shipbuilding and repair, nuclear power and wind energy. Such an effort would naturally involve the identification of suitable sites for firms as well as integrated approaches to workforce development. To the greatest extent possible, the location of firms should occur in a way that fills out existing areas with a greater density of industry actors.
4	Creation of a Hampton Roads Consortium of Talent to upgrade the offerings of engineering degrees at ODU and other four-year universities to support the region's production economy and upgrade the skills of workers in close collaboration with high schools, skills providers and community colleges. Metros like Kansas City are also contemplating the creation of an Instructor Corps to ensure that the supply of teachers for technical trades matches the manufacturing demand.
5	New contractual relationships with major defense installations and research laboratories to pioneer the rapid transition to reliable and resilient energy sources and load management.
6	Maximized use of the Inflation Reduction Act to accelerate the energy transition and advance climate resilience, particularly around government and university campuses and a city-wide building upgrade program to modernize and climate-proof homes.
7	Discrete projects focused on enabling companies to move ideas to market , from R&D to testing and commercialization of these technologies, taking full advantage of federal resources (e.g., SBIR, STTR awards). This could entail developing an accelerator on specific technologies needed for this region

Hampton Roads Investment Playbook

(Phase I)

Thank you!

September, 2024

Appendix: Hampton Roads Investment Playbook Phase I - Interviews conducted

Organization	Stakeholder	Position
US Navy	Matt Zirkle	Former Rear Admiral
Hampton Roads Regional Planning District Commission	Bob Crum	Executive Director
Hampton Roads Military and Federal Facilities Alliance	Todd Nichols	Deputy Executive Director
Hampton Roads Military and Federal Facilities Alliance	Rick Dwyer	Executive Director
Jefferson Lab (SURA)	Sean Hearne	President & CEO
NASA Langley	Deborah Tomek	NASA Senior Executive
NASA Langley	Brandi Quam	Business Development Specialist
The Port of Virginia	Stephen Edwards	CEO & Executive Director
Hampton Roads Workforce Council	Sean Avery	CEO
Virginia Peninsula Chamber	Bob McKenna	President/CEO
Hampton Roads Executive Roundtable	Nancy Grden	President & CEO
Virginia Tech	Brett Malone	Executive Director
Virginia	Chelsea Jenkins	Deputy Secretary of Commerce and Trade

We received additional written feedback from the following stakeholders:

Organization	Stakeholder	Position
757 COLLAB	Paul Nolde	Managing Director & Executive Director
Hampton Roads Executive Roundtable	Nancy Grden	Executive Roundtable
CIVIC Leadership Institute	Mary Kate Andris	President & CEO
Hampton Roads Military and Federal Facilities Alliance (HRMFFA)	Rick Dwyer	Executive Director

Investor Relations Update

Alisa Crider, Director of Investor & Public Relations



Investor Tiers

Level	Number of Investors
Diamond (\$100,000+)	7
Platinum (\$50,000+)	4
Gold (\$25,000+)	11
Silver (\$10,000+)	23
Bronze (\$5,000+)	58

Investor Recommendations

Tier Updates

- Remove the \$5,000 Tier
- Add a \$150,000 Tier

Advisory Committee

- C-Suite Leaders from Diamond, Platinum, and Gold Tiers
- Provides Top Investors with access to information and the chance to provide feedback
- Ensure that Investors feel involved and are engaged in developing the Alliance's mission and goals

CURRENT

Diamond
(\$100,000+)

Platinum
(\$50,000+)

Gold
(\$25,000+)

Silver
(\$10,000+)

Bronze
(\$5,000+)

PROPOSED

Diamond
(\$150,000+)

Platinum
(\$100,000+)

Gold
(\$50,000+)

Silver
(\$25,000+)

Bronze
(\$10,000+)

General Discussion

Keith Vander Vennet
Chairman



Upcoming Events and Meetings

a. Holiday Reception

Friday, December 6, 2024 @ 6:00 P.M.
Chrysler Museum of Art
1 Memorial Place
Norfolk, VA 23510

b. Board of Directors Meeting

Friday, November 8, 2024 @ 9:00 A.M.
TowneBank Newport News
1 Old Oyster Point Road
Newport News, VA 23602

c. Annual Meeting

Thursday, February 27, 2024 @ 3:00 P.M.
Christopher Newport University
1 Avenue of the Arts
Newport News, VA 23606

Adjournment

Keith Vander Vennet
Chairman

