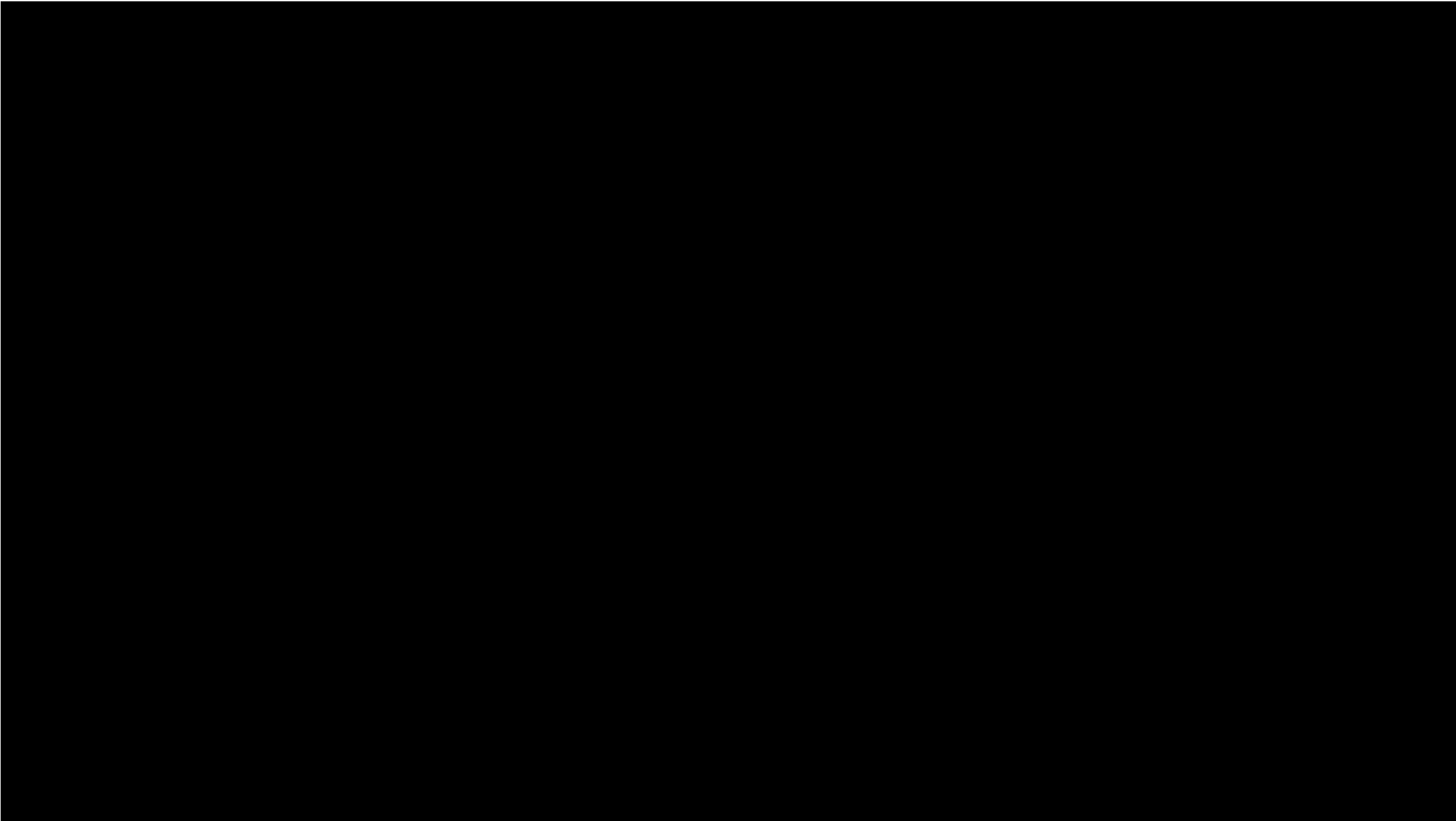




Virginia Department of Transportation Workforce of Tomorrow

Presentation for the CTB

January 15th, 2019



Macro Trends in Transportation

Five macro trends will shape the future of transportation and fundamentally redefine the role of DOTs

We define Macro Trends as the broadest forces shaping the future of transportation.

These trends will continue to evolve the future of mobility in 5, 10, 20 years and beyond.

Social

Mobility preferences are shifting in response to changing demographics – urbanization is decreasing generational demands for personal vehicles and creating diverging needs across urban and rural areas.

Technology

Across the transportation ecosystem, emerging technologies are changing the design and implementation of transportation solutions.

Economic

Alternative revenue streams and monetization structures are shifting investment strategies and enabling new technologies.

Environmental

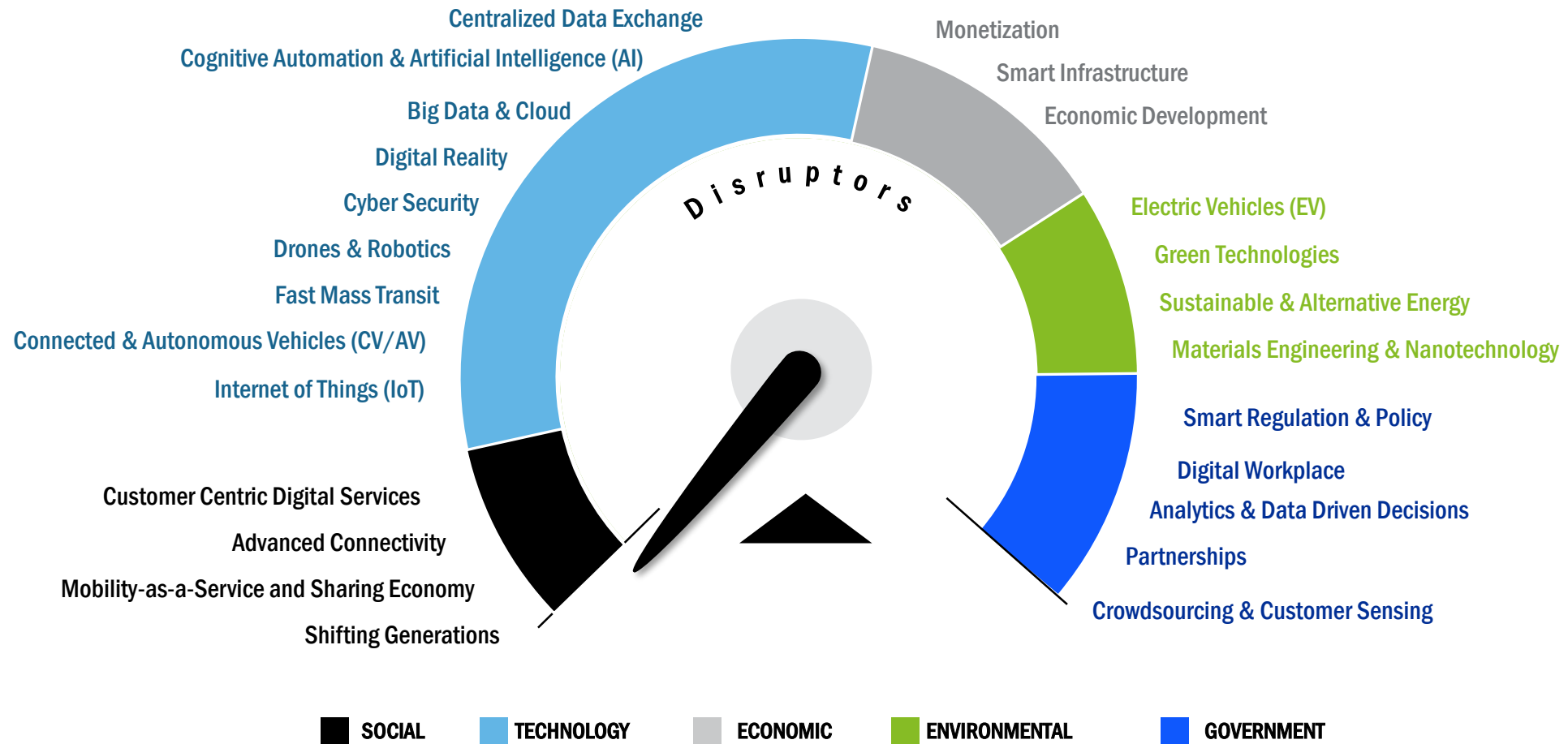
Global recognition of resource dependencies and environmental impacts are putting pressure on transportation agencies and driving the development of alternatives.

Government

Government is increasingly expected to integrate data, digital, and design to deliver transparent services, facilitate economic development and enhance quality of life.

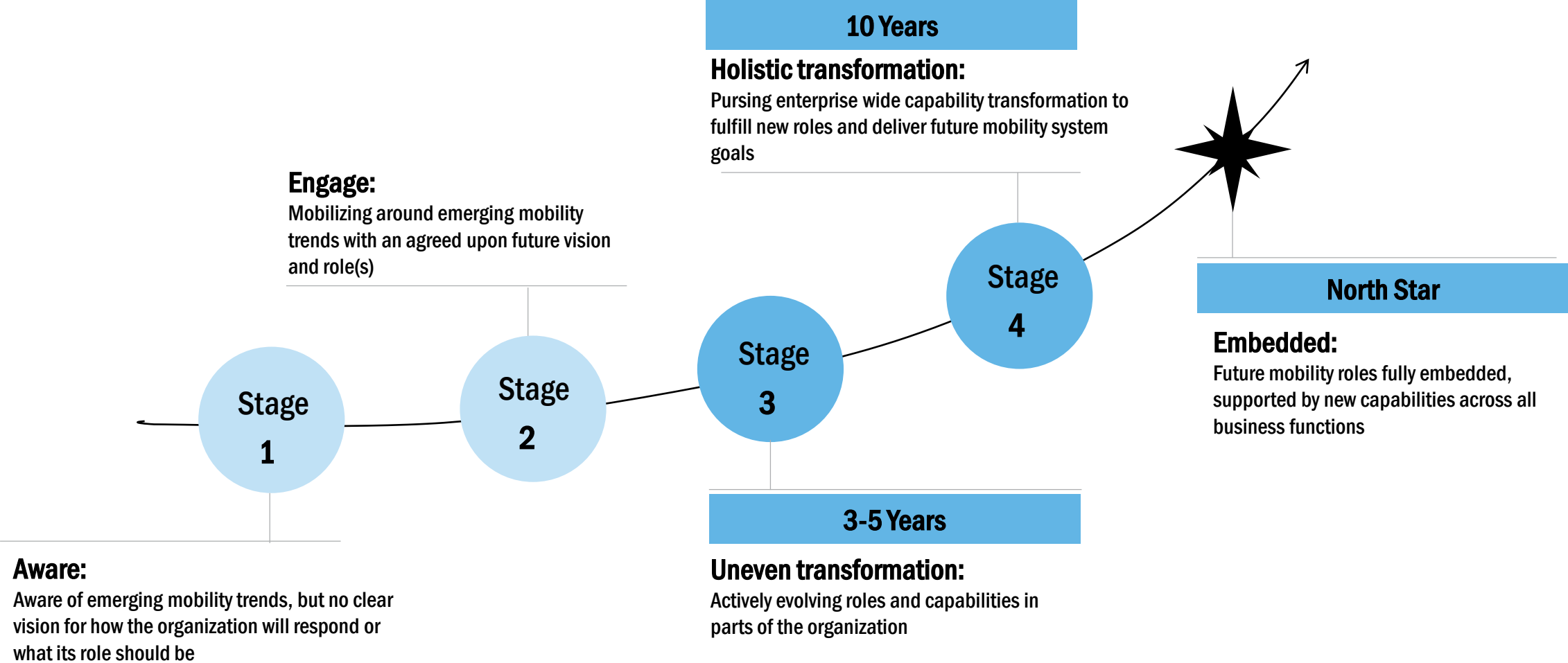
Transportation Disruptors

Underpinning macro trends are 25 significant internal and external forces challenging DOTs to operate in new ways



The Transportation Maturity Curve

Most state DOTs and transportation agencies around the world are operating at stage 1 or stage 2 – but VDOT is out ahead



3 Dimensions of VDOT's Path

Reaching the North Star requires VDOT to make bold moves across the 3 dimensions



WORK

The fundamental nature of the work performed to achieve mission outcomes

- **HOW** is the nature of the work performed changing to achieve new business goals?
- **WHAT** work may be augmented by digital and other technologies and what are the workforce implications?



WORKFORCE

The portfolio of talent and skills tapped to perform the work

- **WHO** is best to perform the current and future work and what skills are necessary?
- **HOW** do you close the gap between current and future skills by tapping into alternative talent pools and upskilling the current workforce?



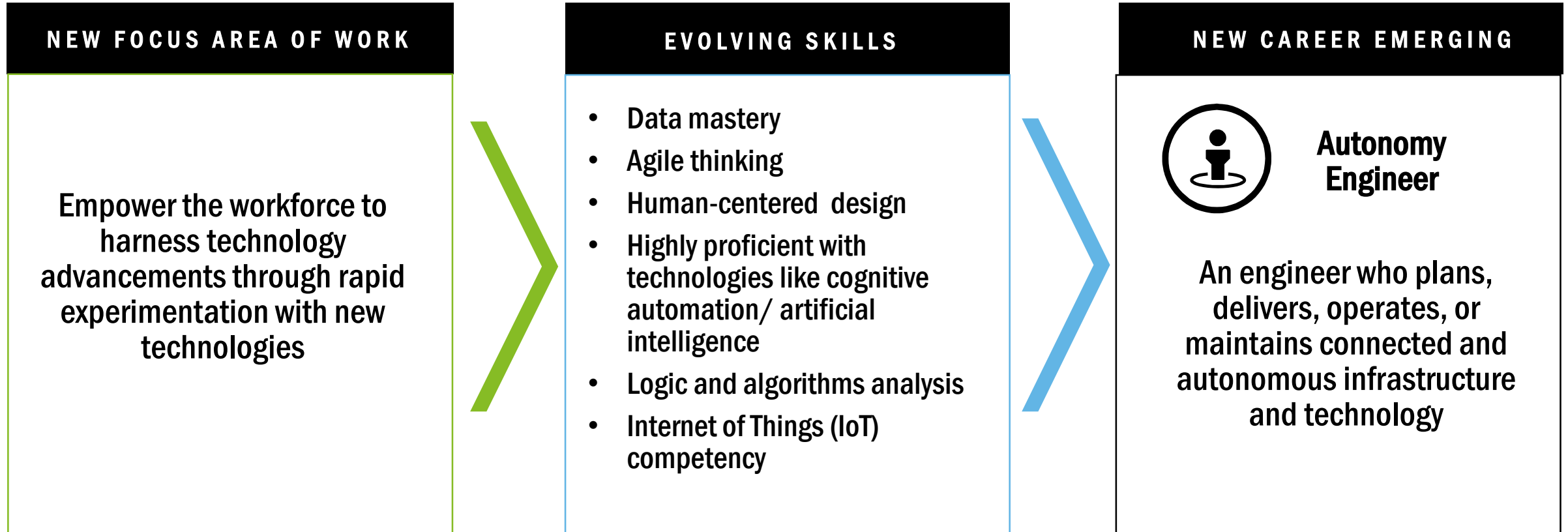
WORKPLACE

The environment and policies – not just the physical structures or location – utilized to maximize collaboration and consistency of the talent experience and efficiency and cost-effectiveness for VDOT

- **WHERE** is best to perform the work to maximize return on investment (e.g., in office vs. virtual)?
- **WHAT** physical design and technology maximizes productivity?

A Sample “Net New” Career

An **Autonomy Engineer** is an illustrative example of a “net new” career resulting from emerging technologies



Next Steps

VDOT looks at disruptors as opportunities

- 1** Communicate the vision with VDOT employees and key stakeholders
- 2** Validate linkages between North Star and VDOT's strategic priorities
- 3** Prioritize key opportunities across work, workforce, and workplace to achieve North Star

Planning for the Workforce of Tomorrow

Deloitte is working with VDOT to imagine the future and develop a plan to get there

