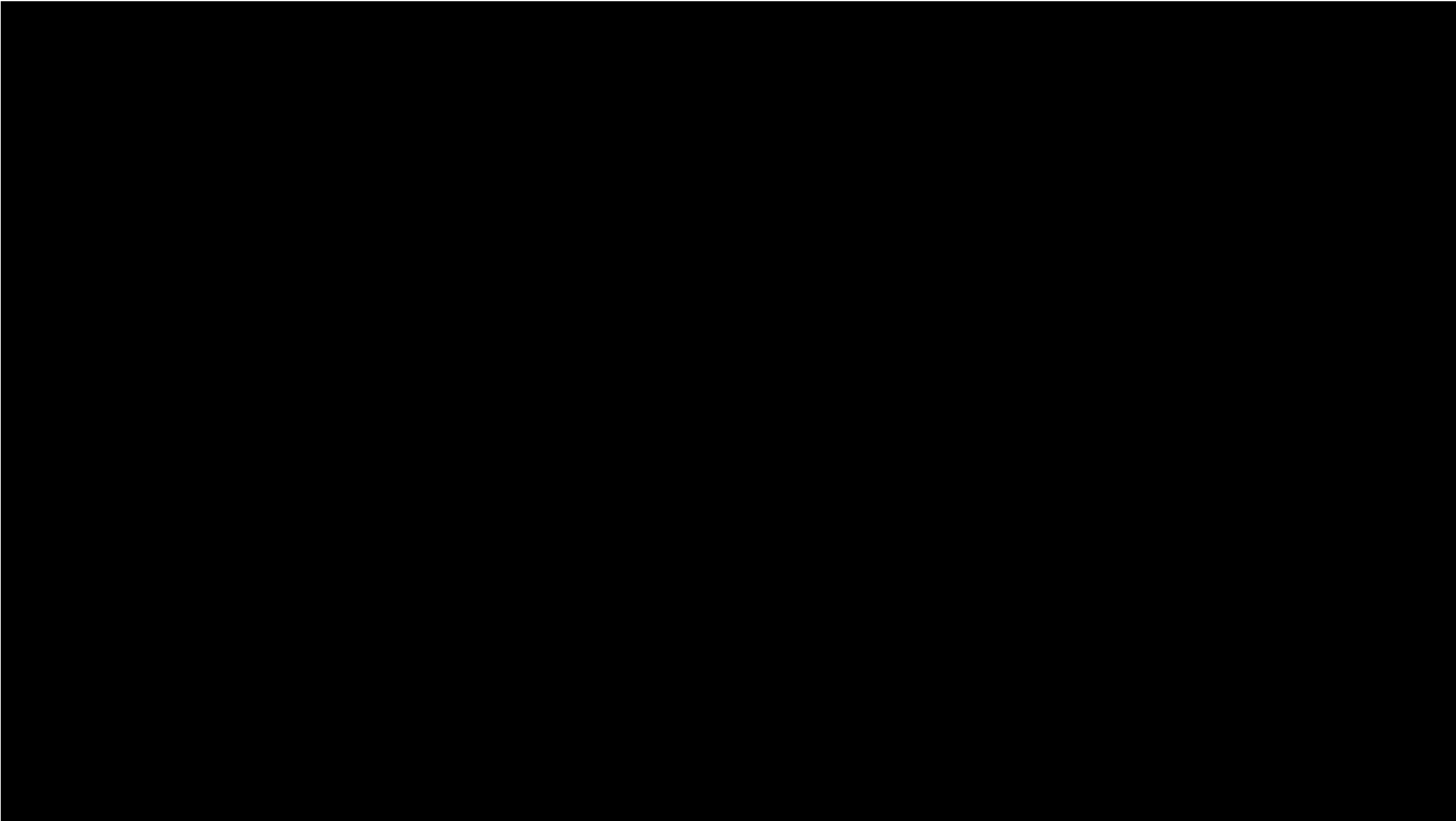




## Virginia Department of Transportation Workforce of Tomorrow

Presentation for the CTB

January 15<sup>th</sup>, 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**

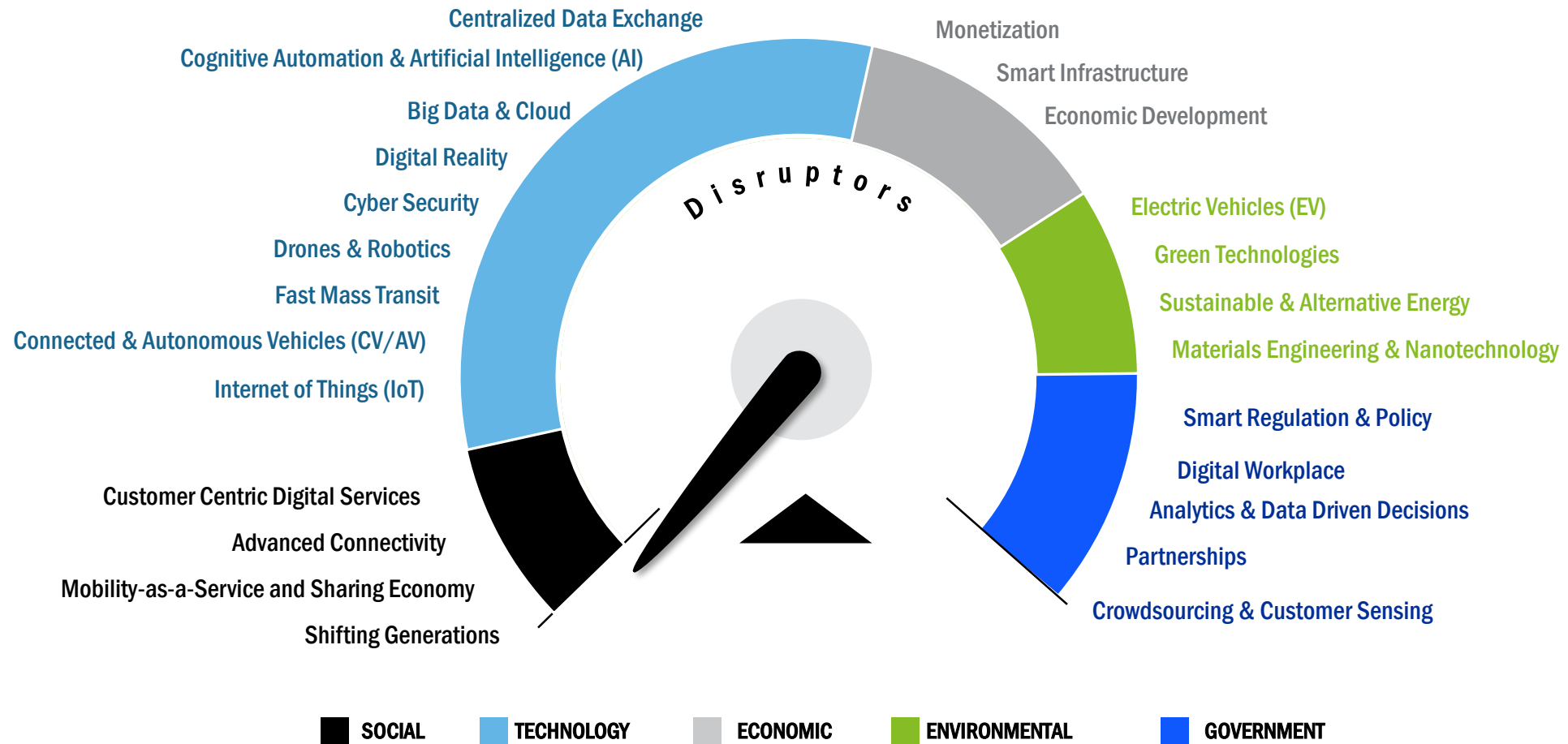
Global recognition of resource dependencies and environmental impacts are putting pressure on transportation agencies and driving the development of alternatives.

## **Government**

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

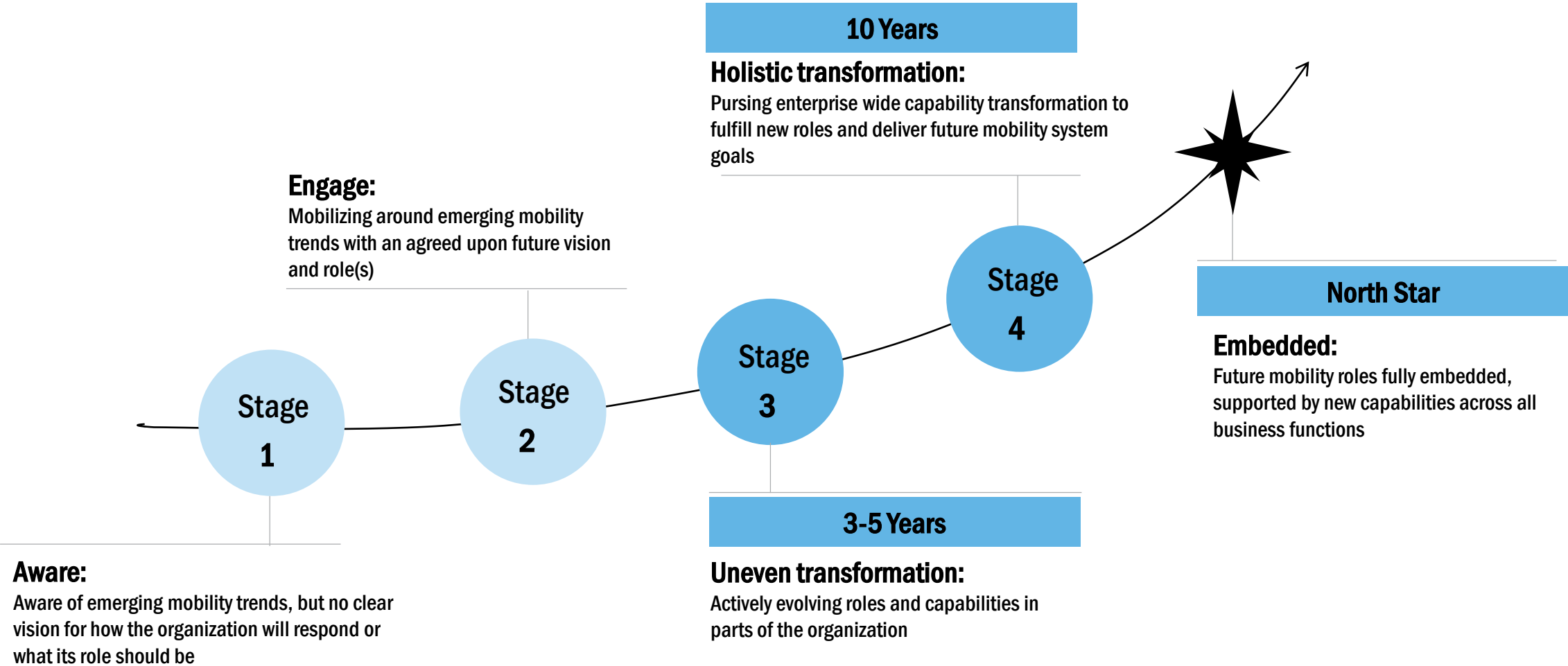
# Transportation Disruptors

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?



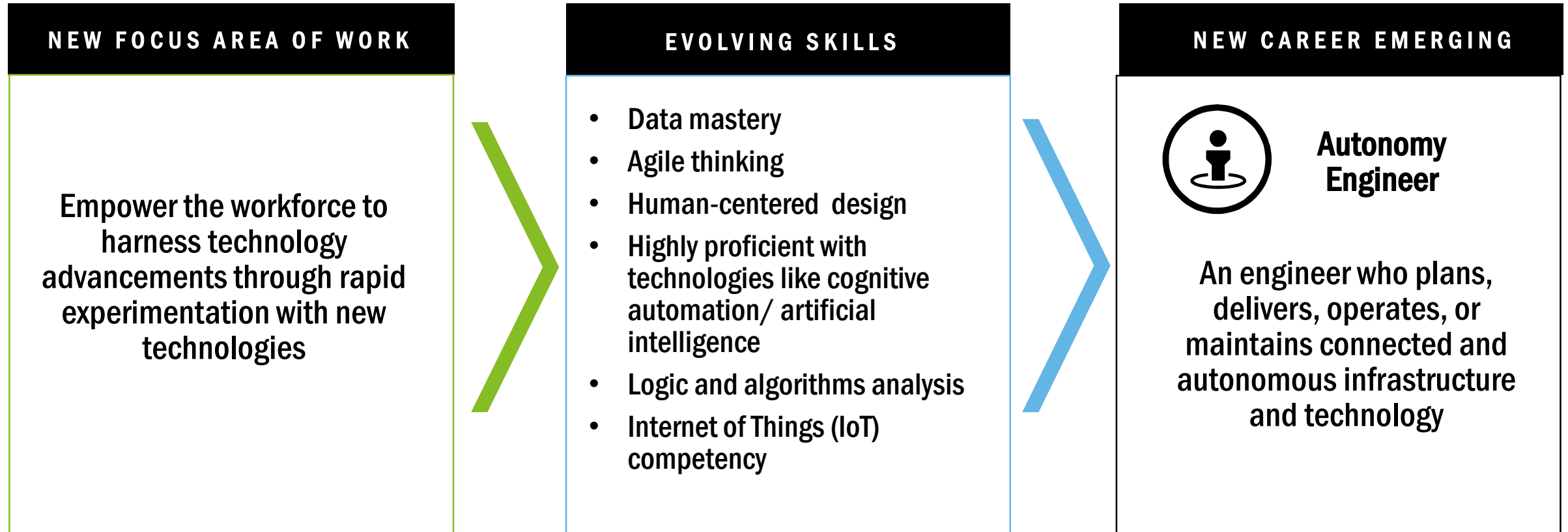
## WORKPLACE

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

