

Technology Webinar

MGA



July 24, 2018

The Smartland: Prepared, Agile and Empowered for the Future - Workforce, Infrastructure, Energy & Life

<http://www.midwesterngovernors.org/chairagenda.htm>

<http://www.midwesterngovernors.org/AgileWorkforce.htm>

The Smartland: Prepared, Agile and Empowered for the Future - Workforce, Infrastructure, Energy & Life



The Next Horizon:

From Wheelchair Ramps
to Supportive Tech,
How Technology First is
Changing Ohio's Service
Landscape

John Martin, Director
*Ohio Department of
Developmental Disabilities*



Federal laws like the [Americans with Disabilities Act](#) have gone a long way to ensure that people with disabilities are guaranteed equal access and opportunity.

Addressing barriers to inclusion

- curb cuts
- accessible buildings
- parking spots
- integrated schools
- integrated employment
- community living
- accessible housing
- money follows the person
- voting rights

In 2013, the Coleman Institute, with its issuance of “*The Rights of People with Cognitive Disabilities to Technology and Information Access*”, challenged the DD community to think about the right to access technology in the same way we think

about the right to access buildings.

2013 Coleman Institute
[Proclamation](#), Extending the
ADA

<http://www.colemaninstitute.org/wp-content/uploads/2017/01/TheDeclaration.pdf>

The Rights of People with Cognitive Disabilities to Technology and Information Access

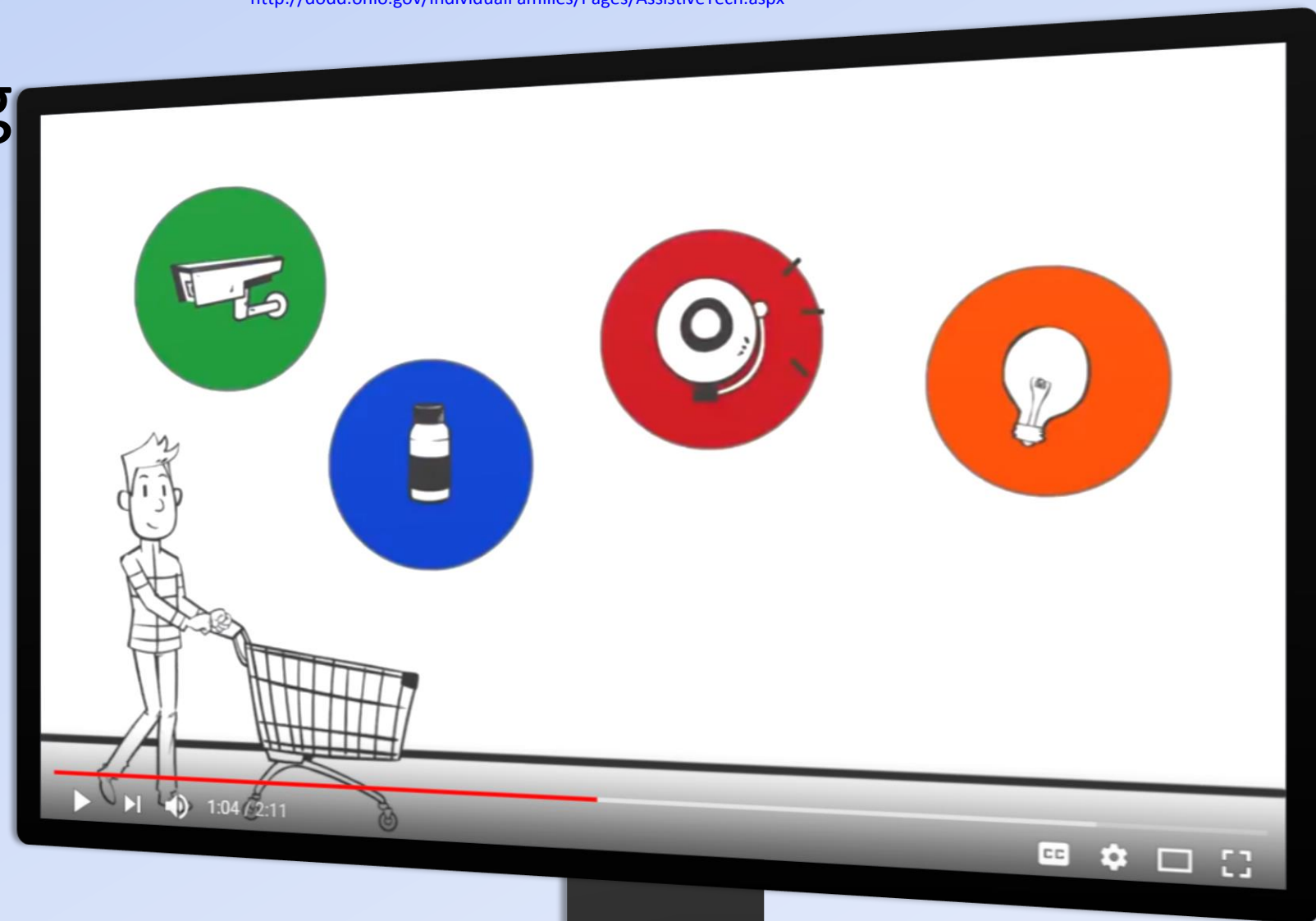
Whereas

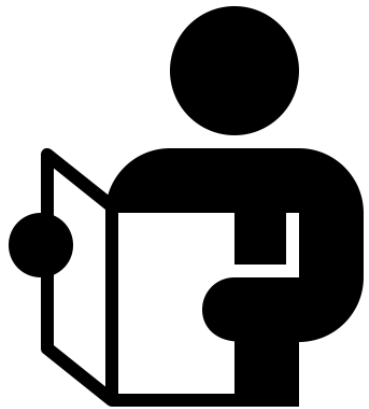
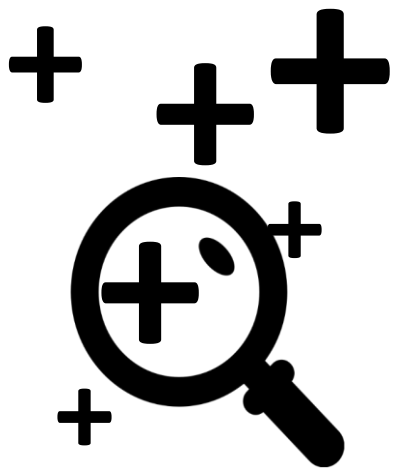
- Twenty-eight million United States citizens have cognitive disabilities such as intellectual disability; severe, persistent mental illness; brain injury; stroke; and neurodegenerative disorders such as Alzheimer’s disease;
- People with cognitive disabilities are entitled to inclusion in our democratic society under federal laws such as the Americans with Disabilities Act (ADA), the Developmental Disabilities Assistance and Bill of Rights Act (DD Act), the Individuals with Disabilities Education Act (IDEA), and the Rehabilitation Act of 1973;
- People with cognitive disabilities must have access to commercially available devices and software that incorporate principles of universal design such as flexibility and ease of use for all;
- Technology and information access by people with cognitive disabilities must be guided by standards and best-practices, such as personalization and compatibility across devices and platforms, and through the application of innovations including

Ohio began slowly, with three years of careful exploration, incorporating technology through Remote Monitoring services, available in home and community-based waivers beginning in 2013.

DODD's [Remote Monitoring](http://dodd.ohio.gov/IndividualFamilies/Pages/AssistiveTech.aspx) Animation

<http://dodd.ohio.gov/IndividualFamilies/Pages/AssistiveTech.aspx>





Followed by

- assessment,

- evaluation,

- and promotion

of available technology services.

EMPLOYMENT FIRST

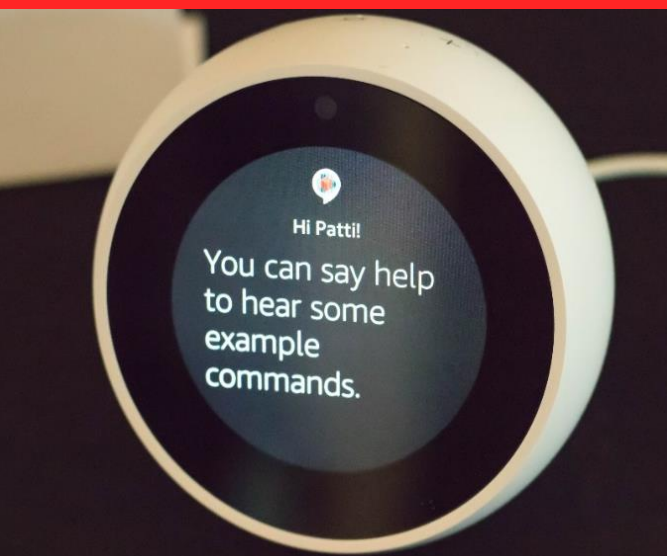
Building on the idea of
“employment first, not
employment only”
we asked the Governor
to consider making Ohio
a Technology
First state.



At Person-Centered Planning Meetings, support teams should look to *technology first* when planning for support needs.

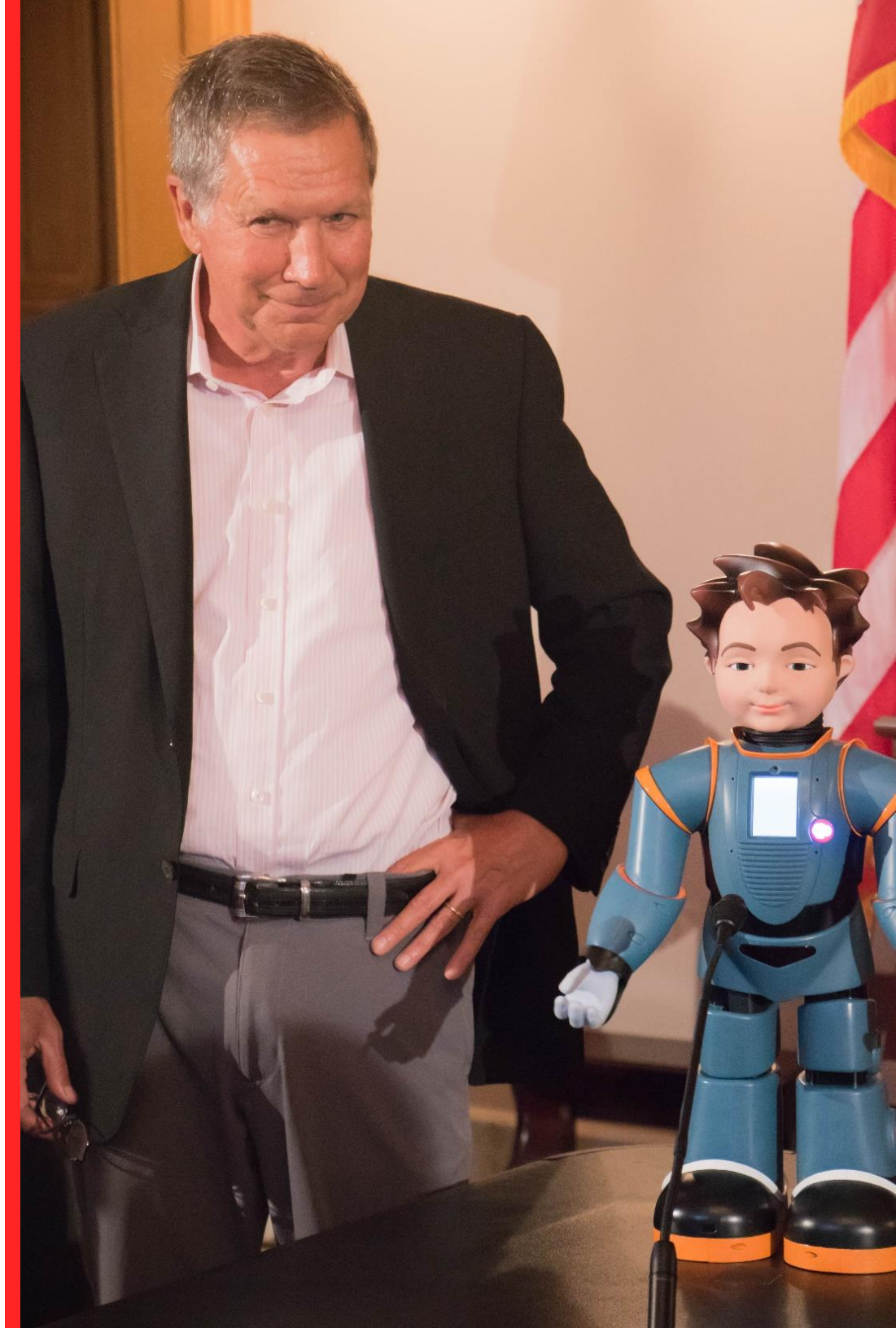
Many people will need and desire the support of a staff person.





Current support plans incorporate

- sensors,
- cameras,
- and even robots!



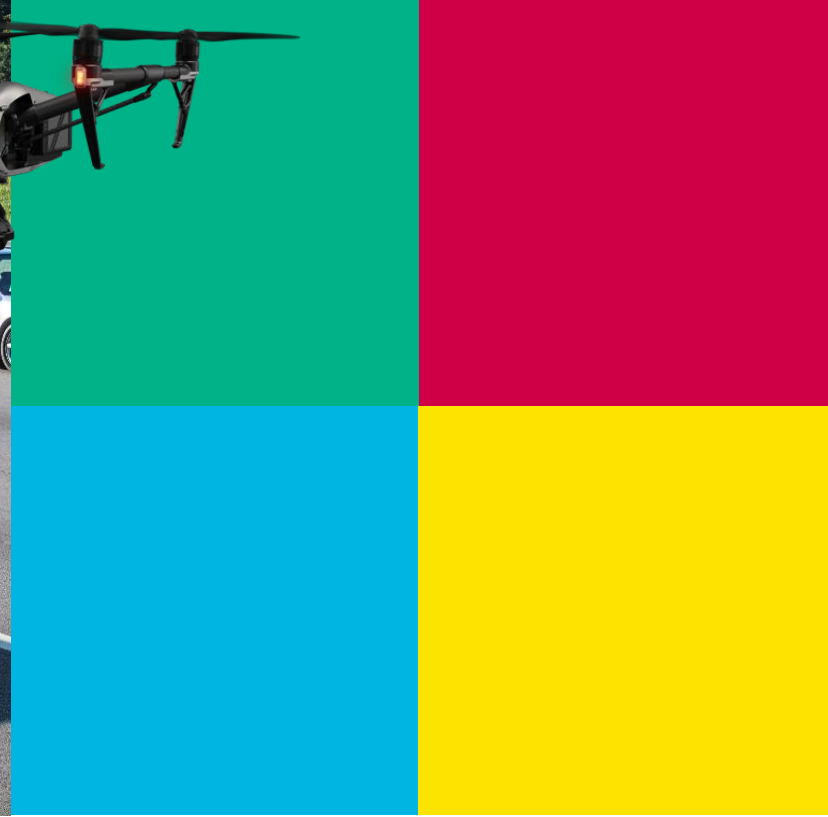


*“I can keep on
doing my thing
with my life.”*

-Patti

Resulting in

- better quality of life,
- and less cost.



Nick Hegemier, P.E.

Managing Director – Infrastructure / Vehicle
Deployment

Fred Judson

Managing Director – Unmanned Aircraft

Drive  hio

The Future of Smart Mobility



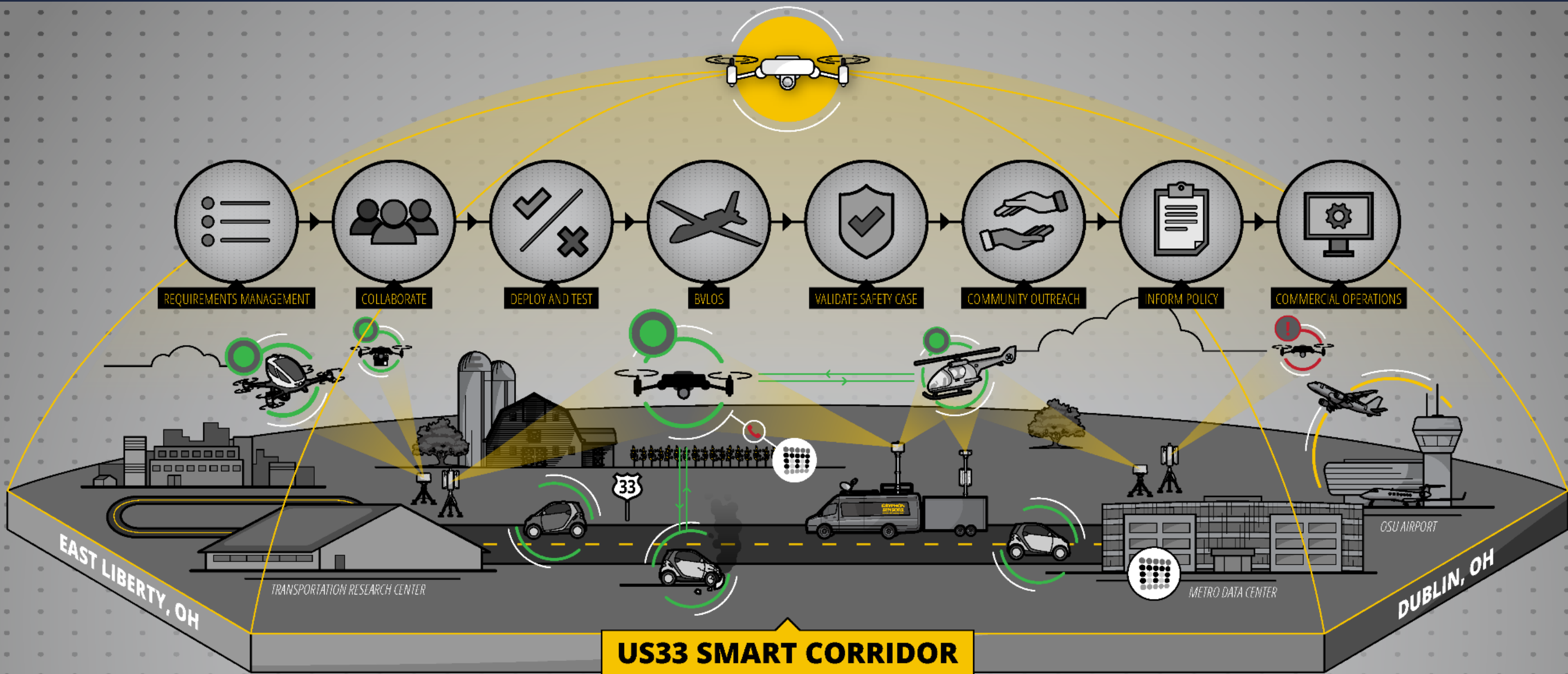
UAS Center

Integrating ITS into Smart Mobility

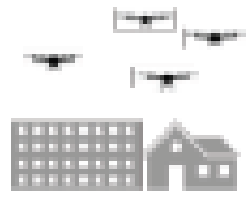
Existing ODOT Road Weather Info System – 172 sites
ODOT Existing Traffic Cameras – 670 sites
Wrong Way Sensors
Over Height Vehicle Sensors



Unmanned Aircraft Traffic Management Solutions for the State of Ohio



Unmanned Aircraft Traffic Management Solutions for the State of Ohio



TCL1

Remote Population

Low Traffic Density

Rural Applications

Multiple VLOS
Operations

Notification-based
Operations

TCL 2

Sparse Population

Moderate-Low Traffic
Density

Rural / Industrial
Applications

Multiple BVLOS
Operations
Tracking and
Operational Procedures

TCL 3

Moderate Population

Moderate Traffic Density

Suburban Applications

Manned/Unmanned BVLOS
Operations

Detect and Avoid
Public Safety Operations

TCL 4

Dense Population

High Traffic Density













































Urban Applications

Dense Urban BVLOS
Operations

Large Scale Contingency
Management

Unmanned Aircraft Traffic Management Solutions for the State of Ohio

Sensor Performance Comparison

	 DF SPECTRUM SENSING	 ACTIVE RADAR	 PASSIVE RADAR	 MULTISENSOR SUITE
Range				
System Complexity				
All Weather				
Hovering Target				
Autonomous Target				
Target Adaptability				
Line of Sight Tolerance				
Accuracy				
RF Spectrum Usage				
Classification				

 = GOOD  = FAIR  = POOR

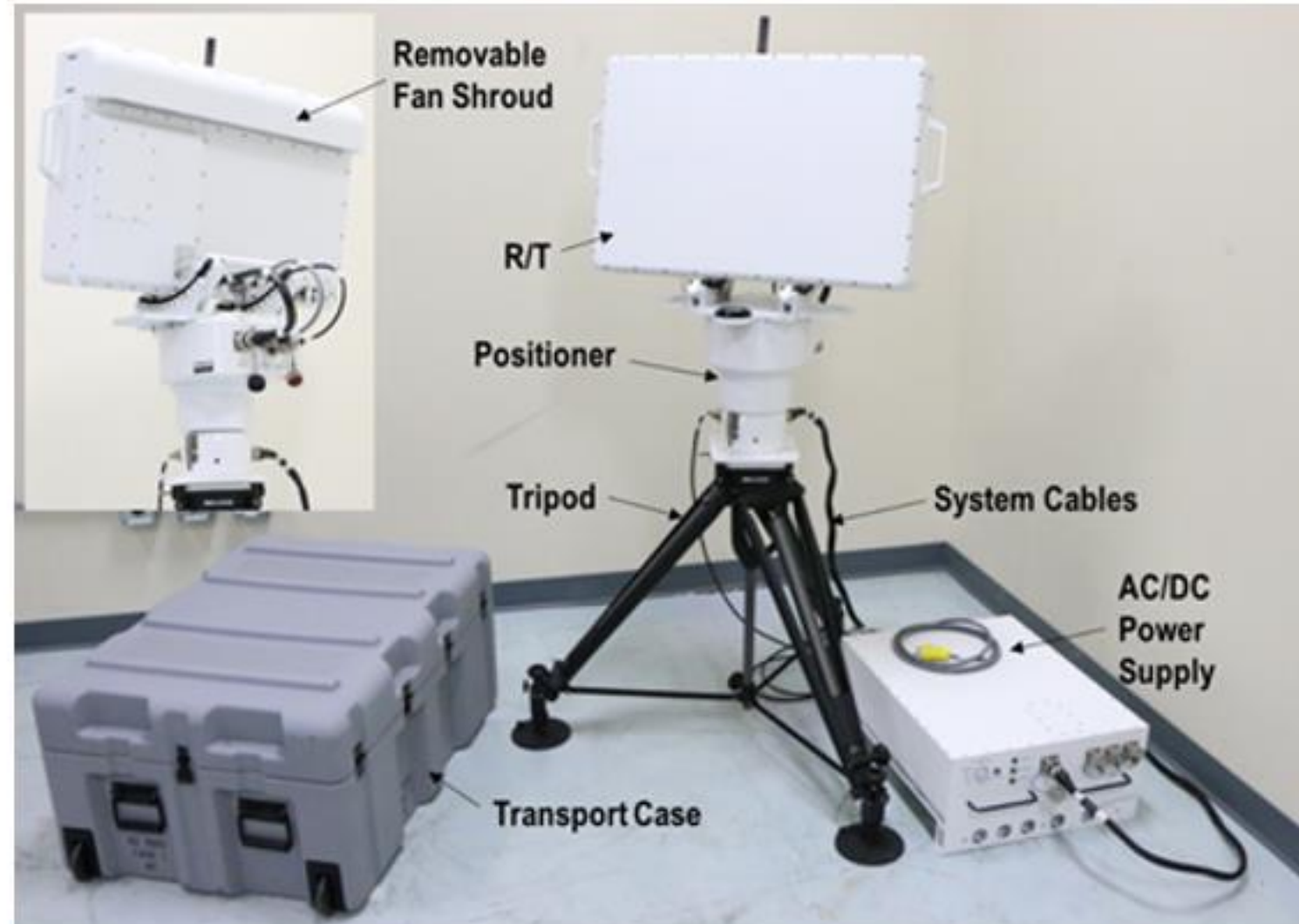


Figure 6: R1400 System Components.

QUESTIONS?



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Questions & Answers

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In-Person Meeting

September 19-20 – Columbus, Ohio

<http://www.midwesterngovernors.org/AgileWorkforce.htm>

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