



SMS SUMMIT 2023

VTIME AND ERDC AS A TESTBED

VIRTUAL TESTBED FOR INSTALLATION MISSION EFFECTIVENESS



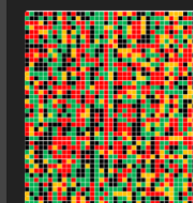

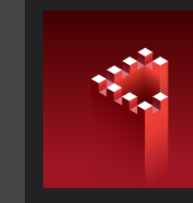




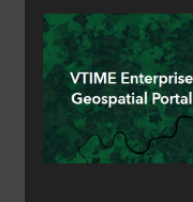
Data Analytics Track: Session 2C
Tuesday, Aug 8 – 2:00 – 2:50 PM



U.S. ARMY



US Army Corps of Engineers®

 Integrated Data Dashboard	 ERDC Integrated Data Dashboard	 Facility Investment Analytics (FIA)	 PLANNER v2 (Dev)	 System Master Planner (SMPL)
 Work Plan Evaluation Tool (WPET)	 (Dev) VTIME IoT Data Catalog (on Army Vantage)	 ERDC Sensor Dashboard	 Rapid Exploration and Analysis of Data (READ)	 VTIME Geospatial Portal

Virtual Testbed for Installation Mission Effectiveness (VTIME) Operational View (OV-1)

High-Level Capability Overview

AIS-IP,
Task
2.4



Real-Time Data-Informed Installation Decision-Making

Garrison CDR, Staff, HHQ

Capabilities are aligned to
**Army Installation Strategy &
Army Climate Strategy**
Implementation Plans (AIS-IP and ACS-IP)

ACS-
IP

AIS-
IP

ACS-
IP,
Obj. 1



Integrated Installation Planning

Installations Futures & Resources

AIS-IP,
Task
3.4

Emerging Technology Integration

Garrison Modernization

AIS-IP,
Task
3.3

AIS-IP,
Task
3.4

MODERNIZE FASTER. PLAN BETTER. REACT SMARTER.

VTIME Problems and Solutions

What will be done?

VTIME will accelerate installation resilience, adaptivity, and data-driven decision-making.

Inadequate installation planning tools for data-driven decisions

No real-time understanding of garrison operational environment

Slow installation operations modernization & tech transition

Digitized installation planning suite across the enterprise

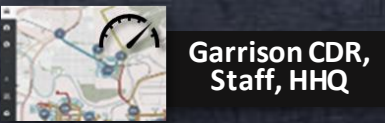
Integrate real-time systems and data for visualization & analysis at Fort Carson, Fort Moore

Modernization testbeds for rapid prototyping – Moore, Carson, enterprise

Year-over-year Army Climate Strategy data collection and plans alignment

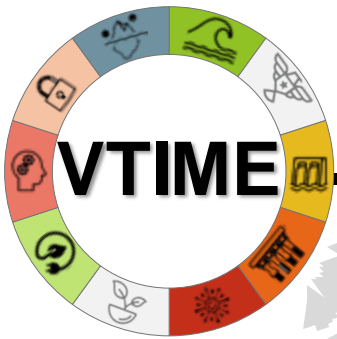
Adaptable architecture; three additional installations; plan for remaining installations

Support and temporarily sustain operational prototypes & transitions



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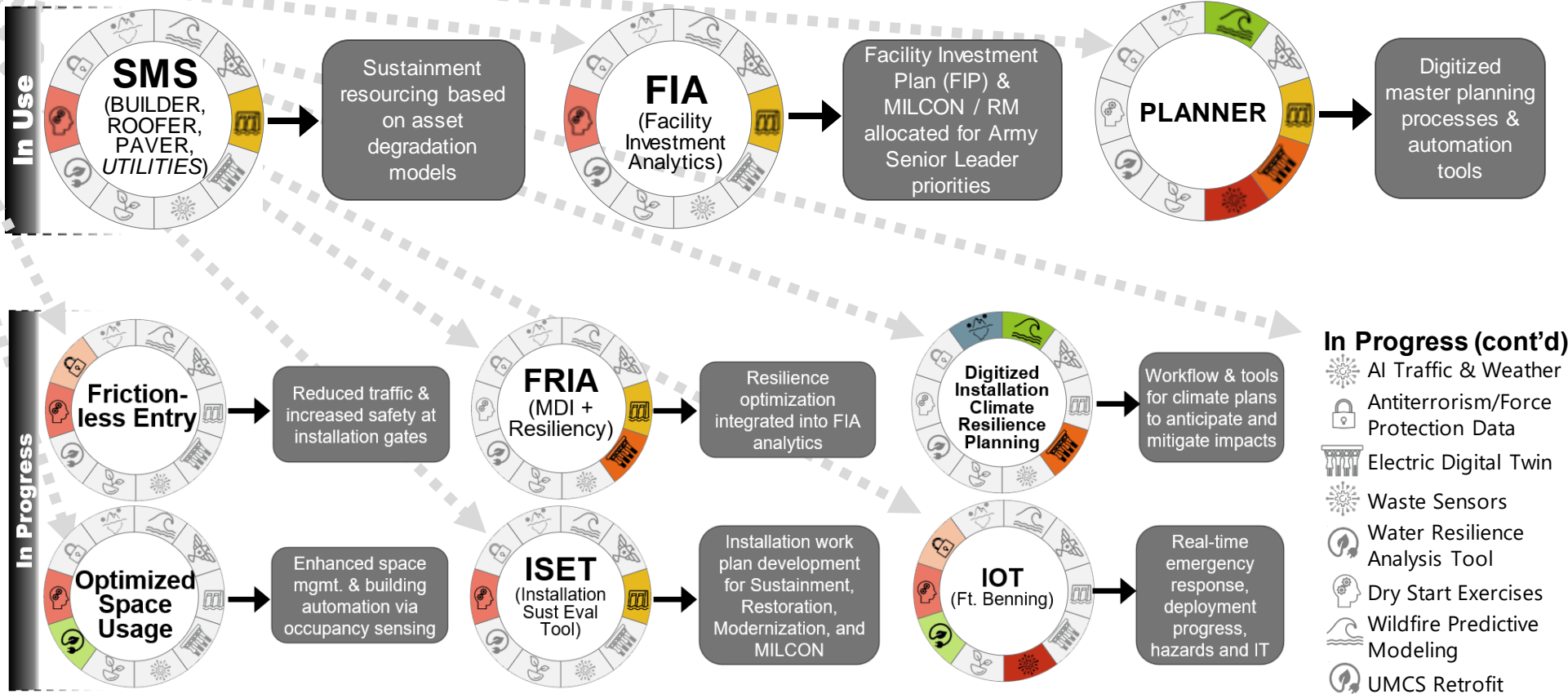
VTIME as part of the Modern Army Installation



Outcome:
 Installation ability in a contested environment to execute the Army Installations Strategy with a **common operating picture**, integrating legacy and modern data sources, models and analytics to support tactical to strategic decisions.

USACE R&D Priorities

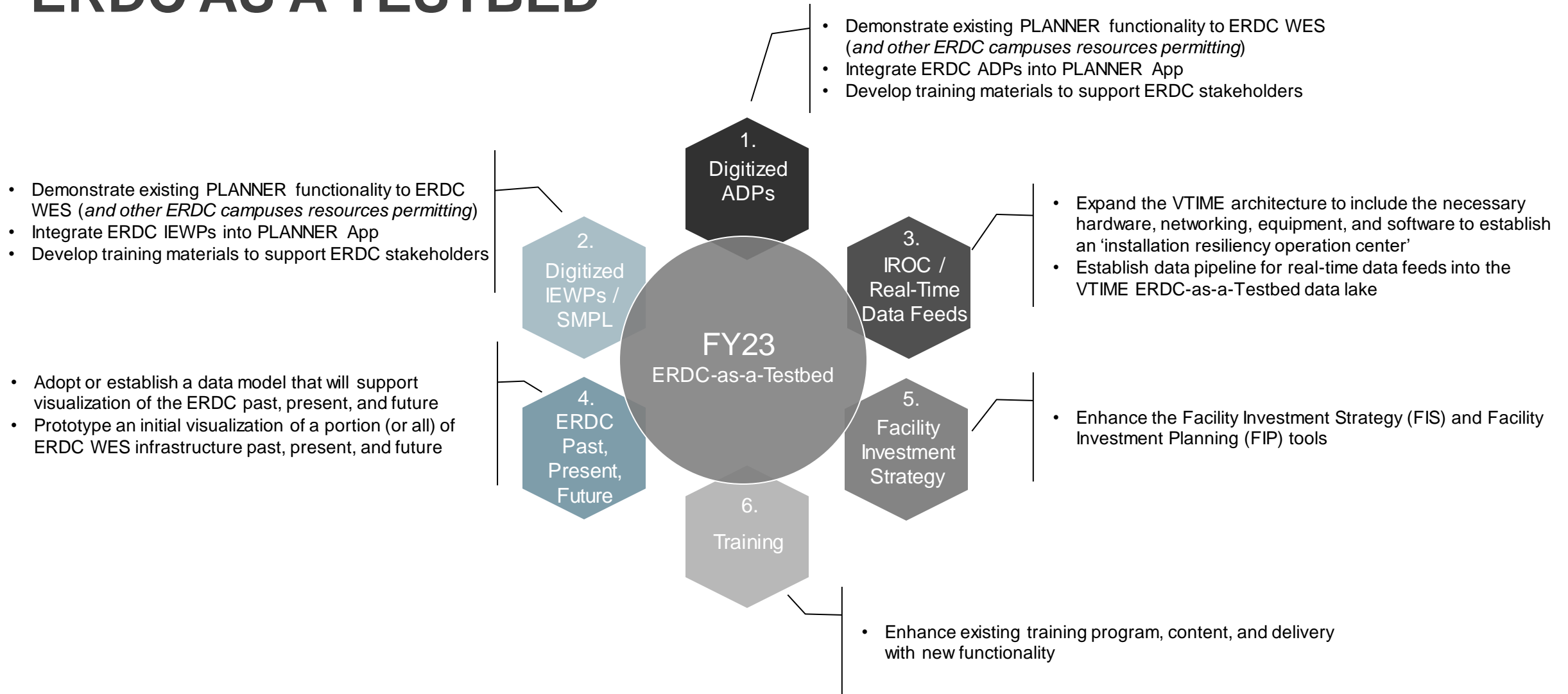
- Mitigate and Adapt to **Climate Change**
- Win Future **Wars**
- Modernize Our Nation's **Infrastructure**
- Support Resilient **Communities**
- Enable Smart & Resilient **Installations**
- Ensure **Environmental Sustainability & Resilience**
- Secure Reliable Installation **Energy**
- Revolutionize & Accelerate **Decision Making**
- Improve Cyber and Physical **Security**
- Protect and Defend the **Arctic**



In Progress (cont'd)

- AI Traffic & Weather
- Antiterrorism/Force Protection Data
- Electric Digital Twin
- Waste Sensors
- Water Resilience Analysis Tool
- Dry Start Exercises
- Wildfire Predictive Modeling
- UMCS Retrofit

ERDC AS A TESTBED





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LIVE DEMONSTRATIONS



Sustainment Management Systems (SMS) Summit 2023

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QUESTIONS / IDEAS / FEEDBACK

