



TECHNICAL CENTER VISION FOR VERIFICATION & VALIDATION

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FAA

Center Strategic Vision

Goal 1 - Support/Sustain/Modernize the NAS

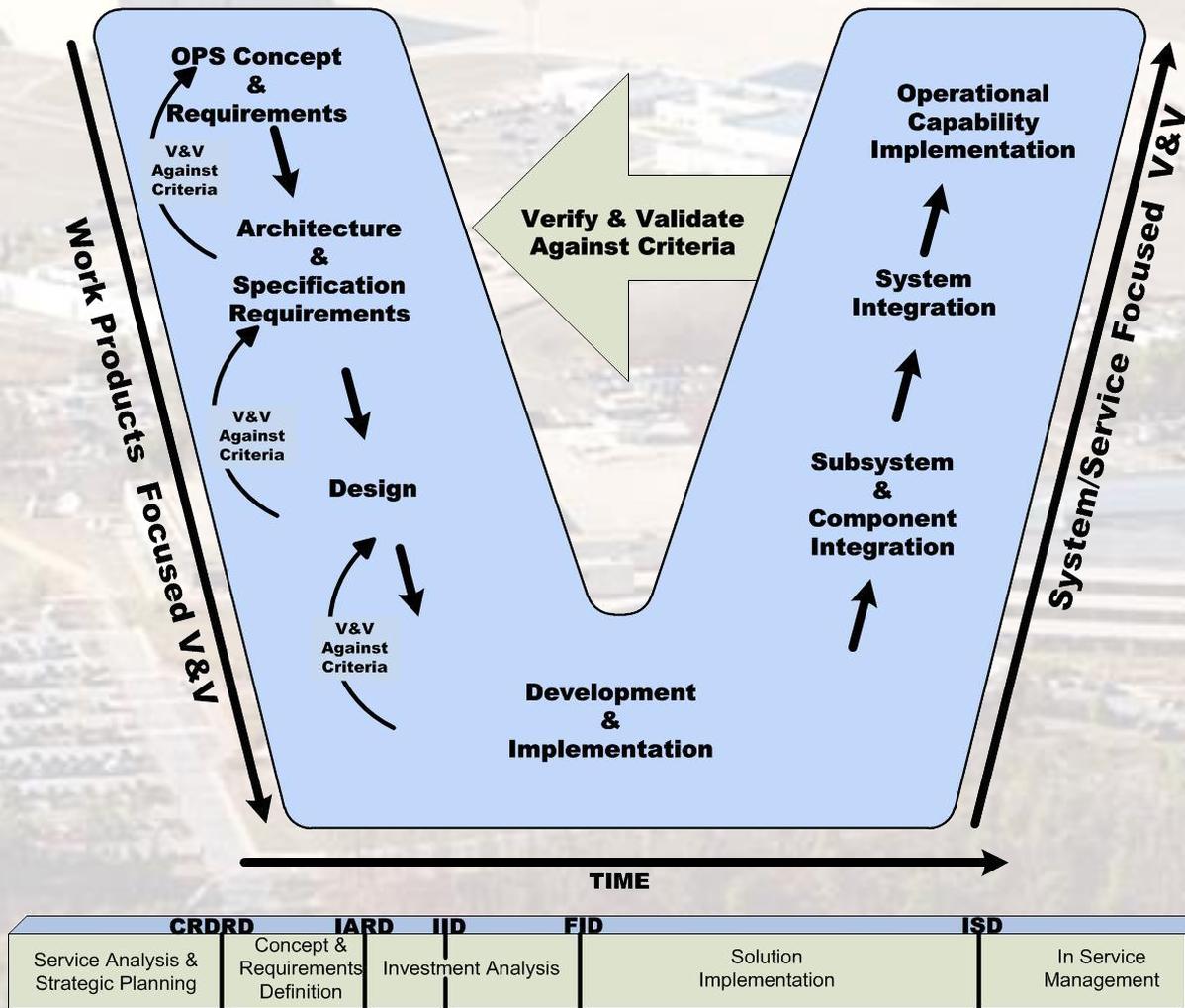
- Keep NAS operating ...
 - Efficiently
 - Safely
- ... throughout FAA Lifecycle



- Provide RDT&E support for FAA and NextGen
- Maximize the Capabilities of our Laboratories



FAA Lifecycle V&V



Center Strategic Vision

Goal 2 – Develop our Human Capital

- Strategic Hiring
- Reinvigorate and Sustain the CO-OP program
- Maximize our participation in STEM outreach to make WJHTC the technical employer of choice
- Explore options to broaden our technical base



Center Strategic Vision

Goal 3 – Prepare for Tomorrow's Challenges Today

- Unmanned Aircraft Systems
- Commercial Space Operations
- Cyber Security
- Future FAA and NextGen Capabilities



Center Strategic Vision

Goal 4 – Effective Strategic Outreach

- Communicate and demonstrate to industry, academia and government entities that the WJHTC is the “go to place” for integrated aviation solutions



Opportunities

- Identify and foster Strategic Partnerships
 - Industry
 - Academia
 - International
- Identify, Develop and Integrate the emerging Technologies in Future NAS Operations



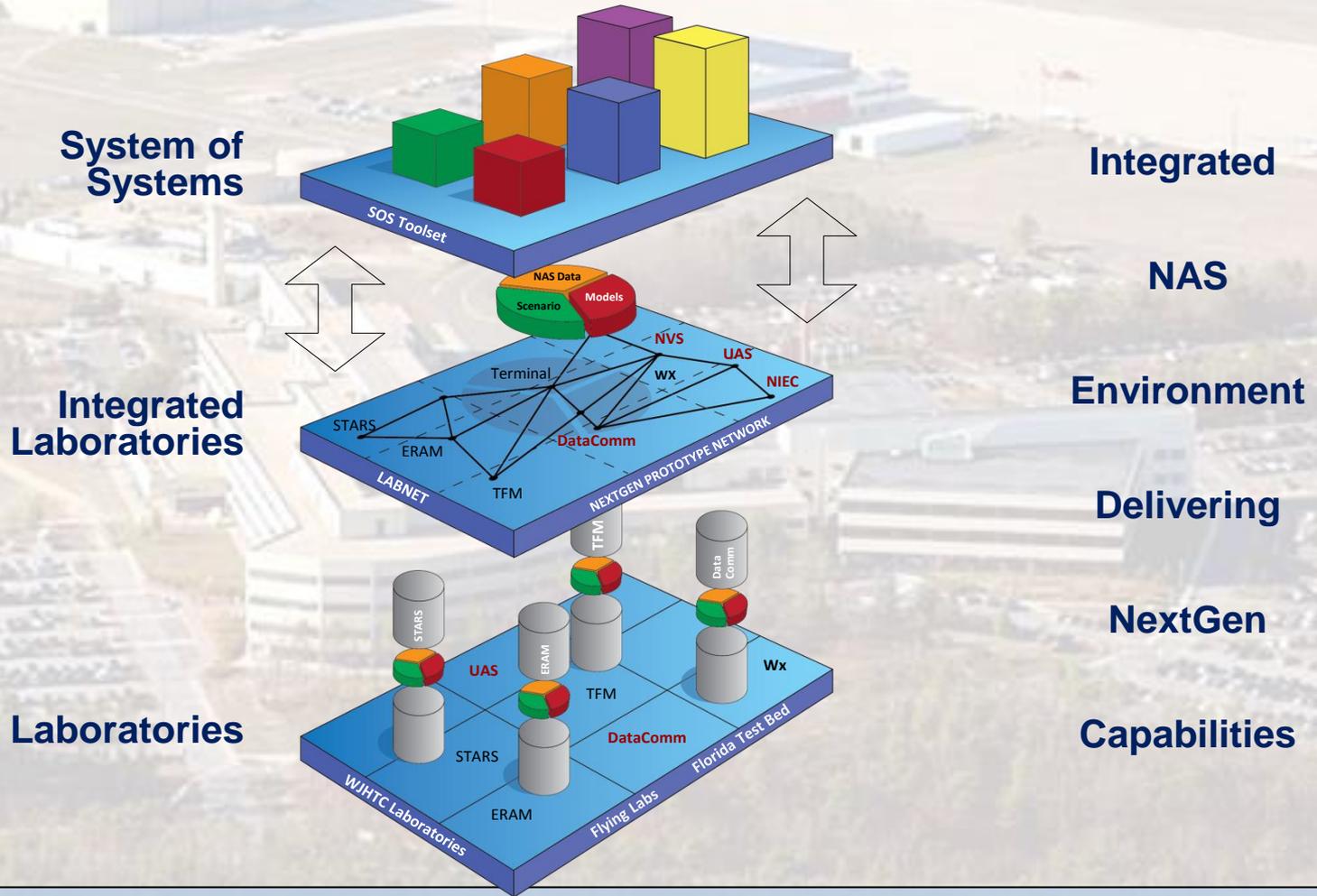
NextGen's Unique Test Requirements

- Increased interdependence on procedures, airspace, and technologies
- Avionics integral part of delivering NextGen capabilities
- System of Systems Verification and Validation:
 - Fundamental paradigm shift***
 - FROM single system and point to point systems integration
 - TO an integrated, digital, net centric architecture
- Robust real & virtual hybrid distributed test environment
- Validation of people/process/technology working in their intended environment to deliver operational benefits



Technical Center: NextGen Integration

World-class technical expertise and “state-of-the-art” facilities to support NextGen



NAS Experience & Expertise



NextGEN

Challenges

Evolving the Center to Support FAA's Future Aviation Research, Engineering, Development and Test Needs



NextGEN

Questions ?



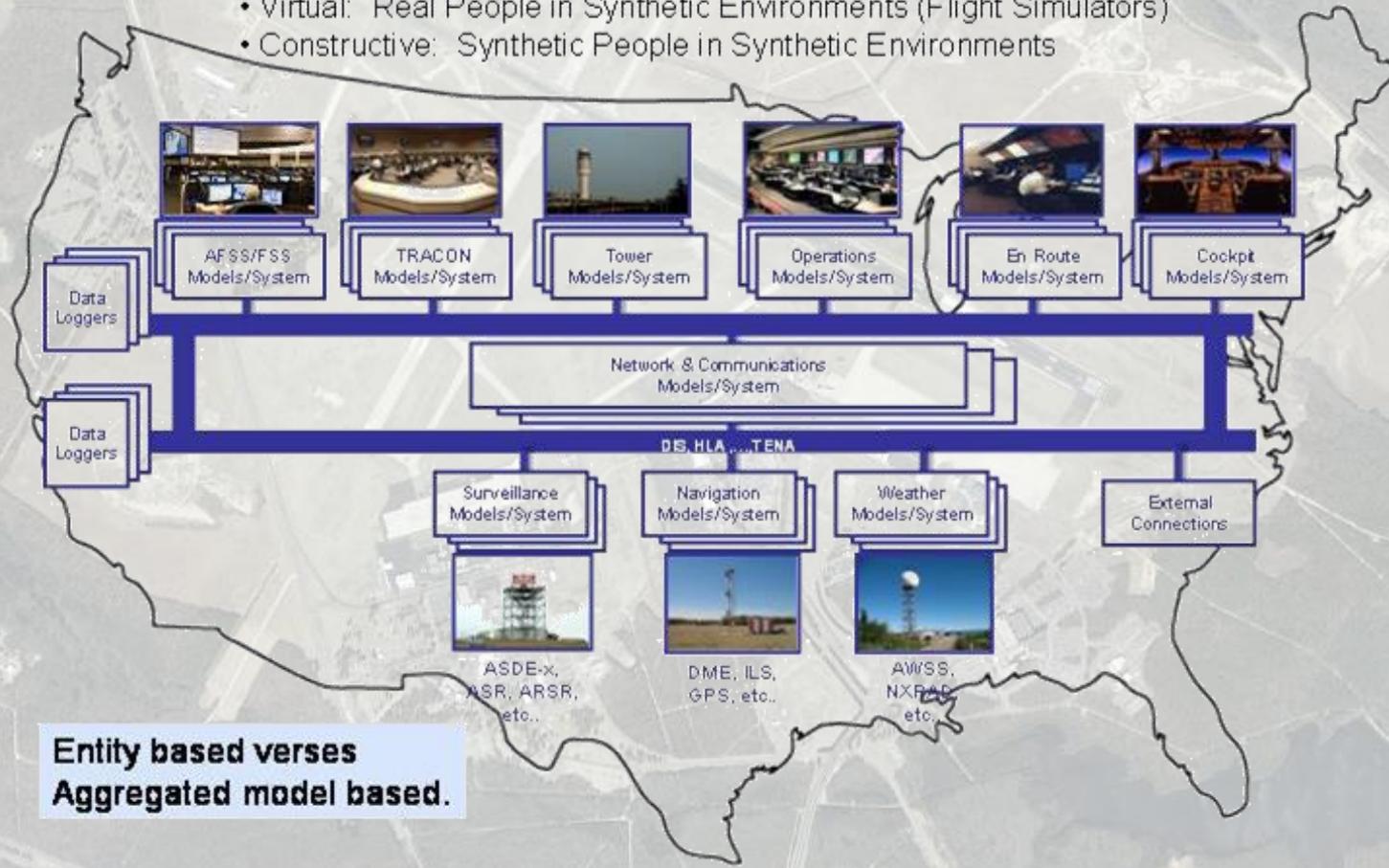
Next**GEN**

System-of-Systems V&V

NextGen Synthetic Environment

In combination, these components form the capability:

- Live: Real People in Real Environments (Laser Tag)
- Virtual: Real People in Synthetic Environments (Flight Simulators)
- Constructive: Synthetic People in Synthetic Environments



Strategy & Execution

