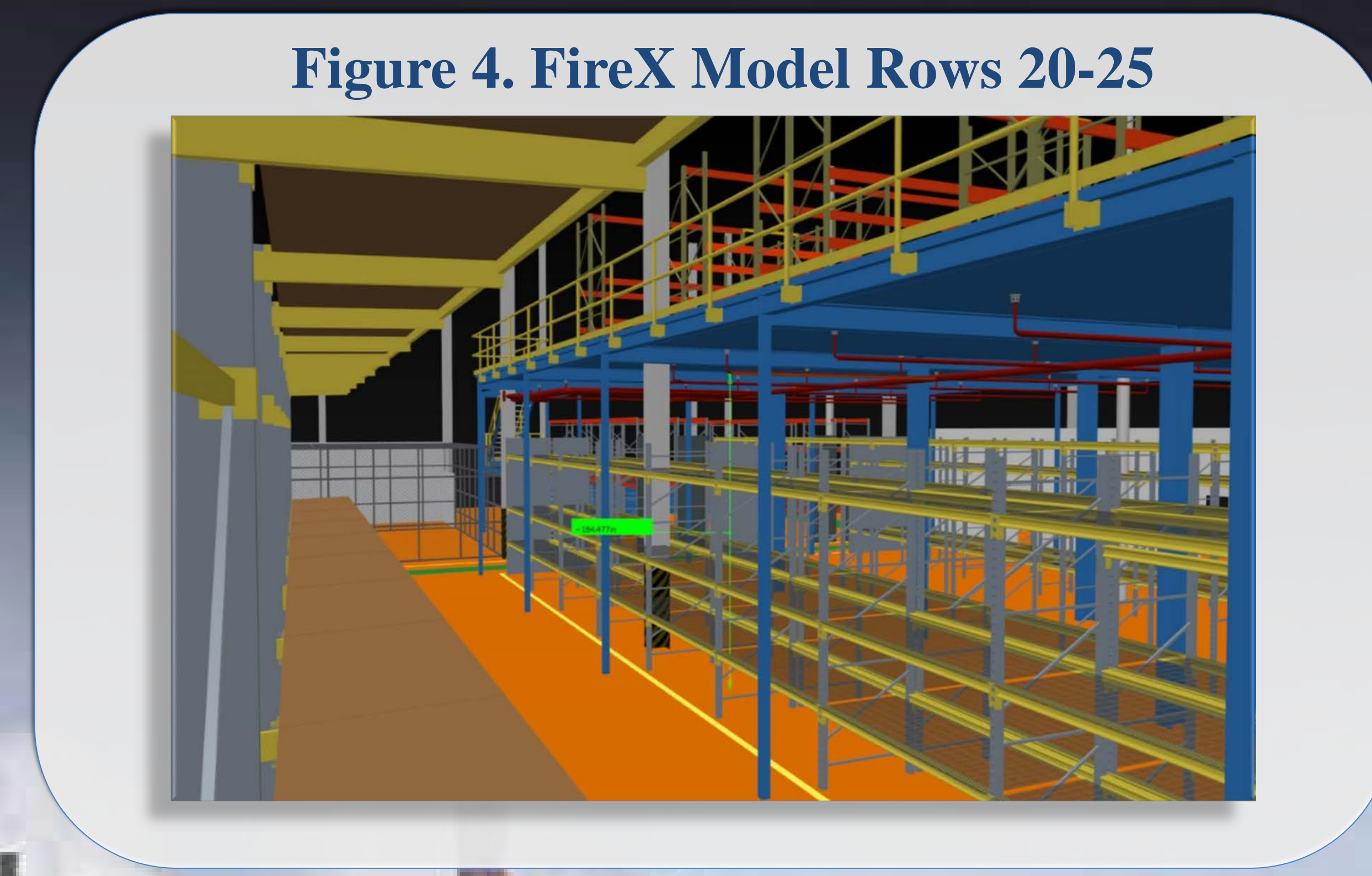
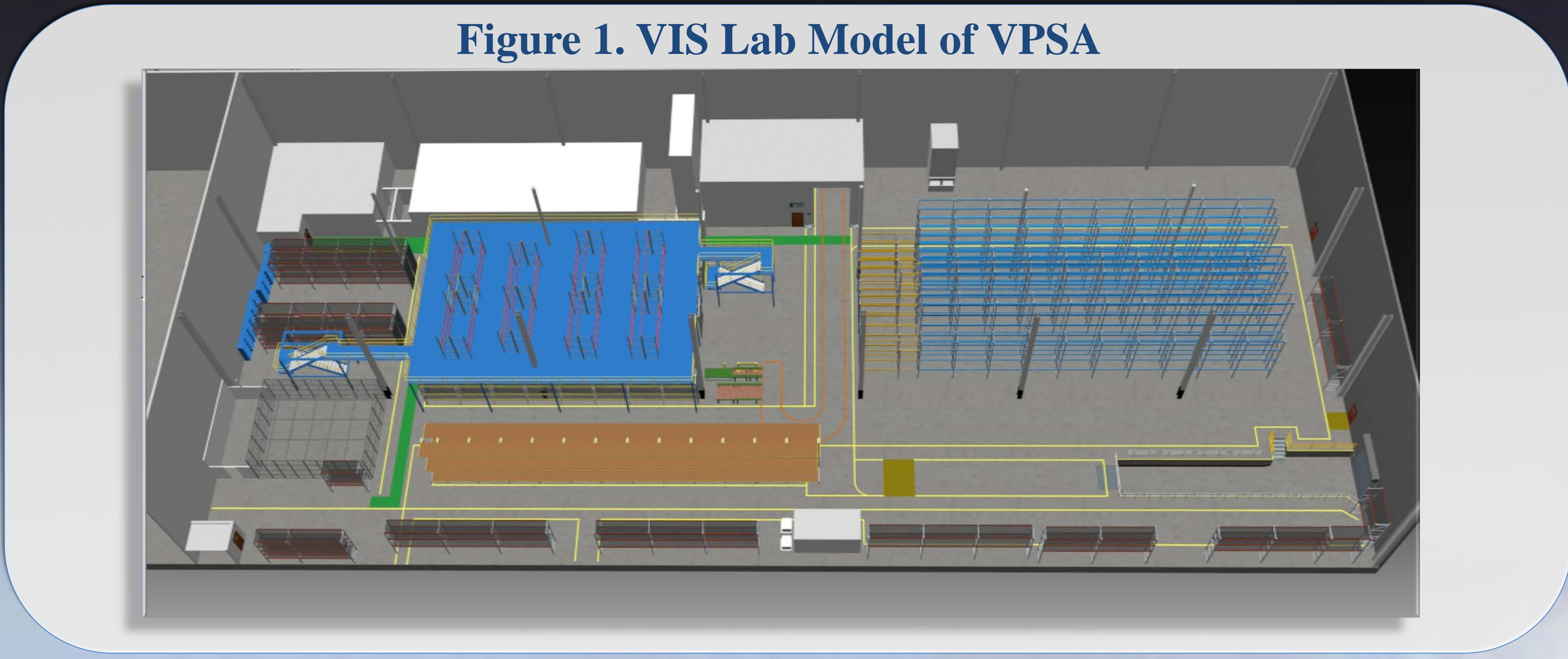


Logistics Warehouse Facility Utilization Study Vehicle Processing Support Area (VPSA)

Brittany Woods

Mentor: Kenneth Nowak, LX-L



About Me

Bethune-Cookman University
Bachelor of Science in Mathematics
Summa Cum Laude
May 2013

University of Central Florida
Master of Science in Industrial Engineering
Aug 2019

VPSA Overview

- Purpose:** Provide conditioned storage for flight hardware materials and temperature sensitive ground support hardware.
- Specifications:**
 - Over 11,000 items stored in 30,765 square feet
 - 4 storage columns for very small materials
 - Internal truck well serviced by two 5-ton bridge cranes
- Significance**
 - Provide storage options for large/ oversized items requiring AC

Duties

- Develop alternate options for optimizing warehouse space-VPSA
 - Study VPSA floorplan
 - Warehouse walk downs to map inventory
 - Review VIS lab model
 - Calculate current percentage of available warehouse space
 - Review large storage items (future storage)
 - Compile findings and recommendations
 - Collaborate with VIS Lab personnel to show potential future options
- Complete Logistics Engineering On-The-Job-Training package

Table 1. Available Warehouse Space (3/25/19)

Space Available in VPSA SQ FT	
	13068
Total Pallets Open	
	983
Overall SQ FT	
	26437
Total Percentage Available	
	49.4%

Milestones

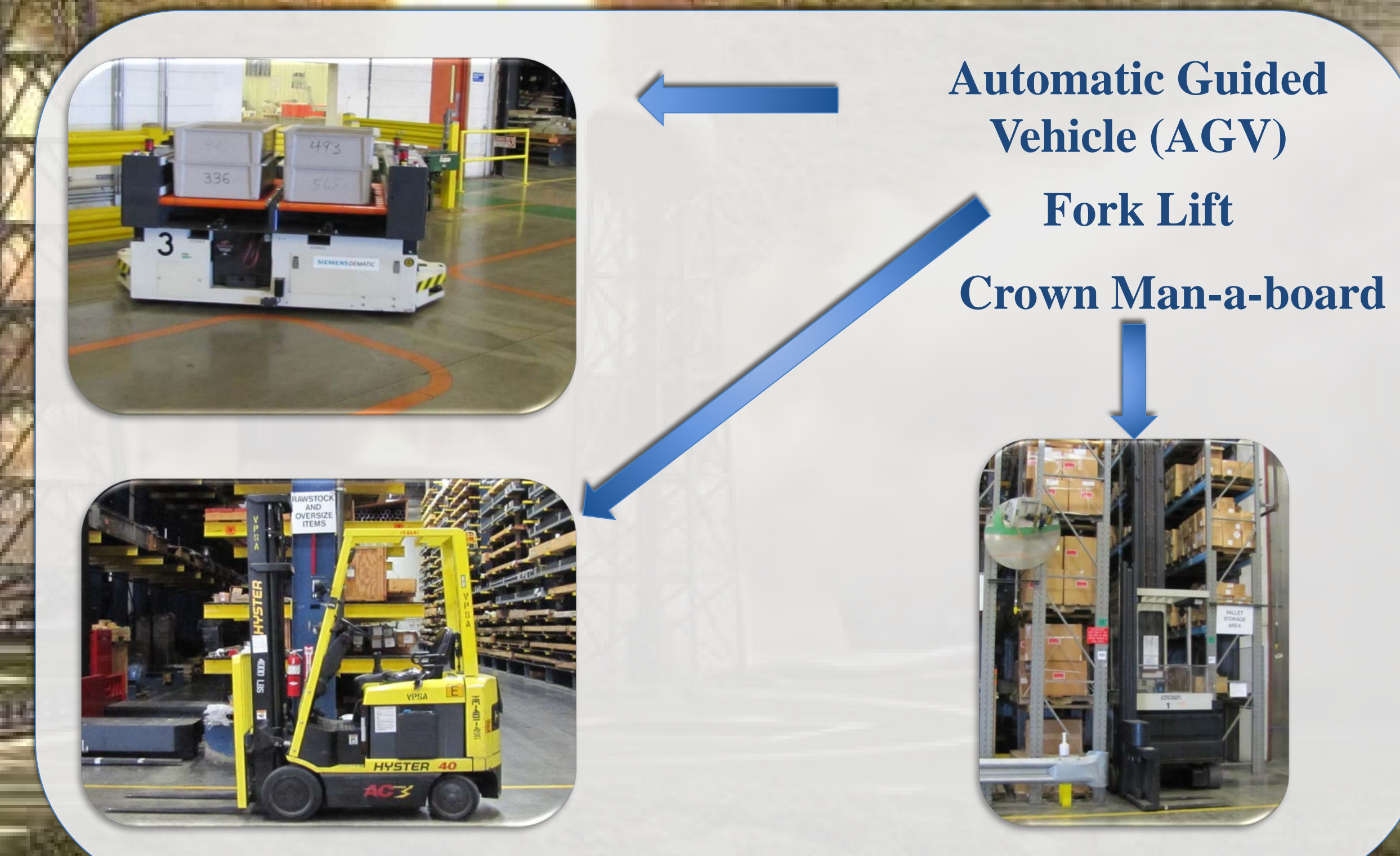
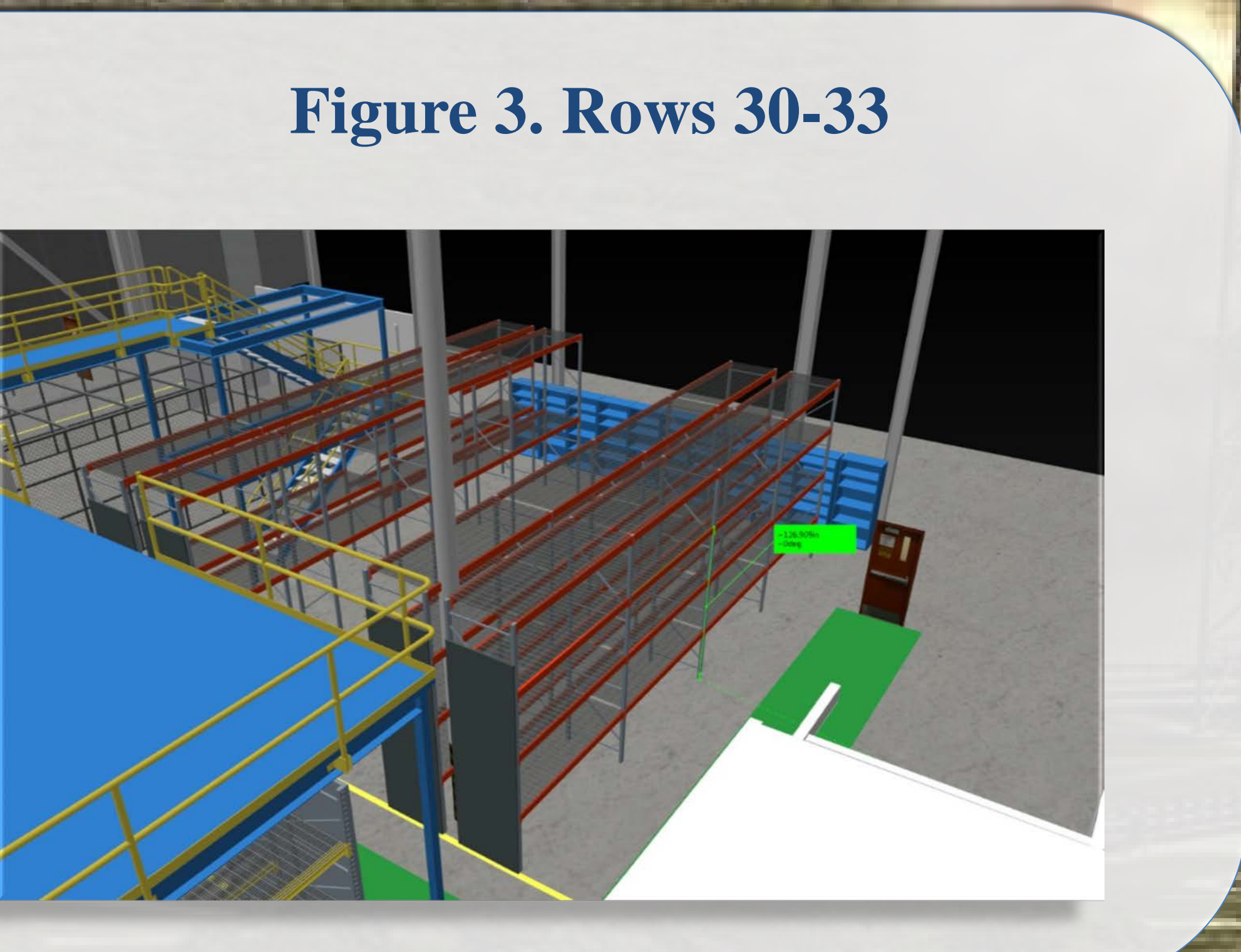
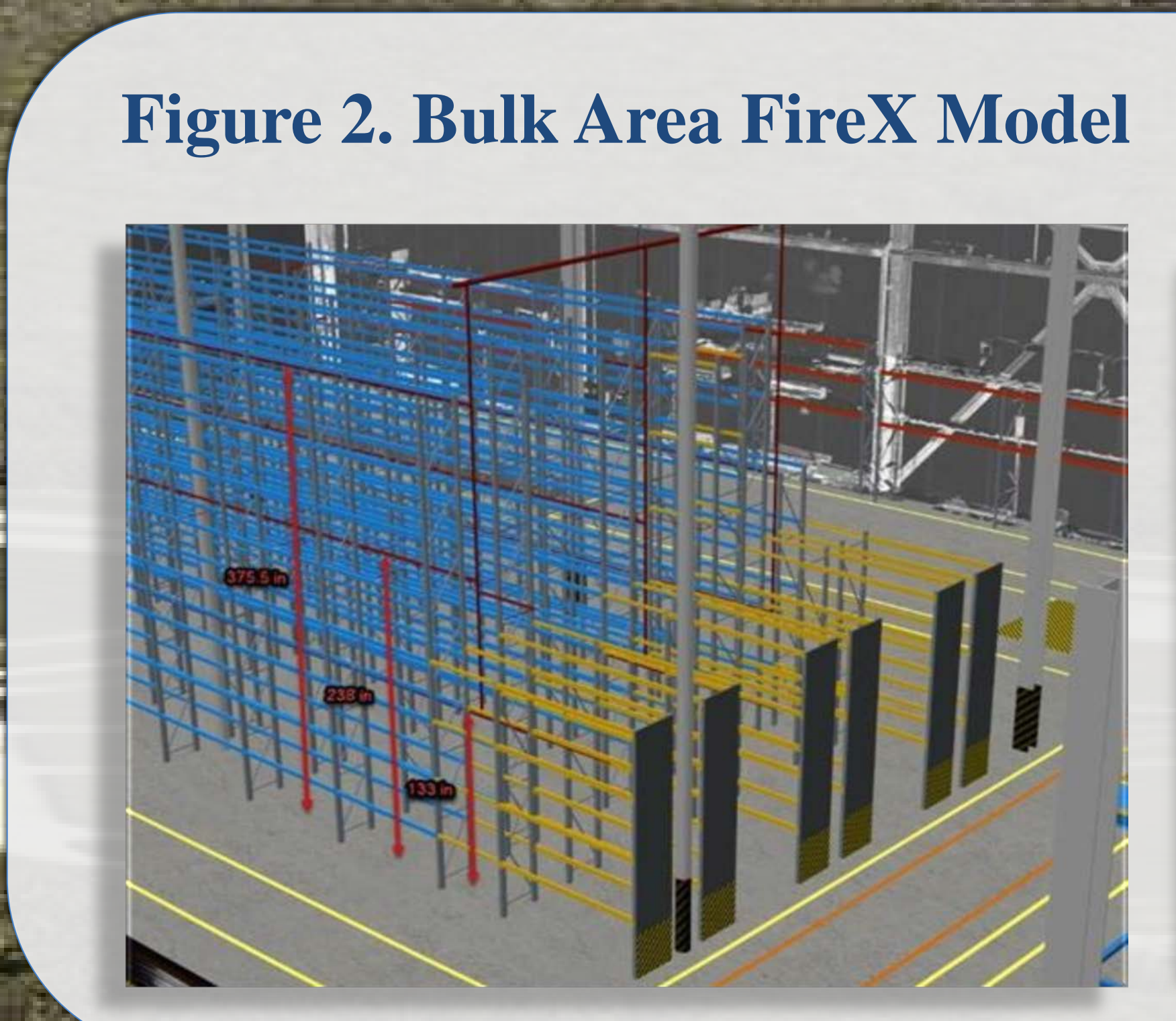
- Review VIS Lab model of VPSA 02/15/19
- Calculate current percentage of available space 03/25/19
- Compile findings and recommend options 05/23/19
- Work with VIS Lab personnel to model potential options 06/13/19
- Deliver formal presentation to EGS Program Logistics Chief and the TOSC Logistics Director TBD

Stakeholders

- NASA
- Test and Operations Support Contractor (TOSC)
- Design Visualization Group
- Future customers (SLS, Orion, etc.)

Skills & Competencies

- Teamwork
- Communication
- Problem solving
- Adaptability
- Share drive
- Warehouse Processes
- Safety procedures (PPE)



Accomplishments

- Identified inconsistencies within PeopleSoft Inventory System and physical locations in the warehouse
- Created a plan to optimize warehouse space

Future Research

- Investigate costs associated with enlarging or adding additional roll-up door