



North Carolina Aerospace Alliance



North Carolina's Role NewSpace Commerce



Richard Walls, P.E.
Aviation Director

November 2009
Elizabeth City, North Carolina

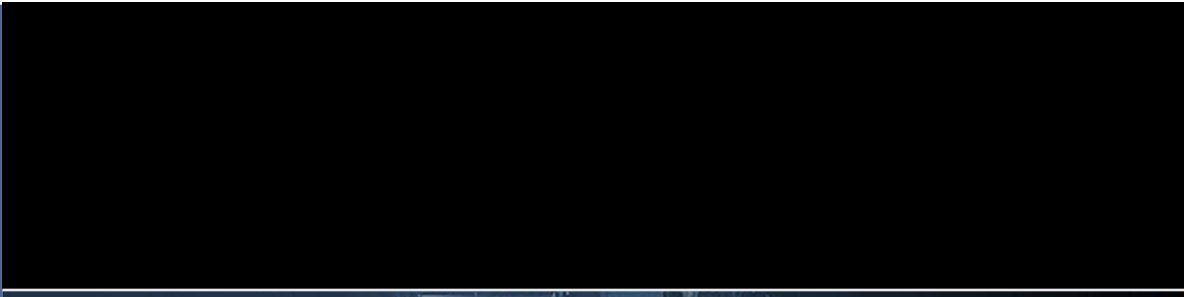
States with SpacePorts

- ▶ Mojave Air and Space Port - California
- ▶ Cape Canaveral SpacePort - Florida
- ▶ Spaceport America – New Mexico
- ▶ Oklahoma Space Port - Oklahoma
- ▶ Mid-Atlantic Space Port – Virginia
- ▶ Alaska Aerospace Corporation - Alaska



SpacePort Components

- ▶ Vehicle Delivery System
 - Launch Pad for Vertical Delivery Systems
 - Runway for Horizontal Delivery Systems / Logistics
- ▶ Launch Control Facility
- ▶ Payload Processing Facility
- ▶ Integration Facility – Launch Vehicle and Payload
- ▶ Transfer Facility
- ▶ Communications / Tracking Facilities
- ▶ Maintenance Support Facility



Issues

- ▶ Educate the Leaders on Importance of Space Commerce
 - Federal
 - State
 - Local
 - Military
- ▶ Integrate SpacePorts into our Multimodal Transportation Plan
- ▶ Preliminary SpacePort Site Selection
- ▶ Funding

Logistics

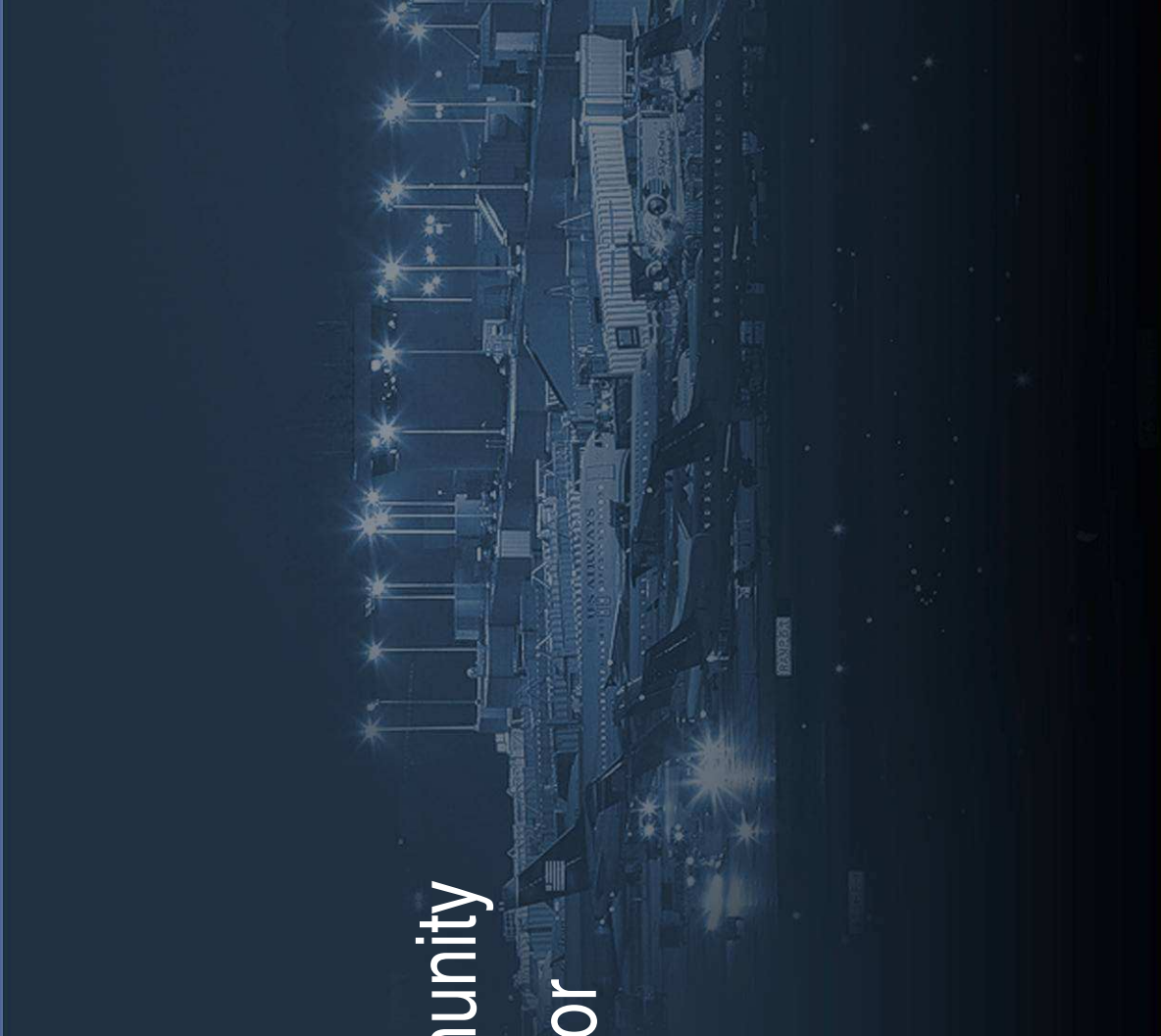
- ▶ Authority
 - Public / Private Partnership
 - State Ownership / Shared Facilities
 - Private Ownership
 - Federal / Military Ownership
 - Independent Public Authority
- ▶ Strategic Partners
 - Government – Federal / State / Local Communities
 - Local Interest
 - Educational / University
 - Private Sector
 - Launch Facilitators
 - Product Demand

Logistical Issues

- ▶ Site Selection
 - Support Infrastructure
 - Clear-Down Range Facilities
 - Alternate Contingency Landing Facilities
 - Ground Support Stations
 - Vertical and/or Horizontal Delivery Systems
 - Long Runway – Recovery Operations
 - Airborne Launch Systems
 - Rocket Assembly Building
- ▶ Environmental Assessment
- ▶ FAA Launch Permit
 - Pre-Application
 - Final Application

Funding

- ▶ Federal
- ▶ State
- ▶ Local Community
- ▶ Private Sector
- ▶ Innovative



Going Forward...

- ▶ Low-Cost Space Access
 - Leadership
 - National
 - International
 - Tourism
 - High Tech Aerospace Jobs
 - National Defense
 - Energy Production
 - Education / Science
 - Pharmaceutical Development



North Carolina Aerospace Alliance



Thank you

**Richard Walls, P.E.
Aviation Director**

**November 2009
Elizabeth City, North Carolina**

