



Innovation in Rural Economic Development

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SoMD before and after WWII, and 1990's BRAC process



Pre-1943

- Agriculture
- Watermen
- Exclusively rural
- On a peninsula

Post-1943

- Established naval aviation test center
- Introduction of new tech workforce
- Ag/watermen still a large part of economy



1990's BRAC process

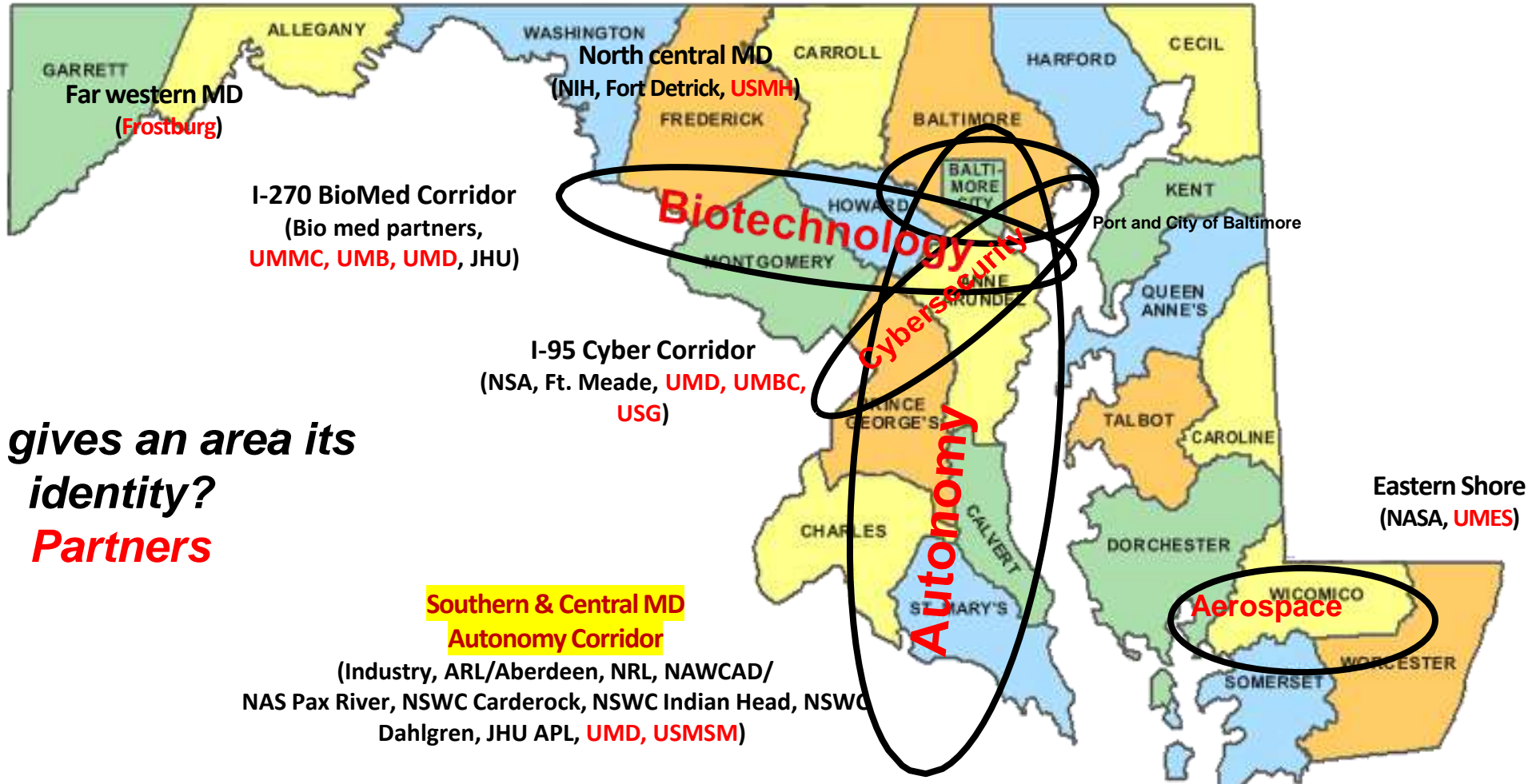
- Brought **naval** aviation RDT&E, sustainment and support to NAS Patuxent River
 - **Doubled** the population of Saint Mary's County in ten years
 - Economy became **dependent on technology and DoD** (80-85%)
- Changed nature of the region forever... **still rural, remote, and high quality of life**



The value of *research*

- Regional/state focus is not operations, but rather research
- Impacted by budgetary impacts, good/bad
- Research drives development – economic, education, regulatory, quality of life
- Revenue from research (jobs!)
 - Entrepreneurs, start-ups
 - Pivots
 - Location, location, location...
- *How do we build it for SoMD?...*

Our vision of high-tech economies



What gives an area its identity?
Partners

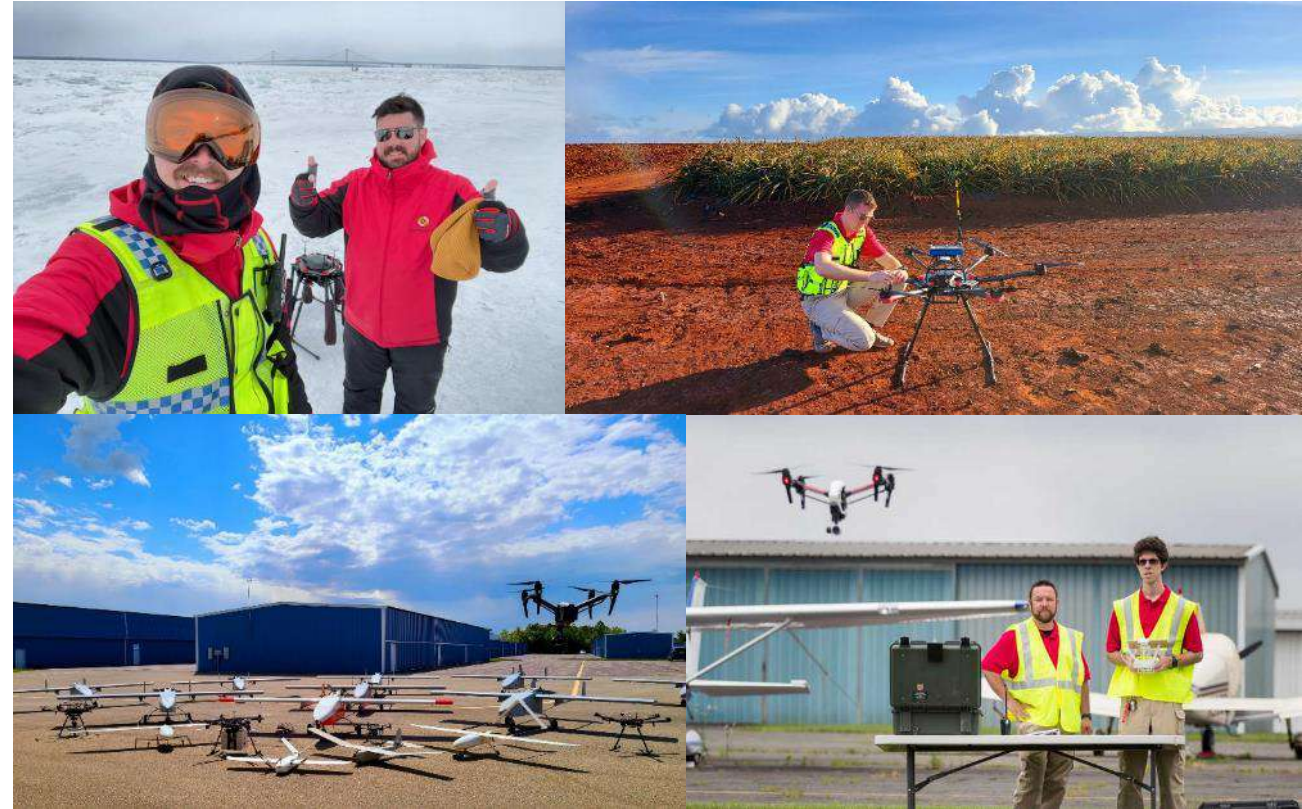
Autonomy Corridor

- Effort focusing on technology research, education and economic development
- Government agencies, academia, and industry



Open-Air UAS Flight

- UMD UAS Research and Operations Center (UROC)
 - Work with the Federal Aviation Administration (FAA) and industry on developing regulations for future use cases
 - Guidance for flying a range of applications and vehicles
 - Rigorous airworthiness evaluations
 - Needs assessments
 - Locally at the AeroPark and worldwide



USMSM SMART Building and UMD Matrix Lab

- Hosting multiple **USM** degree-granting institution partners
- The **MATRIX Lab** - researching uncrewed, automated and autonomous systems across all domains with industry, government and academia partners
 - **Innovation** – how do we learn to trust autonomy and make it work for us
 - **Education and training** – creating the workforce of the future
- Attract worldwide talent
- Basic to applied to operational research
- Build off existing **UMD** capabilities, partner with **Navy** and others - growing current partnerships and fostering new ones
- Take advantage of colocation and the work of **UAS Research & Operations Center (UROC)**
- **Bring state/USM/UMCP programs and resources to SoMD**





AEROPARK

INNOVATION DISTRICT

where ideas take flight

Creating an Innovation District in a rural county

- What is an Innovation District?
- Why create one?
- How do you create one?



What is an Innovation District?

Geographic areas where institutions and businesses cluster to drive innovation, accelerate product development, and assist with commercialization of new technology.

- ⇒ Facilitate Collaboration
- ⇒ Promote Cross Pollination of Ideas
- ⇒ Leverage Institutional Relationships
- ⇒ Provide Mixed-Use Amenities
- ⇒ Enhance Walkability
- ⇒ Create a Strong Identity & Sense of Place





Why create an Innovation District?

- Creates a work, live, play environment
- Collaboration and cross pollination of ideas facilitates business to business relationships, innovations, start up businesses





Innovation Districts Fuel the Economy

- The density of the district allows for walking, biking, and engaging with people on the street.
- The mixed-use nature of innovation districts means workers can live within or close-by, can eat, shop, be entertained. This attracts workers.
- The focus on aviation and autonomous vehicles creates an industry cluster of businesses that can interact with each other within the district.
- Where innovation happens, new businesses form and existing businesses grow.

How do you create an Innovation District?

- Collaborate with partners from private sector, educational institutions, government
- Identify a target industry – autonomy and aviation
- Identify or development key assets
- Master Plan



Components of an Innovation Ecosystem



Economic Assets

Firms, Institutions, and Organizations

Physical Assets

Buildings, Open Spaces, Streets, and Infrastructure

Networking Assets

Relationships, Opportunities, and Activities

St. Mary's County has an Approved Master Plan



St. Mary's County Airport Innovation District Master Plan

The Commissioners of St. Mary's County Development
Calvert-St. Mary's Metropolitan Planning Organization

November 5, 2019

 Torti Gallas + Partners
Toole Design Group

Key Assets

- USMSM - SMART Building and MATRIX Lab
- UMD Research and Operations Center
- SMC Airport – Terminal
- TechPort
- Private Sector Firms
- NAWC-AD – SOMD Tech Bridge





Thank you!

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