

The Old Dominion University Transportation Research Cluster

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Outline

- Trans Res Cluster background & mission
- TRC Organizational form
- Working relationship
- Strategies for developing the program and reputation

Consider ODU broader context

- Access to education
- Intellectual capital formation
- Creation, transfer & application of knowledge
- Internationalization
- Transformation & change (IT)
- Promote economic development
- Integrating students into research
- Interdisciplinary research, education, & service

Background: Elements of success

- Opportunity: Fresh start
- Relationships—internal & external
- Development—new program & projects

Background: View of transportation

- Transportation is a story of innovations
- Transformations & change: Mobility, energy, environment, security, natural disasters, health
- Trans is “Glocal problem”--crosses spatial scales
- Inter-disciplinary: Engineering disciplines, social, economic, health

Mission: ODU-TRC

- Mission:
 - Bring together transportation expertise on ODU campus
 - Promote research to create transportation alternatives
- Focus on:
 - Mobility, safety, environmental problems
 - Technology, policy, land use solutions
 - Integrated solns to address dynamics & uncertainty
- Develop cooperative relationships with our sponsors to ensure that we address important issues
- Produce implementable research

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TRC faculty & staff

TRC will work to improve transportation systems

- Faculty/Research fellows
 - Faculty & researchers from ODU & other VA universities will be encouraged to form teams
 - Collaborations to result in projects
- Support can be provided to teams
 - Administrative support staff
 - Technical support, including library & information management, programming, graphics & design

TRC Policy board

- Distinguished representatives from academia, state government & other entities to be invited to give presentations
- Private-sector representation is necessary

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TRC working relationships

- Research fellows from many disciplines
- ODU
 - Various centers, e.g., VMASC
 - Departments, e.g., Psychology
- Federal agencies & centers
 - US DOT (FHWA, FTA, RITA, etc.)
 - US EPA
- Foundations
 - RWJF
 - AAA Foundation for Traffic Safety

Working relationships

- State & local agencies
 - VDOT
 - Local governments & metro planning orgs
- Consultants & private sector
 - Battelle, CH2M Hill
 - GM, FORD, Toyota
- Universities
 - VA public universities (UVA, VT)
 - Other U.S. & international universities

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Build reputation...

- TRC is a setting for faculty & researchers to accomplish interdisciplinary trans research
- TRC will develop & enhance “capitals”
 - Human
 - Social
 - Economic
 - Technological
 - Collaboration

Build human capital

- Engage faculty fellows, graduate & undergraduate students
- Obtain resources for support staff

Benefits of human capital formation

- Win-win: VMASC & other centers & faculty
- SAFETEA-LU: 10 Tier 1 transportation research centers—\$1 M/year for 4 yrs
- Eligibility (work toward meeting it):
 - \geq \$1 mil in trans research each year for last 5 years
 - \geq 5 graduate degrees awarded per year
 - \geq 3 tenured or tenure-track transportation faculty
 - \geq 20 refereed publications during past 5 years

Develop social, economic & technological capital

- Internationalization
 - Partnerships, international training, funding
- Economic development
 - Private sector involvement
- IT applied to Transportation Systems
 - Driver, vehicle & roadway interactions
 - System efficiency

Create collaboration capital

- Participate in ODU-wide initiatives
- More collaborations:
 - Enterprise Research Centers
 - Engineering
 - Other Departments

Selected trans facilities & activities

- GE I-Sim driving simulator
- Maritime Institute
 - Shipping, ports, logistics
- Virginia Modeling, Analysis, and Simulation Center
- Other?



TRC: Invitation to get involved

- Please tell us about yourself...
- What are the potential funding sources?
- How can we collaborate to achieve common goals?
- Other important issues not covered here?