

Patapsco-BWI Greenway – A Regional Connector LARC 642 – Dr. Chris Ellis (Fall)

Bridging a crucial gap in this Howard-Anne Arundel trail system opened up a major Ellicott City to Annapolis ped-bike route with economic spinoff benefits at key nodes. It also facilitated connections to Baltimore City and County trails. Student designs will be the basis for implementation.

Water Quality Protection – Educating the Public CPSP 249E – Dr. Nicole Mogul, Mira Azarm (Spring)

Students in this course designed an entertaining exhibit that illustrated stormwater management and water treatment processes so as to educate school children, and their parents, on the importance of clean water.

Annapolis Capacity Building

A GIS Land Use Database for the City

Dr. Chao Liu (Summer 2016)

A special summer effort was launched to execute this very ambitious product, the City's top priority. All land uses were classified at the parcel level in GIS, using various data sources, becoming the basis for other PALS projects.

Eastport Historic Survey

INST 742 – Dr. Richard Marciano (Spring)

This GIS-based inventory of historically significant properties in this waterfront neighborhood included detailed background research, field visits, and photo documentation to support preservation and a national district nomination.

Balancing Land Use and Traffic on Forest Drive

URSP 788 – Uri Avin, Dr. Chao Liu (Fall)

What land use changes might occur along this four-mile corridor and can traffic impacts be managed? Software training and scenario analysis using CommunityViz and the new land use database provided answers as well as a generic tool.

Economic Development

Development Trends and Redevelopment Potential

URSP 688M – Dr. Chao Liu (Spring)

The new land use database was mined to assess land use and market trends over the past decade and to identify redevelopment opportunities using factors like underdevelopment, land/improvement values, and age.

Opportunities and Constraints in the Marine Industry URSP 708 – Dr. Scott Dempwolf (Fall)

This planning studio explored the strength of the maritime industry and its potential to support an innovation district and makerspaces. Local and national trends informed the work. Necessary zoning district changes were also identified.

Environment

The Waterfront: Design for Resilience

LARC 748 – Dr. Vikki Chantse (Fall)

This advanced studio created conceptual plans and design solutions to help absorb coastal storm surges and address sea level rise in ways that preserve the area's historic waterfront character and role as a tourist magnet.



Annapolis Waterfront

PALS is part of the National Center for Smart Growth and is funded by a modest charge per course from the participating jurisdictions and a grant from UMD's Office of the Provost. PALS covers all course-related travel expenses and provides additional incentives for participating faculty. PALS courses fulfill the General Education Program requirements for service learning.

PARTNERSHIP for ACTION LEARNING in SUSTAINABILITY



PALS is harnessing the knowledge and experience of University of Maryland faculty along with the energy and ingenuity of the University's students to advance environmental, economic and social sustainability in Maryland's communities. For the 2016-2017 academic year, UMD has joined forces with Anne Arundel County and the City of Annapolis to build on their sustainability efforts. This involves 400 students, 11 schools and 26 courses across College Park.



County Executive Steve Schuh

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Visit the PALS website at www.smartgrowth.umd.edu/pals

Anne Arundel County

Capacity Building

Enhancing Public Access to the Water

[ENCE 422 – Dr. Qingbin Cui \(Spring\)](#)

Students analyzed the cost and feasibility of installing mooring ball anchors at strategic locations to increase options for boaters without access to private piers and marinas, recommending a sustainable program over time.

The Potential for County/City Shared Service Delivery

[ECON 454 – Ken Coriale \(Fall\)](#)

The City of Annapolis and Anne Arundel County have a long-standing legislative and tax relationship for service provision, but a new organizational structure may offer efficiency and cost-savings. Students examined the potential cost savings of combining selected city and county services.



BWI Airport

The Feasibility of Express Bus: Annapolis to BWI

[ENCE 472 – Dr. Paul Schonfeld \(Spring\)](#)

This graduate transportation engineering course helped the County expand transit options by testing the potential usage, service levels, traffic effects and costs of such a bus service. The NCSG's travel model provided ridership estimates.

Enhancing Information Management in the County

[INFM 736/737 – Dr. Kathy Weaver \(Fall/Spring\)](#)

Numerous projects are included in this yearlong effort: Resources for Inmate Reentry; Digitizing Employee Wellness; Infection Control Database; Non-Emergency Systems Survey; Mobile Crime App Design; Visualization of Healthcare Quality Metrics; Senior Needs Assessment

Economic Development

Tipton Airport Market Study

[URSP 788 – Melina Duggal \(Fall\)](#)

This high priority project addressed the potential of this general aviation airport to maximize corporate jet traffic, facilitated by a proposed runway extension. Market analysis supported by case studies and interviews inform recommendations that were also enhanced by Engineering faculty input and the Maryland Aviation Authority.

Farm to Fork – Opportunities and Constraints

[AREC 489P – Phillip Gottwals \(Spring\)](#)

Students analyzed the varied programs that connect local food producers with communities, food deserts, restaurateurs, and schools. Their recommendations also addressed public health issues and supported agriculture-based economic development.

Revitalizing Odenton Town Center

[LARC 340 – Dennis Nola \(Fall\)](#)

Creating a civic open space that could function as the core of a new growth area was the challenge facing this studio. The selected site's constraints focused the solutions created. An interdepartmental competition to design a large-scale gateway to the park yielded numerous ambitious proposals.

High School Students as Business Entrepreneurs

[TBD \(Spring\)](#)

High school students can benefit from the hands-on experience that comes from tackling the day-to-day issues of running a real business. UMD students developed a concept for a student-run business that fitted within the goals and resources of AACPS.

Social Equity

Deep Challenges: Heroin and Youth Suicide

[HLTH 391 – Dr. Sharon Desmond, Dr. James Butler \(Fall/Spring\)](#)

Working with the Health Department on heroin addiction and with the Crisis Response System on suicide prevention among youth, students conducted interviews, compiled and analyzed data and recommended filling some system gaps.

Health Hot Spots

[URSP 688L – Dr. Chao Liu \(Fall\)](#)

Students applied CAD and eMED data in a GIS analysis and synthesis of spatial distribution and data systems that highlighted hot spots for priority emergency medical calls to facilitate county planning.

Can Transit Better Support Lower-Income Workers?

[URSP 688M – Dr. Chao Liu \(Spring\)](#)

Working with the County's Department of Aging and Disabilities, students analyzed connections from households to employment nodes ("welfare to work"), assessing options for improved accessibility.

Video Storytelling in Anne Arundel County

[JOUR 368V/668V – Bethany Swain \(Fall/Spring\)](#)

Students developed videos around topics including the heroin epidemic, rain tax (public education and environmental issues), vocational and career preparation at the Center for Applied Technology, and finding adoptive/foster parents for older children.



Environment

A Master Plan for the Arlington Echo Campsite

[LARC 341 – Dr. Chris Ellis \(Spring\)](#)

This design studio developed a master plan that balanced the 24 acre site's forest and waterfront ecologies with its use for public school student and adult education programs. The plan includes recommendations for a net-zero building replacement to provide office and teaching space.

Conserving Energy in County Facilities

[ENCE 602 – Dr. Qingbin Cui \(Fall\)](#)

Students tracked the energy use of all County buildings and facilities to determine how they use energy, the largest users, peak demand users, and energy demand per square foot, developing recommendations for enhanced conservation.