Feature Writing
Course: JOUR371 Faculty: Marlene Cimons
Feature writing gives journalists the opportunity to be creative, convey a compelling narrative, or chronicle an unfolding story. This project enlists the creativity of UMD’s journalism students to report on some of the PALS projects and tell the story of the University’s partnership with the City.

Greenhouse Gas Inventory
Course: URSP688 Faculty: Sean Williamson
In order to better assess and manage carbon emissions, a key metric of community sustainability, Frederick is working with students to learn about their energy fuel mix and consumption patterns and costs via a carbon inventory for municipal buildings. They are making recommendations for reducing greenhouse gas emissions and advancing related sustainability goals.

Development Plans for Surplus City Properties
Course: RDEV688I Faculty: Margaret McFarland, J.D.
As part of a capstone real estate development course, students are targeting a key City property. They are conducting a market analysis, proposing a design-based development program, calculating construction and soft costs and identifying potential financing. The several alternatives developed provide feasible site development options for the City.

East Frederick Rising Industrial Redevelopment
Course: URSP688V Faculty: Dr. Scott Dempwolf
The East Frederick Rising Vision Plan (EFR) contemplates significant mixed use growth and land use succession which may have significant impacts on two groups: current industrial land users and new manufacturing startups. This course undertakes an industrial land use study for East Frederick to determine current conditions, likely impacts and planning options for the City as it implements the EFR Plan.

Downtown Architectural Tour Guide
Course: HISP 655 Faculty: Dr. Don Linebaugh
Frederick, has an award-winning historic district. This tourist destination and the City’s preservation efforts play a key role in its economic growth. A missing ingredient is an architectural walking tour guide to promote tourism and highlight the area’s architectural and social significance. Both brochure and electronic versions are being created.

Jefferson Street Corridor Revitalization
Course: ARCH700 Faculty: Matt Bell
The revitalization of a historic city is no easy feat. In this project students, working with local stakeholders, are documenting and analyzing site-specific and corridor-wide opportunities and constraints for redevelopment. Their design proposals range from building to neighborhood scales, incorporating public spaces, building fabric/type.

Selected Industry Analysis
Course: BUMO758K Faculty: Dr. Protiti Dastidar
To enhance its business environment, the City is enlisting this graduate business course to analyze Frederick’s business conference potential and corporate airport potential and competition. Students’ recommendations are helping position and market Frederick’s new conference center and its Municipal Airport.

Promoting Local Businesses
Course: BUSI758R Coordinator: Pammi Bhuller
Building on the Selected Industry project, this effort involves further analysis of the business conference and corporate airport sector studies and develops strategic plans for them. Students are also investigating the current status and potential of the bed and breakfast industry and how to bolster the local job market by increasing material sourcing from within the City.

The Latin Connection
Course: Latin 472/672 Faculty: Judith Hallett
Frederick will host this high school competition (Certamen) in Latin to celebrate Earth Day and entitled Terra Mater [Mother Earth]. Working with a longtime Frederick Latin teacher, students will develop questions about ancient Roman writings and efforts to cherish the earth and natural environment which much influenced our classically-trained, agrarian Founding Fathers.

East Frederick & Monocacy Boulevard Development
Course: ARCH407 Faculty: Jana Vandergoot
This course revisits Frederick’s current model for greenfield development near Liberty Road and Catoctin Mountain Highway. Students are proposing a development plan in East Frederick as well as site plans for City owned properties near the airport and Monocacy Boulevard. These emphasize urban space making that balances ecological, social, and economic factors.

For more information please contact PALS Director, Uri Avin: uavin@umd.edu
### 2014–2015 PROJECTS:

**Composting and Organics Recovery**  
Course: CPSP363  
Faculty: Drs. Mira Azarm & Nicole Mogul  
As part of updating its Sustainability Plan, Frederick wants to encourage its residents and businesses to embrace composting as part of their daily waste stream practices. This project investigates the long-term impacts of municipal composting programs and helps create a comprehensive and effective plan that includes marketing, implementation, and end product usage.

**Outreach to Minority-owned Businesses in Golden Mile**  
Course: URSP673/688Z  
Faculty: Dr. Willow Lung-Amam  
In 2010, Frederick launched the Golden Mile Small Area Plan to revitalize the largely minority- and immigrant-owned business area in the western part of the City. To engage these businesses, UMD is partnering with Centro Hispano and the Asian American Center to prepare the community for the City's future redevelopment plans and help them become active players in the implementation process.

**Climate Change and the Frederick Watershed**  
Course: CON5670  
Faculty: Dr. Keryn Gedan  
Using the City’s reservoir watershed as a living laboratory, biology students are mapping biodiversity and invasive plant species throughout the trail network and examining how climate change impacts the watershed. They are also developing approaches to avoid or mitigate environmental harm and recommending forest management actions.

**Enhancing Environmental Resilience**  
Course: PUAF798F  
Faculty: Dr. Anand Patwardhan  
Communities all over the world are realizing that adaptation to climate change is vital to their long-term sustainability. This project identifies and evaluates specific climate-related risks and proposes adaptation interventions in the City of Frederick with regard to water needs (supply constraints) and summer “heat islands.”

**Algae in Carroll Creek**  
Course: LARC452  
Faculty: Dr. David Myers  
This landscape architecture course focuses on how green infrastructure in an urban area contributes to the ecosystem by investigating the ecology of Carroll Creek Park. The class is exploring and proposing green infrastructure solutions to mitigate challenges like excessive algae growth.

**Designing the Shared Use Path**  
Course: LARC642  
Faculty: Dr. Chris Ellis  
More walkable and bikeable cities are the cornerstone of modern urban design. Frederick wants new, effective design concepts for currently undeveloped portions of its Shared Use Paths. This project aims to improve connectivity between neighborhoods and community amenities through bicycle and pedestrian transportation within an ecological greenways framework.

**Complete Streets Approach: East Street Corridor**  
Graduate Thesis Landscape Architecture  
Student: Jun Jiang  
The focus of the East Street Corridor project is the conversion of an auto-dominant street to a multi-modal facility which incorporates landscaped sidewalks and connects to the City's parallel rails-to-trails project.

**Economics of Historic Preservation**  
Course: HIS680  
Faculty: Constance Ramirez  
Frederick wants to understand exactly how rehabilitation projects support the local economy and how property owners benefit from historic preservation. This project establishes a long-range data collection program to help the City quantify the economic benefit of each dollar spent on restoring and protecting Frederick’s many historic buildings.

**Oral Histories of Downtown Frederick**  
Course: HIST408B  
Faculty: Dr. David Freund  
Frederick’s downtown brims with clues about its evolution from the gateway to Western Maryland during colonial times to a regional commercial center. This course surfaces the fascinating stories of individuals and families who influenced Frederick’s current landscape; interviews and video footage capture highlights of the City’s rich heritage, which will also inform the architectural tour guide.

**Recreation in the Watershed Stewardship Plan**  
Course: LARC341  
Faculty: Dr. Chris Ellis  
Frederick is enhancing its Watershed Stewardship Plan to carefully accommodate some recreational activities. Students are reviewing existing plans, regulations and environmental constraints, investigating the environmental and cultural contexts of possible revisions, and developing a recreational master plan that responds to a committee of very diverse stakeholders.

**Mapping Neighborhood Identities**  
Course: URSP688L  
Faculty: Dr. Chao Liu  
Frederick, increasingly culturally diverse, has proposed an ambitious project to map the cultural resources and identities of the City’s neighborhoods. The class is mapping neighborhood cultural resources and exploring alternative configurations of neighborhoods using social media, survey, and video/photo-sharing technologies to engage City residents and solicit feedback.

**Re-Use of the Renn Farm**  
Graduate Thesis Landscape Architecture  
Student: Seth Fleming  
The Renn Farm floodplain, along Carroll Creek and within walking distance of Downtown Frederick, currently functions as the release grounds for the conduits of the Carroll Creek Flood Control Project. This design project, focused on vegetation master planning and biodiversity design and management, will transform the floodplain into a city park, a key link in the City’s shared-use path system.

**Video Storytelling**  
Course: JOUR368v/688v  
Faculty: Bethany Swain  
Journalism students are creating in-depth video stories around Frederick drilling down on some of the fascinating PALS projects. These stories highlight sustainability through character-driven pieces, representing a variety of voices and perspectives on their chosen topic.