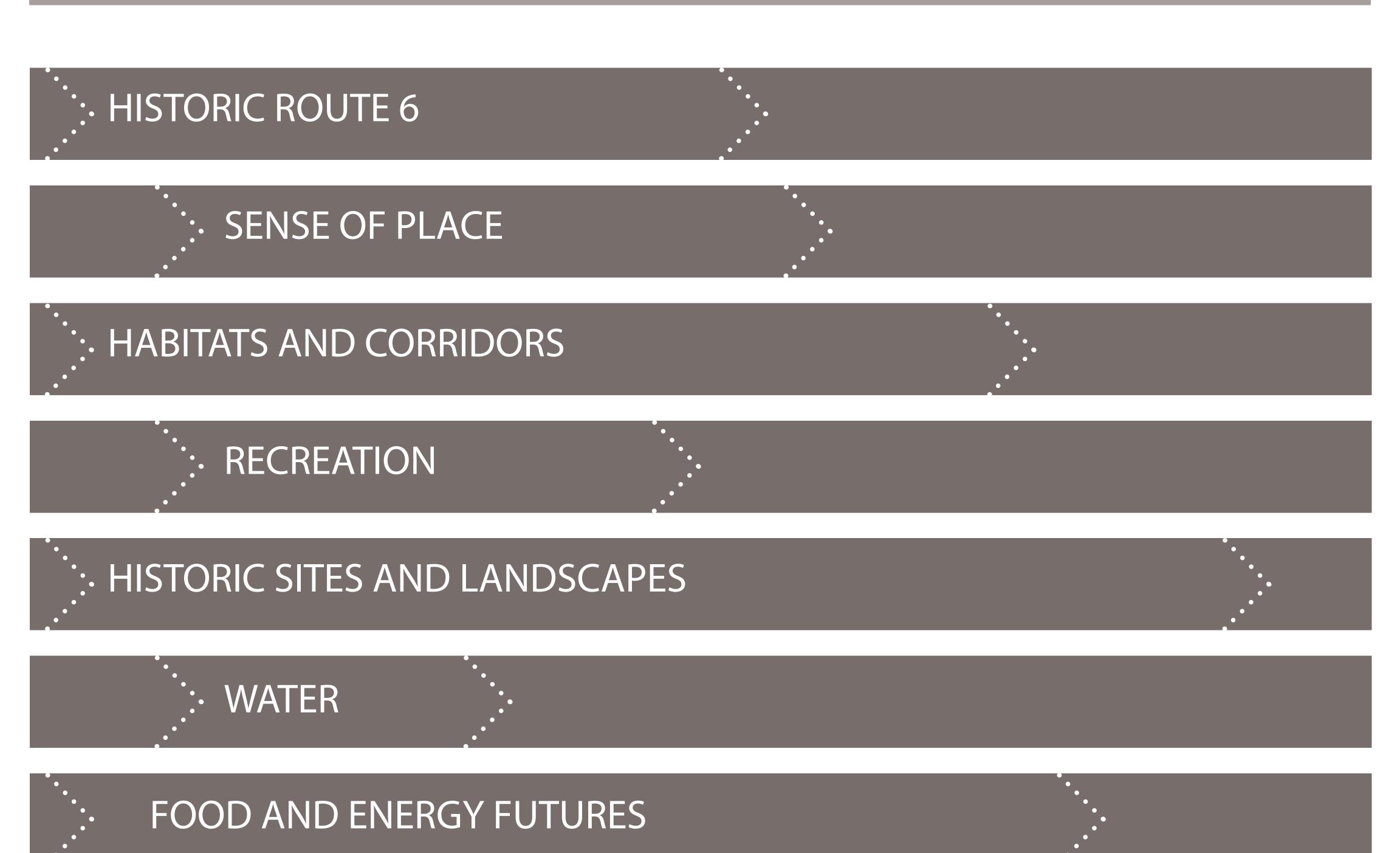
## MARCELLUS BY DESIGN The Pennsylvania State University



# Historic Route 6



In the upper tier of the state, lies *historic* Route 6. Traversing the northern counties, this corridor has played a vital role in the transportation of people, goods, and resources. With the recent onset of the Marcellus Shale, preservation and accommodation are essential to retaining a prolific future. Our goal is to determine places of opportunity to preserve and enhance the identity of Historic Route 6 using various analytical techniques and processes.

> Infrastructure and Geography

**Cultural Amenities** and Resources

> **Tioga County Analysis**

> > **Proposal**

Landscapes

Historic Route 6

Water Dynamics

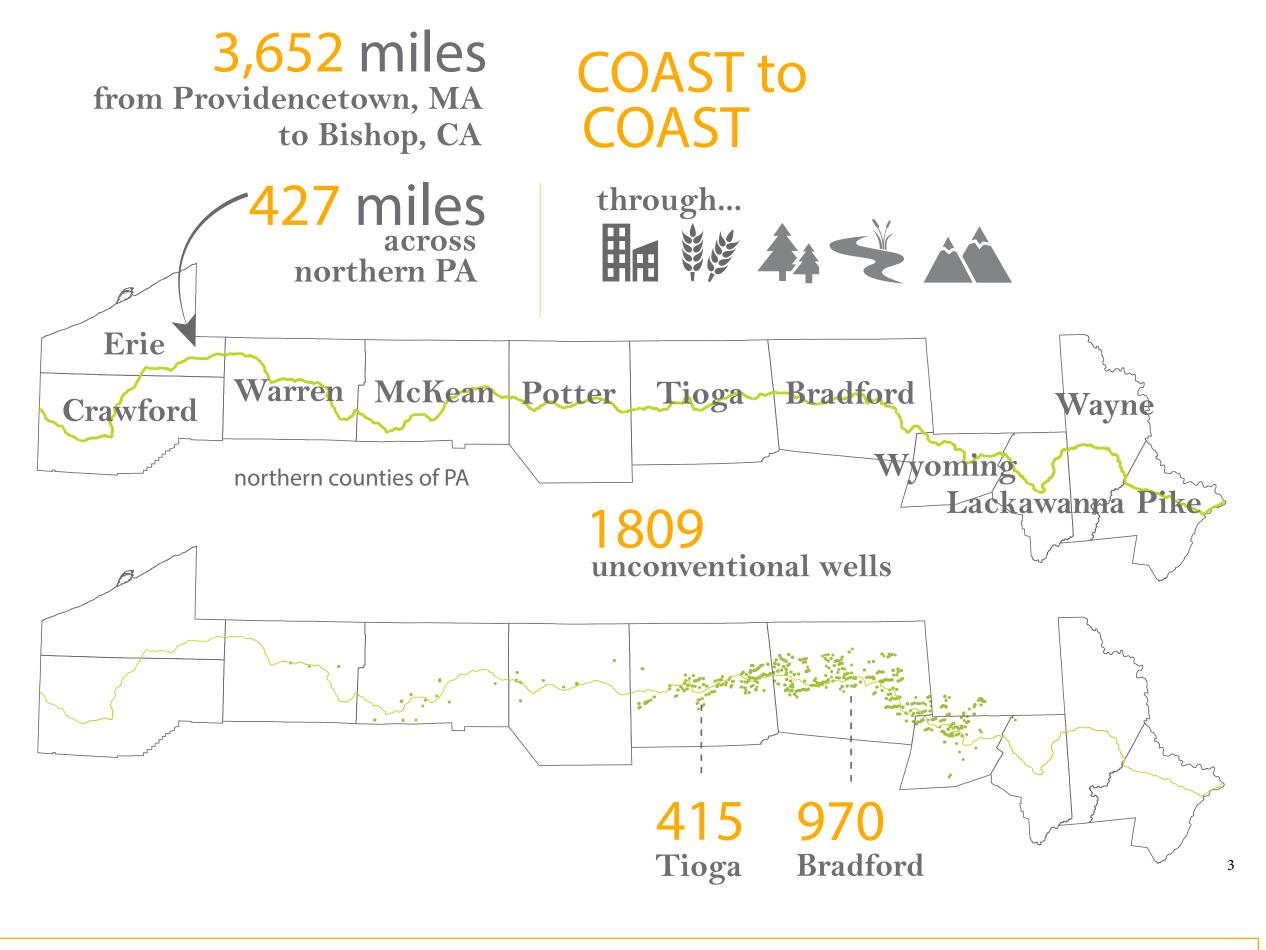
Food, Water & **Energy Futures** 

Habitat & Corridors

Sense of Place

Recreation

### transportingpeopleandnaturalresources



A highway spanning across the country, Historic Route 6 runs through a multitude of landscapes: towns, cities, mountains, plateaus, rivers, lakes, forests and everything in between. The highway welcomes over three and a half million visitors each year. Throughout Pennsylvania it runs through eleven counties, and seventy - five municipalities.

### HISTORIC ROUTE 6

### **Tioga County Analysis**

Development and production has increased with the advent of the Marcellus Shale drilling. Tioga County has seen a lot of this due to the density and depth that covers the majority of the county.



#### Natural Gas Development

Natural Gas Development in Tioga County is one of the main driving forces for design. By locating wells and pipelines, it is evident where problematic areas can arise.



#### Visibility

High visibility characteristics are important for the driving experience along Route 6. Finding these vast expansive views provides opportunity for preservation and development.



#### The Experience

The Tioga County driving experience is depicted through a series of diagrams that show the enclosure and types of development. It is shown driving from East to West, the direction generally more traveled.



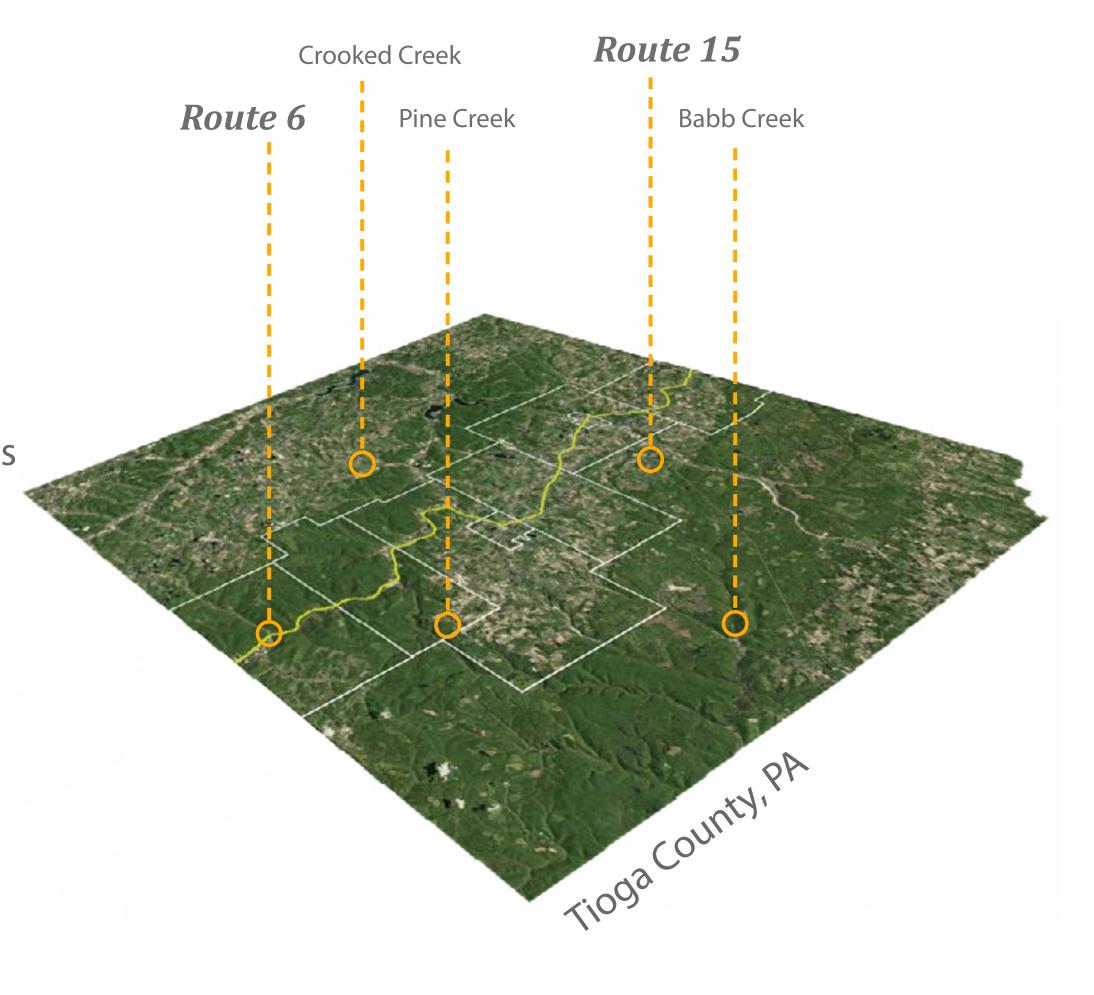
#### Cultural Amenities and Resources

By looking at the cultural amenities and resources across the entire county, we are able to assess where areas of concentration are, as well as where there are vast stretches without amenities or resources.



#### Circulation

Circulation shows the corridors that are traveled most frequently. By looking at primary arteries as well as secondary ones, it depicts the high trafficked areas and areas of opportunity.

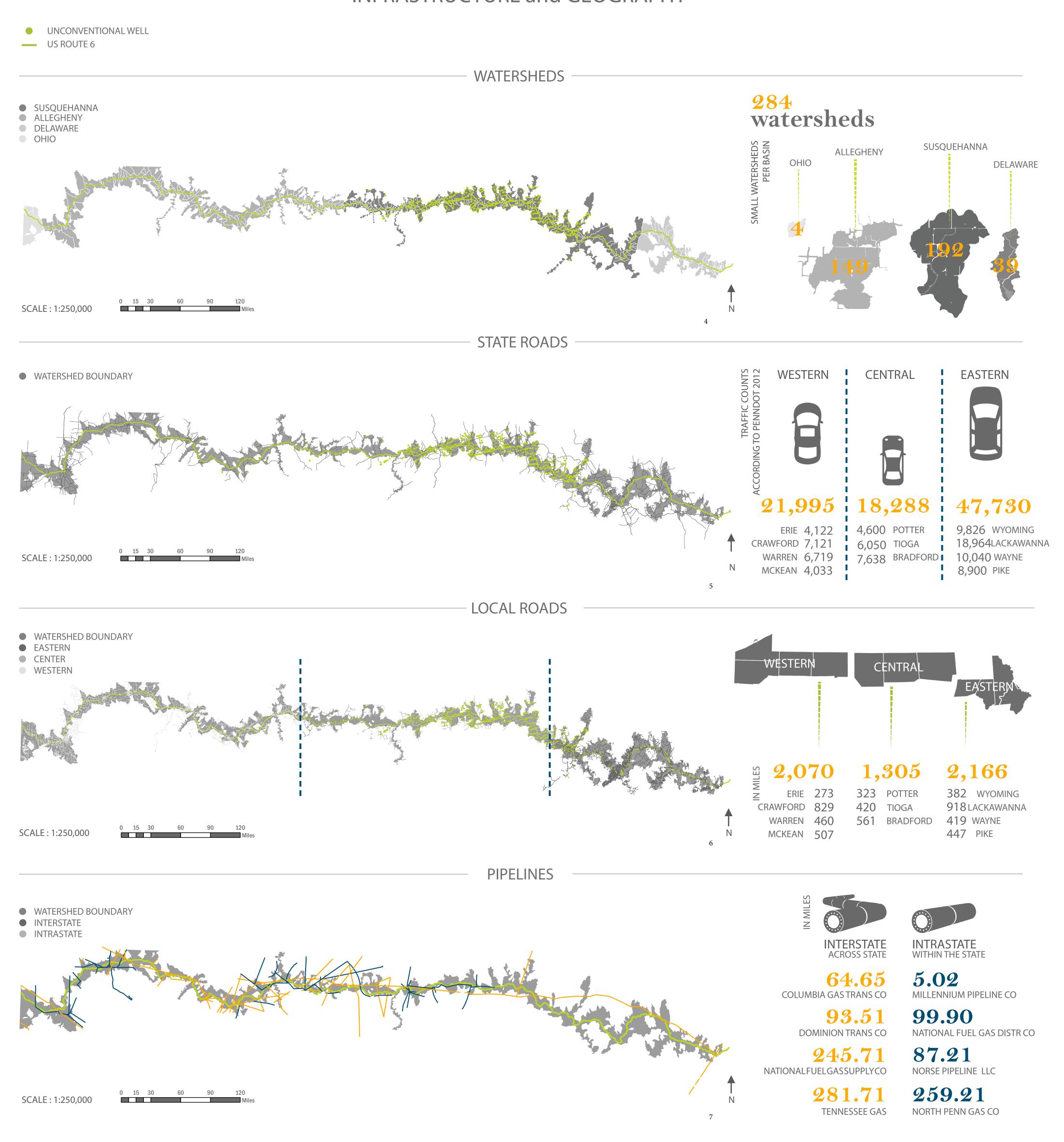


MARCELLUS BY DESIGN The Pennsylvania State University

Historic Route 6

MARCELLUS BY DESIGN The Pennsylvania State University

INVENTORY **INFRASTRUCTURE** and **GEOGRAPHY** 



# HISTORIC ROUTE 6

### INVENTORY

**CULTURAL AMENITIES & RESOURCES** 



#### TIOGA COUNTY **EXPERIENCE**





41. 44′ 35.022″ N 77. 15′ 40.68″ W



41. 48′ 15.54″ N 76. 55′ 1.998″ W





41. 48′ 34.512″ N 77. 4′ 5.96″ W WELLSBORO



41. 44′ 44.118″ N 77. 16′ 44.01″ W





41. 44′ 50.988″ N 77. 17′ 24.06″ W

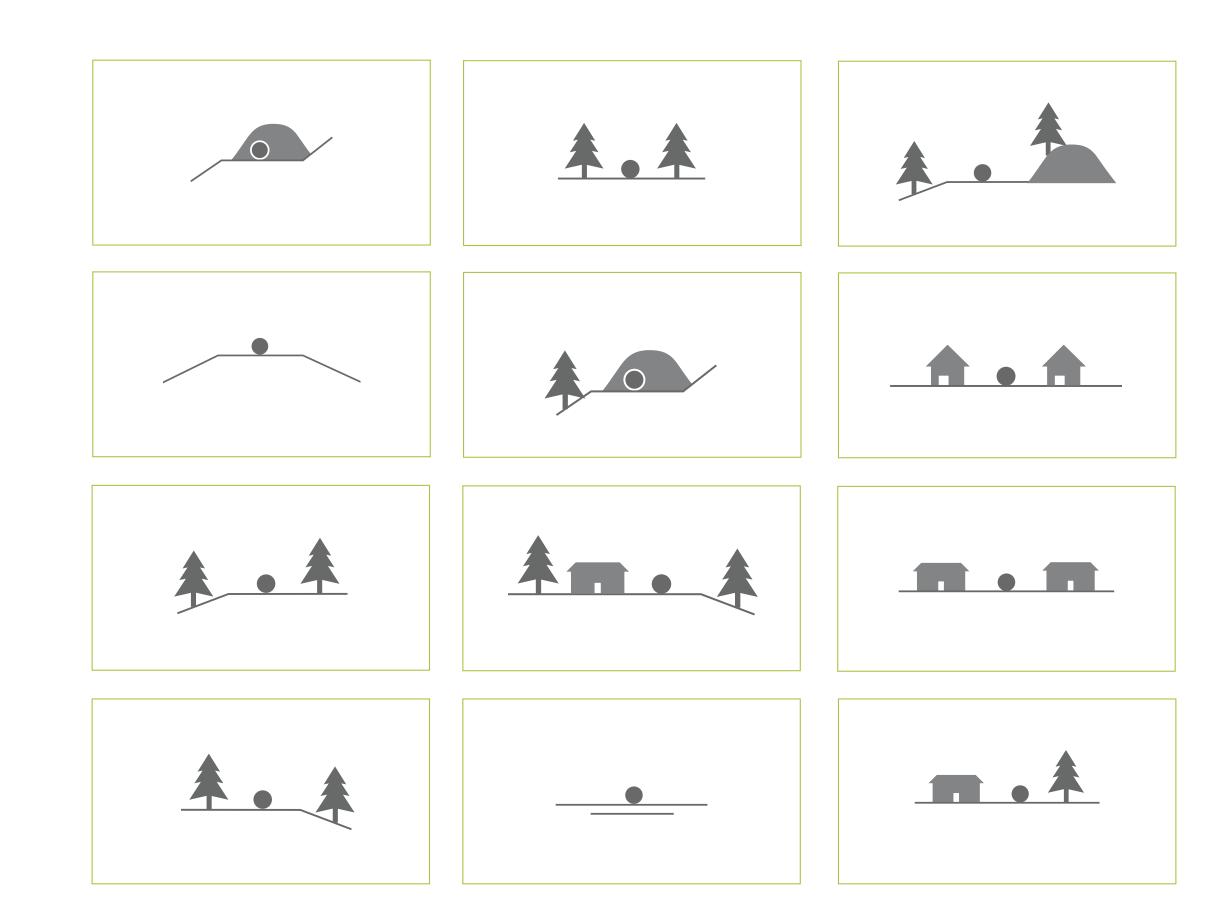


41. 48′ 25.842″ N 77. 4′ 39.68″ W

Taken from the view of our car, these photos illustrate the physical setting of Route 6 through Tioga County. Despite the weather, this trip enabled us to experience the highway in a more personal manner. Throughout the trip we took note of various levels of development.

### HISTORIC ROUTE 6

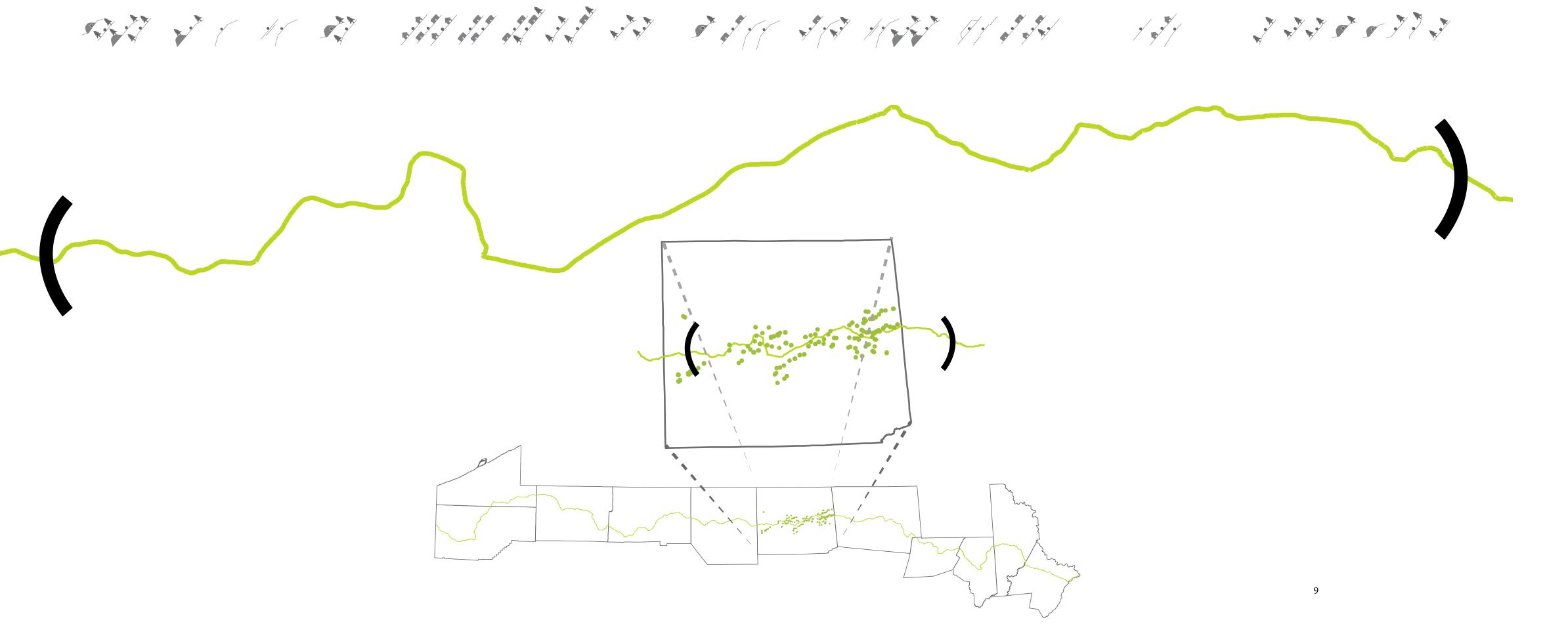
#### TIOGA COUNTY **EXPERIENCE**



Each of these diagrams represent different types of experiences along Route 6 in Tioga County. Looking into the experiential quality, we focused on enclosure, visibility, and development. We simplified each to include a combination of either hills, slopes, trees, buildings and houses. We thought it was important to simplify them in order to compare and contrast amongst them.

DEVELOPMEN

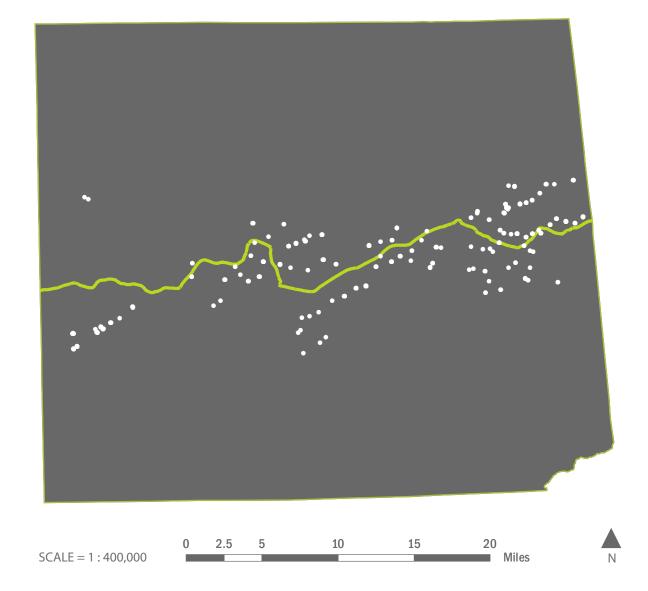
#### TIOGA COUNTY **EXPERIENCE**



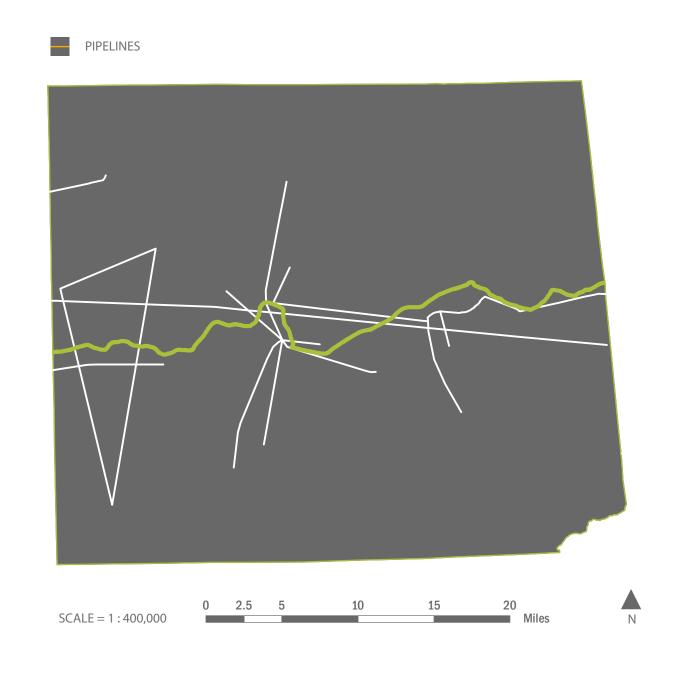
### HISTORIC ROUTE 6

#### TIOGA COUNTY NATURAL GAS DEVELOPMENT





#### **PIPELINES**



#### AREAS of CONCENTRATION





The diagrams described prior have been referenced to their specified position along Route 6. Interestingly, we found that the majority of the experiences fall under areas of development or expansive views. This portion of Route 6, through Tioga County, encompasses a variety of settings ranging from enclosed forests views to wide views of farmland.

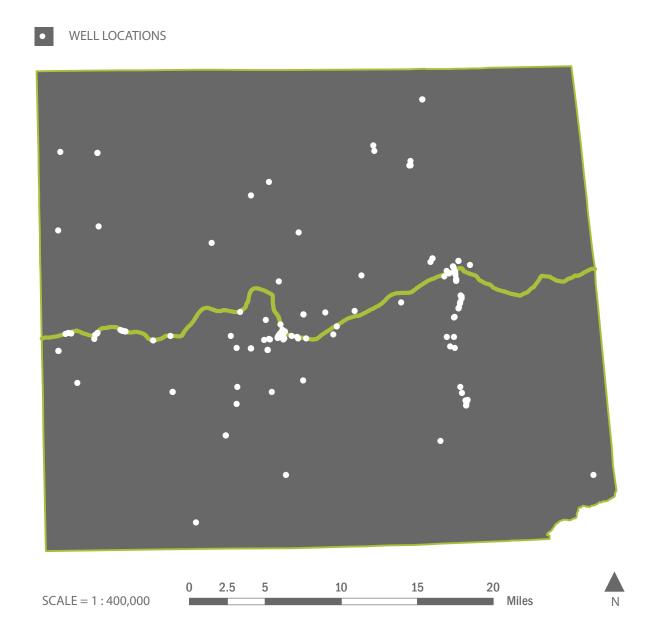
This map identifies the unconventional wells that are within the small watersheds intersecting with Route 6. There are 415. The majority of them are located towards the Eastern side of the county, past Mansfield.

This map shows the pipelines that intersect with Route 6. There are two types of pipeline: interstate and intrastate. Interstate represent pipelines running through multiple state, intrastate represent pipelines strictly within PA.

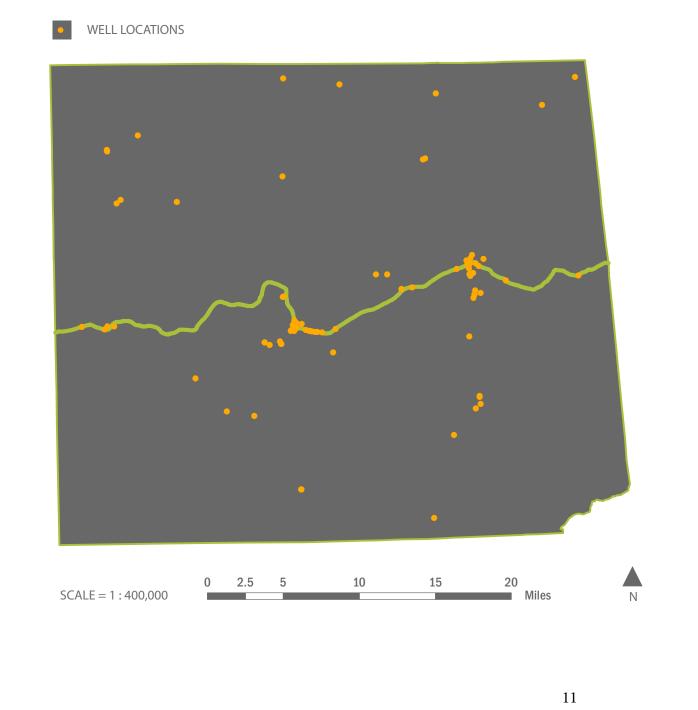
Overlaying the unconventional wells with the pipelines that intersect with the highway provide areas of high concentration. These areas lie within Wellsboro and just East and West of Mansfield.

#### TIOGA COUNTY CULTURAL AMENITIES AND RESOURCES

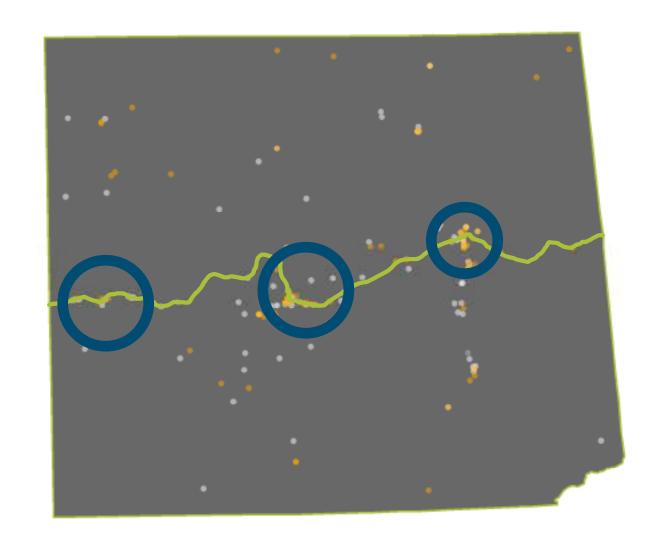
#### PRIMARY AMENITIES

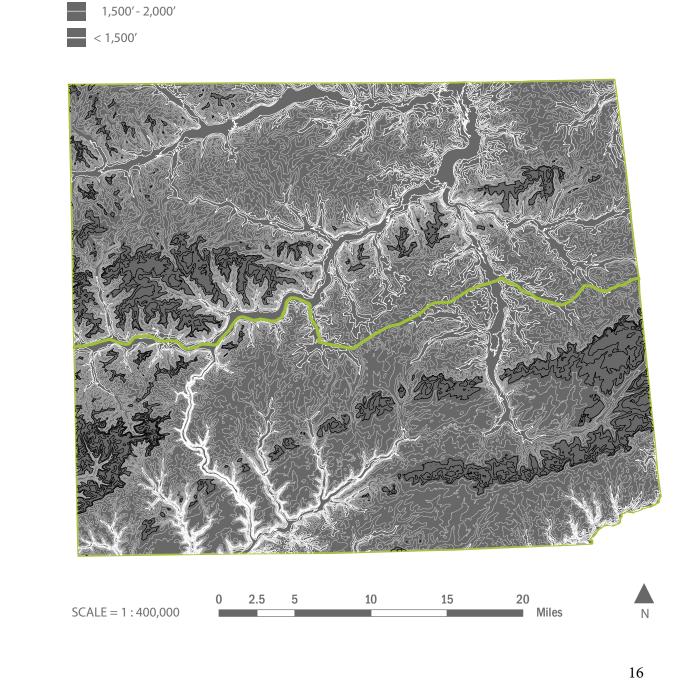


#### SUPPLEMENTAL AMENITIES



#### AREAS of CONCENTRATION



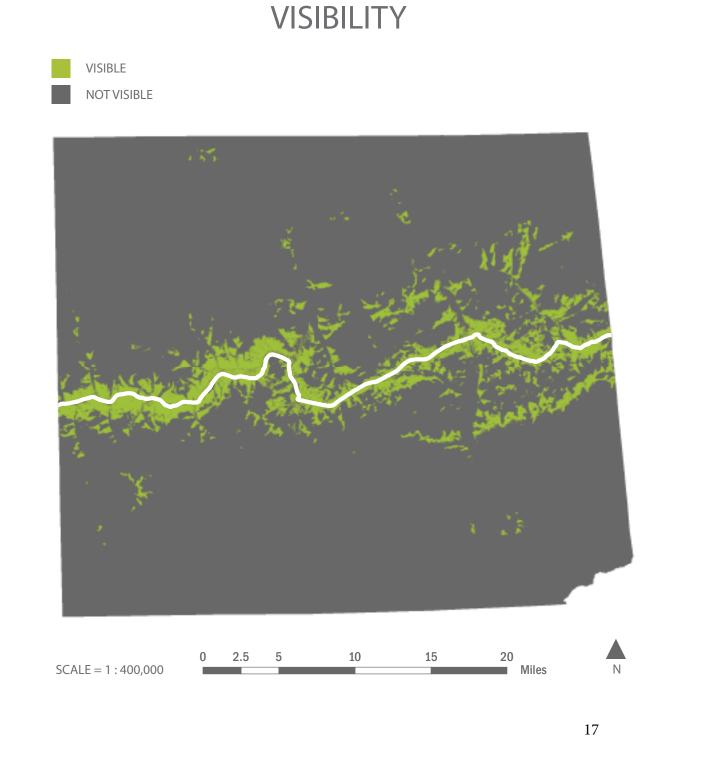


**TOPOGRAPHY** 

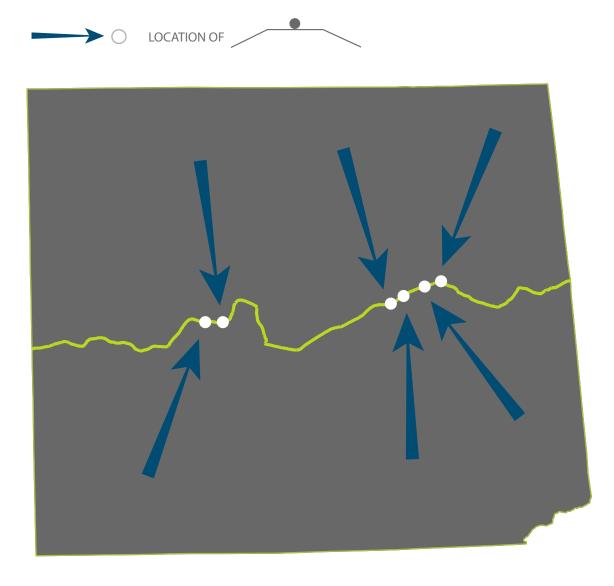
HISTORIC ROUTE 6

TIOGA COUNTY

VISIBILITY



#### **BEST VIEWS**



Primary amenities consist of categories such as food and drink, accommodations, and transportation services. These types of amenities and resources are primary because they are deemed necessities.

Supplemental amenities are made up of retail, services, sports and recreation, as well as entertainment. Cultural resources and amenities such as these are extracurricular.

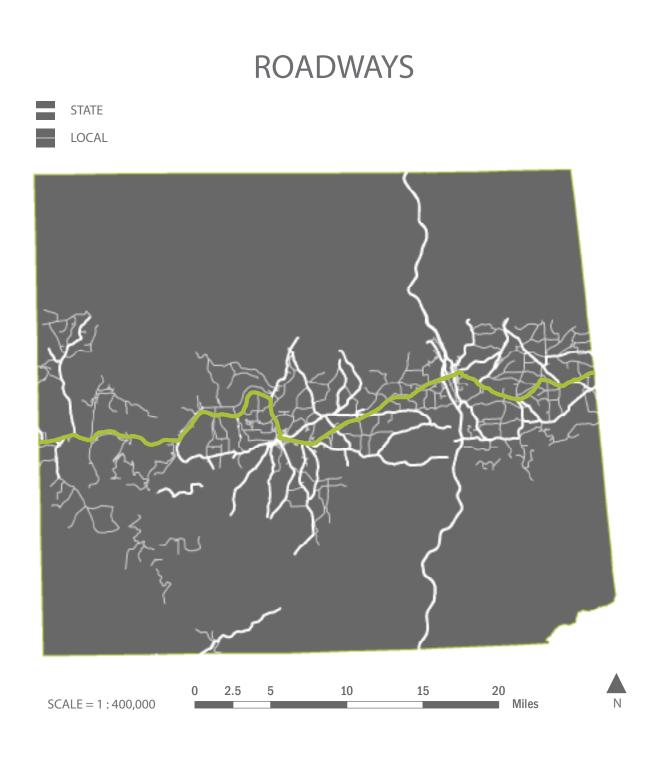
By overlaying both the primary and supplementary resources, we found the areas of concentration lie within the towns of Mansfield and Wellsboro as towards the edge of the Western county line.

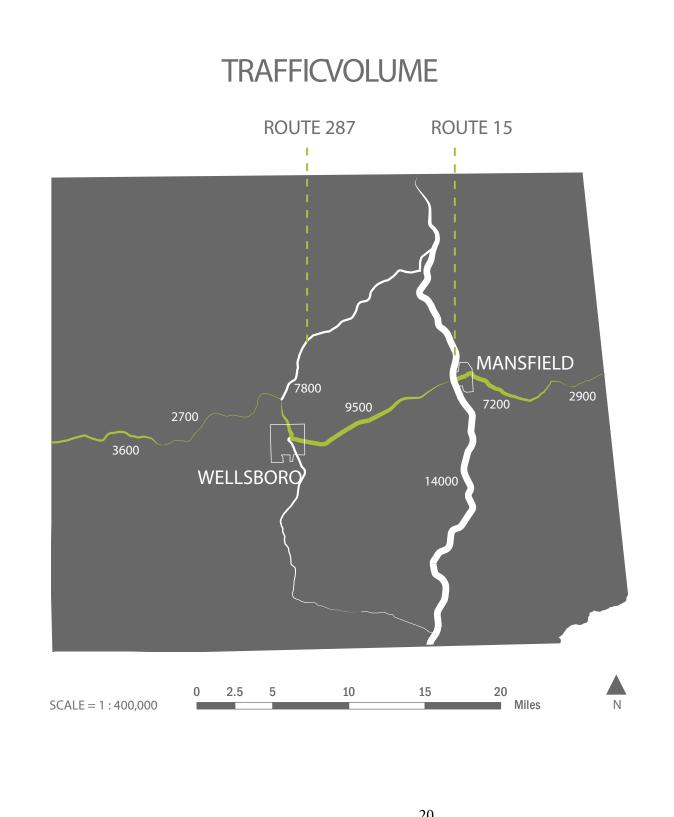
Here, five foot contour lines show the topographical characteristics of the county. The lighter the contour line, the lower the elevation. The darker the contour line, the higher the elevation.

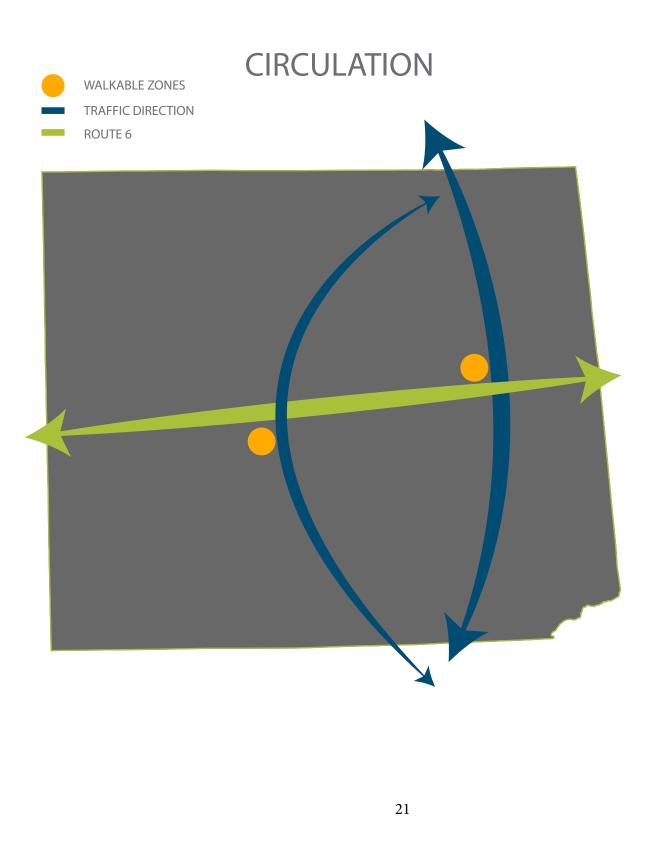
This visibility analysis looks at what the driver can see from Route 6. The majority of the land adjacent to the road is visible, with the exception of some areas where forests and trees block the view.

The combination of overlaying the topography and the visibility maps gave us a deeper understanding of where the best views are. Using this and our personal experience, this map shows where the views are located.

#### TIOGA COUNTY CIRCULATION







Identification of the roadways gives us insight as to where the various amounts of traffic flow occur. Here, the thick white lines represent state roads, the thinner white lines represent local roads. Looking at the traffic counts according to PennDot, we found that the majority of traffic does not run through Route 6. The highest traffic counts run North and South along Route 15.

This simple diagram simplifies the traffic flow of the county. Historic Route 6 is highlighted in green, Route 15 and Route 287 are highlighted in blue. The

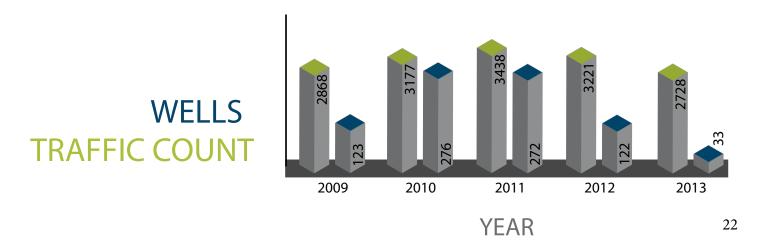
### **Design Proposals**

683 potential wells over the next 30 years in Tioga County

%5 gas tax proposed by newly elected governor, Tom Wolf

\$1,523,000 on average per well generated in 2013 in Tioga

\$52,010,450 potential gastax revenue for municipalities in Tioga County



# Where should this money go? a gateway



something to remind drivers of the historic highway they are utilizing

something to bring a physical identity to the highway

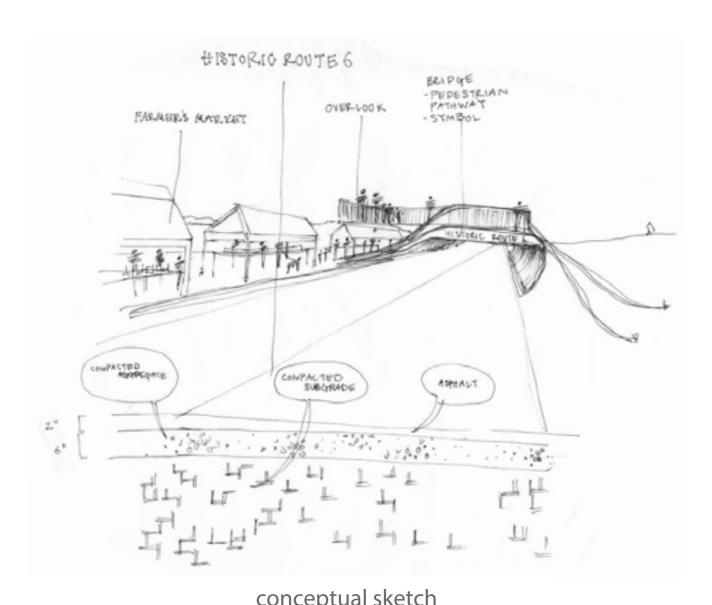
something to celebrate the area the highway is in and to apply to various places along the Route

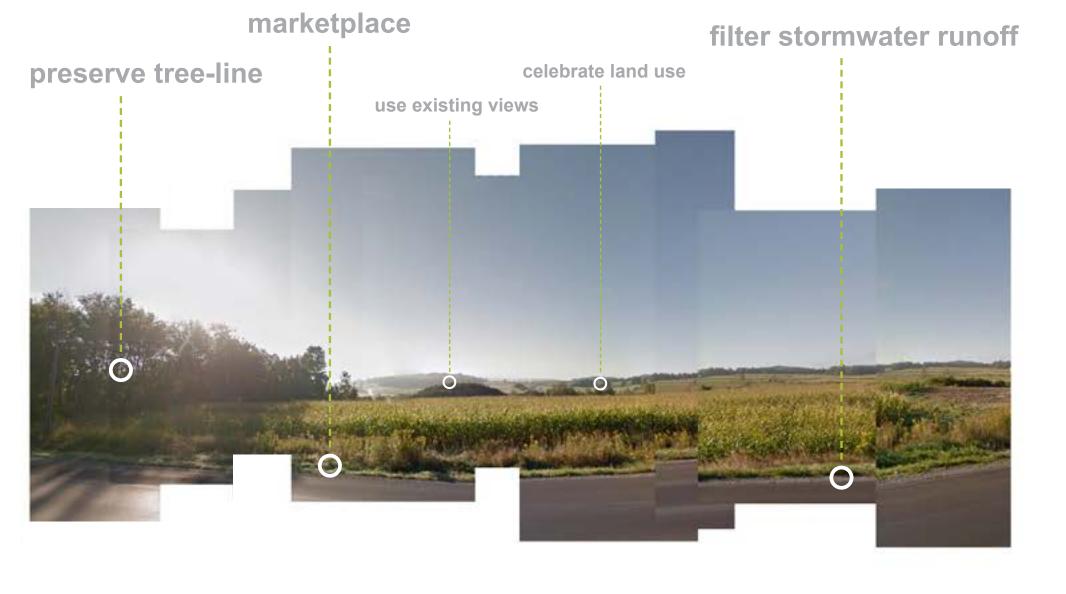
### **About Us**

### Where should this money go?

a linear pocket of community

artisan market farmer's market pedestrian bridge overlook multiple modes of transportation filtration system education node



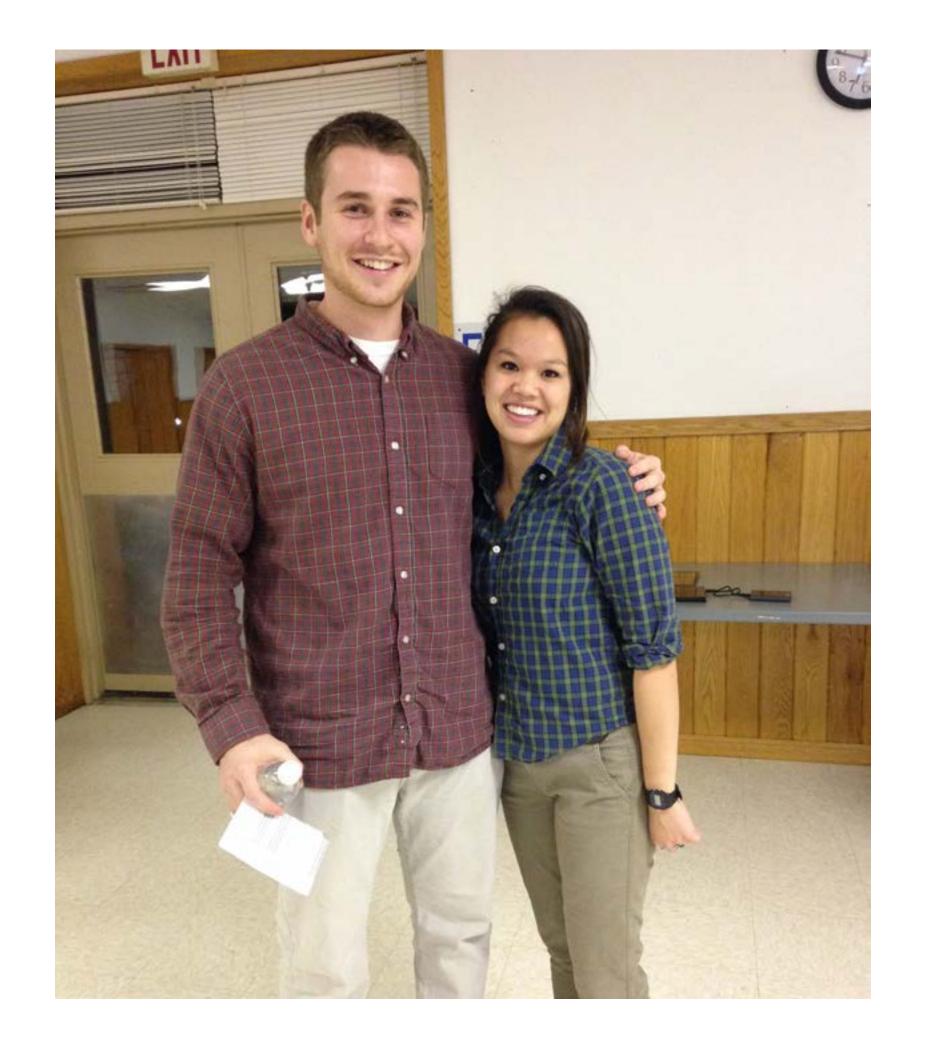




### Kevin Gavaghan

Kevin was born and raised in Wall Township, New Jersey- a town situated close by the beach. He is pursuing a Bachelor degree in Landscape Architecture at Penn State University. He is also minoring in environmental inquiry with a focus in geography.

Email: Kjg5228@gmail.com



### Katie Nguyen

Katie was born in Pittsburgh, PA. She is currently in her fourth year of study at The Pennsylvania State University. She is pursuing a Bachelor of Landscape Architecture degree with a minor in Architectural studies.

Email: kathrynhnguyen@gmail.com