

2015 Summer Intern Project List

Title: Forest conservation in Latin America

Description: The project develops decision tools and analysis focused on (i) targeting forest conservation policies to generate the greatest possible “bang-for-the-buck”, and (ii) evaluating the effectiveness of specific policies, such as protected areas and payments for environmental services.

Skills desired: Econometrics, program evaluation, computer programming, (Spanish would be great but not required).

Project leader: Allen Blackman

Web link to this project: http://catalogue.servirglobal.net/Product?product_id=25

Title: What Does an Electric Vehicle Replace?

Description: This project aims to understand the substitution pattern in the automobile market with alternative fuel vehicles. The substitution pattern is critical when estimating the environmental benefits brought by the clean-fuel-vehicle subsidy programs such as plug-in electric vehicles (EVs). Results from this study will help us understand the environmental benefits from promoting EVs and provide empirical evidence that can be used to design more effective policies to promote electric vehicles in certain locations (where EVs replace more gasoline vehicles) to achieve emission reduction goals.

Skills Required: STAT, MatLab

Project Leader: Benjamin Leard

Funding Source: Cornell University Dyson School of Applied Economics and Management through Shanjun Li, Assistant Professor

Title: Analyzing the cost effectiveness of instream flow protection policies

Description: Prior research and experience in several river basins in the United States confirm that instream flows are an important determinant of a variety of economic and environmental outcomes. In this project, we will implement econometric analysis and hydroeconomic modeling techniques to explore how instream flow protection policies can be designed to minimize costs to water users while allowing regulators to achieve desired streamflow targets. The specific goals of the project are to:

1. Build a database of available measures of streamflow condition;
2. Identify and collect water use data for economic activities that can deplete streams, such as irrigation and oil/gas development;
3. Develop new hydroeconomic models of river basin management; and
4. Conduct an empirical analysis of the impact of water use on streamflow.

The intern for this project will undertake a variety of tasks in support of research on the economics of instream flow protection, including help with literature reviews, gathering data, analyzing regulations, writing of background documents, and conducting interviews with relevant stakeholders. Based on skill set, the intern may also help with GIS mapping, spatial analysis, and economic modeling.

Skills desired: Some background in economics; interest in water resources and water resource management; ability to read and synthesize primary literature; familiarity with hydrologic principles would be helpful.

Project leader: Yusuke Kuwayama

Web Links to Projects:

<http://www.rff.org/shalemaps>

<http://www.rff.org/cleanairact>

Title: Understanding Energy Efficiency Investment Decisions, Fuel Demand and Carbon Dioxide Emissions in Heavy Duty Truck Markets

Description: The goal of this project is to empirically evaluate how heavy duty truck ownership and utilization responds to changes in operating costs. The results of the analysis will be used to provide policy makers with empirical evidence that they can use to evaluate the costs and benefits of the Phase 2 heavy duty greenhouse gas and fuel economy regulations that are set to begin in 2017.

Skills desired: Stata programming and data collection experience

Project leader: Benjamin Leard, Virginia McConnell

Project Title: Environmental Regulation, the Permitting Process, and Untangling Red Tape for Increased Efficiency

Description: Federal licensing and permitting processes are a key policy lever for achieving a variety of government goals, including environmental protection, workplace safety, and protecting historical/heritage sites. Licenses and permits establish legally binding terms that govern the construction or operation of major industrial, electricity, and oil and gas production facilities. As a result,

licensing and permitting processes can help protect the environment, but they also may have adverse effects on economic activity.

Federal licensing and permitting requirements for manufacturing implement the Clean Air Act, the Clean Water Act, and the Resource Conservation and Recovery Act. Other Federal licensing processes with environmental goals govern activities such as oil and gas drilling and the siting of liquid natural gas terminals, transmission lines, and wind farms. Additionally, each state has its own programs and requirements and many localities issue additional permits to address local goals. Therefore, there may be important licensing and permitting differences by region and state.

Federal licensing and permitting processes have been criticized by the industrial sector on the grounds that they create long delays and are inefficient. NGOs on the other hand oppose streamlining of these processes on the grounds that environmental, etc goals will be given only cursory attention under streamlined “one-stop shopping” processes. However, there are little data to support either side of this debate. Resources for the Future would like the IPA team to explore the extent to which there are differences in approval times across several licensing and permitting programs, and to review what evidence exists that such differences lead to differences in levels of economic activity. This project could also include a review of differences in State permitting processes—for example, do permitting times differ by state? Using this analysis, the team may identify those programs with more efficient permitting processes and make recommendations to improve current practices.

RFF would consider using the resulting information in briefings with government policy makers, in meetings with interested stakeholders, and / or in more detailed scholarly work.

Skills desired: Proficient in MS Word, Excel, and Powerpoint.

Project leader: Art Fraas

Title: Outdoor recreation and climate in the United States

Description: This study empirically investigates outdoor recreation behavior in the United States and its connections to weather and climate. The study focuses on data development and econometric estimations, including cross-section and panel data methods (continuous and discrete-continuous).

Skills desired: Stata, econometrics

Project leader: Juha Siikamäki

Title: Regulatory Environment and Investment in Gas-Fired Generators

Description: The project examines the effect of the regulatory environment on the amount of investment in new natural gas combined cycle generators, as well as the effects on the characteristics and operation of those generators. Responsibilities include merging and cleaning data sets, as well as preliminary statistical analysis.

Skills desired: Comfortable working with STATA and some econometrics coursework

Project leader: Joshua Linn

Title: Energy Efficiency in Commercial Buildings

Description: This project is evaluating several issues related to improving energy efficiency in commercial buildings. The intern may work on analyzing the effectiveness of municipal commercial building energy benchmarking and disclosure laws or other policies directed at commercial buildings and/or help to evaluate data on building energy use collected by cities that have implemented these laws. The intern may also work with data to analyze whether energy expenditures affect building values, rents and occupancy rates.

Skills desired: Proficient in Stata and other statistical packages. Excellent writing ability. Economics majors preferred. Understanding of real estate finance a plus. Graduate students, college grads, or rising seniors only.

Project leaders: Karen Palmer and Margaret Walls

Web link to this project: http://www.rff.org/centers/energy_economics_and_policy/Pages/Energy-Efficiency-Information-Initiative.aspx
