

# Patrick Flynn

Email: patrick.j.flynn@vanderbilt.edu  
Website: patrick-flynn.net  
Phone (Cell): (989) 293-3745  
Citizenship: United States

## Education

Ph.D. Economics, Vanderbilt University, anticipated completion spring 2022

B.S. Mathematics, Michigan State University, 2017

B.S. Economics, Michigan State University, 2017

## Research Fields

Public Economics, Environmental Economics, Health Economics, Economics of Education

## Research Papers

"Rivers, Lakes and Revenue Streams: The Heterogeneous Effects of Clean Water Act Grants on Local Spending," with Tucker Smith (job market paper). Revisions requested at *Journal of Public Economics*.

*Abstract:* The Clean Water Act (CWA) provided \$153 billion (2014\$) to municipal governments for wastewater treatment upgrades. We leverage variation in the timing of grant receipt with a difference-in-differences design to estimate the effect of CWA grants on local spending. CWA grants caused a dollar-for-dollar increase in sewerage capital spending up to the amount needed to cover the costs of capital upgrades newly mandated by the CWA. After municipalities met these capital requirements, or if the capital mandate was not binding, they reduced their own spending on sewerage capital in response to grant receipt. Municipalities then redistributed grant money to local residents by reducing water bills. On average, each dollar of grant revenue caused a \$0.45 increase in sewerage capital spending. Dividing previously estimated benefit to cost ratios of CWA grants by this estimate suggests that each CWA grant dollar that municipalities spent on sewerage capital generated an average return of \$1.01.

"A Watershed Moment: The Clean Water Act and Infant Health," with Michelle Marcus. Under review.

*Abstract:* The CWA significantly improved surface water quality, but at a cost exceeding the estimated benefits. We quantify the effect of the CWA on a direct measure of health and incorporate health benefits into a cost-benefit analysis. Using a difference-in-differences framework, we compare health upstream and downstream from wastewater treatment facilities before and after CWA grant receipt. Pollution only decreased downstream from facilities required to upgrade their treatment technology, and we leverage this additional variation with a triple difference. CWA grants increased average birth weight by 8 grams. A back-of-the-envelope calculation bounds infant health benefits below \$29 billion.

"Competitive Grants and Student Achievement: The Effect of Race to the Top Grants"

*Abstract:* Race to the Top (RTTT) was a competitive federal grant program that allocated \$4.35 billion to state education agencies. The US Department of Education distributed grants according to states' compliance with a number of education reform policies. While 19 states adopted reform policies in order to qualify for RTTT grants, the program ran out of funding after awarding grants to 12 states. Using a difference-in-differences design, I show that student achievement increased in qualifying states regardless of grant receipt. These improvements were statistically larger in states that received grants.

## Research Experience

Research Assistant, Tennessee Education Research Alliance, 2019-present

## Teaching Experience

Instructor: Stata boot camp for economics Ph.D. students, Vanderbilt University, 2020

Teaching Assistant: Principles of Microeconomics, Research Methods, Industrial Organization, Vanderbilt University, 2018-2019

## Research Presentations

2021: Association for Public Policy Analysis and Management (APPAM) Fall Research Conference\*  
Southern Economic Association (SEA) Annual Meeting  
Missouri Valley Economic Association (MVEA) Annual Conference  
Association of Environmental and Resource Economists (AERE) Summer Conference  
APPAM Student Seminar Series  
Vanderbilt Empirical Applied Microeconomics Seminar  
Vanderbilt University Graduate Student Research Day

\* indicates scheduled

## Awards

Kirk Dornbush Summer Research Award, 2021

George F. McGregor Scholarship in Economics, 2017