

The Eye of the TIGER

The Politics of Recovery Act Transportation Spending

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Background

The Politics of Discretionary Spending

- Traditional emphasis was on congressional “pork barrel” spending:
 - Reelection: cultivate personal vote.
 - Logrolling: trading with other members.
- More recent investigation of *presidential*/executive branch decisions:
 - Reelection benefits in marginal states (Kriner and Reeves; Lowande, Jenkins, and Clarke).
 - Rewarding supporters.
 - Negotiation with Congress (e.g. Rottinghaus and Waggoner).

TIGER and BUILD Grants

- Originated in American Recovery and Reinvestment Act of 2009.
- TIGER: “Transportation Income Generating Economic Recovery”
- Funding for “capital investments in surface transportation infrastructure.”
- Criteria for awards not detailed.
- Renamed BUILD (“Better Utilizing Investments to Leverage Development”) by Trump Administration in 2018.



Differences between TIGER and BUILD

Reflective of different priorities, support bases of Obama and Trump administrations:

- TIGER had greater emphasis on non-highway infrastructure such as mass transit and non-motorized vehicle projects.
- Trump Administration, particularly under BUILD, has given greater emphasis to rural and highway projects.

Secretary of Transportation:

- Ray LaHood (2009–13).
- Anthony Foxx (2013–17).
- Elaine Chao (2017–present).

Hypotheses

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1. More grants to states that supported president in most recent presidential election.
2. More grants directed to *battleground* states.
3. More grants directed to states with more co-partisans in Congress.
4. More grants to states with members on House and Senate appropriations committees.

Control Variables

- State population.
- Lane-miles of public highways and roads.
- Annual vehicle-miles traveled *per capita*.

Data and Methods

- Information from 608 TIGER and BUILD grant awards between 2009 and 2019, retrieved from USDOT website.
- Presidential election results from MIT Election and Data Science Lab.
- Current and historical congressional data from the @unitedstates project on GitHub.
- Historical committee composition data from Stewart and Woon (2017).
- Data collated into state-year format, giving 550 observations (50 states and 11 years). D.C. and insular territories omitted.

Dependent Variables

- Analyzed using 3 dependent variables:
 - Count of grants awarded to state in a year (range: 0–6).
 - Total amount of grants awarded to state (in millions of nominal dollars; range: \$0–\$130 million).
 - State's percentage share of the total awards in a given year (range: 0–10.46%).

- Grant count model: Poisson regression.
- Total count and grant share models: Gaussian (linear) regression.
- Random effects models with state-level and year-level random effects.
- Estimated using Bayesian MCMC with naïve priors to avoid convergence issues with frequentist mixed-effects models.

Findings

- All three models in general agreement.
- Coefficients with 95% credible intervals not including zero (“statistically significant”):
 - State population.
 - Presidential vote share.
- Other variables lacked significant effects.

Count model

	coefficient	s.d.	lower bound	upper bound
Intercept	-1.108	0.440	-1.984	-0.254
popM	0.026	0.012	0.002	0.051
trump[T.True]	0.125	0.235	-0.332	0.602
VMTPC	-0.014	0.028	-0.070	0.039
approp	0.014	0.052	-0.086	0.119
marginal[T.True]	0.035	0.099	-0.172	0.217
prezvote	0.015	0.008	-0.000	0.031
LaneMilesK	0.001	0.001	-0.000	0.002
congressprez	0.001	0.003	-0.004	0.006
1 state_sd	0.126	0.072	0.000	0.249
1 trump:year_sd	0.310	0.108	0.138	0.522

Total grants model

	coefficient	s.d.	lower bound	upper bound
Intercept	-8.267	7.377	-23.015	5.969
popM	0.898	0.218	0.482	1.342
trump[T.True]	5.469	6.093	-6.883	17.420
VMTPC	0.089	0.448	-0.793	0.966
approp	0.140	0.825	-1.472	1.775
marginal[T.True]	-2.182	1.604	-5.322	0.917
prezvote	0.266	0.116	0.045	0.501
LaneMilesK	0.007	0.010	-0.013	0.029
congressprez	-0.001	0.038	-0.080	0.072
1 state_sd	3.352	1.089	1.083	5.514
1 trump:year_sd	8.466	2.637	4.399	13.685
TotalGrantsM_sd	14.081	0.455	13.194	14.969

Grant share model

	coefficient	s.d.	lower bound	upper bound
Intercept	-0.943	0.824	-2.538	0.707
popM	0.123	0.027	0.066	0.174
trump[T.True]	-0.080	0.180	-0.430	0.273
VMTPC	-0.015	0.057	-0.124	0.100
approp	0.069	0.101	-0.125	0.267
marginal[T.True]	-0.203	0.198	-0.601	0.178
prezvote	0.045	0.014	0.018	0.071
LaneMilesK	0.001	0.001	-0.002	0.003
congressprez	-0.003	0.004	-0.012	0.006
1 state_sd	0.498	0.116	0.276	0.736
1 trump:year_sd	0.076	0.064	0.000	0.198
TotalGrantsShare_sd	1.676	0.054	1.571	1.782

Conclusions

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- Some evidence to suggest grants are used to reward supportive states.
- No evidence for other hypotheses.
- Why no effects?
 - Grant sizes may be relatively inconsequential.
 - Presidents may have fewer opportunities for horse-trading due to ideological polarization in Congress.
 - Congress is producing less primary legislation than in prior eras.
 - Level of analysis may not be fine-grained enough.

Thank you!