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Gasoline Taxes: An Examination of News Media Discourse Related to Gas Tax Funding in Six States

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Gasoline Taxes: An Examination of News Media Discourse Related to Gas Tax Funding Debates in Six States

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1. Background

The transportation system in the United States is funded primarily by state and federal gasoline taxes. Gasoline taxes provide 90 percent of the funds in the Highway Trust Fund (HTF) and substantial portions of state transportation budgets (1, 2). But increasing gasoline taxes, even to maintain pace with inflation has proven to be extremely difficult. At the federal level, legislators have increased gasoline taxes just three times in the last 40 years. At the state level, while 15 states increased gas taxes between 1997-2009, the small increases (usually under 5-cents per gallon) lag behind estimated funding needs (3). The lack of substantial increases in gasoline tax revenues combined with increased vehicle miles traveled (VMT) have led to a massive funding shortfall for the transportation system. The National Surface Transportation Infrastructure Financing Commission reports the federal funding gap in the Trust Fund could reach \$2.3 trillion over the coming 25 years (4).

Combined state and federal gasoline taxes in the United States average 40.4 cents per gallon, far lower than most industrialized nations (3). The purchasing power of the 18.4 cents federal gas tax has declined 33 percent since it was last increased in 1993 (4). In a number of states, doubling the gas tax would bring the state to 1957 funding levels without adjusting for additional need due to increased VMT, aging infrastructure and added populations (5). The present shortfall between transportation-related revenues and expenses is estimated at between 20 and 70 cents a gallon (2, 5, 6).

One solution to the projected funding crisis is to increase gasoline taxes and invest the increased revenue in the transportation system. Economists broadly agree that raising the gas tax is an effective mechanism for raising revenue if monitoring and administrative costs are low (5). Yet raising gas taxes in the U.S. is extremely difficult for political leaders (7). Despite the projected deficit in the Highway Trust Fund, the Obama administration removed the gasoline tax as a funding source in 2009 (8). At the state level, policy-makers have instead increased transportation fund revenues by turning to vehicle registrations, tolling, purchase and use taxes and other fees. The political challenges involved in raising the gas tax at the state level continue.

For example in January of 2009, legislators and chief executives in as many as 15 states were proposing legislation to raise gasoline taxes. With gasoline prices averaging half of their July 2008 peak, and states facing massive budget deficits in operating budgets and transportation accounts, increasing gas taxes became a logical option. However, by the end of June, only three state legislatures had approved gasoline tax hikes: Oregon, Rhode Island and Vermont. The debate continues in several others.

1.1 The Case Study

Why is it that some state legislatures approved gasoline tax increases while others did not? In this analysis we examine gasoline tax issue frames in the print news media to see if these frames provide clues to the eventual policy outcomes.

We examined the media discourse between 2006 and 2009 around proposed gasoline tax hikes in six states: Vermont, New Hampshire, Massachusetts, Minnesota, Idaho and Oregon. In three of these states, Minnesota in 2008 and Vermont and Oregon in 2009, state legislatures increased the gas tax. In Massachusetts and Idaho, gubernatorial-proposed

increases were rejected by legislators. And in New Hampshire, the state senate rejected a house-approved measure to increase the gas tax.

Clearly, there are many possible explanations for the success and failure of gasoline tax increases at the state level. In each state, the details of the policy debate, the relationships between political parties and policy actors and the overall context differs. In this analysis we focus exclusively on how the issue has been framed in the news media as a window into the discourse surrounding the policy debate.

We start with a brief overview of the debate in each of the states.

1.2 Idaho

In January 2009, Gov. C.L. "Butch" Otter proposed raising the state's 26-cent gas tax by 2 cents in each of the next five years for a total of 10 cents. The governor's proposal was intended to address an expected annual shortfall of \$240 million in the transportation fund. For the newly elected Republican governor (2006), investing in transportation was to be one of his signature initiatives. Instead, Republican leaders in the house strongly opposed the package. In six separate votes, the house rejected a number of compromise proposals offered by Gov. Otter. The last vote, on a two-year, 6-cent hike, failed 55-15. Otter then vetoed all 45 bills the legislature had passed. In the end, the house won the stand-off; no gas tax was approved. Legislators did fund an additional \$55 million for transportation through a combination of registration and other transportation fees.

1.3 New Hampshire

In 2008, state transportation officials reported that the state highway fund faced a deficit of more than \$1 billion over the next 10 years. In response, the state's long-range transportation plan slashed \$2 billion from the state's project list. In 2008, a legislative-proposed gas tax proposal did not clear either legislative body. But in 2009, the Democratic-controlled house passed a three-year, 15-cent gas tax increase. In response to a threatened veto by Democratic Governor John Lynch, senate leaders removed the gas tax and approved the governor's plan for new transportation funding based on increasing tolls and registration fees.

1.4 Massachusetts

In early 2008, a government-appointed commission announced the state would need between \$15 and \$19 billion in additional revenue to fund the state transportation system. In February 2009, Democratic Governor Deval Patrick proposed a 19-cent gasoline tax increase to raise \$494 million in new revenue annually. Patrick also proposed consolidating the state's transportation entities and restructuring government oversight of the transportation system. Legislative leaders in the Democratic-controlled house and senate promoted their own restructuring plans and expressed little support for gas tax increases. In June the Legislature approved a sales tax increase, effective August 1, raising the state sales tax from 5 to 6.25 percent and directing \$275 million to the transportation system. Legislators also

approved the creation of a new state Department of Transportation that will oversee highways, mass transit, aeronautics, and the Registry of Motor Vehicles.

1.5 Minnesota

In Minnesota, the Democratic-Farmer-Labor (DFL) controlled-house and senate approved a 7.5-cent gas tax increase in 2007. Strongly anti-tax Republican Governor Tim Pawlenty vetoed the bill. Following the August 1 collapse of the I-35W bridge, where 13 people died, Pawlenty said he would support a gas tax increase to fund transportation infrastructure. When the legislative session started in January, Pawlenty announced he would veto any gasoline tax increases despite a report by the state auditor that projected an annual \$672 million shortfall for bridge and road maintenance. Legislators passed a bill in February that would increase the state's gas tax 8 cents by 2012 starting with a 5-cent increase in the fall of 2008. Following the Governor's expected veto, there was an intense struggle to find the needed Republican votes to support an override. In the end six Republicans broke ranks to defy the governor and provide the two-thirds majority. The final vote was 91-41. None of Pawlenty's 36 previous vetoes had been overturned, including vetoes of previous legislative attempts to increase gasoline taxes.

1.6 Oregon

The Oregon legislature meets every two years. During 2007 and 2008 a gubernatorial commission held hearings around the state into expected transportation fund shortfalls above \$1 billion dollars. The commission recommended increasing the gas tax. A previous attempt to raise the gas tax in 2000 was roundly defeated in a statewide referendum. In January 2009, Democratic Governor Ted Kulongoski proposed a 2-cent gas tax increase as part of a \$1 billion transportation spending package. Legislative leaders amended the proposal to increase the tax to 6 cents by January 2011, or earlier if the state had two consecutive quarters of nonfarm employment growth. The bill passed both houses and is expected to be signed into law. The legislation was supported by key interest groups including gas station owners who endorsed the state-wide tax in return for the legislature restricting the ability of local jurisdictions to set gasoline tax rates.

1.7 Vermont

In Vermont, legislative leaders have made several attempts to increase the gasoline tax. In 2006, the Democratic-controlled house passed a 4-cent gas tax increase. The increase was removed by Democratic leaders in the senate in the face of a promised veto by Republican Governor James Douglas. In 2009, the strongly-Democratic house passed a 5-cent gas tax increase by a vote of 108-35. The senate changed the 5-cent increase to a 2 percent gasoline sales tax and a 3-cent diesel fuel tax. The new taxes are expected to generate about \$12.5 million in revenue next year.

Table 1-1 Summary of case study states, gas taxes and case study time frame.

State	Case Study Years	Gas Tax Increase	Executive Position	Details
Idaho	2007-2009	No	For	Gov. Otter proposals ranging from 5-10 cents rejected by State House of Representative.
New Hampshire	2007-2009	No	Against	Legislative proposal for 3-year, 15 cents increase passed House. Removed by Senate in response to expected Gov. Lynch veto.
Massachusetts	2007-2009	No	For	Gov. Patrick proposal to raise gas tax 19 cents rejected by Legislative leaders. Instead, Legislature raised state sales tax from 5 to 6.25 percent and allocated \$275 million to transportation.
Minnesota	2006-2008	Yes	Against	Legislature approved an 8 cent increase to be phased in by 2011. Gov. Tim Pawlenty vetoed the bill. Legislature overrode Governor's veto.
Oregon	2007-2009	Yes	For	Gov. Ted Kulongoski proposed a 2 cents increase. Legislature increased proposal to 6 cents. Signed into law by Governor.
Vermont	2006-2009	Yes	Against	House approved a 5 cent increase. Senate changed to a 2 percent gasoline sales tax.

Source: For state gas taxes at the time of the vote; ARTBA State Gas Tax Report. Note some rates shown may include various sales, environmental, petroleum and LUST taxes and fees.

2. Research Methods

2.1. Theoretical Context

Mass media coverage of policy issues can influence how consumers' think and policy makers act (9). Frame analysis of media discourse provides a structure for analyzing the core meanings in policy news coverage. Framing is the process of collecting pieces of perceived reality and assembling a narrative that connects those pieces to promote a particular interpretation. Frames define problems, provide causal analysis, moral judgments and promote particular solutions (9, 10, 11, 12). Gamson and Modigliani (11) defined a frame as a "central organizing idea... for making sense of relevant events, suggesting what is at issue."

Frames are not the objective structure of the material, but one way to view, discover and to look at how the world is being interpreted (12). Frames contain a number of condensing symbols that suggest the core theme of the frame in shorthand. These can be described with a metaphor or other symbolic device (11). Frames must have a position on the issue at hand.

Frames are introduced and advocated for by sponsors. The ability of a sponsor to promote their frame depends on many factors, including the sponsor's economic and cultural resources, knowledge of journalistic practices, and sponsorship skills (13, 14). A sponsor's prominence and the prominence of their chosen frame can be analyzed depending on their media standing--the percent of time they appear in the media discourse (14).

Another measure to understand the prominence of certain frames is narrative integrity which refers to the coherence of the story that the frame fits within (15). Frames are not static and must be able to incorporate unfolding events and explain them to "make sense" to the readers.

2.2 Newspaper Analysis

The researcher collected 196 print media news articles between 2006 and 2009 from the six states in the case study. In each state, the analysis included the largest state-wide newspaper and the Associated Press wire service stories. Articles were collected from the Lexus-Nexus search system and from the newspaper archives directly. Articles about the gas tax debate at the state level were the focus of the investigation. Articles that only slightly mentioned gas taxes were not included, i.e. stories about transportation funding problems, road infrastructure needs and gasoline prices.

Figure 1-1. Summary of Newspapers and Number of Articles by State and Year.



Source: Newspaper Articles data-base. Vermont includes 2006 and 2007. Totals include the Associated Press articles also collected for each state.

Thematic content analysis was used to identify the frames through a process called coding which attempts to categorize the data according to similar characteristics (16). This was an iterative process with codes coming and going. The process was inductive (findings emerged from the interactions with the data), flexible and open-ended. Since the process was iterative, themes emerged inductively through the research process and were not predetermined at the outset. The coding process ended when codes became redundant. In addition, the analysis used content analysis, a qualitative and quantitative technique that describes a document's significant content by counting the occurrences of phrases and words. Each data source was analyzed through the HyperRESEARCH data analysis software program.

3. Data Analysis

The data was first analyzed to identify and describe the most prominent issue-frames. The occurrence of the issue-frames is then summarized statistically, along with the distribution of the attributions for the frames. Finally, the overall prominence of each frame is discussed according to its narrative integrity and its media standing.

3.1 Frames

The researcher collected 196 print media news articles between 2006 and 2009 from the six states in the case study. In each state, the analysis included the largest state-wide newspaper and the Associated Press wire service stories. Articles were collected from the Lexus-Nexus search system and from the newspaper archives directly. Articles about the gas tax debate at the state level were the focus of the investigation. Articles that only slightly mentioned gas taxes were not included, i.e. stories about transportation funding problems, road infrastructure needs and gasoline prices.

3.2 Pro-Gas Tax Frames

Crumbling infrastructure

Higher gas taxes are necessary to fund transportation infrastructure because the system is in dire shape. We must increase the gas tax to fix a deteriorating system that is unsafe, overly congested and in danger of collapse. The bridge collapse in Minnesota is only one example of what will happen if we don't raise the gas tax to fix the system.

The sponsors of this frame use vivid language describing the shape of the system as dire, deteriorating, poor, in collapse, falling down, struggling, un-safe, in-crisis, bleak, slashed, desperate, worst, and bad. The “crumbling infrastructure” metaphor appears several times across the news stories. The frame contains a problem, crumbling infrastructure and a solution, high gasoline taxes.

Before the vote, Rep. Shelley Madore, DFL-Apple Valley, said that she couldn't help but think of a man from her district Peter Hausmann who died in the Minneapolis bridge collapse, leaving four children behind. "Is his life worth a nickel a gallon? I'm telling you it is," she said (17).

Economic Progress

Increasing gas taxes creates jobs by putting people to work. Furthermore, funding from the gas tax will improve transportation infrastructure allowing businesses to compete and reduce time wasted in congestion.

Backers said the package will sustain 4,600 jobs each year, or about 40,000 total over the next decade. "It's the largest jobs package we will vote on this session," said House Speaker Dave Hunt, who took to the House floor to urge passage of the bill. "This will be an economic stimulus for workers at a time when they really need it" (18).

Long-term solution

Increasing the gas tax is the best solution to close funding shortfalls, fix transportation budget deficits and provide long-term stable funding for transportation infrastructure. The gas tax is the best mechanism to provide funding support for long-term bonding or to match federal funds. Raising the gas tax can also benefit society by reducing car trips and increasing the use of other modes. The gas tax is more fair than tolling or vehicle fees because it is paid for by all users, including visitors to the state. Consumers have capacity to pay higher gas taxes because gas prices have dropped.

This frame is similar to crumbling infrastructure but lacks the drama and vivid language. The problem is funding shortfalls, not crumbling infrastructure. Policy-makers raising this frame talk about funding gaps and maintenance and investment needs.

The 27-cent increase would have raised an estimated \$702 million in annual revenue; the 19-cent hike would generate \$494 million. With the smaller tax increase, [Massachusetts Governor] Patrick will have less money to do what he says the state needs: make long-term, structural changes to the transportation system and set the state on a course to long-term transportation financing stability (19).

3.3 Anti-Gas Tax Frames

Opposed to taxes

Taxes are wrong, we pay too much already and "people are taxed to death."

This frame displays strong opposition to tax increases but no particular reason is stated. Images include tea party protests and other public rallies. This frame also includes several references to the political problem of raising gas taxes. Anti-tax groups are frequently quoted.

But Rep. Paul Kohls, R-Victoria, denounced the bill as a "taxapalooza" and lingered over the lyrics of a Beatles song: "If you drive a car, I'll tax the street ... If you take a walk, I'll tax your feet, 'cause I'm the taxman"(20).

Cut programs first

Before raising the gas tax, policy-makers should cut government programs first or manage them more efficiently. Plans and studies should be conducted first before raising new revenue. Other fees make more sense than raising the gas tax to fund transportation. Stop diverting transportation dollars to other programs. Furthermore there is no need to raise the gas tax because the state is receiving stimulus funds or other federal funds.

This frame emphasizing cutting state programs before raising new revenues.

The chairman of the Senate's transportation committee said he doesn't support either of those proposals and does not intend to pursue tax increases until changes are made. "The focus needs to be on fixing the system first," said Senator Steve Baddour, a Methuen Democrat" (21).

Hurts the economy

An economic downturn is the wrong time to raise taxes. Gas prices are already too high. People are hurting. The gas tax hurts certain groups more than others, such as low-income people in rural areas. If you raise taxes, people will leave the state to buy their gas.

(Governor) Lynch said he told legislative leaders he would not accept the 15-cent tax increase passed by the House and under consideration in the Senate. "In very difficult economic times, the last thing we should do is increase the gas tax," he said (22).
transportation financing stability (19).

3.4 Attributions

In addition to identifying the issue frames, the researcher coded attributions to four different types of groups: executive branch, legislative branch, interest groups and individuals. Executive branch attributions included the state's governor, gubernatorial spokesperson(s), transportation secretary and other state government staff. Legislators included most frequently the leaders of either legislative body and relevant committees but also individual legislators. Interest groups included business groups, trucking companies, environmentalists, anti and pro-tax groups.

Attributions were coded as for the proposed gas tax increase or against the increase. Only those attributions containing a position were coded. The researcher primarily coded statements attributed to an individual instead of broad statements such as the "House passed the gas tax increase."

3.5 Frame Summary

In five of the six states a majority of the issue frames displayed supported increasing gas taxes. In New Hampshire only were the majority of frames displayed in opposition to gas tax increases. Pro-gas tax frames in Oregon supported the proposed increase by an overwhelming 20:1 margin. In Massachusetts, pro-gas tax frames ran 3:1 in support of the gas tax increase although the legislature never voted on the issue.

Table 3-1. Summary of State Frames in Support and Opposition to Gas Tax Increases in the Year of the Vote Examined in the Case Study

State	Gas Tax Increase	Executive Position	% Pro Frames	% Anti-Frames
Oregon 2009	Yes	For	95%	5%
Massachusetts 2009	No	For	72%	28%
Minnesota 2008	Yes	Opposed	69%	31%
Vermont 2009	Yes	Opposed	64%	36%
Idaho 2009	No	For	62%	36%
New Hampshire 2009	No	Opposed	48%	52%

Source: Newspaper database.

In two of the states that approved gas tax increases, Oregon and Minnesota, the display of pro-gas tax frames increased over the three years of the case study. In Vermont pro-frames decreased over time. In New Hampshire and Idaho, where legislators rejected gas tax

increases, pro-frames declined over time. In Massachusetts displays of the pro-gas tax frame increased during the three years of the case study.

Table 3-2. Display of Pro-gas Tax Frames Over the Three years of the Case Study

State	Gas Tax Increase	Pro-Frames Year-1	Pro-Frames Year-2	Pro-Frames Year-3
Idaho 2007-2009	No	64%	64%	62%
Massachusetts 2007-2009	No	58%	59%	72%
New Hampshire 2007-2009	No	85%	67%	48%
Minnesota 2006-2008	Yes	0%	69%	69%
Oregon 2007-2009	Yes	77%	69%	95%
Vermont 2006-2009	Yes	78%	60%	64%

Note: Vermont data includes 2006 and 2007 combined as year 1.

Although pro-gas tax frames were the majority of the frames displayed in each state, the types of frames displayed varied. In Minnesota and Vermont, *crumbling infrastructure* occurred most frequently within the pro-gas tax frames. In Idaho and Massachusetts, *long-term solutions* was the most frequent frame. In Oregon, the *economic progress* frame received the majority of pro-gas tax displays in the news media discourse.

Table 3-3. Types of Pro-gas Frames Displayed for Each State in the Final Year of the Case Study

State	Gas Tax Increase	Crumbling infrastructure	Economic Progress	Long-term solution
Vermont	Yes	74%	0%	24%
Minnesota 2008	Yes	59%	9%	30%
New Hampshire 2009	No	50%	10%	40%
Oregon 2009	Yes	21%	45%	21%
Massachusetts 2009	No	19%	6%	73%
Idaho 2009	No	12%	9%	79%

Source: Newspaper data base. Frames do not add up to 100 percent.

Anti-gas tax frames also varied in prominence depending on the state. In three of the states, Idaho, New Hampshire and Oregon opposition frames emphasizing the difficult economy were close to or more than half of the anti-gas tax frames displayed. In Massachusetts, *cut programs first* was the primary anti-gas tax frame.

Table 3-4. Types of Anti-gas Frames Displayed for Each State in the Final Year of the Case Study

State	Gas Tax Increase	Opposed to taxes	Cut programs 1st	Hurts economy
Idaho 2009	No	14%	38%	48%
Massachusetts 2009	No	15%	62%	23%
New Hampshire 2009	No	9%	32%	59%
Minnesota 2008	Yes	58%	13%	29%
Oregon 2009	Yes	0%	50%	50%
Vermont 2009	Yes	39%	36%	25%

Source: Newspaper data base. Frames do not add up to 100 percent.

3.4 Attribution Summary

Overall, as with the display of issue frames, pro-gas tax attributions outnumbered comments in opposition to gas tax increases in all of the states except New Hampshire. Idaho, where the proposed gas tax increase was also rejected, ranked close to New Hampshire. In Massachusetts, positive attributions outnumbered opposition attributions.

Table 3-5. Percent of Pro-gas Tax Attributions by State.

State	Gas Tax Increase	Governor	Pro-gas tax attributions	Anti-gas tax attributions
Massachusetts 2009	No	For	79%	21%
Oregon 2009	Yes	For	75%	25%
Minnesota 2008	Yes	Opposed	59%	41%
Vermont 2009	Yes	Opposed	58%	42%
Idaho 2009	No	For	53%	47%
New Hampshire 2009	No	Opposed	42%	58%

Source: Newspaper database.

In all of the states, the debate about gas taxes in the news media discourse is very much a debate between and within the legislative and executive branches. Of all the frames attributed to different speakers during the three years of the case study, about 80 percent were either legislators or members of the executive branch. Of that total, half are attributed to legislators.

Table 3-6. Frames by Attribution Source

State	Total Govt. Frames	Leg Position	Executive Position	Executive Attributions	Legislative Attributions
Idaho 2009	93%	Opposed	For	29%	64%
Massachusetts 2009	75%	Opposed	For	48%	27%
New Hampshire 2009	60%	For/Opposed	Opposed	30%	30%
Minnesota 2008	75%	For	Opposed	24%	51%
Oregon 2009	63%	For	For	13%	50%
Vermont 2009	94%	For	Opposed	19%	75%

Source: Newspaper data base.

While total legislative attributions outnumbered executive attributions, there was a broad range of legislators quoted. Different legislators quoted ranged from a high of 37 in Minnesota to a low of 10 in Vermont. Executive branch attributions were almost completely dominated by the state's governor, while multiple legislators on different sides of the issue were quoted.

4. Discussion

The data indicates that pro-gas tax frames outnumbered anti-gas tax frames in the states that saw gas tax increases: Vermont, Oregon and Minnesota. However, Massachusetts and Idaho also had a majority of pro-gas tax frames in the news discourse but did not see a legislative vote to increase gas taxes. There are at least two possible explanations, staying within the focus of this study on media discourse, that draw from the literature on narrative integrity and media standing.

Narrative integrity refers to the coherence of the story that the frame fits within. A frame has to be able to explain unfolding events and “make sense” to the readers (15). The story of aging and crumbling infrastructure resonated with transportation users who drive the transportation system every day. In addition, the powerful metaphors of collapsing bridges and crumbling concrete enhance the frame’s resonance. The collapse of the I-35W bridge in 2007 only underscored the “truth” of this story. Legislators in Minnesota who framed the issue as one of ***crumbling infrastructure*** had their story confirmed when the I-35W bridge collapsed on August 1, 2007.

In Vermont and Minnesota, ***crumbling infrastructure*** comprised the majority of the pro-gas tax frames. This is a powerful frame that carries images of collapsing bridges, aging and deteriorating roadways, threats to physical health and a system in dire jeopardy. The list of words that appear in this frame include: dire, deteriorating, poor, in collapse, falling down, struggling, un-safe, in-crisis, bleak, slashed, desperate, worst, and bad. Policy-makers understand the power of this frame.

Transportation Chairman Richard Westman, R-Cambridge, tried to turn lawmaker’s attention away from a partisan fight over the taxes and back to the heart of the bill -- the road, bridge and rail projects."When you go home tonight, nearly one-quarter of the bridges you drove over are structurally deficient," Westman said. He noted, too, that at present funding levels, "by 2010, nearly 40 percent of our roads will be in poor condition" (23).

In Massachusetts and Idaho the dominant pro-gas tax frame was ***long-term solution*** – displayed about 75 percent of total pro-gas tax frames. This frame emphasized funding and financial mechanisms and lacks the imagery of ***crumbling infrastructure***. In both states the debate in the news discourse became about transportation system funding not the deteriorating system. In Massachusetts, the debate became particularly complicated because of competing revenue raising proposals and legislative and executive branch initiatives to restructure the state transportation agencies.

A second explanation for the number of pro-gas tax frames and pro-gas tax attributions in Massachusetts and Idaho despite the failure in the policy domain is related to media standing. In both those states, the state’s governors proposed and strongly supported the tax increases. Media standing is a measure of how “accepted” the sponsor of a frame quoted in a media article is as a regular and valid contributor to the policy debate on a particular policy issue. Standing reflects a news judgment by reporters about which issues or players are significant. Governors clearly receive media standing to promote their chosen frames.

Legislative leaders did not always receive media standing. For example, in New Hampshire, executive branch attributions outnumber the chief legislative supporter of increasing gas taxes more than 5:1. New Hampshire Gov. Lynch opposed the gas tax increases for economic reasons which raised the prominence of the ***hurts the economy*** frame. But in Massachusetts, legislative opponents rallied around the ***cut programs first*** frame which is

indicated by its status as the leading anti-gas tax frame with almost two-thirds of total anti-tax frame displays.

Oregon provides another example of the power of a frame with narrative integrity. Policy-makers in the legislature and executive branch consistently emphasized the link between gas-tax increases and job creation. Unlike the other states in the case study, ***economic progress*** was the dominant frame in the news discourse. In the midst of the economic recession this frame clearly resonated. A previous attempt to raise the state's gas tax was forced to a statewide referendum and defeated overwhelming in 2000. In 2009, pro-gas tax frames ran 20:1 and attributions 3:1 in support of increasing the gas tax.

5. Conclusion and Further Research

In conclusion, there is evidence suggesting a relationship between pro-gas tax frames in the news media discourse and the corresponding success of policy-makers proposing gas tax increases. Understanding this relationship requires examining the narrative integrity of the frames displayed, the media standing of the frames' sponsors as well as the number of pro-gas tax frames.

Another area of research is to look at the media standing of the sponsor's preferred frame. For example, in this analysis it is not clear if Massachusetts Governor Deval Patrick promoted *long-term solutions* or events, journalistic norms and news routines elevated its prominence. To understand this more fully it would be necessary to review the entire statements, press conferences and press releases conducted by the governor and executive branch officials.

Some policy analysts believe that factors at the local level may presage policy changes at the federal level. In their analysis of the 1991 Intermodal Surface Transportation Efficiency Act (ISTEA), Lewis and McGhee (2001) argue that understanding policy issues at the state and regional level can help explain national policy changes. Shifts in the emphasis in transportation planning, funding responsibility and decision-making in ISTEA and TEA-21 from state agencies of transportation to Metropolitan Planning Organizations is not explained by traditional policy approaches they state. Instead, examining local issue environments can help explain fundamental changes of policy at the national level (25).

In this study, the focus on state gas-tax news media discourse may provide information to national policy-makers as the debate over how to fund the next federal transportation law continues. The data suggests that in the states where the news discourse emphasized either *crumbling infrastructure* or *economic progress* there was a corresponding success in the policy domain for pro-gas tax policy-makers.

References

1. National Surface Transportation Policy and Revenue Study Commission. 2007. *Transportation for Tomorrow: Report of the National Surface Transportation Policy and Revenue Study Commission*. Washington, D.C.
2. Nelson, Peter, Kenneth Gillingham and Elena Safirova. 2003. Revving up the Tax Engine: Gas Taxes and the DC Metro Area's Transportation Dilemma. Resources for the Future. Washington, D.C.
3. ARTBA. January, 2009. State Gas Tax Report. The American Road & Transportation Builders Association, Washington, D.C.
4. National Surface Transportation Infrastructure Financing Commission. 2009. *Paying our Way: A New Framework for Transportation Finance*. Washington, D.C.
5. Wachs, Martin. 2003. A Dozen Reasons for Raising Gasoline Taxes. Institute of Transportation Studies. University of California, Berkeley.
6. Delucchi, Mark. 2007. Do motor-vehicle users in the U.S. pay their own way? *Transportation Research Part A*. (41), 982-1003.
7. Hsu, Shi-Ling, Joshua Walters and Anthony Purgas. 2008. Pollution Tax Heuristics: An Empirical Study of Willingness to Pay Higher Gasoline Taxes. *Energy Policy* 36, 3612-3619.
8. Edmonson, R.G. June 4, 2009. *Panel Reviews Gas Tax Alternatives*. The Journal of Commerce Online - News Story. Washington, D.C.
9. Entman, Robert M., (2003) Cascading activation: Contesting the White House's frame after 9/11. *Political Communication*. (20), 415-432.
10. Entman, Robert M., (2007) Framing bias: Media in the distribution of power. *Journal of Communication*. (57), 158-173.
11. Gamson, William A. & Andre Modigliani. (1989). Media discourse and public opinion on nuclear power: a constructionist approach. *American Journal of Sociology*, 95(1), 1-37.
12. Gamson, William A. (1992) *Talking politics*. Cambridge, MA: Cambridge University Press.
13. Gamson, William. (2005) Movement impact on cultural change. In S. Pfohl, A. Van Wagenen, P. Arend, A. Brooks & D. Leckenby (eds) *Culture, power and history: Studies in critical sociology*. The Netherlands: Brill Academic Publishers.
14. Carragee, K.M. & Roefs, W. (2004). The neglect of power in recent framing research. *Journal of Communication*, (20), 287-308.
15. Reese, Stephen D., (2007) The framing project: A bridging model for media research revisited. *Journal of Communication* (57), 148-154.
16. Miles, Matthew B. and Michael A. Huberman. (1994) *An Expanded Sourcebook: Qualitative Data Analysis*. Thousand Oaks, CA: Sage Publications.
17. Bakst, Brian. February 26, 2008. Transportation bill reaches law over Pawlenty veto. Associated Press.
18. Cain, Brad. May 27, 2009, Ore. lawmakers back gas tax increase. Associated Press. Portland, Oregon.
19. Johnson, Glen. February 20, 2009, MA drivers face 19-cent gas tax hike under plan. Associated Press. Boston, Mass.
20. Defiebre, Conrad. March 24, 2007. House approves \$9 billion roads bill. Minnesota Star Tribune, Minneapolis.
21. Ross, Casey. May 4, 2009. Transit woes bad for business, executives say. Boston Globe, Boston, Mass.
22. _____. May 24, 2009. Lynch vows he'll veto gas tax. Concord, New Hampshire.
23. Remsen, Nancy. March 18, 2006. House passes fuel tax increases. Burlington Free Press, Burlington, VT.
24. Lewis, Paul and Eric McGhee. 2001. The Local Roots of Federal Policy Change: Transportation in the 1990s. *Polity*. Volume XXXIV, (2), 205-229.