Public Opinion on Tolling

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The Public Supports Pricing if . . .

A Synthesis of Public Opinion Studies on Tolling and Road Pricing

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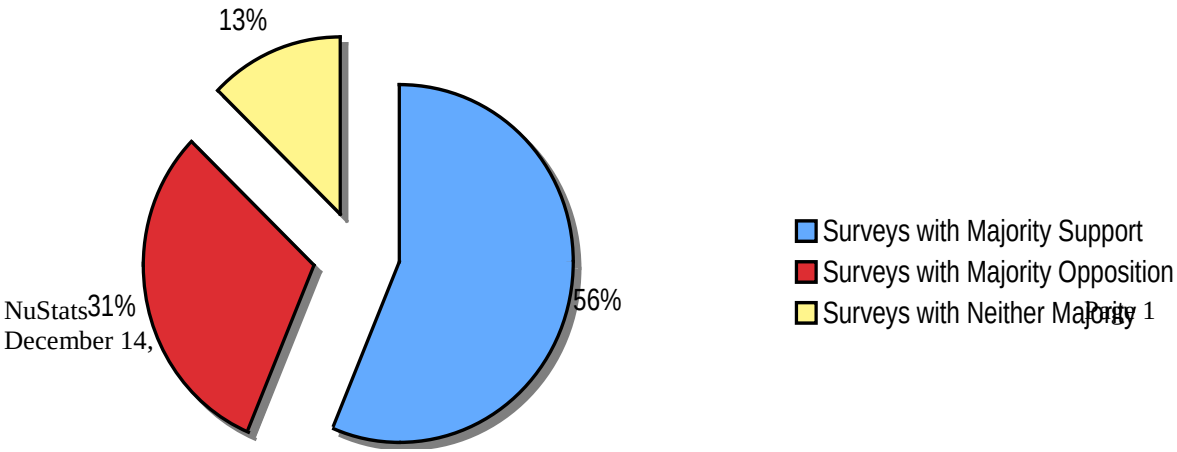
Given the widespread concerns about congestion and the need for infrastructure expansion, an increasing number of proposals to price transportation capacity to both generate revenue and manage transportation demand are forthcoming and inevitable. We have now reached a threshold where the major constraint on the successful implementation of tolling and road pricing proposals relates largely to policy making (i.e., lack of stakeholder and political acceptability), rather than to technical or administrative barriers. The feasibility of these proposals often depends on public support, and more often, on elected officials' *perceptions* of public support. In many places, a gulf exists between elected officials' perceptions of what the public thinks…and what the public actually thinks. So even within the context of such support, political acceptability remains a challenge.

The power of surveys to illuminate the attitudes of citizens means that results are often used as the foundation for policymaking. As aptly said by Earl Newsom, American Petroleum Institute, nearly 50 years ago, "Today's public opinion, though it may appear light as air, may become tomorrow's legislation – for better or worse." Given the link between policymaking and public opinion, the quality of public opinion data is critical. A badly taken poll or inaccurate survey can misrepresent actual public opinion and, in turn, influence future policy debates. But who controls the quality of the measures of public opinion that are communicated to public officials and policymakers? The quality of scientific research is typically controlled through the process of publication and replication. The ways in which surveys or public opinion polls are reported often miss the checks and balances developed as part of the scientific process. So how does one know what the public actually thinks? NuStats recently conducted a systematic review of what the public thinks about tolling and road pricing. Our synthesis provided a broad perspective on public opinions across the U.S. and internationally. It was based on a thorough review of the published literature, a scan of national and international media stories on the topic, and contact with organizations with interest in or experience with tolling programs and road pricing.

Results from "Survey of Surveys"

In total, we examined the findings of 110 public opinion studies (i.e., survey and focus group studies) on this topic. Our "survey of public opinion studies" indicated that in the aggregate there is clear majority support for tolling and road pricing. Among all surveys, 56 percent showed support (See Figure 1). Opposition was encountered in 31 percent of the surveys. Mixed results (i.e., no majority support or opposition) occurred in 13 percent of them.

Figure 1: Support for Road Pricing in Public Opinion Surveys (N=103)



The results in Figure 1 were derived by coding each of the 103 surveys compiled for our synthesis on a 5-point scale of support or opposition (i.e., strongly support, support, mixed, oppose, strongly oppose). Is this valid? While we cannot be certain that all relevant studies were found, our focus was on breadth of information, without regard to positions on the issue. We acknowledge that the sample of surveys while larger than most was still small, and it was not randomly generated. Furthermore, we recognize that the results from the different surveys may have been measured on different scales and with different analysis designs. At the same time, great care was taken in the development of this sample of public opinion studies. Most of the surveys we reviewed had sufficient sample sizes and were conducted in a sound scientific manner.

Does our "survey of surveys" represent the population well? The key to representativeness is that the chance (or probability) of every unit (or person) in the population being selected for the sample must be known and properly accounted for in the analysis of the results. It would be hard for us to know how well we have done since a perfect listing of the universe for our synthesis does not exist. Importantly, we sampled for diversity, including a broad and diverse range of public opinion studies and used snowball sampling techniques to uncover rare or hard-to-find research studies. We compiled both survey and focus group studies. Focus group results have not been included in our quantitative analyses of public opinion trends and patterns since there is less reliability in their findings. Focus groups may provide interesting insight for certain purposes, but they cannot be used, as scientific surveys can, to draw inferences about the larger population.

Factors Influencing Public Opinion

Interesting findings in level of support or opposition can be explained by methodology factors, including the validity of the research, its sponsor, the survey population, and question wording.

Validity of the Surveys. Assessing the validity of the surveys without full access to the documentation is challenging. But available information, primarily sample size and sample type, were used to rate the validity each survey in the synthesis. Nearly half (54%) of polls or surveys were coded as having "high" validity, about a third (30%) as having "moderate" validity, and 16 percent were coded as "low." We found public support for tolling in 59 percent of the studies coded as "high" validity, compared with 61 percent of the "moderate" validity and 38 percent of the "low" validity cases. This finding adds credence to the general finding of majority support for tolling and road pricing.

Sponsor of the Surveys. Differences in aggregate results were found based upon the sponsor of the poll or survey. When a tolling or agency responsible for the project sponsored the poll or survey, support was significantly higher in the aggregate (70%) than opposition (22%). Aggregate support was higher than opposition in media-sponsored polls but by a smaller margin (54 to 46 percent). When it was sponsored by another organization (i.e., university, association), aggregate support (47%) was below the majority threshold but still higher than opposition (34%).

Survey Respondents. Polling and sponsoring agencies have a choice in the selection of the respondents to be surveyed or interviewed. This analysis indicates that support and opposition vary depending upon the type of respondent pool selected. For data representative of "potential users", aggregate support was higher (74%) than opposition (15%). A similar outcome was observed with public opinion measures of registered voters – support was found 71 percent of cases and opposition in 24 percent. However, for those polls or surveys that targeted the general public, a different pattern was observed. In these latter polls, support and opposition were equal in proportion (at 42% each).

Question Wording. Most of the polls or surveys did not include clarifying or additional information in the question wording that might influence public opinion one way or another. However, support was higher when this information was presented to respondents as part of the survey question, such as "would you support congestion pricing if the revenue were used to prevent an increase in mass transit fares and bridge and tunnel tolls." Support for tolling was noted in 94 percent of these cases when additional information was provided, compared to 48 percent of cases in which no additional information was presented as part of the survey question.

Our compiled public opinion data also supported analysis of differences in public opinion results based on project-or issue-related characteristics, such as type of pricing, year, and context.

Context of Specific Project. Most of the surveys and polls compiled in the synthesis (63%) were done in association with a specific project (i.e., pre- and post-surveys to evaluate the impact of the I-394 MnPass Lanes in Minneapolis, Minnesota). Other times public opinion was elicited in a general public opinion survey on multiple issues (i.e., citizen survey for the Collier County, Florida government). Public opinion was more supportive when a specific project or concept was targeted (62% of cases) versus general questioning on tolling or road pricing (48% of cases).

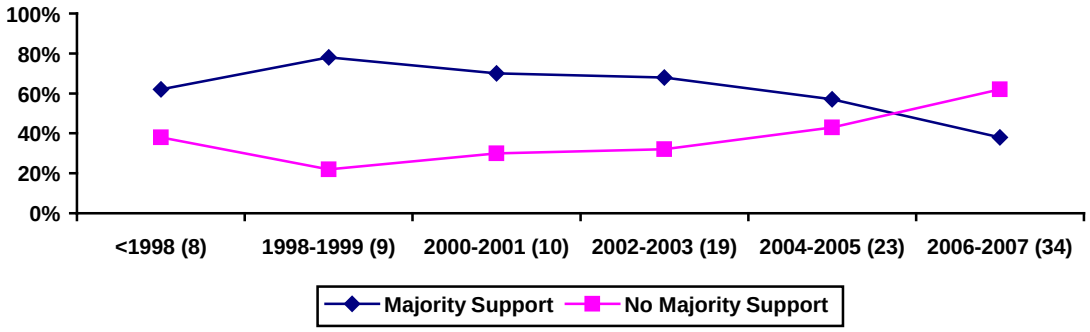
Type of Project. Levels of support or opposition varied according to the type of project on which public opinion was solicited (see Table 1). The notable standouts are cordon/ area pricing and private-ownership, both of which showed higher opposition than support. Public opinion was supportive in the vast majority of surveys or polls asking about HOT lanes, traditional tolling, or express toll lanes.

Table 1: Public Opinion based on Type of Pricing

Survey Results	Type of Pricing Project				
	HOT Lanes	Traditional Tolling	Express Toll Lanes	Cordon / Area Pricing	Private Ownership
Majority Support	73%	71%	62%	32%	0%
Majority Opposition	15%	26%	23%	53%	60%
Neither Majority	12%	3%	15%	16%	40%
Total Percent	100%	100%	100%	100%	100%
Total Cases	26	35	13	19	10

Trends over Time. Discussing trends in support and opposition is challenging since the sample sizes for any given year were quite small. In Figure 2 we have identified in parenthesis the number of polls or surveys that were available for analysis by year. With these caveats in mind, we found a rise in support for pricing in the mid-1990s and a drop-off in support starting in 2002. Support averaged 70 percent of cases prior to 2002. Subsequent to 2002, support averaged 49 percent of cases. In addition, public opinion was much more polarized prior to 2003.

Figure 2: Trends in Support versus Opposition to Pricing



The number of cases in these two time periods differed significantly, with 27 public opinion polls or surveys prior to 2002 and 76 afterward. This increase in the number of surveys or polls is indicative of the growing interest in tolling and road pricing as solutions for financing or congestion challenges. The drop-off in support may be associated with the type of pricing that was referenced in the public opinion research. The early surveys were done in association with the early cordon or area pricing experiments. In the mid-1990s to 2002, the types of projects being considered were traditional toll roads, express toll lanes, and HOT lanes. In more recent years, cordon tolling and PPP projects have been brought into the public sphere.

Geography. The polls and surveys in the West have resulted in support for pricing to a much greater degree than opposition. The West also has the longest history with pricing initiatives. Public support for pricing in the Midwest is also strong. Public support is less evident in the South, where there is less history with road pricing and where there was the introduction of many new pricing initiatives recently. In the Northeast, public support is also mixed. This is most likely the result of the types of new initiatives that are being introduced.

Table 2: Public Opinion based on U.S. Geography

Survey Results	Northeast	Midwest	South	West
Majority Support	36%	64%	44%	84%
Majority Opposition	36%	27%	32%	13%
No Majority	27%	9%	24%	3%
Total Percent	100%	100%	100%	100%
Total Cases	11	11	25	38

Themes in Public Opinion Results

1. The public wants to see value.

When a concrete benefit is linked to the idea of tolling or charging for road usage as opposed to tolling in the abstract, the public support of tolling is higher. It is important to articulate benefits as they pertain to individuals, to communities, and society as a whole. In Atlanta, focus group participants liked a HOT lane proposal because "it offers more choices. It gives me benefits – I can get to places faster." In London, support for the Central London Congestion Charge increased

as the scheme was proven to improve air quality and reduce particulates contributing to poor health. In a survey of New Yorkers, reasons for supporting congestion pricing were – reduced congestion and pollution, increased use of transit and city revenues.

2. The public prefers tangible and specific rationales.

When public opinion on tolling is measured in the context of a specific project as opposed to the general principle or policy, the level of support is higher. In the former context, road pricing is perceived of as a "choice" not as a kind of a punishment. This is likely the reason that low-income individuals generally support pricing – they appreciate having the "choice" of paying to use uncongested lanes or roadways. Traffic problems must be evident, and it must be demonstrated that pricing is the best solution to the problems. In many European examples, support was higher when road pricing was put forth as part of a comprehensive policy package of road and public transit investments.

3. The public cares about the use of toll revenues.

The use of tolling revenues is a key determinant to acceptance or rejection of congestion pricing. When the perceived beneficiaries of tolling revenues are special interest groups (private companies or investors), support for tolling is lower. In New Jersey, respondents were against the sale of the New Jersey Turnpike and Garden State Parkway to pay down the state's debt. However, they were more supportive when the money was used to fund transportation infrastructure in the state. Support tends to be higher when revenues are used for highway infrastructure or public transit improvements and/or to complete necessary transportation construction faster.

4. The public learns from experience.

Support from a majority of citizens often cannot be expected from the outset. When the opportunity to use tolled facilities already exists, public support of tolling is higher than when/where tolling is simply a possibility for the future. In Oslo, Sweden, and London, support for cordon tolling increased after the pricing program was implemented. Building support is a long-term, continuous process that should not stop after implementation. In the SR 91, I-15, and I-394 HOT lane evaluations, support remained high and even increased as respondents experienced more of the benefits.

5. The public uses knowledge and information when available.

When opinion is informed by objective explanation of the conditions and mechanics of tolling and its pros and cons, support is higher than when there is no context for how tolling works. In surveys in both Denver and Alameda County, support for HOT lane projects increased after information and clarification on how the HOT lanes worked. In San Diego, equity concerns dissolved and support for a pricing project strengthened when participants received clarifying information on the features of the project. This factor may explain why members of the public may express negative attitudes about tolling and road pricing as theoretical constructs, but will use the priced facility when it opens.

6. The public believes in equity and fairness.

Public opposition of tolling is higher where there is perceived unfairness. In Atlanta, respondents supported proposals that would toll vehicles with as many as three persons (HOV-4) more than proposals that would toll vehicles with two persons (HOT-3). HOT-3 was perceived as penalizing carpoolers, whereas almost everyone would be tolled in HOT-4. In Port Authority of NY/NJ focus groups, peak period pricing was mentioned as "unfair to commuters." Also encapsulated in this perception is that people do not want to "pay for [roads] that they have gotten for free in the past. That's unfair." This also relates to why having an "alternative cost-free route" is so important for public support, and why support for tolling new roads and bridges is higher than for tolling existing facilities. In terms of equity, there is general agreement that decisions to use or not use a priced facility revolve around people's needs and preferences. Everyone, regardless of who they are or where they live, benefits from having a choice.

7. The public wants simplicity.

When the mechanics of tolling or other user fee programs are simple and clear and therefore easy to understand, public support of tolling is higher than with highly complex programs. In two failed cordon toll projects in Hong Kong, the alternatives had complex pricing structures and numerous charging locations. In a statewide survey in Oregon, opposition was lower for the simplest idea (i.e., toll roads, 68%) than for more complex ideas (i.e., per-household highway access fee, 91% and mileage fee, 81%). In focus groups around Washington State, some participants preferred the gas tax as a revenue instrument rather than the mileage-based system using GPS and cell phone technology that was tested in the study. "I would rather pay a higher gas tax than [have] another system to keep track of." Complex systems engender apprehension about opportunities for government abuse or fraud.

8. The public favors tolls if the alternative is taxes.

While there are some instances of the surveyed public preferring tax increases over tolling, these are isolated instances. In Maine, survey respondents were given a list of alternatives for funding a new highway or bridge. Fifty-six percent (56%) supported establishing tolls; 16 percent increasing the gas tax; and 10 percent would cancel the project. One individual in Minneapolis focus groups was quoted as saying, "I like tolls because I wouldn't use them and I wouldn't pay for it. We've got enough taxes." In New Jersey, nearly two-thirds of voters opposed raising tolls on the states turnpikes to pay off state debt. However, when asked to choose between raising tolls, cutting services, or raising taxes, more persons opted for raising tolls (44%, 28%, and 9%, respectively). In a statewide survey in California, respondents favored HOT lanes, tolls roads, and express toll lanes over gas and sales tax increases. Likewise in a national American Automobile Association survey, the public supported adding tolls on new and existing roads and highway lanes over increasing motor- and non-fuel taxes or imposing a vehicle mile tax.

Conclusion

The political nature of a community and its interest groups can often shape the public debate on tolling and road pricing and tend to obscure the majority opinion on the issue. A very vocal minority can often transform the complex subject of road pricing into an object of politicking. Rather than stimulate discussion, the transformation of pricing into a political issue has in some places resulted in policies that possess superficial majority appeal but fail to address the real issues of how to deal with infrastructure financing, congestion management, or global warming.

An early pioneer in the science of public opinion measurement, George Gallup, suggested that, with the measurement of public opinion, politicians "will be better able to represent…the general public by avoiding the kind of distorted picture sent to them…by overzealous pressure groups who claim to speak for all the people, but actually speak for themselves".

The public may have little daily contact with many issues on the public agenda, yet their opinions greatly influence policymakers. What can we do about it? We need an informed public. The public needs to say, "we consent." But, the public still lacks credible, available, objective information on the benefits and challenges in tolling and road pricing. The public needs to understand the problems so they can accept a solution. We also need to track public opinion over time, particularly in the context of regional or local initiatives – from the idea stages to implementation and ultimate usage by the public. It is important to track the nature of support and opposition across variations in project type and to document how public opinion can shift with changing values, new knowledge, or a new state of the world.

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