

Why Failure Is an Essential Option: Building Accountability Insurance into Public Policy

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Introduction

Since the deservedly celebrated recovery of the Apollo 13 mission from a close brush with disaster in 1970, the motto of NASA flight director Gene Kranz, “Failure is not an option” has entered the vocabulary of policy makers around the world who intervene to address difficult challenges and serious risks. From winning the “war on terrorism,” to keeping nuclear plants running safely, to preventing a global pandemic such as bird flu, political leaders regularly assure the public that the plans, programs, and policies they have created will preclude failure so that people can go about their lives without worrying too much about “what if” Policy failure is thus presented to the public as being virtually unthinkable, even by government leaders who routinely “run against government” during election campaigns and stoke populist and neo-conservative political sentiments that “government is the problem.” This paper seeks to get behind such rhetoric and explore a significantly more complex political reality.

The implication of a “zero tolerance” approach to formulating policy in high risk domains like nuclear power or preventing terrorism is that safety offered by public policies governing quotidian activities such as drinking water from the tap or driving to work is at least as firmly established. This paper explores how governments deal with that expectation in one of the most risky daily activities, travel by automobile. It examines the way in which road safety policy goals have been chosen, drawing extensively upon an earlier study that compared road safety policy making in ten OECD member states. (Perl and Berry, 2007)

Road safety merits attention as a window on how policy failure is addressed in policy formulation because transport by automobile combines widely perceived benefits with relatively high risk. In Canada, for example, automobile accidents killed 2,778 people in 2003, and caused 222,260 serious injuries. (Transport Canada, 2004) For Canadian males aged 10 to 24, and females aged 10 to 29, motor vehicle accidents pose the greatest risk of death from any cause. (Statistics Canada, 1999) Road risks are both less spectacular, and yet more ubiquitous, than those facing astronauts, soldiers or nuclear power plant workers. Governments are thus faced with the challenge of insulating themselves against the blame that could arise from the steady stream of road carnage. This paper highlights an apparent paradox that arises when governments

foresee some level of policy failure, yet are reluctant to act, or unsure of their capability to eliminate such failings. Under such circumstances, governments can pursue a strategy of anticipating policy failure, and incorporating it into the established policy goals. In building the capacity to “fail successfully” into policy design, policy makers seek to inoculate themselves from subsequent accountability.

This strategy of building accountability insurance into policy design is not universal, but arises under certain circumstances. The more room there is within a policy community for differing definitions of success or failure, and the more likely that some policy actors will assert the success of particular outcomes while others criticize failure, the greater the temptation for policy makers to seek accountability insurance through building the room to fail successfully into their policy goals. Road safety turns out to be the kind of policy issue where such temptation exists.

Statistically speaking, travel by automobile is the most dangerous activity that citizens of developed countries routinely expose themselves to. While the absolute level of road deaths and injuries might seem worthy of ambitious policy intervention, Covello (1989) suggests that a steep discount is often applied to risks associated with mundane activity and familiar technology. Automobile travel thus appears safe in comparison to the dangers arising from more unusual technologies whose failure yields very infrequent, but spectacular, disasters such as airplane crashes or nuclear reactor meltdowns. Hewitt (2000) places Canadian traffic accidents in the category of “chronic dangers” which occur frequently but on a dispersed scale, and thus do not draw public attention.

When faced with occasional evidence of the road safety problem, such as when particularly large instances of road carnage make news, the public perception that something unfortunate has happened to bad or unlucky drivers means that governments will not get blamed. Yet the expectation remains that government is doing what it can to make roads and autos safer. Different policy approaches to managing risk on the roads reveal two alternative approaches to policy formulation. This difference can be seen through goals that are stated in terms of concrete outcomes (e.g., road deaths and injuries) and those that are expressed in relation to other activities (e.g., as a percent of vehicle kilometers traveled, or frequency of impaired driving or

seat belt use). This difference in setting targets for future policy reflects the confidence that elected officials (and their closest advisors) have in the often disparate views of experts from different disciplines (e.g., traffic engineering, psychology, or public health).

Ways of expressing road safety goals reveal more than just different accounting and measurement schemes. They also illustrate how governments approach the challenge of improving safety outcomes in a domain where counterproductive responses to risk mitigation are well documented. John Adams (1995) has noted that such compensating behaviour is often underestimated, leading to policy outcomes that fall short of goals once the safety-enhancing measures stimulate an upswing in risk-taking such as driving at higher speed or traveling in poor weather conditions. As seen by Wilde (1982: 219-220), who originated this theory of risk homeostasis, "... lasting accident reduction ... cannot be achieved by means of merely providing road users with more opportunity to be safe, but that *safety can be enhanced by measures that increase people's desire to be safe.*" Such advice to policy makers yields a political challenge.

If policy makers take account of their society's risk "thermostat," and if they then adopt a strategy to lower their public's tolerance for road risks so that drivers will not compensate for safer vehicle technology and road designs, then they are also courting a greater propensity for blame since the potential accountability for policy failure would also be likely to go up. This is where the value of accountability insurance becomes a factor in policy formulation. The effect of accountability insurance can be seen in the fact that some jurisdictions have designed road safety programs that embrace specific goals, while others have not. Such a difference in policy formulation is not trivial.

Governments can be seen to express their road safety policy objectives in one of two ways, identifying **concrete** or **relative** goals as the standard by which to measure their efforts. And when these goals are projected into *anticipated* outcomes, it turns out that most jurisdictions that specify concrete outcomes are aiming for more ambitious safety results than those jurisdictions opting to set relative goals. This duality in the formulation of road safety policy is influenced by political and organizational factors that comprise the policy context. On the one hand, public officials' perception of their political legitimacy is positively correlated with the level of

ambition for safer roads, and hence their propensity to establish concrete policy goals. On the other hand, public officials gauge their bureaucracy's capacity when considering how high to aim in these policy goals. Departments with a track record for effective policy implementation are more likely to inspire policy makers to embrace more ambitious goals while those with problems in program delivery could yield a preference for less ambitious outcomes expressed as relative policy goals.

Defining the Problem and Targeting the Solution: Two Approaches to Selecting Policy Goals

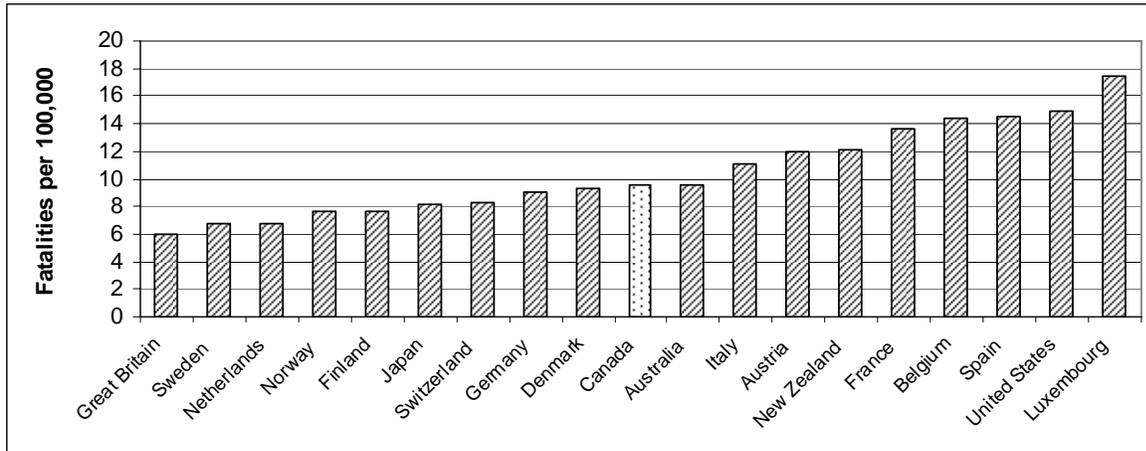
No single metric can capture the "bottom line" for road safety policy effectiveness. Rivara, et. al., (1999) summarize an extensive road safety literature that reveals justifications for focusing on a diverse and not entirely compatible range of safety measures. Perl and Berry (2007) selected the measure of fatalities per 100,000 population as the most effective way of comparing road safety policies across nations with a high level of motorization. Figure 1 below presents the fatalities per 100,000 population for eighteen OECD nations.

Comparing these countries' road safety policies reveals two distinct types of strategy at work in policy formulation. Some governments appear prepared to make commitments that make it easy to hold officials accountable in the short term (e.g., within the current government's mandate). Such a design usually endorses numerical milestones whose attainment is envisioned as an important step in solving the policy problem. Such an approach leads to the embrace of **concrete goals**. It can be hypothesized as more likely to occur in policy formulation where a high degree of societal consensus regarding the importance of the problem is apparent *and* where government officials have a high level of confidence in their ability to implement solutions.

Another approach to policy formulation can be found in the case of nations that express outcomes as relationships to a particular reference point. A measure of outcomes that exist before the intended policy intervention is typically chosen as the benchmark against which progress will be made. Such an approach to formulation is more common when policy actors are less certain about either the legitimacy of addressing a particular policy problem or their

government's administrative capacity to achieve results. This type of approach is aimed at establishing **relative goals**.

Figure 1
Fatalities per 100,000 Population, Selected OECD Countries, 2000



Source: OECD Transport Division RTR Program. (2002) *Road Safety Performance -- Trends and Comparative Analysis*, OECD International Road Transport Accident Database (IRTAD) at: <http://www.oecd.org/dataoecd/56/32/2487308.pdf>

A typology of policy formulation and the key administrative and political dynamics that can shape goal selection is presented in Table 1 below. The institutional configurations summarized in Table 1 can influence the ways in which policy makers consider what to do about road safety challenges in relation to other jurisdictions' efforts. Table 2 presents an estimate of what these different approaches yield in comparable terms.

Table 1
Policy Formulation and Institutional Configuration

	Jurisdictional Cohesion	Admin. Capacity	Political Legitimacy	Political Autonomy	Nations
Concrete Goals	Unitary or Centralized	Reliable	Strong	<i>If Necessary:</i> Population often aligned with leadership	Sweden Norway Netherlands New Zealand Japan
Relative Goals	Decentralized	Less certain	Potential	<i>If Possible:</i> Uncertainty among leaders regarding how far to get ahead of population	United States United Kingdom Denmark Austria Canada

Formulating Road Safety Policy in Ten Nations

To gain an understanding of what kind of insulation from failure might be provided by concrete and relative goals in road safety policy, it is important to express the anticipated outcomes in comparable terms. Table 2 depicts the number of road deaths per 100,000 population that ten nations have arrived at in formulating their particular road safety policies. Developing this estimate required some simplifying assumptions discussed in a methodological footnote¹. Calculating these anticipated outcomes is not meant to predict actual road safety results, but rather to clarify what outcomes policy makers expect they are committing to achieve, and could thus be held accountable for.

¹ Table 2 was constructed by first determining what each nation's road safety goal would yield in terms of projected deaths. For countries which have identified concrete goals, these targets were used directly. In countries that have set relative goals, projected deaths were calculated by taking the number of fatalities during the year from which they have based their goal, and reducing it by the percentage which they have stated as their goal. Population data was gathered from the CIA database, and was then multiplied by the expected growth rate of the population, compounded year by year at the same rate up to the target year. Since population growth projections for specific years between 2005 and their target year were not available, a steady growth rate has been assumed during each year of the particular time period. The target year goal is then divided by the forecast population level to produce a target of fatalities per 100,000. This is the rate that would be reached in the target year selected by each nation, with no further change to policy goals between that time and 2010.

When results that are projected to arise from different policy goals are calculated for 2010, we see Canada maintaining its position near the median of national road safety performance. These projected outcomes are illustrated in Figure 2 below, with nations that have formulated concrete policy goals indicated in black, those with relative goals indicated in gray. These results reveal that nations choosing concrete policy goals are found predominantly below the mean of projected fatalities while those that set relative targets are found largely above the mean. The administrative and political context for each nation are profiled below – beginning with the group of nations that have formulated concrete policy goals and concluding with a focus on Canada.

Among these nations, Sweden has specified the most ambitious target. The goal of putting an end to deaths from motor vehicle accidents in Sweden’s “Vision Zero” policy framework presents the ultimate assertion of government’s confidence in its ability to resolve a policy problem. It is the equivalent of President Kennedy’s promise that America would land a man on the moon during the 1960s. Such a clear expression of commitment leaves little room for future backsliding – without the potential for criticism regarding policy failure.

Table 2
Anticipated Road Safety Outcomes

Country	Target Year	Projected Death Target, At Target Year	Projected Death Target, Adjusted for 2010 ⁷	2005 Population, July est. (millions)	Population Growth Rate (2005) est.	2010 Population (millions)	Fatalities Per 100,000 (2010)
Concrete Goal Adopters							
Sweden	2007	269 ¹	269	9.0	.17%	9.1	2.96
Netherlands	2010	750	750	16.4	.53%	16.9	4.45
Norway	2012	200	223	4.6	.40%	4.7	4.97
Japan	2010	7,566 ²	7,566	127.4	.05%	127.7	5.92
New Zealand	2010	300 ³	300	4.0	.02%	4.3	7.07
Relative Goal Adopters							
United Kingdom	2010	2,236	2,236	60.4	.28%	61.3	3.65
Denmark	2012	299 ⁴	345	5.4	.34%	5.6	6.24
Austria	2005	577 ⁵	577	8.2	.11%	8.2	7.01
United States	2008	33,457 ⁶	31,067	295.7	.92%	309.6	10.03
Canada	2010	2,076	2,076	32.8	.90%	34.3	6.05

Notes: Population, Population Growth Rates: United States, Central Intelligence Agency. *The World Fact Book*. (2005) at <http://www.cia.gov/cia/publications/factbook/>

Target year, target information: Canada, 27-31,

¹50% reduction over 1996 levels (537 deaths) (Europa, 2002)

²Reduce fatalities by 1500 over 2000 figures by 2010 (9066) (Japan, 2005)

³No more than 300 by 2010. (New Zealand, 6, 2003)

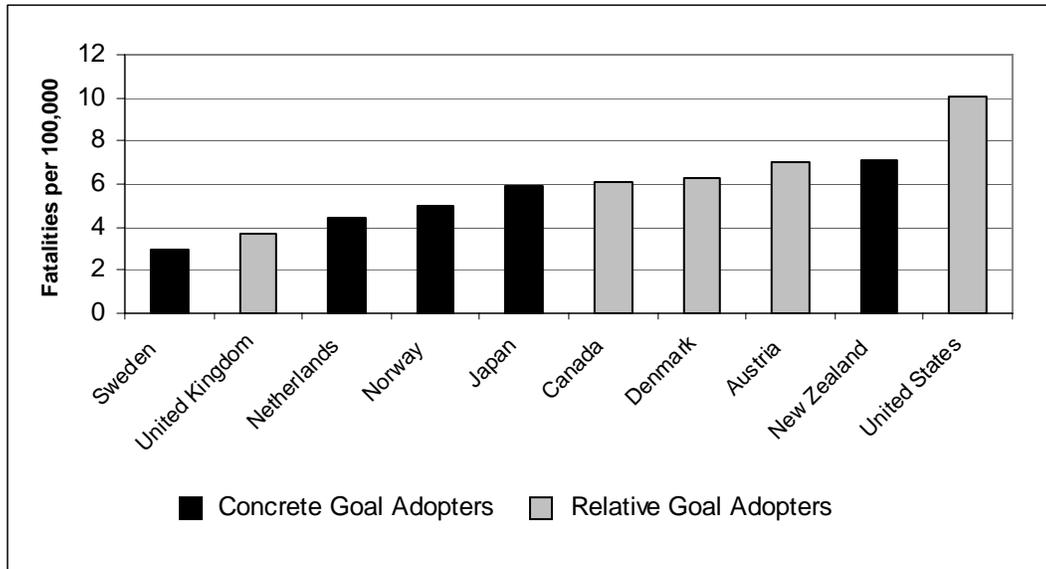
⁴40% reduction over 2000 levels (498 deaths) (Europa, 2002c)

⁵40% reduction over 1998 levels (963 deaths) (Europa, 2002b)

⁶20% reduction over 2000 levels (41,821 deaths) (United States, ii, 2001)

⁷Assuming that progress towards goal is linear, uniform, and continues after targets have been met. The two exceptions are Sweden and Austria, which as of 2004 are not likely to meet their projected goals by their target dates.

Figure 2
Projected Fatalities per 100,000 Population, 2010



Sweden’s timetable for the complete eradication of deaths on the road remains open ended – offering some political insulation for the officials making this commitment. But Sweden has identified a major milestone enroute to the eradication of road deaths, a 50% drop in the number of casualties by 2007 compared to 1996 figures. (Transport Canada, 2003: 7). Meeting this milestone would keep Sweden well ahead of other nations’ road safety performance, both in the 2007 target year and afterwards. These policy ambitions are built upon a political context where risk reduction measures carry high legitimacy and a solid administrative foundation.

Sweden’s National Road Administration, the authority responsible for the road transportation system, and Parliament have a long track record of work on road safety initiatives dating from the 1950s. The National Road Administration originally advanced a goal of zero road deaths in 1996, and prepared a memorandum elaborating and justifying this policy in January 1997. Dr. Claes Tingvall, Director of Traffic Safety for the Swedish National Road Administration, became a high profile champion of the Vision Zero approach, drafting a memorandum that made the case for ending all road transportation deaths as a public policy goal. Sweden’s parliament passed legislation in response to this memorandum in October 1997. (Andersson, 2003)

The Netherlands has also adopted an ambitious concrete goal in road safety, without yet considering an end to automotive fatalities. The Dutch target, as established in “From A to Better: National Traffic and Transport Plan 2001-2010,” is for no more than 750 deaths by 2010. (Netherlands, Ministerie van Verkeer en Waterstaat, 2001) This concrete goal selection builds upon previous policy initiatives that identified relative goals for road safety. In 1986, the “Second Traffic and Transport Structure Plan 1990-2010” called for a 50% reduction in death and 40% reduction in injuries over 1986 figures by 2010. The LRSP plan’s death reduction target was achieved by 2000, while the target for injury reductions was not. (Netherlands, Ministry of Transport, Public Works and Water Management, 1986: 22)

In 1997, policy implementation moved into a new phase of coordination, when a covenant was signed between the Minister of Transport and a number of local authorities to jointly implement a program called “Start-Up to Sustainably Safe”. This collaborative approach sought to clarify the ways in which different levels of government would pursue road safety goals by enumerating specific responsibilities. In 1998, the Dutch Parliament adopted a new Traffic and Transport Act that integrated the 1986 Long-Term Road Safety Plan into a National Traffic and Transport Plan (NTTP). “From A to Better: National traffic and Transport plan 2001-2010” called for no more than 750 road deaths by 2010. Dutch experience thus suggests that establishing clear roles and responsibilities for different levels of government can reduce policy makers’ perceived need for accountability insurance, indicated by a shift from relative to concrete policy goals.

Norway’s concrete policy goal of no more than 200 road deaths by 2012, down from 275 in 2001, leaves little room for doubt that public officials in that country are confident about continuing their achievements. Norway justifies its road safety ambitions by recognizing casualties on the road as “a serious problem to society.” (Norway, Ministry of Transport and Communications, 2002: 5) Meeting this goal could put Norway ahead of the Netherlands by 2012, unless the Dutch move on to set even more ambitious goals in the meantime.

Japanese road safety policy goals have been expressed as concrete outcomes for quite some time. Responding to public pressure over a sharp rise in road fatalities, the government passed the “Traffic Safety Policies Law” in 1970, which established the framework for five year plans.

These plans, set by the “Fundamental Traffic Safety Program,” have set concrete goals every five years since 1971. The first and second five year plans were successful; however, subsequent five year plans have not been. In fact, fatalities increased over 10,000 under the third five year plan (Japan, Traffic Safety Policy Office Management and Coordination Agency, 1998). In 2003, Prime Minister Koizumi, who is the chairman of the Central Committee on Traffic Safety Measures, declared that it was “his intention to make Japan’s roads the ‘safest in the world’ by bringing the annual number of road deaths below 5,000 in a ten year period.” (Japan. Directorate General for Policies on Cohesive Society, Cabinet Office, 2004:6). The Seventh Five Year Plan sets a different concrete goal, presumably en route to a goal below 5,000 for the Eighth Five Year Plan.

New Zealand is the only OECD nation in the sample with a concrete road safety goal that is above the mean on anticipated fatalities per 100,000 population. New Zealand’s “Road Safety to 2010” document calls for no more than 300 fatalities and 4,500 hospitalizations by 2010. (New Zealand, Ministry of Transport, 2003: 5) The plan sets specific goals for fatalities and hospitalizations in different regions. New Zealand’s administrative capacity is also unique because the dedicated organization responsible for road safety also has power over enforcement. The New Zealand Road Safety Authority was responsible for education and support services, as well as for allocating money for policing. (New Zealand, Land Transport Safety Authority, 2003: 19) This fiscal capacity is significant. When New Zealand added 225 police officers for highway patrol, deaths fell by 24%. (New Zealand, Land Transport Safety Authority, 2003: 9)

New Zealand had not formulated concrete road safety goals until recently, which may help to explain its position in these projected outcomes relative to other nations with concrete goals. The preceding plan, “The National Road Safety Plan 1995” had formulated a relative goal “aimed at achieving a level of safety consistent with the highest levels of safety experienced in the world.” (New Zealand Land Transport Safety Authority, 2000: 4) In 1998, the Land Transport Safety Authority put out its fourth working paper entitled “Safety Directions: Setting Road Safety Targets” in which their entire target setting model was laid out. The authors differentiated between a forecast and a target – and acknowledged that the purpose of a target is to motivate progress towards a goal, as well to measure progress and assign accountability

should failure occur. It was only after an extended public consultation that a concrete goal was selected.

Among the nations having formulated road safety policy with relative goals, the United Kingdom is projected to achieve the most impressive outcomes by 2010. The policy, “Tomorrow’s Roads: Safer for Everyone” calls for a 40% reduction in drivers “killed or seriously injured” by 2010, with a 50% reduction in deaths and serious injuries among those under 16. (United Kingdom, Department for Transport, 2000) While the available evidence does not allow us to infer a definitive intent, the United Kingdom’s policy formulation could provide a chance to declare success in the event that only one element of the goal (e.g., reduction in serious injury) were to be met.

By contrast, Canada’s similar formulation of multiple goals supporting an overall objective of having “the safest roads in the world,” which is detailed below, includes an explicit acknowledgement that achieving the goal requires attaining each of the specified subtargets. This same approach was adopted when projecting the UK’s goal of a full 40% reduction in deaths road deaths in Table 2, even though such parity was not made explicit. In the event that the UK’s measure of road safety achievement were to be interpreted as being met by the accumulation of smaller percentage reductions in deaths and serious injuries, the UK ranking in Figure 2 would show a higher level of deaths per 100,000 population in 2010, offering even stronger evidence the interpretation that relative goal adopters are less ambitious in anticipating policy outcomes.

Taking the 40% reduction in deaths and serious injuries to imply a 40% decrease in road deaths by 2010, the U.K.’s results would be second only to Sweden’s achievements. But the means used to attain this goal would differ from approaches taken by nations that have formulated their policy around concrete goals. Great Britain aims to make use of policy ‘carrots’ that encourage subordinate local governments to reach targets for the UK’s relative goals. Local Public Service Agreements (LPSAs) must contain twelve goals that reflect national government policy. One of these goals has to be transportation related, and many local authorities have selected specific road safety targets. Successful local governments receive additional funding. (United Kingdom,

Department for Transport, 2002: 10) For instance, the Department for Transport identified that creating 20 mile per hour speed zones around crosswalks would improve safety, and allocated £3.5 million to local authorities to implement such zones. (United Kingdom, Department for Transport, 2002: 77)

By pursuing road safety improvements with a relative target, British policy makers maintain considerable flexibility. Success can be leveraged through risk communication strategies that bolster public support for more stringent regulatory intervention (e.g., zero tolerance for drunk driving or speeding). Falling short of targeted results can also be used to raise awareness of the road safety challenge. Blame avoidance for policy setbacks is thus easier when outcomes are identified as a percentage shortfall rather than a specific number of deaths.

Denmark's relative goal is outlined in "Every Accident is One Too Many". The plan endorses Sweden's "Vision Zero", but identifies Denmark's goal as reducing the number of deaths and serious injuries by 40 percent by 2012 over 1998 figures. (Denmark, Danish Road Safety Commission, 2000: 5) Denmark's relative goal of a 40 percent reduction in deaths and serious injuries appears to have been formulated to close the gap between Denmark's past road safety results and those nations that have been identified as appropriate peers. The current Danish road safety plan notes that "...Sweden – and to a certain extent United Kingdom and Norway – boast a level of road deaths per inhabitant which is approximately 40 percent lower than ours". (Denmark, Danish Road Safety Commission, 2000: 5) The intent is to catch up while remaining insulated from blame regarding the gap.

Austria's Road Safety Programme for 2002 – 2010 also adopted the goal of a 40% reduction in fatalities relative to 1998. The goal was justified in economic terms, with a clear statement that "We cannot afford to continue having accident rates in Austria that result in socio-economic costs currently amounting to 3.6 billion Euros annually." (Austria, Ministry for Transport, Innovation, and Technology, 2004: 10) The government notes that while fatalities have fallen by nearly 40% over 1961 levels, "By European comparisons, it could be seen that, at best, Austria lies in the middle. The "best" countries have death rates nearly half [those of] Austria." (Austria, Ministry for Transport, Innovation, and Technology, 2004: 11) Austria's plan sets out a number

of recommendations and cites past progress, noting considerable progress in reducing fatalities since 1972. But the measures and milestones that are to be used in implementation remain unspecified, suggesting that political and administrative uncertainty about how far to go remains an issue.

As the world's most mobile, and most motorized, society the United States generates an imposing number of road casualties. Critics have long noted the automobile's high death and injury levels, and even compared the carnage on America's roads (unfavourably) with wartime casualties. (Burby, 1971: 5; Kay, 1997: 103) The political controversy arising from the massive number of deaths might be sufficient to dissuade public officials from choosing concrete policy goals in road safety, and embrace the target of a 20% reduction over 2000 deaths by 2008. This relative goal makes it less likely that implementing road safety initiatives would involve mechanisms that seek to reduce or otherwise constrain mobility.

Canada's overarching policy goal to "have the safest roads in the world" is stated in its Vision for Road Safety. (Transport Canada, 2002) This suggests a high degree of ambition, but also a desire for flexibility in attaining the outcome. Canada's policy goal involves considerable relativity in aiming for "... a 30% decrease in the average number of road users killed or seriously injured during the 2008 – 2010 period (compared to 1996 – 2001)." (Transport Canada, 2001a: 10) The strategy is to be pursued through program specific subtargets, such as increasing seat belt use or reducing drunk driving. These subtargets are identified as contributing to overall road safety and offer the opportunity to connect a national ambition with subnational implementation mechanisms, anticipating that certain provincial jurisdictions will be more enthusiastic, or capable, in pursuing certain subtargets. While such flexibility may well advance Canadian road safety, it is not clear how such an approach would leapfrog Canada into global leadership on having the world's safest roads.

Explaining Canada's blend of ambition with caution in formulating road safety policy requires understanding the ways in which Canadian policy actors assess the political legitimacy and administrative capacity that frame their policy options. The place to look for such evidence is at the level of a "policy community," the set of public and private policy actors that converge to

address a problem or issue that has been identified as being worthy of government's attention. (Coleman and Skogstad, 1990) In seeking explanations for the retreat from highway expansion in the 1980s and the rush into railway privatization during the 1990s, Dudley and Richardson (2000) have identified transport policy communities as the place where individuals, ideas, interests, and institutions interact to create major breaks with past objectives and outcomes. Available evidence points to the policy community playing a key role in the formulation of road safety targets.

Given Canada's federal structure, every policy community will be greatly influenced by a set of beliefs that transcends their specific problem area. Policy communities will reflect the institutionalized rivalry between Ottawa and the provinces, as well as tensions between municipalities and their provincial "masters." Canada's policy implementation reveals strong evidence of how federalism affects the capacity of policy communities to attain substantive goals that may be well supported as ends, but where the means of achieving them are in dispute. It is this capacity constraint that has oriented the road safety policy community to support the relative articulation of goals, a strategy that political leaders will support as long as the prospect of overcoming such capacity constraints appears uncertain.

The Canadian Council of Motor Transport Administrators (CCMTA) forms the nucleus of Canada's road safety policy community. (Canadian Council of Motor Transport Administrators, 2005a) Federal, provincial and territorial government departments, insurance corporations, and automotive manufacturers are all active in CCMTA's deliberations. The CCMTA council comprises representatives from each provincial department of transport and the federal government. The council's standing committees address drivers and vehicles, road safety research and policy, and compliance and regulatory affairs. (Canadian Council of Motor Transport Administrators, 2005b) They coordinate regulatory efforts, and collect and share information and strategy. This organization would thus be one place to gauge the dimensions of road safety policy legitimacy and capacity in Canada.

CCMTA is also a focus for non-governmental organizations advocating positions in road safety. Since the federal government regulates vehicle safety standards, auto manufacturers

and suppliers engage in policy deliberations through the Automotive Industry Association and Canadian Vehicle Manufacturer's Association. Other groups include Mothers Against Drunk Driving (MADD), the Traffic Injury Research Foundation and the private insurance industry.

The CCMTA reveals an administrative structure where implementation is fragmented among multiple public and quasi-public actors. Transport Canada has the power to set safety standards, for instance the specifics regarding vehicle standards for inter-provincial shipments, or the minimum requirements for a vehicle to be deemed road worthy. (Transport Canada, 2005) But Canada's national government relies on many other departments and agencies for enforcing its road safety standards. Effective federal enforcement depends on cooperation by the RCMP as well as the provincial departments of transportation, quasi-public insurance corporations, where they exist, both local and provincial law enforcement, and vehicle manufacturers.

Although the federal government can take responsibility for developing a national road safety strategy and promulgating key regulations, it has negligible capacity to enforce these regulations. Canada's two most populous provinces, Ontario and Quebec, have autonomous provincial police services, which carry out the enforcement of any road safety policy. Major municipalities across Canada also operate their own police forces. In jurisdictions where the Royal Canadian Mounted Police (RCMP) and a local police force co-exist, the RCMP tends to focus on larger scale criminality such as organized crime or fraud schemes, and leave traffic law enforcement to the municipal police. Many rural communities and smaller centres contract with the RCMP for their local policing. In these communities, the police enforcement capacity is determined by what the rural community is prepared to pay, rather than law enforcement priorities of higher government, such as road safety.

This configuration of overlapping responsibilities has shaped Canada's articulation of road safety policy. Policy community participants recognize the constraints of what Fritz W. Scharpf has elsewhere labeled the "joint decision trap," a situation where overlapping jurisdiction requires different levels of government to accept consistent policy priorities. (Scharpf, 1997: 10-15) In

the absence of consistent priorities, policy implementation can be blocked by even a single dissenter, hence the trap that joint decision creates for policy with the potential for controversy.

The administrative consequences of a joint decision trap can be seen at work in the two major road safety policy initiatives that fed into Ottawa's "Vision for Road Safety 2010" framework. These initiatives, the National Occupant Restraint Program (NORP) and the Strategy to Reduce Impaired Driving (STRID), illustrate classic incrementalism, exhibiting the successive limited comparison pattern described by Lindblom as 'the science of muddling through'. (Lindblom, 1959: 87) Canada's policy community initiated specific policy efforts before formulating an overarching strategy. Drunk driving laws, followed by seat belt legislation, were put forward independently and were loosely linked, rather than integrated into any formal plan. (Transport Canada, 2001b:1) These efforts resulted in a decline from 6,061 fatalities in 1975 (Transport Canada, 2001c) to 3,651 fatalities by 1989. (Transport Canada, 2004) NORP was initiated in 1989 with a goal of achieving 95% seat belt use by 1995. (Canadian Council of Motor Transport Administrators, 2001a: 1)

STRID followed in 1990, with a stated goal "to reduce by 20% the number of traffic fatalities involving impaired drivers by the year 1995". (Canadian Council of Motor Transport Administrators, 2001b: 1) Very few jurisdictions were able to implement STRID, and the program failed to make a significant impact on the number of impaired driving fatalities, which accounted for 39% of Canada's road fatalities in 1995. (Canadian Council of Motor Transport Administrators, 2001b: 2) NORP was more effective, particularly in cities. By the mid 1990s, Canada ranked first out of 16 countries in urban seatbelt use. (International Road Traffic and Accident Database, 1997) These mixed results highlighted the capacity constraints on road safety policy that led policy makers to define future goals in more flexible terms.

The result was Vision 2001. Published in 1996, it introduced the overarching goal of "making Canada's roads the safest in the world." (Transport Canada, 1999) The Vision had four basic aims: "raise public awareness of road safety issues"; "improve communication, cooperation and collaboration among road safety agencies"; "toughen enforcement measures", and; "improve national road safety data collection". (Transport Canada, 1999: 1) There were no metrics

attached to any of these overarching objectives, and no targets set for attaining them. The two existing programs, NORP and STRID, were carried forward and relabeled NORP 2001 and STRID 2001. Most provinces supported this specific policy reformulation. (Transport Canada, 2001c) STRID 2001 set a goal of a 20% reduction in the number of alcohol related road deaths from the 1990-1995 average by 2001. NORP 2001 set a goal of 95% seat belt use. (Transport Canada, 2001c)

The reformulated NORP and STRID initiatives made progress toward their goals, but fell short. In 2001, 90.1% of occupants in light vehicles were restrained, falling short of the 95% goal. The 10.3% decrease in alcohol related road deaths over the 1990-1995 period was well short of the 20% goal elaborated in STRID 2001. (Transport Canada, 2001c) The four general aims of Vision 2001 were never translated into specific targets, so no data were available to evaluate the Vision 2001 plan's effectiveness on these counts. However, the death rate on Canada's roads did improve between 1996 and 2001. Gross fatalities fell from 3,091 to 2,781, while gross injuries fell from 230,890 to 221,121. (Transport Canada, 2004) The consensus in the policy network was thus to maintain the vision's general orientation, and pursue it with a range of programs that could meet diverse policy priorities in different jurisdictions. The question of how far such an approach would bring Canada remained very open among the policy community.

If the ten countries presented in Figure 2 managed to attain all of their projected targets, Canada would achieve sixth place among road safety results. Sweden would have the safest roads in the world with just 2.98 fatalities per 100,000 people. Moreover, as Sweden's stated long term vision is to have zero deaths, Canada would eventually need to aim for road transportation that was free of fatalities. Whether such a goal could be endorsed by the Canadian policy community is unclear, given the institutional constraints on achieving the policy interventions that would need to be overcome.

Conclusions

When it comes to managing risk in one of the most ubiquitous, yet dangerous, daily activities in developed nations, the goals and targets that policy makers have set for road safety programs

turn out to vary by design. Some nations express their ambitions in concrete measures, while others seek relative expressions of desired outcomes. This paper offers evidence to suggest that under certain circumstances, policy makers will seek to build political insulation from anticipated failure into policy, by formulating relative policy goals that offer the chance to fail successfully.

When policy makers perceive both the legitimacy of their intervention and government's capacity to influence change as being high, then the insulation from policy failure will not be seen as critical and road safety goals will be defined as concrete targets. For the most part, such concrete goals will yield more ambitious anticipated results than nations which have opted to express their goals as relative measures. Relative goals appear to be associated with concerns about either the legitimacy of government's exercising authority on road safety, or the capacity of government to address that problem, or a combination of both. Relative policy goals appear to offer more "wiggle room" to avoid blame in the event that policy failure does provide an opening for criticism.

In Sweden, Japan, New Zealand, Norway and the Netherlands the need for such inoculation against blame appears to be less valued in a political culture that supports risk reducing initiatives and an administrative capacity that inspires confidence when it comes to meeting safety targets. The concrete goals that have been selected appear both popular and attainable. Even when efforts to meet them fall short, as occurred in Japan, policy actors feel comfortable in pursuing concrete targets. And in all cases except for New Zealand, the concrete goals that have been expressed reflect ambitions that are above the mean in our ten nation sample.

The United Kingdom, United States, Austria, Denmark, and Canada have formulated their road safety goals with relative targets, reflecting expectations that policy failure can be better managed if it is built in at the formulation stage. With the exception of the U.K., these relative goals translate into anticipated outcomes that are below the mean among the ten nation sample. Policy makers who have set relative goals may well hope to leverage success in meeting these targets to pursue more ambitious future outcomes. Canada's embrace of relative policy goals in road safety reflects a tension between the high legitimacy of improving road safety and the

administrative constraints of delegated implementation in a decentralized federation. As this assessment has shown, whether a government anticipates policy failure and formulates policy goals in order to fail successfully can make a difference in the objectives that are set, and ultimately in the results that are achieved.

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