A ROAD THAT DIVIDED A CITY:

Assessing the key factors that influenced the decision to rebuild the Gardiner Expressway East in Toronto

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ABSTRACT

Transportation planning has long focused on the car, but more recently planners are rethinking the prioritization of the automobile in urban transportation networks. As urban highways built in the 1950s and 1960s are in need of expensive repairs, cities have the opportunity to change historical patterns of transportation and urban development to become more efficient and sustainable. In June 2015, Toronto's city council voted on the future of the eastern portion of the Gardiner Expressway, an elevated innercity highway that creates a barrier between the downtown and the waterfront. Although the majority of planning professionals recommending removing the highway and replacing it with an at-grade boulevard, and an environmental assessment that supported this change, the city council voted 24-21 to rebuild the elevated highway. This research examines why Toronto's city council decided to rebuild the expressway despite thorough studies and a large body of professional planning expertise that supported its removal. Through an analysis of publicly available reports, media, letters to council and deputations, as well as semi-structured interviews with stakeholders, four key factors were identified that led council to vote to rebuild the highway: (1) an uneven balance of power; (2) the need to shift away from automobility values; (3) uncertainty and risk; and (4) the isolation of this decision from other municipal decisions. While planning theory may have moved past automobile-centric transportation planning, this Gardiner Expressway decision demonstrates that much of society has not; the concern over the potential of an infrastructural change to increase travel times and traffic congestion, even slightly, cannot be underestimated. More broadly, this outcome demonstrates the importance of politics in planning and calls into question the value placed on the professional expertise of planners in transportation planning decisions.

Résumé

Alors que la planification du transport s'était longtemps attardée sur la voiture, les urbanistes d'aujourd'hui repensent la priorité donnée à l'automobile dans les réseaux de transports urbains. Les autoroutes urbaines construites dans les années 50 et 60 nécessitent des réparations majeures, ce qui donne la chance aux villes de changer leur façon de faire en ce qui a trait au transport et développement urbain pour devenir plus efficace et durable. En juin 2015, le conseil municipal de Toronto a tenu un vote sur l'avenir du tronçon est de la Gardiner Expressway, une autoroute urbaine surélevée qui crée une barrière entre le centreville et le secteur portuaire. Bien que la plupart des professionnels en aménagement recommandaient que l'autoroute soit démolie et remplacée par un boulevard au niveau du sol, et qu'une évaluation environnementale appuyait cette modification, le conseil municipal a voté 24-21 pour la reconstruction de l'autoroute surélevée. Ce travail de recherche examine pourquoi le conseil municipal de Toronto a décidé de reconstruire l'autoroute malgré les études approfondies et le grand nombre d'avis d'experts en aménagement qui appuyait sa démolition. Par le biais d'une analyse de rapports disponibles publiquement, de médias, de lettres au conseil et députations, ainsi que des entrevues semi-structurées avec des intervenants, quatre facteurs ont été identifiés expliquant pourquoi le conseil a décidé de voter pour la reconstruction de l'autoroute : (1) un rapport de force déséquilibré; (2) le besoin de se distancer des valeurs de l'automobilité; (3) le risque et l'incertitude; et (4) l'isolation de cette décision des autres décisions municipales. Alors que la théorie en urbanisme s'est éloignée de la planification des transports centrée sur l'automobile, la décision de la Gardiner Expressway démontre qu'une grande partie de la société n'est pas de cet avis; l'inquiétude suscitée par le potentiel du changement en infrastructure d'augmenter les temps de déplacement et la congestion de la circulation, même légèrement, ne peut être sous-estimée. Plus généralement, ce résultat démontre l'importance de la politique dans les questions d'aménagement et remet en question la valeur accordée à l'expertise professionnelle des urbanistes dans les décisions de planification des transports.

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CHAPTER 1: INTRODUCTION

The allocation of space for cars, bikes, pedestrians, and transit is one of the most contentious aspects of contemporary urban planning and transportation decision-making. The tension has emerged as transportation planning theory has recognized the need to reduce our reliance on the automobile and transition away from planning for cars to planning for people. The focus on moving people rather than cars is necessary to create more sustainable cities and efficient transportation networks as urban populations continue to grow. More people are able to travel within a given space when walking, cycling, or taking transit, than if each is in an automobile, which means the transportation system can handle more people more efficiently. This benefits people who must drive, as fewer non-essential drivers are on the roads, and reduces greenhouse gas emissions on a per capita basis. As transportation planning decisions impact how people and goods can move around a city and a region, they concurrently shape urban growth. Beyond the ability to move more people within a set amount of resources, planning for people also creates more compact communities with amenities located within a reasonable walking or cycling distance.

This change in transportation planning and urban form would mean reallocating road space away from cars – driving lanes, parking lanes, and parking lots – to create space for people walking, cycling, and using public transit, such as wider sidewalks, safe cycling infrastructure, and dedicated transit lanes. While this shift is happening on a small scale in cities, for example by transforming one lane of driving or parking at different locations in the city into space for other modes of transportation, it is not often happening on a larger, more significant scale. An example of a larger scale shift is the removal of freeways that cut through innercity areas and the redevelopment of the resulting available land for other

purposes, such as more sustainable transportation options and new walkable development. However, such a shift requires changing how we think about transportation and land use, changing what transportation infrastructure we have and ensuring it reflects this different priority, and most importantly changing our values surrounding transportation and urban life. Bringing about these changes to reduce our reliance on the automobile and make our cities more sustainable, efficient, and healthier is a key challenge planners currently face.

TORONTO'S GARDINER EXPRESSWAY CASE

The decision about whether to remove or rebuild the eastern portion of Toronto's Gardiner Expressway epitomized the tension around shifting mobility priorities. Heated debate occurred over several weeks at City Hall, in newspapers, at public consultations, and online about which choice was better for the expressway: Hybrid (rebuild the elevated highway with a few modifications) or Remove (remove the highway and improve the boulevard underneath). The Mayor and the Chief Planner were in direct conflict with their preferences. Planners and local interests pushed for the need to plan for the future and highlighted the benefits removing the highway would bring, including a much lower capital and maintenance cost; conversely, the car lobby and regional interests argued that rebuilding was necessary to mitigate future increases in traffic congestion and resulting negative impacts on the economy. Despite a thorough environmental assessment that supported removing the highway, Toronto's City Council ultimately voted 24-21 to rebuild the highway.

This decision showed an obvious divergence between how planning decision-making is expected to occur and what actually happened. Instead of planners and other City staff involved in the process presenting a technical analysis (the environmental assessment),

listing the tradeoffs, and making a clear recommendation to councillors, the planning department was at odds with the Mayor's view and the car lobby. Consequently, rather than the usual process of weighing the interests of different external stakeholder groups, councillors had to choose whether to side with the majority of planning professionals (including the Chief Planner) and other supporters of the Remove option or with the Mayor and supporters of the Hybrid option. This contentious decision to rebuild the highway and the divergence from car-oriented planning theory demonstrate that transportation values had not shifted enough for people-oriented planning to be truly put into practice on a large scale in urban areas.

HISTORICAL CAR-ORIENTED TRANSPORTATION PLANNING

Since cars became increasingly affordable and ubiquitous after World War II, transportation planning has focused on the car as the main way to get around. Streetcars developed at the turn of the 20th century enabled the separation of home and workplace, creating "streetcar suburbs". The mass consumption of private automobiles intensified this trend, and highways built between the suburbs and central city made it possible for suburbs to be even farther away. The resulting urban sprawl cemented the everyday reliance on the automobile and created the expectation that vehicular travel would be prioritized in planning decisions.

Although planning roads and transportation infrastructure for the car initially provided the speed and freedom people sought, as cities grew, traffic congestion worsened. With the belief that an increase in road space would reduce traffic congestion, roads were widened and new highways built. As infrastructure shapes how we travel, adding road space unfortunately only induced the demand to drive, promoting more automobile travel and

maintaining congestion (Goodwin, 1996; Noland, 2001). Moreover, within the last few decades, as city budgets are limited and climate change and health feature more centrally in policy discussions, the negative impacts of automobile-focused planning have become apparent: unsustainable urban sprawl, expensive provision of utilities to the area, the high cost of building and maintaining expressways, environmental impacts such as air pollution, carbon dioxide emissions, and water run-off, and health epidemics like obesity and increased stress from driving. Planners increasingly recognize that continuing to prioritize the automobile in transportation planning will further these problems and not create a more efficient or sustainable transportation network.

However, shifting away from planning around the car is not an easy decision. North American cities experienced their greatest period of economic growth at the same time as the mass adoption of the car and the construction of the highway system. Separating the automobile and highways from the rapid economic development is very challenging; regional highway connections did indeed link regions and contribute to the economic growth. Having experienced great economic benefits with car-oriented planning, shifting to people-oriented planning and away from a model that was successful in the past and is thus a counterintuitive choice. Indeed, an efficient transportation network that meets rising mobility demands is very important for the economy. However, as urban populations rise, highway networks are increasingly congested and car-oriented planning is no longer efficient. Transitioning to people-oriented planning in urbanized areas asks us to rethink the connection between highways and the economy.

Of course, we must acknowledge that to a large degree we cannot change past land use and transportation patterns. Even if everyone wanted to move away from the car, the

current spatial structure of North American cities and metropolitan regions – sprawled over vast areas at low densities – mean that automobiles remain essential to the mobility network. Our cities were built around car transportation. Local changes, even on major arteries, will not alter the necessity for many residents of metropolitan areas to use their cars, especially considering the existing locations of residential areas and major employment centres within the metropolitan area. While some people and businesses may relocate to take advantage of a change in infrastructure, intervention on the transportation network will not rapidly alter this historical geographical separation. That said, the Gardiner Expressway East decision, although expensive, is arguably a modest planning decision and not intended to recreate Toronto's transportation system.

Several cities have already removed inner city freeways and reduced vehicular capacity, other cities have planned to remove elevated highways, and still more are considering it. Not only is removing an elevated highway less expensive than rebuilding it, freeway removals can provide benefits that include eliminating a large physical barrier in the city, reducing the associated blight, increasing land values, and strengthening the local economy through redevelopment opportunities (Billings, Garrick, & Lownes, 2013). San Francisco demolished two innercity highways after they were damaged by an earthquake and replaced them with at-grade roads; New York City did not rebuild the West Side Highway in Manhattan after it collapsed under the weight of a truck; Seoul, South Korea, removed an elevated highway through downtown and replaced it with a linear park. These cities have experienced net positive economic benefits from the highway removals without sacrificing transportation performance (Cervero, Kang, & Shively, 2009). Nevertheless, as there is a limited – though growing – number of highway removals to turn to for precedent, and given

the historical transportation-planning context, the full impacts of freeway removals are not certain and the idea of removing a piece of highway, like in the Gardiner Expressway East case, remains counterintuitive. A remaining question is whether a wide boulevard can become a livable street.

PLANNING WITHIN POLITICS

While planners may understand the need to change transportation priorities, politicians make the decisions. Consequently, transportation planning cannot be separated from the political context in which it operates. In Toronto and other Canadian cities, decisions about planning must be approved through a vote by city councillors. City staff from various departments, such as city planning, transportation services, economic development, corporate finance, and construction and engineering services, present their recommendations to councillors and the public is given an opportunity to provide their views during deputations. Weighing this information and the views they have gathered from their electorate, councillors are expected to act in the interests of their constituents and vote accordingly.

The shift in transportation planning priorities has happened more quickly in planning theory than in practice and this lag presents a challenge for politicians and planners. When planners make a recommendation for a change to the current transportation network that conflicts with the views of some constituents, such as removing a highway, the Mayor and councillors must chose whose recommendation to follow. A planner's ability to act in the best interest of the public is thus constrained by the councillors' decisions. Without being able to influence politicians, even the best planning ideas and visions cannot be

accomplished. Therefore, understanding the politics underlying a decision is crucial to advancing planning practice and improving the sustainability and livability of cities.

PURPOSE AND OUTLINE OF THIS RESEARCH

To better understand why council voted to rebuild the section of the Gardiner Expressway, this research investigates the key factors that influenced the decision. Thoroughly understanding what happened in this case will help improve future transportation planning decisions so that they better align with goals of creating sustainable, less car-reliant cities.

Chapter 2 reviews three main themes from transportation planning decision-making literature to help understand the Gardiner Expressway East decision: first, the presence of uncertainty in transportation planning in age where evidence-based decision-making is considered the ideal; second, the role of politics in transportation megaproject decisions; and third, the impact of automobility – the role of the car in everyday lives, culture, and values – on transportation decision-making. Finally, it briefly reviews the impacts of highway removals in other cities with a focus on traffic congestion – the most contentious issue.

Chapter 3 explains the methodology for this research. Publicly available reports, videos of committee meetings, and media sources and interviews with key informants were used to examine the key issues that influenced the city council decision and which stakeholder groups were most powerful in the Gardiner Expressway East decision-making process.

Chapter 4 presents the Gardiner Expressway East case study. It includes the current location and use of the Gardiner Expressway, the long history of the decision process, the environmental assessment process and proposed alternatives, the actors involved, and finally

the decision made at council. A careful reconstruction of the case reveals that while the environmental assessment was thorough and supported removing the portion of elevated highway in question, the decision outcome did not reflect the analysis and was not based on the long-held goal to improve Toronto's waterfront. Factors outside of the outlined rational decision-making process played a more significant role in the outcome.

Chapter 5 analyzes three key factors and a few additional, Toronto-specific, factors that influenced council to vote for the Hybrid option over the Remove option. First, an uneven balance of power between key actors favoured the Hybrid option. Second, the need to shift from automobility to city building values was required for the Remove option but not for the Hybrid option. Third, the Hybrid option, which essentially maintained the status quo, had much less uncertainty and associated risk than the infrastructural change inherent in the Remove option. Finally, the additional factors that played into the decision-making context included the decision being made in isolation from a comprehensive transportation plan or a discussion of cost, the absence of a clear recommendation from City staff, and the different framing of the two options. Together, the these factors illustrate why the concern of a small increase in travel times for a relatively small number of users outweighed all the other benefits the Remove option could provide. This Gardiner Expressway East case also exemplifies why it is so difficult to rethink a fairly small and underused piece of the transportation system.

Chapter 6 concludes with three key takeaways for planners that flow from this research. First, while planning theory has moved past car-centric planning, society has not. Second, the burden of proof for a change lies with the proponents of the change. And third, the uneven balance of power that favours the Mayor and business interests calls into

question the role of the planner in the decision-making process. In this chapter I also propose strategies to tackle these challenges, and present outstanding questions applicable to future controversial transportation planning decisions.

CHAPTER 2: LITERATURE REVIEW

Historically, North American transportation planning has focused on making automobile travel more efficient. Elevated highways were built to create fast, direct vehicular between the centre and the periphery of a city; in doing so, highways also generated the periphery to which they gave access. As more people drove and traffic increased, roads were widened to increase vehicular capacity in attempts to reduce congestion. Now however, planners are recognizing how intimately transportation infrastructure is linked to the built, social, economic, and natural environments. Transportation infrastructure, travel options, and street design will influence land use, density, and human travel behaviour, mode choice, housing demand, and the use of public space, to name a few (Jones & Lucas, 2012). When making recommendations about transportation planning, planners face the complex task of understanding how different alternatives will contribute to a more livable and sustainable city, and then of disseminating this information to decision-makers.

Large-scale urban infrastructure projects, which scholars have collectively described as "transportation megaprojects", present an additional challenge as these are non-routine, irreversible, and expensive changes to the transportation infrastructure and the city fabric. Replacing an elevated highway with an at-grade road falls into this category. While planners – and engineers – are responsible for the project analyses and subsequent recommendations, the decision-makers are usually elected officials or another authority (Altshuler & Luberoff, 2003). How decision-makers view and use the information provided to them by planners to choose a transportation planning option is not always transparent. This is particularly problematic in cases such as the Gardiner Expressway East in Toronto, where the decision and the planners' recommendations do not agree.

This literature review will look at three main themes to help understand the Gardiner Expressway East decision: first, the presence of uncertainty in transportation planning in age where evidence-based decision-making is considered the ideal; second, the role of politics in transportation megaproject decisions; and third, the impact of automobility – the role of cars in everyday lives and culture – on transportation decision-making. Finally, it will briefly review the impacts of highway removals in other cities with a focus on traffic congestion – the most contentious issue.

UNCERTAINTY IN TRANSPORTATION PLANNING DECISION-MAKING

Planners have to confront uncertainty when assessing the impacts of a change of any size to the transportation network. Key contributors to uncertainty in transportation planning include assumption in modeling, exogenous events, difficult to define criteria, and, for decision-making in particular, the value system against which the criteria are judged.

Similar to other fields, transportation planning project selection in theory follows a straightforward process: determine the project goals and selection criteria, develop alternatives to consider, assess the impacts of each option, evaluate the impacts against the criteria (often presented as a cost-benefit or multicriteria analysis), weigh the criteria to determine the importance of each impact, and finally select the alternative with the best expected outcome (Mahmassani, 1984; Nobbe, 2014). In transportation planning, a thorough impact assessment will consider impacts not only on traffic capacity and costs, but also on

the economy, environment, urban design, health, and quality of life of the affected populations.

Ideally this is an evidence based process, however, this is not always the case: various sources of uncertainty and bias can influence the result (Mahmassani, 1984; Priemus, 2010). First, although impact assessments are often presented as comprehensive and technically sound, there are many assumptions used in the models and other underlying uncertainties. For example, travel demand is a key component of transportation modeling yet it depends on human travel behaviours including mode choice, time of trip, route choice, and necessity of the trip, which themselves each rely on each individual's values (Mackie & Preston, 1998). These uncertain inputs and assumptions in the models can be reduced through additional measurement, scenario building, and comparing the models to actual impacts (Mahmassani, 1984). However, despite such attempts to reduce uncertainty, Watling et al. (2012) found that the predictions generated from travel demand models when road capacity was reduced were poor. Although models are widely used and trusted, this study claims to be the first to compare traffic models to real experience (Watling et al., 2012).

Exogenous events, difficult to define criteria, and the values system used to evaluate decision are all more difficult to account for through modeling (Mahmassani, 1984). An exogenous event occurs independent of the transportation decision but affects the environment in which the transportation system operates. For example, a change in mayor could impact a project's priority and implementation; a condominium development could affect the demand on the system at a particular point; more expensive fuel prices could lessen the frequency that people drive. The uncertainty of such political, social, or economic events can be reduced somewhat through scenario building and then assessing each

alternative under the different circumstances, but still the occurrence of such events can alter the expected success of the decision.

Difficult to define criteria, such as aesthetics, urban design, environment, and political desirability are more difficult to express in quantitative terms and raise issues about impact representation and comparison. A well-designed, walkable, and pleasant public realm is crucial for an area to attract people using various transportation modes and to be deemed successful, but quantifying this value of design is challenging. While these more subjective criteria can be essential to good decision-making and should not to be overlooked, but in the absence of tangible metrics their value can often be minimized. Consequently, attempts can be made to express their value in measurable dollar terms; however, as these difficult to define criteria are more subjective, their importance needs to be sincerely discussed and negotiated if they are to be considered in wider-decision making.

Finally, and most importantly, the underlying value system against which the transportation alternatives are evaluated greatly impacts decision-making (Mahmassani, 1984). The weightings of criteria, whether explicit or implicit, are determined based on the preferences, beliefs and values of decision-makers. As decision-makers are usually elected officials, their priorities are influenced by their constituents – including businesses, community advocates, and other interest groups – as well as their own views of acceptable tradeoffs and perception of risk (Mahmassani, 1984; Slovic, 1987). Consequently, the values of elected officials and powerful influencers strongly impact the project selection process and ultimately determine what decisions are made (Berechman & Paaswell, 2005; Swyngedouw, Moulaert, & Rodriguez, 2002). Whereas experimentation through pilot projects can alleviate fears of change by demonstrating cause and effect, such temporary

projects are more difficult – if not impossible – for major and irreversible projects such as those involving highway infrastructure. This irreversibility presents an additional challenge for transportation decision-making when an option challenges existing understandings of transportation and mobility values.

ROLE OF POLITICS IN TRANSPORTATION PLANNING DECISION-MAKING

The non-routine, expensive, and long-term-change-inducing nature of highway projects – characteristics shared with other transportation megaprojects (Altshuler & Luberoff, 2003) – intensifies the questions of uncertainty in these decisions. The complexity unique to each case makes it unrealistic to have a pre-existing decision-making processes in place for these projects. Despite the appeal of evidence-based decision-making, several factors impact the decision making process and add additional hurdles to evidence based planning: political and jurisdictional structures, business actors, interests groups, market forces, and transportation cultures (Flyvbjerg, Skamris Holm, & Buhl, 2005; Hall, 1980; Mackie & Preston, 1998).

Altshuler and Luberoff (2003) examined cases of transportation infrastructure megaprojects in the United States and found four common elements in megaprojects that were carried out: a political champion; the support of business interests; "doing no harm" to existing communities; and being part of a larger transportation plan. So important are politics and business support that Altshuler and Luberoff claim that multicriteria analyses are mainly "window dressing" (Altshuler & Luberoff, 2003). Whether the idea for a megaproject is initiated by public officials or by the business sector, both groups must support the change and politicians must demonstrate leadership in advocating for the project.

The importance of political champions has been echoed in subsequent analyses of highway removals. Napolitan and Zegras (2008) found that removals only occurred when those in power valued the mobility benefits associated with highways less than they valued other objectives, such as economic development (Napolitan & Zegras, 2008) or livability (Cervero, 2009). Nobbe's (2014) model of transportation megaproject decision-making situates transport-economic studies within politics. More strikingly, Iskandar (2014) developed a conceptual model of the policy process for freeway deconstruction that does not even include an evaluation of the alternatives for highway removal decision-making.

In developing the necessary political backing, business interests need to align with (or at least not oppose) a highway removal, and project opponents need to be few and politically insignificant (Altshuler & Luberoff, 2003). Originally "do no harm" arose in response to the post-war planning era where highway construction and urban renewal expropriated large amounts of land and displaced or severed communities. Now it means acting within the constraints of existing daily users, imposing nothing more that trivial costs on affected groups, and mitigating adverse effects as much as possible (Altshuler & Luberoff, 2003). Replacing a highway with a lower capacity road impacts the road users likely more than what they consider a trivial amount; having the decision embedded within a larger transportation plan can help clarify the rationale behind the decision.

Recent studies of highway removals have shed light on what additional contextual factors are needed to shift values and garner support from politicians and decision-makers. First, the highway's condition must raise serious concerns about the safety and structural integrity (Napolitan & Zegras, 2008). Second, a window of opportunity must exist for advocates to push for the change (Napolitan & Zegras, 2008). This window might be the

result of a crisis, as with the earthquakes that damaged the (now removed) elevated highways in San Francisco and Seattle and with the West Side Highway in New York City that collapsed under the weight of a cement truck; it could also be the election of a new political figure who champions the removal, as in Milwaukee or Seoul. Third, all cities that have considered removing central city highways and replacing them with a lower capacity road are partially or fully integrating into their development policy concepts of attracting the creative class in order to be a world-class city (Iskandar, 2014). This suggests that these cities are already interested in more recent ideas relating to urban development and creating attractive, more livable environments.

The importance of values in decision-making about highway removals, especially the values of powerful actors like the mayor and the business community, is clear from these theories. For elected officials, decisions that solidify their political base are often valued over economically efficient or evidence based ones (Altshuler & Luberoff, 2003). Where highways are still the norm, a strong shift in values to better balance mobility and livability will be needed both by politicians and their constituents if a central city highway is going to be successfully removed.

IMPACT OF AUTOMOBILITY ON TRANSPORTATION PLANNING DECISION-MAKING

Automobility is the "centering of society and everyday life around automobiles and their spaces" (Henderson, 2006, p. 293). The definition encompasses: the road, servicing, and parking infrastructure needed for automobiles; the values of speed, on-demand travel,

and private space that car use has shaped; and the culture of success and "the good life" that car ownership provides (Sheller and Urry, 2000).

Despite the shift away from planning for vehicular transportation to planning for people and the evidence against cars as an environmentally sustainable form of transportation in cities, automobility continues to strongly impact transportation planning and decision-making, especially for large irreversible decisions like highway removals. The impacts are a result of cultural assumptions about automobiles, the existing built environment that perpetuates those assumptions, and the political actors who use these social and physical contexts to appeal to their constituencies.

First, the system of automobility has created widespread cultural assumptions that cars are vital to cities. Efficient vehicular transportation – for people, businesses, and goods movement – is viewed as being crucial for a prosperous economy. While intercity highways continue to be important regional connections for economic competitiveness, a more efficient urban transportation network can be achieved within the existing road space when more people are able to walk, cycle, or take public transit to their destinations than drive. Secondly, most of today's population has not lived in a city without cars, making it difficult to imagine a city with less emphasis on the car. Travel in a car has changed perceptions of time, speed, and space (Walks, 2015a), often making other choices less attractive. Reducing space allocated to driving has been presented as an affront to individual freedoms, specifically the convenience and flexibility afforded by driving (Urry, 2004; Vigar, 2002). Nevertheless, these arguments continue to be used to justify transportation and land use policies that give a strong importance to car transportation.

Second, automobility values have shaped the built environment, which correspondingly validates those assumptions. Many North American cities grew rapidly in the 1950s to 1980s, at the same time that cars became more affordable and ubiquitous. Increased automobile ownership enabled suburban real estate development – urban sprawl – as longer commuting distances could be covered quickly. This greater spatial separation between work and home in turn determined the order of cities and the traffic flow within and through them (Freund & Martin, 1993; Sheller & Urry, 2000). Investment in car infrastructure – roads, highways, gas stations, auto repair shops – increased while investment in other infrastructure, like transit, cycling, and the pedestrian realm, decreased (Urry, 2004). Consequently, to reach many areas of many cities today, people have no choice but to drive, which further entrenches cars in the landscape and impacts transportation planning.

Third, political actors can leverage the automobility culture and the current built environment to appeal to constituents and speak on their behalf as drivers or car users. Although values appear to be changing – especially among millennials – many people still commute by car from the suburbs, have limited transit access, associate success with car ownership, or require cars for other purposes. As more attention is paid to transit improvements in the downtown, political actors do not want to be seen as "anti-motorist" or as increasing traffic congestion (Vigar, 2002). Therefore, politicians with primarily suburban, low-density electorates have an interest in supporting and lobbying for transportation decisions and policies that directly benefit these more car-oriented groups.

In sum, automobility has created a bias towards pro-car planning that is deeply rooted in the social, physical, and political arrangement of the city. Vigar (2002) found that true shifts in UK congestion management policy required a change in discourse before

governments and stakeholders could abandon the appeal of transportation policies that continued the status quo. Attempting to greatly change a city by replacing a limited access, high-speed highway with an at grade road with signalized intersections would therefore be expected to be contentious.

EXPERIENCE FROM CITIES THAT HAVE REMOVED HIGHWAYS

A few cities have removed central city highways, many have plans to remove them, and more still are considering this option as a way to remedy blight, revitalize urban areas, and reclaim space for other uses (The Preservation Institute, 2014). The most frequently studied cases are the Embarcadero and the Central Artery removals in San Francisco, the Park East Freeway in Milwaukee, and the Cheonggyecheon Restoration Project in Seoul, South Korea. (Note that Boston's Big Dig does not fit the definition of a removal because it replaced the elevated highway with an underground highway and did not reduce vehicular capacity).

Despite the common concern of traffic congestion and travel times increasing as a result of highway removals, recent evidence suggests this is not the case. Cairns, Hass-Klau and Goodwin (1998) studied 60 cities where road capacity had been reduced – due, for example, to construction, events, and road narrowings – and found that 14-25% of the volume disappeared. Traffic problems were far less serious than predicted when road space was reallocated to pedestrians and cyclists (Cairns et al., 1998). Billings et al. (2013) looked at the impacts of the highway removals on travel patterns and traffic distribution in the cases of the Embarcadero Freeway, Central Freeway, both in San Francisco, and the East Park

Freeway in Milwaukee. Without exception, traffic was able to redistribute within the existing street network, and the local streets did not reach capacity. While in U.S. cities there are often several alternate highway routes, in Seoul 6.1 km of a "key" highway through downtown, with no nearby alternative highway route, was removed and replaced with a linear park. This reduction in road capacity has not decreased travel speeds (Bocarejo, 2012; Chung, Yeon Hwang, & Kyung Bae, 2012). In New York, prior to the West Side Highway collapse in 1974, 140,000 vehicles used this road per day, whereas the boulevard that replaced it in 2001 now carries only 95,000 vehicles per day and citizens value the improved public realm and waterfront access (Dillon Consulting, 2009). In all cases, people adjusted their travel behaviour and the traffic chaos did not ensue. Where traffic went depended on the next most convenient option, such as taking an adjacent road, shifting travel time, or changing modes. Additionally, some trips were simply not taken (Cervero et al., 2009).

Importantly, for each of these cases of freeway removal, there was a simultaneous increase in transit capacity to accommodate change of modes. For instance, in Seoul four subway lines totaling 152km were built and BRT lanes were added to increase transportation network capacity; the City also implemented car-use restrictions into the downtown (Bocarejo, 2012). Consequently, while the vehicular volume in the area decreased, trips taken to and from this area on transit increased by 41% – from 181,689 in 2002 to 256,289 in 2006 (Cairns et al., 1998). Improving public transportation may be a key component in mitigating any impacts freeway removal may have on traffic congestion.

Additional benefits that have been studied include increased property values near where the highway was removed (Cervero et al., 2009; Iskandar, 2014; Kang & Cervero, 2009), increased tourism (Chung et al., 2012; Iskandar, 2014), improved access to amenities (The Preservation Institute, 2014), and reduced air pollution (Chung et al., 2012). These are typically the reasons for considering a highway removal at the outset and these studies show that such improvements do in fact result.

CONCLUSION

Transportation megaproject decisions are complex not only because of their many impacts on travel behaviour and the surrounding built environment, but also due to the uncertainty in project modeling and evaluation, the political buy-in and support necessary for selection and implementation, and the entrenched automobility value system that biases policy but is simultaneously at odds with contemporary transportation planning theory. These contextual factors render evidence-based decision-making even more difficult, even as highway removals in other cities have been found to be successful, including in their impacts on traffic congestion.

Using this understanding of the complexity of transportation planning decisionmaking, the following chapters will examine the key issues and actors in the debate over the removal of Gardiner Expressway East and discuss why the planning department and other advocates of removing the highway were unable to convince council to vote according to their recommendation.

CHAPTER 3: METHODOLOGY

The purpose of this research is to gain knowledge about the impact of politics on transportation planning decision-making, particularly as planners and urbanists are challenging the priority of automobility values over other city building and mobility values. The research examines the factors and actors that influenced the city council decision over the fate of the Gardiner Expressway East in Toronto. It determines which stakeholder groups were most powerful in the Gardiner Expressway East decision-making process and which issues and concerns they stressed to shape the decision outcome. To achieve this goal, the report analyzes publicly available documentation about the decision and key informant interviews. Finally, this research culminates with key takeaways and recommendations for planners who are faced with a large-scale transportation decision that challenges the status quo.

This research began with an analysis of publicly available data to detail what happened during the decision-making process and to identify the key actors and issues that were influential in the decision outcome. Data sources included planning and policy documents related to the Gardiner Expressway East, reports from public consultations, recorded statements of Toronto elected officials, City of Toronto staff and other stakeholders, deputations to the Public Works and Infrastructure Committee (available on Toronto City Council's YouTube channel), letters to council, and online media, such as newspaper articles and tweets. Table 1: Reports and planning and policy documents consulted relating to the Gardiner Expressway East decision

		D : (:
	Date	Description
Gardiner Expressway / Lake Shore Boulevard Reconfiguration Environmental Assessment (EA) and Urban Design Study: Alternative Solutions Evaluation Interim Report	2014	Environmental assessment of original four options (Maintain, Improve, Replace, Remove), this includes traffic and economic analyses
Gardiner Expressway / Lake Shore Boulevard Reconfiguration Environmental Assessment (EA) and Urban Design Study: Alternative Solutions Evaluation Interim Report – Addendum	2015	Addendum to the environmental assessment to assess the Hybrid option
Staff reports to the Public Works and Infrastructure Committee and to Council about the Gardiner Expressway / Lake Shore Boulevard Reconfiguration Environmental Assessment (EA) and Urban Design Study	2008-2015	Reports from City staff to councillors about the decision
Assessment of the Gardiner East Tear Down: Microscopic Modeling Results (Base case vs. Remove)	2015	Traffic and congestion study commissioned by the Gardiner Industry Coalition
Future of the Gardiner Expressway: Environmental Assessment and Urban Design Study – Case Studies (2009)	2009	Twelve case studies of highway reconfigurations internationally, six of which chose to remove the highway
Technical Briefing: Gardiner/Lakeshore Corridor Study	2004	Initial assessment for the future of the Gardiner Expressway that recommended bringing the entire elevated highway to grade level
Gardiner East Public Consultations Reports and Stakeholder Advisory Committee Meeting Summaries	2009-2014	Results and feedback received during the four rounds of public consultation and stakeholder meetings
Rapid Health Impact Assessment	2015	The high-level health impact assessment conducted to compare the Hybrid and Remove options from a health lens

Next, thirteen semi-structured interviews with key informants were conducted in

person or over the telephone lasting between 30 and 60 minutes each. An Ethics Review was

granted prior to the start of interviews (Appendix 1). The purpose of these interviews was to determine the key issues for each stakeholder group and to test the relevance of the issues identified in the literature review and from the analysis of publicly available documents and academic literature about highway removals and transportation megaprojects. See Appendix 2 for the interview guide.

Interviewees were stakeholders who had publicly supported the Hybrid option or the Remove option. They were identified by having written letters to council or opinion pieces in newspapers, made deputations to council, been part of coalitions in support of the Hybrid or Remove options, or been involved in the decision-making process as a councillor or attended Stakeholder Advisory Committee meetings. Interview requests were sent out to several identified people; additional interviewees (who still fit in the above categories) were identified through the snowball method.

Stakeholders included councillors and their staff, developers, urban designers, urban planners (not from the City of Toronto) and representatives from the Gardiner Industry Coalition, CodeBlue, the West Don Lands Committee, and a neighbourhood association. Five interviewees supported the Hybrid option and eight supported the remove option. Four were representatives from the Gardiner Industry Coalition, three interviewees were elected officials or worked in a councillor's office, three were professionals in private urban design and planning practices, one was a developer in Toronto, two were from a local neighbourhood or waterfront development oriented associations, and one was a staff person from the City of Toronto.

As the Gardiner Expressway East decision is recent and the tensions were high, especially between the Mayor and Chief Planner of Toronto, not all parties identified as key

actors responded to interview requests or agreed to be interviewed. This included not only the Mayor (or staff from his office) and Chief Planner themselves, but also planners and other staff within the city planning and transportation services departments. This lack of response is understandable considering these actors are still in their positions and may not want to return to such a recent contentious issue. Not having these interviews meant precluded knowing clearly why there was no clear recommendation from City staff for this decision and also knowing whether there was agreement among different city departments on the best recommendation for the Gardiner Expressway East. Nevertheless, interviewees were able to provide insight into the key issues and actors and explain the key reasons for their positions. Moreover, the extensive media coverage on this issue served to highlight the most contentious aspects of the debate and showed which were overlooked, as well as draw connections between key players involved in the decision.

CHAPTER 4: GARDINER EXPRESSWAY EAST CASE

The future of the Gardiner Expressway has been studied extensively at the federal and municipal government levels since the late 1980s through the lens of sustainably revitalizing the Greater Toronto waterfront with the hope to bolster the regional economy (Crombie, 1992). A clear, rational decision-making process was established to determine the future of the dilapidated elevated Gardiner Expressway that fit within the larger aims for waterfront redevelopment (Waterfront Toronto and City of Toronto, 2009). Based on the results of this process, the overwhelming majority of planning professionals recommended removing the elevated highway. However, when the City of Toronto was required to come to a decision in 2015 about this waterfront highway, the city council voted 24-21 to rebuild the highway.

This chapter will present the current location and use of the Gardiner Expressway, the long history of the decision process, the environmental assessment process and proposed alternatives, the key actors involved, and finally the decision made at council. A careful reconstruction of the case reveals that while the environmental assessment was thorough and supported removing the portion of elevated highway in question, the decision outcome did not reflect the analysis and was not based on the long-held goal to improve Toronto's waterfront. Factors outside of the outlined evidence based decision-making process played a more significant role in the outcome.

EXISTING CONDITIONS

The Gardiner Expressway, built in sections between 1955 and 1966, is a highway in Toronto, owned by the City of Toronto, that runs parallel to the shoreline of Lake Ontario and separates the downtown from the waterfront (City of Toronto, 2014). From Yonge Street to the Don Valley Parkway (DVP), it is an elevated highway, with Lakeshore Boulevard running underneath. The expressway connects to the DVP and forms part of a highway ring road around Toronto (Figure 1). It has long been a key access point for the manufacturing industry in the nearby Portlands employment sector, and is used by people driving into or out of downtown via the DVP or east west across the city. The Gardiner is widely considered unsightly and creates a large barrier between Toronto and the central waterfront. The segment of the Gardiner in question runs through primarily industrial land that has been zoned for future mixed-use development, is the least used section, with 5200 vehicles per hour at peak times, and has excess road capacity (Dillon Consulting, 2014).



Figure 1: Map of Toronto's highway system

Map from: http://www.investtoronto.ca/Quality-of-Life/Transportation/Driving/Map-of-Toronto-Expressways.aspx

HISTORY OF GARDINER EXPRESSWAY DISCUSSIONS AND DECISIONS

Since the late 1980s, revitalizing Toronto's waterfront has been a focus for the City of Toronto as the role of Toronto's industrial port has declined. The Royal Commission on the Future of the Toronto Waterfront, established by the Government of Canada in 1988, recognized the importance of creating a livable environment that sustains economic growth. This Royal Commission recommended regenerating the waterfront to help stimulate the regional economy (Crombie, 1992, p. 465). Goals of subsequent waterfront studies have included improving the environment, unlocking new economic opportunities, and enabling a higher quality of life. By necessity, the future of the Gardiner Expressway has featured centrally in these discussions.

In 1991, the Royal Commission suggested that the Gardiner Expressway, Lake Shore Boulevard, and the railway together made the waterfront area feel like a transportation corridor and negatively impacted the surrounding area (Crombie, 1992). The Royal Commission proposed three options for the Gardiner: Maintain and Ameliorate, Replace, or Remove. These same alternative approaches continued to be put forward in subsequent reports and proposals.

First Gardiner Expressway removal

The first dismantling of the Gardiner Expressway was completed in 2001. Repairing the 1.3 km section of the Gardiner east of the Don River from Bouchette Street to Leslie Street was expected to cost \$48 million while removing it would cost \$34 million (Power, 2006). In 1999, the newly amalgamated Toronto City Council voted 44-8 to remove the Gardiner, increase capacity on Lake Shore Boulevard while reducing it on parallel streets, add public art, and construct separated pedestrian and cycling trails next to the road. The final cost was \$38 million (\$41 million in 2001\$). The concerns of greatly worsened congestion never materialized as predicted.

Proposal to remove the whole elevated Gardiner Expressway: build on the first removal

Building on the experience in Toronto of the first Gardiner Expressway removal and realizing the high cost to simply maintain the elevated highway, the Toronto Waterfront Revitalization Task Force recommended removing the remainder of the elevated Gardiner, from Spadina to the Don River. Waterfront Toronto was then created, funded, and mandated by the three levels of government to deliver a revitalized waterfront. Directed by the City of Toronto in 2003, Waterfront Toronto investigated opportunities to redesign the Gardiner Expressway-Lake Shore Boulevard that would support waterfront improvements and help position Toronto to compete as a global city. According to Waterfront Toronto:

"A primary objective of waterfront revitalization is to leverage the infrastructure project to deliver key economic and social benefits that enable Toronto to compete aggressively with other top tier global cities for investment, jobs and people. " (Waterfront Toronto, 2010)

With a team of nine consultancy firms, Waterfront Toronto examined four basic approaches for the Gardiner Expressway:

Do Nothing (Maintain): continue with necessary repairs

<u>Replacement (*Replace*)</u>: replace the whole Gardiner Expressway with a combination of tunnels and at grade roads

<u>Transformation (*Improve*)</u>: retain the elevated expressway, enhance it with the removal of ramps, add architectural features, relocate Lakeshore Boulevard from beneath, and examine the potential to build underneath the structure to reduce the barrier effect

<u>Great Street (*Remove*)</u>: replace the entire elevated expressway east of Spadina Ave with an atgrade street similar to University Avenue (a main arterial in Toronto) In 2006, after several studies over the previous years, Waterfront Toronto presented the four options to council and recommended the Great Street option for further consideration. They had proposed a street with ten lanes of traffic from Spadina Ave until Jarvis St and eight lanes east of Jarvis St, as well as an extension to Front Street West to accommodate traffic. In selecting the Great Street, the intent was to maintain traffic capacity on a boulevard with the understanding of slower speeds and slightly increased travel times, an outcome deemed acceptable – even desirable according to the Gardiner/Lake Shore Corridor Study team – in a city:

> "The traffic performance is less than the others, with slower average speeds; to be expected and in many ways desired in an urban condition. Capacity is nevertheless maintained, and the system operates satisfactorily" (Toronto Waterfront Revitalization Corporation, 2004)

The total cost for the entire length was estimated to be \$780M (2005\$) and the process was scheduled to take fourteen years in total for the environmental assessment, design, and construction process.

Revised proposal to remove only the eastern section of the expressway: a more affordable solution

Following the Great Street recommendation, an internal review of the Waterfront Toronto study by the City, however, found that projected costs had increased from the initial estimates due to additional constraints from the new development in the area and the need to keep the Gardiner in use while constructing a roadway. Trying to reduce costs, the City worked with Waterfront Toronto to develop a "partial take down" proposal for Gardiner that still achieved some of the public realm goals and could shape future land use patterns. They focused on the section east of Jarvis St., the least used section with the least surrounding
development. In 2008, Waterfront Toronto and the City of Toronto proposed, and were approved by Mayor David Miller and city council, to jointly undertake an environmental assessment (a multi-criteria assessment) that would examine four strategies for this 2.4 km eastern portion of the Gardiner Expressway within the context of the City of Toronto Official Plan, the Central Waterfront Strategy, and other precinct plans. The vision for the City of Toronto set out in the Official Plan and approved by council in 2002 was for "a more livable city based on integrating future growth with a viable transportation network that emphasizes a green space network and reduced reliance on the private automobility" (City of Toronto, 2013, p. 6). Accordingly, any decision relating to this portion of the Gardiner Expressway would be expected to align with this vision.

ENVIRONMENTAL ASSESSMENT AND DECISION-MAKING PROCESS

In 2009, the Terms of Reference for the Gardiner Expressway and Lake Shore Boulevard Reconfiguration Environmental Assessment and Integrated Urban Design Study (EA) were developed and approved by City Council and the Minister of the Environment. The goals for the EA were to:

- 1. Revitalize the waterfront
- 2. Reconnect the city with the lake
- 3. Balance modes of travel
- 4. Achieve sustainability
- 5. Create value

The EA would evaluate redesign approaches for the corridor similar to those from the previous study (Maintain, Improve, Replace, Remove) based on four lenses (environment,

urban design, transportation and infrastructure, and economics), sixteen criteria groups, and

60 measures. The design options were also to be evaluated within the context of other

planning initiatives directly affecting the area:

- Downtown Transportation Operations Study
- Port Lands Acceleration Initiative
- East Bayfront Interim Transit Study
- Lower Yonge Precinct Plan / Transportation Master Plan
- York/Bay/Yonge Ramps Reconfiguration EA Study
- Richmond/Adelaide Separated Bicycle Facility EA Study
- Official Plan Review
- Downtown Relief Line

Note that regional transportation plans, which have a broad impact on the region, were not

explicitly listed despite the historical use of the area as a transportation and freight corridor.

Table 2: Description of each study lens for the Environmental Assessment (EA) based on the study Terms of Reference

Lens	Description				
Transportation and	Focuses on accommodating person-trip activity and non-discretionary				
Infrastructure	vehicular trip-making including goods movement and through travel.				
	Addresses potential effects on other infrastructure, including utilities and				
	rail facilities, and issues relating to project constructability				
Urban Design	Focuses on the creation of opportunities for improved urban form and				
	improved or new public realm/open space.				
Environment	Focuses on the minimization of negative effects on the environment (social,				
	cultural and natural) and natural environment enhancement opportunities.				
Economics	Focuses on achieving a balance of project costs with project financial				
	benefits that could include increased land values and benefits to the				
	economy.				

In the Terms of Reference, the goal to *balance modes of travel* was defined as a balance between public transit, motor vehicles, pedestrians, and cyclists by providing appropriate infrastructure to serve local and regional interests. Regardless of the option chosen, the plan to create this balance relied on upgrades to GO Transit services, the regional transit provider, as well as local transit initiatives – including Union Station LRT loops and West Don Lands/King Street LRT. While studies were underway for these endeavours, neither funding was secured nor plans in place.

The other goals were to be achieved through a better treatment of how the piece of infrastructure interfaced with the local area and how people could cross it to access the waterfront. This included new mixed-use development, new neighbourhood streets, and a more vibrant public realm.

In addition to an assessment of design options for the corridor itself, the EA was to include the design of changes to other roads to support expressway options, a limited review of opportunities to improve transit, the identification of urban design elements and the development of traffic management and construction staging plans.

Early indication of tensions

While the Terms of Reference were being drafted, the consulting team held a series of public forums between March 12 and May 15, 2009 to engage the public about the EA. Citizens were also encouraged to provide input online during this period. Participants saw the tension between balancing modes of travel and the other city building oriented goals, and asked whether a solution that achieved all of these goals was even possible (Lura Consulting, 2009). On one hand, public feedback about the goal to balance modes of travel included a suggestion to link this goal to a modal shift away from automobile transportation and to more generally discuss the future of transportation in Toronto in order to reduce car dependency. On the other hand, participants asked to include maintaining the continuous highway connection between the Gardiner Expressway and the DVP as part of the evaluation criteria and to recognize the role of the Gardiner as a regional transportation route. Already at this early stage of the EA process, the public had identified a tradeoff between city building and traffic congestion, a need to position this as a future looking decision, and a need to rethink existing transportation and mobility values.

Project put on hold as a "courtesy to new council"

In 2010, an international design competition was held to develop ideas for each alternative, but later that year, despite the continued deterioration of the deck and concrete barriers, the Gardiner EA steering committee put the study on hold a couple months before the pending election of a new mayor – Rob Ford – and city council (Grant, 2012). This decision to pause was made at a Waterfront Toronto meeting on September 16th, 2010 where "Timing" was the only order of business. In an email from the president of Waterfront Toronto to then deputy city manager of Toronto, the stated reasons for this pause included it being a "courtesy to new Council and Administration before [going] forward to ensure they were briefed before [the Gardiner Expressway East decision] became public again", as well as to "get a sense of direction from new administration" (Grant, 2012). The deputy city manager replied agreeing to the latter reason. The EA remained "informally" on hold and out of the public's eye until December 2012 when pieces of concrete fell from the elevated

highway. The need to make a decision on the expressway's future was clear and the EA was reactivated in January 2013.

Public feedback on design alternatives

Once the project was again underway, a consultancy firm held public consultations and stakeholder advisory committee meetings to gather and report on the public opinion of the various alternatives. The four alternatives – Maintain, Improve, Replace, and Remove – were presented to the public in February 2014 with a preliminary evaluation matrix that showed how each compared based on the criteria, unweighted, in the Terms of Reference (Table 3) (Waterfront Toronto, 2014).

	Study Lens/ Criteria Group Summary	MAINTAIN	IMPROVE	REPLACE	REMOVE
х п	Automobiles				
	Transit				
CTUR	Pedestrians				1
ORTA	Cycling				
FRAS	Movement of Goods				
IN	Safety				
	Constructability				
77	Planning				
ESIGI	Public Realm				
∍⊡	Built Form				
ENT	Social & Health				
NNO	Natural Environment				
ENVIE	Cultural Resources				
IICS	Regional Economics				
ECONOM	Local Economics				
	Direct Cost and Benefit				

Table 3: Preliminary evaluation results for the EA, 2014

This summary matrix was presented to the public and later to the Public Works and Infrastructure Committee in February 2014. Presentation can be found here: http://gardinereast.ca/sites/default/files//documents/TRN%20-%20presentation%20-%20PIC%203%20-%202014%2002%2006.pdf

The summary matrix designated whether the option was preferred, moderately preferred, or least preferred for each of the sixteen criteria groups. The Remove option, deemed the preferred option for the eleven of sixteen criteria groups and the least preferred option for only two criteria groups, was clearly the preferred option based on this preliminary evaluation. Approximately 60% of the public who was consulted supported the Remove option, 12% supported Maintain, 4% supported Improve, and 3% favoured Replace (Lura

Consulting, 2009). The 19% of participants who preferred an elevated highway in some form (Maintain, Improve, or Replace) were concerned with increases in vehicular traffic and saw this section of the Gardiner as necessary component of transportation infrastructure. The remaining 20% did not specify a preference. There was widespread agreement that public transit investments needed to be prioritized, particularly if the Remove option was to be chosen.

Round 1: Recommendation of the Remove option and introduction of the Hybrid option

On March 4 2014, based on the EA and public feedback, the Deputy City Manager of Toronto gave a presentation to the Public Works and Infrastructure Committee (PWIC) recommending the Remove option. Few disagreed that the Remove option best achieved the urban design, environmental, and economic study goals. However, many contested this option based on its transportation impacts on road capacity, travel times, and potential to increase traffic congestion. This difference forced councillors to place a value on this tradeoff.

The Remove option would have removed the eastern elevated Gardiner Expressway, widened Lakeshore Boulevard – which currently runs underneath – and created a surface road connection to the DVP. It was also the least expensive option, at \$470M (2013\$) compared to \$870M for the Maintain option, \$865M for Improve, and \$1,390M for Replace. Several downtown councillors and members of various waterfront committees gave deputations in support of the Remove option.

However, the Gardiner Industry Coalition, formed on February 28, 2014, only a few days prior to the presentation to the PWIC, publicly announced its position to "save the

Gardiner" and strongly opposed the Remove option for its 3 to 5 minute modeled increase to vehicular travel times in 2031 ("Industry groups form coalition to save the Gardiner," 2014). This coalition consisted of the CAA South Central Ontario (CAASCO), the Canadian Courier & Logistics Association, the Ontario Trucking Association, Redpath Sugar, the Ontario Motor Coach Association, the Toronto Industry Network, the Toronto Financial District BIA, and the Toronto Region Board of Trade – all groups with a stake in vehicular travel and goods movement and that viewed this highway connection as critical to their businesses and the regional economy.

Adding another layer to the debate, David Jerofsky, the CEO of the developer First Gulf, presented a new alternative, later named the "Hybrid" option. This Hybrid option would combine components of the Maintain, Replace, and Remove alternatives. It would open up more land for development by realigning the highway adjacent to the rail corridor, maintain an expressway connection to the DVP, and remove the ramps east of the Don River, replacing them with ones west of the river. This last feature was most important to the developer, as it would greatly improve access to the lands he owned just east of the Don River.

This proposal was of interest to several city councillors, as it would preserve the connection between the Gardiner and DVP, alleviate the congestion concerns, and, as presented to the PWIC (see Figure 3), better achieve other goals for the waterfront. Additionally, it would improve access to and the attractiveness of the First Gulf site, a development that might catalyze a secondary office market in Toronto (City of Toronto, 2015). The PWIC directed Waterfront Toronto and City staff to develop and review this Hybrid option under the EA process (City of Toronto, 2014).



Figure 2: First Gulf (David Jerofsky) Hybrid concept presented to the Public Works and Infrastructure Committee

However, while Jerofsky had proposed an alignment that abutted the rail corridor, the consulting team and the City of Toronto engineers determined that such a tight turn onto the DVP was unfeasible as it required a large decrease in speed that was considered unsafe (Dillon Consulting, 2015). Consequently, the Hybrid design under debate followed the existing Gardiner Expressway alignment and would not have achieved the anticipated city building goals.

Evaluation of the (optimized) Remove and Hybrid options and public feedback

Over the next year, Waterfront Toronto and retained its team of consultants to continue the EA in response to the requests from the PWIC. They optimized the Remove option to improve automobile travel times, developed the Hybrid option, studied goods movement and city economic competitiveness impacts, and assessed and compared the Hybrid option against the previously recommend Remove option (Waterfront Toronto, 2015a). Figure 4 shows the differences in alignment and key features between the two options and the base case. In this case, the summary matrix provided paired ratings of the two options as preferred and less preferred or both equally preferred (Table 4). The (optimized) Remove option was determined to be preferred for nine of sixteen criteria groups, and preferred from the urban design, environment, and economics lenses; the Hybrid option was preferred for five criteria groups and from the transportation and infrastructure lens (Dillon Consulting, 2015). Furthermore, the Remove option was found to better meet all five EA study goals.

Looking more closely at the 60 individual criteria within each criteria group, the Remove option was preferred for 31 criteria, the Hybrid option preferred for 14 criteria; the two options were equally preferred for the remaining 30 criteria. When the Remove option was less preferred than the Hybrid option it was either because of the impacts of an anticipated increase in travel time at peak periods (automobile travel, goods movement, bus transit, employees who commute into downtown from elsewhere in the region – seven criteria total) or because of the construction impact (longer duration, requirement for traffic detours, potential to impact private property, economic impacts during construction - 6criteria total). The only exception was the greater potential impact the Remove option has on archaeological wharf-related features due to the realignment of the boulevard. Interestingly, while one of the EA goals was to balance modes of transportation, sixteen criteria related to automobile travel time impacts (including during the construction period) and only ten

related to pedestrians, cyclists, and safety (for all users, including motorists) combined, demonstrating, intentionally or not, a bias for travel time impacts.

Although there was a less obvious preferred option based on an unweighted evaluation summary matrix compared to the previous summary evaluation of the four options, the Remove option was preferred for many more distinct reasons than the Hybrid option. Comparing the summaries for the two options makes this clear:

Remove option: "This transformative option yields substantial benefits to the eastern waterfront in terms of environmental quality, city-building, and development compatibility. Local benefits are considerably greater than under any other alternative, while lifecycle costs are also less. Negative impacts are primarily related to slightly longer auto travel times for those continuing to choose this form of transportation to access the downtown."

Hybrid option: "Partially addresses some of the negative impacts of the existing infrastructure while largely maintaining auto capacity and expressway functionality. Does not lead to transformation of the corridor west of Cherry St. and commits the City to live with an elevated waterfront expressway for decades to come. Allows for small additional advancement of the CWSP objectives over the base condition." (Dillon Consulting, 2015, p. 49)

Table 4: Summary of Remove (Boulevard) and Hybrid Evaluation Matrix

Study Lens	Criteria Group	Alternative 1: Alternative 2: Optimized Remove (Boulevard) Hybrid	Summary
A. Transportation and Infrastructure	A.1 Automobiles	 Less Preferred - As average AM peak hour auto travel times for select OD pairs are slightly longer – typically by about 2-3 min on average. More auto travellers in study area to experience a greater than 2 min increase in travel time (25%). Preferred – As average AM peak hour OD pairs are slightly shorter – typicall average. Less volume of auto traveller than 2 min increase in travel time (25%). 	auto travel times for select by about 2-3 min on s to experience a greater %).
	A.2 Transit	Equally Preferred: Both alternatives to result in similar travel times on east-west routes serving transit in the Central Area, such as Dundas, Queen, and King Street Streetcars. Both alternatives facilitate new transit projects. Equally Preferred: Both alternatives to on east-west routes serving transit in the Central Area, such as Dundas, Queen, and King Street Streetcars. Both alternatives facilitate new transit projects.	esult in similar travel times e Central Area, such as ars. Both alternatives
	A.3 Pedestrians	Preferred: Shorter crossing distances on Lake Shore Blvd. and more City standard sidewalk configurations Less Preferred: Less normalized inter- distances on Lake Shore Blvd.	ections and longer crossing Hybrid is preferred for the Transportation and Infrastructure Evaluation Lens due to the lower
	A.4 Cycling	Equally Preferred - 4200 metre cycling facility between Yonge and Leslie Streets Equally Preferred - 4200 metre cycling and Leslie Streets	facility between Yonge auto travel time.
	A.5 Movement of Goods	Less Preferred – Less road capacity/higher travel times may have an impact on the movement of goods through the area. Preferred – Due to greater road capacity times	/ and reduced vehicle travel
	A.6 Safety	Preferred - due to elimination of free flow right turns and sight line issues resulting from Gardiner columns.	s resulting from Gardiner
	A.7Construction Impacts	 Less Preferred – Similar overall construction period (6 years), but with more complex traffic management requirements and greater period of traffic detours required (3-4 years) and greater potential for traffic delays 	period (6 years), but less Pars).
B. Urban Design	B.1 Planning	 Preferred - Accommodates development proposals east of the Don River and opens up the mouth of the Don River with removal of Logan Ramps. More flexibility to accommodate additional growth. Accommodates precinct plans in study area. Less Preferred - Accommodates development of the Don River and opens up the mouth of the of Logan Ramps. Less flexibility to accommodate additional growth. Accommodates precinct plans in study area. 	ment proposals east of the ie Don River with removal nmodate additional eating Precinct Plan. The Remove is preferred for Urban Design. The take down of the elevated FGE creates an opportunity
	B.2 Public Realm	 Preferred - Opportunity for significant streetscaping improvements. Significant increase in public realm area within corridor. Corridor will be open to sun and sky. Less Preferred - Minor to moderate im minor increase in public realm. Some of 	for dramatic improvement in the urban design fabric of the corridor. This action transforms the corridor and allows the full development of a urban district introduced by a tree canopied urban
	B.3 Built Form	Preferred - Same benefits east of the Don River from removal of Logan Ramps. West of Cherry St., will allow building fronts to have active uses at-grade oriented towards Lake Shore Blvd. Less preferred – Same benefits east of of Logan Ramps. Majority of space alo Cherry St. will consist of service uses ar uses at-grade.	boulevard. g Lake Shore Blvd west of d will not provide active
C. Environment	C.1 Social and Health	Preferred - Considering potential effects on community health, the alternatives are considered to be similar. However, due to 12% less Green House Gas emmissions, the Remove is considerd preferred (. Less Preferred - Considering potential of the alternatives are considered to be similar. However, due to 12% greater Green House Gas emmissions to greater Green Hou	fects on community health, nilar. However, due to 12% .e Hybrid is less preferred.
	C.2 Natural Environment	 Preferred - Neither alternative will result in impact to existing natural features. Better facilitates ehancement of aquatic habitat in Keating Channel, less area of impervious surface (reduced stormwater generation), and improved micro-climate in corridor. Less Preferred – Neither alternative will result in impact to existing natural features. Less opportunity for trees. Greater area of impervious surface 	result in impact to existing ew/enhanced habitat and ce. The alternatives are similar with respect to community health effects. Remove is however, considered to be preferred due to lower green house gas emissions and greater opportunity to create new natural habitat.
	C.3 Cultural Resources	Less Preferred – Potential for greater impact on known archaeological features as a result of excavation. Preferred – Less area of disturbances a on known archaeological features	d less potential for impact
D. Economics	D.1 Global and Regional Economics	Less Preferred – Higher vehicle travel times could impact employers and employee decisions to locate/work downtown as compared to other regional employment centres. Preferred – change to the regional attr is not expected to change.	ctiveness of the downtown
	D.2 Local Economics	Preferred – Both facilitate job growth opportunities east of the Don River. More new job opportunities west of the Don River (about 2,000 more).	th opportunities east of the t of the Don River. If the Kernove alternative is preferred from an economics perspective as it has lower net 100 year lifecycle cost.
	D.3 Direct Cost & Benefits	Preferred - Less \$595 M (2013\$)/\$195 M (NPV) net revenue Less Preferred - Additional \$595 M (20 lifecycle cost. revenue lifecycle cost.	3\$)/\$195 M (NPV) net

Source: Dillon Consulting, 2015, p.45







Figure 3: Existing conditions and proposed Hybrid and Remove options, including key features of each alternative

The results of the EA and the summary evaluation matrix were presented in April 2015 at two public forums. After this round of public consultation as well as a series of stakeholder meetings, people voiced similar arguments as before. Proponents of the Remove option argued for the opportunity to contribute to broader city-building goals and improve the public realm and transportation options for a variety of users; supporters of the Hybrid option preferred it as it maintained the direct connection between the two highways, maintained the existing road capacity, and would not increase travel times (Lura Consulting, 2015). Otherwise put, the arguments were for or against the Remove option, with the Hybrid as a preferred fallback option to the base case of continued maintenance on the existing structure. A breakdown of public preferences for the two alternatives was not provided for this round of public consultations as had been for the previous one.

The debate heats up

Following the release of the updated EA on April 15, 2015, various reporters covered the issue and prominent figures made their positions known. On May 7th, the Gardiner Industry Coalition released the results of a study that it had commissioned on the traffic impacts of the Remove option (Abdulhai, 2015). This study used a larger study area and assumed no increase to transit availability; it projected up to a 10-minute increase in travel times with the Remove option. It assumed the Hybrid option was equivalent to the base case of existing conditions and did not model it. This study however was not easily made publicly available and at least one councillor was unaware of its existence at the May 13th PWIC meeting (Toronto City Council YouTube Channel, 2015).

On May 12th 2015, two days before the PWIC meeting to discuss the Gardiner

Expressway East decision, John van Nostrand, an urban planner and architect with a history of involvement with Toronto's Central Waterfront Plan, published an article in support of he Hybrid option in the Toronto Star (van Nostrand, 2015). Van Nostrand's position was in contrast to that of almost all other planners, architects, urban designers, and developers, including all living former Chief Planners of Toronto. The same day, Mayor Tory, elected in October 2014 with a campaign promise to not add to congestion, announced his support for the Hybrid option (Pagliaro, 2015b). Certain journalists viewed these two announcements as connected.

Round 2: Presentation of Remove and Hybrid options to the Public Works and Infrastructure Committee

Whereas at the March 4, 2014 meeting to the PWIC, Waterfront Toronto and City staff clearly recommended the Remove option over the other three alternatives, at the PWIC meeting on May 13th, 2015, Waterfront Toronto and City staff did not present a preferred recommendation to council between Hybrid and Remove. Instead, they presented both options as "strong and viable". They positioned the Remove option as the preferred option based on the urban design, environment, and economic study lenses and the Hybrid option as the preferred option under the transportation and infrastructure study lens. It is unusual for City staff not to provide a recommendation to committee or council.

Supporters of both options deputed: members of the Gardiner Industry Coalition, representatives of various waterfront committees and neighbourhood associations, past City of Toronto chief planners, academics, and engaged citizens. Both sides viewed their preferred option as the most cost effective one. The Remove option was estimated to cost \$461 million over 100 years in construction and maintenance, and to unlock lands to sell worth up to \$150 million. It would provide improvements for urban design and quality of life, and the money saved could be invested in other priorities, like much needed transit or affordable housing. In contrast, while the Hybrid would cost \$919 million over 100 years, this higher cost would quickly be offset by the externality of the increased cost of congestion the remove option was said to create. Conversely, the EA had found that the cost of congestion through the study area would actually be lower with the Remove option than the Hybrid (though both significantly increased compared to the present) due to changes in travel behaviour and a modal shift away from automobiles. Councillors asked deputants very pointed questions about the impact of each option, including potential ways to fund the \$465M more expensive Hybrid option (no Hybrid advocates offered potential revenue sources) (Toronto City Council YouTube Channel, 2015).

After a full day of discussion, the committee opted to not state a preferred position but instead requested an additional report on ways to enhance both options – city building objectives for the Hybrid option and traffic mitigation measures for the Remove option – to be presented at the June City Council meeting.

The debate gets hotter

Between the two meetings, on May 22nd, the Chief Planner of the City of Toronto publicly announced her support for the Remove option based on the EA and her professional planning expertise. However, this call to replace this section of the Gardiner with a "grand boulevard" put her at odds with the Mayor. This conflict escalated with accusations of the mayor "silencing" and "muzzling" the Chief Planner (Pagliaro, 2015a) and also allegedly requiring media requests to speak with the chief planner about the Gardiner to go through the Mayor's office (Rider, 2015b).

Debate continued as opinion pieces from both sides were published in the newspapers. The City of Toronto Director of Urban Design tweeted planning evidence and visuals to support the Remove option (Micallef, 2015). The Gardiner Industry Coalition launched the "Don't Cut Me Off" campaign to urge councillors to vote for the Hybrid option (Shum, 2015). Toronto's Budget Chief Gary Crawford announced that the Hybrid was the fiscally responsible option (Fox, 2015) while three Toronto developers wrote a commentary on the economic case for removing the Gardiner (Delzotto, 2015). Moreover, fourteen prominent real estate developers, investors, and other business leaders, who collectively own or control 51 hectares of land near the waterfront (Ervin, 2015), formed CityBuilders to show unified support of removing the elevated Gardiner East and replacing it with a surface boulevard. Public petitions to tear down the Gardiner were even created (Donnelly, 2015). As media speculated how each councillor would vote, there was no doubt that the decision outcome would be very close.

City Council meeting and decision

Finally, on June 10th, 2015, City staff presented the two options to City Council. The report to council framed the decision as a choice between traffic congestion and city building. After two days of discussion, much in camera, the Remove option was defeated in a vote of 19-26 and the Hybrid option was selected for further study in a vote of 24-21 (Toronto City Council, 2015). As part of the motion, Council directed City staff to reevaluate the option to realign the highway, to identify funding options with no cost to the taxpayers, to report on the potential to toll the road, and to request the Gardiner Expressway

be uploaded to the Province. These additional measures could be conceived as strategies to help convince undecided councillors to vote for the Hybrid option, though as much of the discussion took place in camera this is hard to confirm.

Figure 4 shows how each councillor voted, by ward. There is a clear concentration of votes for the Remove option (boulevard, in Red), which closely aligns to the more urban, "old City of Toronto" boundaries, and a large preference for the Hybrid option among councillors representing suburban wards.



Figure 4: Map of how Toronto city councillors voted, by ward Source: (Rider, 2015a)

While it was expected that most centrally located councillors would vote for the Remove option and suburban councillors vote for the Hybrid, as they are more dependent on driving, six suburban councillors voted for the Remove option, including councillors whose constituents would be most likely to be impacted by the increase travel times (Rider, 2015a).

Furthermore, contrary to usual voting procedures where a Mayor's executive committee is expected to vote in line with the Mayor, three of twelve councillors in the executive committee voted for the Remove option, including the Chair of the Economic Development Committee.

Conclusion

After over two decades of discussion, a decision on the Gardiner Expressway finally has been made to move forward. However, this decision was not the obvious one resulting from years of studies and public consultation. A great concern that emerged during the debate is that evidence-based, future oriented planning for this significant and long term transportation planning decision took a back seat to political desires, lobbying, and an unwillingness to change from the status quo.

The next chapter delves deeper into the guiding research question of why council voted for the Hybrid option against both the recommendation from the majority of planners to remove it and the original results of the Environmental Assessment. In chapter 5, I analyze the key actors and issues in the decision-making process bringing to light the role that uncertainty, politics, and automobility played.

CHAPTER 5: WHY DID THE DECISION TURN OUT THE WAY IT DID?

The potential impact the Remove option had on traffic congestion became the key issue in the debate about the Gardiner Expressway East. The question this raises is why a small increase in travel times for a relatively small number of users outweighed all the other benefits the Remove option could provide. More broadly, why is it so difficult to rethink a fairly small and underused piece of the transportation system?

Based on interviews, news articles, and publicly available deputations, this section details the key reasons the Hybrid option was chosen by city council, despite the recommendation from most planners and urbanists to select the Remove option. First, an uneven balance of power between key actors favoured the Hybrid option. Second, the need to shift from automobility to city building values was required for the Remove option but not for the Hybrid option. Third, the Hybrid option, which essentially maintained the status quo, had much less uncertainty and associated risk than the infrastructural change inherent in the Remove option. And fourth, additional "Toronto-specific" factors played into the decisionmaking context, including the decision being made in isolation from a comprehensive transportation plan or a discussion of cost, the absence of a recommendation from City staff, and the different framing of the two options.

1. UNEVEN BALANCE OF POWER FAVOURING THE HYBRID OPTION

This Gardiner Expressway East outcome demonstrates the uneven balance of power in transportation planning decisions: a small group of Hybrid proponents that focused on one main consequence of the Remove option was more consequential than a larger group of Remove supporters who advocated for many benefits of the Remove option. This imbalance of power can be further understood as a result of divides between: (1) businesses reliant on vehicular movement and businesses reliant on good urban development, (2) the elected Mayor and the appointed Chief City Planner, and (3) urban and suburban councillors. In sum, an alliance of the car lobby, the mayor, and suburban councillors succeeded in having council choose the Hybrid option.

Stakeholder group positions and the expected impact of the Remove option

Although the environmental assessment evaluated the impact of the Hybrid and Remove options based on various criteria, it did not analyze how these impacts would affect different groups of people and stakeholders. Several of the impacts and arguments were raised during public forums, however they were not directly associated with particular groups in the consultation report. Table 5, based on media sources, interviews, and comments from public consultations, highlights the key impacts on different groups. Such an analysis is important as it can help determine how the impacts, both positive and negative, would have been distributed among different segments of the population.

Table 5: Stakeholder positions, arguments and anticipated impacts

Affected Group	Subgroups (if applicable)	Included organizations (if applicable)	Choice based on direct impacts	Key argument for choice	Expected Impact of Remove Option
Car- commuters	Outside of Toronto commuters into downtown or across the city, within Toronto commuters into downtown	Canadian Automobile Association (CAA)	Hybrid, some support Remove	Congestion and 2-5+ minute extra travel time during the AM peak period is too much; some do support the Remove option if transit is improved to provide another transportation option, however no real timeline has been established for transit	Impact on commuters' ability to enter downtown efficiently
Industrial Groups	Manufacturing, Industry; Retail; Courier and Logistics;	Gardiner Industry Coalition: Canadian Courier and Logistics Association, CAA, Ontario Trucking Association, Redpath Sugar, Ontario Motor Coach Association, Toronto Industry Network, Toronto Region Board of Trade	Hybrid	Congestion delay and any increased travel time will harm business and competitiveness; cannot break a link of the "ring road"; remove option with 8-10 lanes is not safe; this will increase congestion throughout the city at and around other highway exits; the extra travel time and need to start and stop will increase greenhouse gas emission due to high truck fuel consumption. This group funded the U of T Faculty of Engineering study (\$100,000) to model congestion and project the cost of congestion. The study area was different than that for the EA.	Prevents free flow traffic and impacts delivery schedules; businesses will incur increased costs as a result; forces trucks onto main roads
Toronto Financial District BIA		Toronto's downtown financial district, including Union Station, the PATH underground walkway and Canada's five major banks and most prominent firms.	Hybrid	Part of the Gardiner Industry Coalition; position driven by uncertainty of future transit and concerns of movement of goods, could not support any increased travel times to the downtown. It is unclear whether this position is based on business only or also employees' travel modes as 72% of people going into downtown take transit, walk, or cycle and the Gardiner East is expected to effect only 3% of downtown bound traffic.	This expected impact is less clear, although this area, especially the PATH, relies on a lot of deliveries of goods so the Remove option increase the cost to businesses

Local Residents, Local Business Associations		St. Lawrence Resident's association; St. Lawrence BIA; Gooderham and Worts Neighbourhood Association	Remove	About 70% of residents in the neighbourhood north of the Gardiner do not own or use a car; they care more about transit options. Many concerns about safety walking underneath the Gardiner with uncontrolled intersections (ie. to get to main grocery stores), which are not addressed by the Hybrid option, especially for senior residents. The BIA also supports encouraging a more vibrant neighbourhood for business.	
Land Owners and Real Estate Developers	East of Don River	First Gulf Developer	No preference	Proposed the Hybrid option to remove the section of the Gardiner east of the Don River; now publicly indifferent to choice since in both options the ramps at the southern edge of the property will be removed.	
	West of Don River	3C Lakeshore, which includes Castlepoint Realty Partners, Continental Ventures Realty and Cityzen Development Group	Remove	3C Lakeshore is concerned the hybrid option would break up the company's 14 acres of land within the Keating Channel precinct (Gupta, 2015) and positions the Hybrid off ramps on their land. Remove is preferred as it fits with the many waterfront precinct plans, creates a better urban environment, and costs much less.	
Public transit		TTC, Metrolinx, GO Transit	No stated preference	No public position on choice. Without prioritized bus lanes, slightly increased travel times may result as forecast, but an at grade road means more opportunities to pick up passengers. TTC Chair (and Councilor) Josh Colle called for privatizing the Gardiner (Moore, 2015). Remove would provide the potential to spend the \$465M on transit projects instead of the highway.	
Waterfront Toronto			Initially supported Remove, but no official position for the 2015 vote	The vision for the waterfront, and the original impetus for the EA, was to determine how to best revitalize and reconnect the waterfront to downtown. \$1.5B of public money has been earmarked for development and remediation of the waterfront (Waterfront Toronto, 2014). The hybrid option opposes these efforts.	Aligns with existing plans, and how money has been spent to date, allows better access to the waterfront, creates a better urban environment, meets the goals of the EA and the mandate of Waterfront Toronto

Move the GTHA	CodeRedTO, DavidSuzuki Foundation, Evergreen Brickworks, Pembina Institute, Registered Nurses Association of Ontario, Transport Action Ontario, Toronto Environmental Alliance, Toronto Centre for Active Transportation	Remove	Argue for investment in the region's transportation system rather than highways. Transport Action Ontario, an advocacy group for sustainable public and freight transportation, suggested that the media misrepresented the outcomes of the U of T traffic modeling study to the detriment of the Remove option (Transport Action Ontario, 2015) Note that not all organizations involved in <i>Move the GTHA</i> publicly support the remove option.	Remove aligns with the mandates or philosophies of these organizations
CodeBlueTO	Individuals, organizations, and groups of various professional backgrounds and ages concerned about Toronto's waterfront and Port Lands	Remove	Argue for Toronto's waterfront to be revitalized in the most beautiful, ecologically sensitive, and financially astute ways possible, using processes that are transparent and engage the broader community; remove is that option (http://codeblueto.com/about)	Many of the organizations involved have a stake in the waterfront's development and have been involved in the process for a long time. See the value of a high quality waterfront. Remove would enable this asset to be developed for the city, its economy, and tourism. Many understand induced demand and saw Hybrid as a lost opportunity that would impact future development.
City of Toronto Staff		Previously recommended Remove, no official recommendation for the 2015 vote	No official recommendation from the planning staff for the 2015 vote; Chief Planner Jennifer Keesmaat strongly supports removal for, but not limited to, city building and urban design reasons; Chief Medical Officer supports removal for its impact on health, safety, and the environment; the City faced a possibile additional financial burden if landowners pursue legal action for locating the ramps of the Hybrid option on privately owned land and negatively impacting the potential development on other lands	Remove better aligned will all existing planning documents, better supporting the vision set out in these other plans.

Jennifer Keesmaat, Chief Planner of the City of Toronto		Remove option	Strongly supported the remove option for the benefits explained in the EA	Choosing the Remove option would have demonstrated Keesmaat's influence in the City, particularly in an unelected position
Mayor John Tory		Hybrid option	Campaigned on a promise to not increase traffic congestion; argued it was the more financially sustainable decision (based on the Chief	Remove option would have been a major defeat for the Mayor and shown an inability to get his own agenda through council during his elected term
Urban Councillors		Remove	Benefits outlines in the EA and the lower cost	Would support their interest in funding other projects; many urban constituents supported the Remove option
Suburban Councillors		Mostly Hybrid, but six supported Remove	Many constituents must drive to work and rely on highways; Councillors who voted for the Remove option saw the benefits based on the EA assessment; Councillor Filion stated that he did not want to impose the suburban lifestyle on an urban population	Supporting the Hybrid meant not being seen as negatively impacting constituents who drive into the city

Table 5 demonstrates there are more groups that support the Remove option than support the Hybrid option; however, determining how and how many people would have been directly impacted by each option is more difficult. On one hand, Hybrid proponents argued that they represent citywide interests as all people who drive will be impacted, with suburban commuters and industrial businesses carrying this burden of travel time delay, and that the Remove option will greatly impact Toronto's economy. On the other hand, Remove proponents argued that this part of the highway only serves a small population and the rest of the city will more greatly benefit from the many improvements outlined in the EA as well as the ability to fund pressing projects in various areas of the city. How councillors viewed and valued the different impacts of the decision influenced their assessment of the choice. Consequently, even if these numbers had been available (no city-wide poll was conducted), the value placed on the impacts would likely still have been the more important factor in the decision.

A clear conclusion that can be drawn when comparing this stakeholder impact table with the EA is that a few particular groups of actors – the Gardiner Industry Coalition and the Mayor – were able to convince council to place a great weight on very few criteria at the expense of many other groups and potential benefits.

Key actors and power divides

While the Stakeholder Table shows that many groups made public statements regarding this decision, interviewees consistently cited a few stakeholders as key actors in the debate: Mayor Tory, the Gardiner Industry Coalition (GIC), present and past chief city planners, downtown city councillors, and businesses involved in the waterfront redevelopment.

The GIC (commonly referred to as the car lobby, but which included representation from Toronto's financial district and the Toronto Region Board of Trade) and Mayor Tory were the two key advocates of the Hybrid option. These two groups focused on the negative impact on congestion that the Remove option would have, the fact that it would remove the corner of the Toronto's "ring road", and the importance of this section of the highway to the regional economy. While many suburban city councillors did not need convincing, this strategy helped to ensure enough city councillors to vote for the Hybrid option.

For the Remove option, key players included the Chief Planner of the City of Toronto Jennifer Keesmaat, city councillors Pamela McConnell, Paula Fletcher, and Joe Cressy, and businesses involved in the waterfront redevelopment, such as investment companies and real estate developers. There were also many prominent urbanists, architects, residents' associations, and other organizations that publicly supported the Remove option.

Proponents of Remove viewed the increased travel time and congestion as a worthwhile tradeoff to attain other, more important, benefits. City councillors argued that preventing this small increase in travel time for relatively few drivers was not worth the additional cost of the Hybrid option borne by taxpayers. Urbanists and planners urged that Toronto must plan for future mobility patterns that work in a densifying city rather than rebuild a planning decision from the 1950s. Local residents contended that the pedestrian safety that comes with controlled intersections compared to uncontrolled ones (i.e. those with highway on/off ramps) should be more important than that time cost to drivers.

Environment and health advocates argued for the sustainability and health improvements of creating better people-centred urban environments.

Despite these many arguments and the variety of benefits from the Remove option, the car lobby's position on traffic congestion was ultimately more powerful. One key informant from a city councillor's office noted that Mayor Tory was additionally unwilling to entertain a councillor's suggestion to invest the cost savings of the Remove option in advancing the City's Congestion Management Plan. The cost savings could have funded the traffic signal upgrades and new technologies needed to better monitor traffic flow to both help alleviate the increase in travel times due the Remove option and respond to congestion throughout the city. This asymmetrical power of stakeholder groups highlights three key divides within the city that contribute to this power imbalance.

Business Interests: Real estate vs. the Gardiner Industry Coalition

The "growth machine" model of urban politics predicts that local elites that urban politics will generally be dominated by the pro-growth and pro-development perspectives of local elites (Logan & Molotch, 2007). However, growth machine theory does not specify that different groups of local elites will agree on the best way to achieve growth. In this Gardiner Expressway East case, the support of businesses was divided between the Hybrid and Remove options. The interests of the land and building oriented industries, which would have benefited from the Remove option, were pitted against the industries focused on vehicular movement, which would have benefited from the Hybrid option.

Since the Gardiner Expressway is a highway, the manufacturing, logistics, and courier industries were able to argue that the removal of this one section would negatively

impact their business. In contrast, the urban development industries had to argue based on potential economic development in the future. Notably, when the interests of David Jerofsky, the president of the real estate development company that owns land just east of the Don River, aligned with the interests of the GIC – or at least did not interfere with them – and he proposed the Hybrid concept to improve the access to this land, his proposal was welcomed.

Providing additional support for the Hybrid option were the Toronto Financial District BIA and the Toronto Region Board of Trade. These two groups were interested in maintaining and increasing Toronto's role in the financial industry and in trade, and consequently had a strong influence. Even though the EA found the Remove option to be preferred as it would positively impact the local economy, cost less in capital and maintenance, and have no effect on Toronto's global competitiveness, these groups instead supported the Hybrid option. Jan de Silva, the CEO of the Toronto Board of Trade, argued that it was the most fiscally responsible choice once considering the cost of congestion and the increased delays due to the construction (De Silva, 2015). De Silva claimed that removing this piece of the Gardiner would add an estimated \$37 million in congestion annually to the existing \$6 billion lost due to congestion in the Greater Toronto Area (De Silva, 2015). Interestingly, while similar fears of congestion existed during the discussion about removal the Gardiner east of the Don River, the fiscally conservative Mayor Mel Lastman saw the cost of maintaining the Gardiner as a large unnecessary expense. Although the economic and congestion impacts may be debated, the powerful financial industry and Board of Trade clearly opposed the Remove option.

City Hall: Mayor Tory vs. Jennifer Keesmaat

Soon after Mayor Tory endorsed the Hybrid option, the Chief City Planner Jennifer Keesmaat strongly recommended the Remove option. One informant who had been in touch with the Mayor's office said it was "very bitter" between Mayor Tory and Keesmaat. This divide created significant tension within City Hall and, according to interviewees who work at City Hall, put city councillors in a position where they had to support either the Mayor or the Chief Planner, both of whom are supposed to act in the public interest. It also showed that the Mayor was more influenced by external interest groups than by the recommendation from the City's Chief Planner.

While in one sense the outcome of the decision demonstrated the power of the Mayor, this struggle between Keesmaat and Tory's weakened both of their influences. It was more difficult to heed Keesmaat's professional recommendation since the Mayor lobbied against it. Conversely, since the EA and a large body of professionals recommended the Remove option, it was harder for Tory to ensure enough councillors would vote with him. Furthermore, although the Mayor is an elected official and expected to take a position on transportation, he announced his position before the EA was presented to the PWIC, reinforcing his campaign promise and calling into question his commitment to the EA process and evidence-based decision making. Similarly, while one informant, a representative of a large real estate company who supported the Remove option, saw it as courageous and responsible of Keesmaat - a non-elected City official - to publicly express her professional opinion, another informant, a representative from the GIC who supported the Hybrid option, saw it as subverting authority.

Councillors: Urban vs. Suburban

Since the 1998 amalgamation in Toronto, and more strongly since Rod Ford was Mayor, councillors have been ideologically divided by geography. First, residents in urban wards largely have better access to public transit and live in more walkable areas. Consequently, they see the importance of investing in these modes to ensure people can move within the city more efficiently as the population continues to grow. In contrast, residents in suburban wards are still more reliant on the automobile for transportation, including to conveniently get downtown. As a result, removing a piece of highway was viewed as limiting their access and mobility.

Secondly, entrenching the phrasing used by Rob Ford, suburban councillors often present issues as benefiting the "elites" in the core of Toronto at the expense of the "good people" in the suburbs. There is indeed a division between Toronto's rich and poor that follows to some extent urban and suburban divides (Hulchanski, Bourne, & Egan, 2010). Moreover, "elite" as it has been used also refers to people who have access to reliable transit and can choose to walk or bike. For the Gardiner decision in particular, the "urban elite" of each divide supported the Remove: Keesmaat was viewed as more interested in the "elite" core of Toronto than Tory, according to two interviewees, a representative of the GIC and a planner who supported the Hybrid option; the real estate and land development industries are more elite than the manufacturing and trade industries; and the urban councillors represent more elite populations than suburban ones. As the divide between Toronto's rich and poor increases, and as urban wards gentrify more rapidly than suburban ones, this rhetoric of elitism continues. Beyond this rhetoric, it is not undemocratic that suburban councillors have more power than urban councillors when voting along such ideological lines. At the time of the vote, there were 31 suburban wards compared to 13 urban ones. This reality played into the Gardiner Expressway East decision. Not even a year after the Gardiner East decision, however, Toronto's ward boundaries are being reassessed to better reflect the changes in population distribution and more fairly represent constituents. One redrawing of ward boundaries adds three new urban wards. While there would still be more suburban wards than urban wards, three additional votes for the Remove option would have made a different in the Gardiner East outcome.

2. THE REMOVE OPTION REQUIRED A SHIFT IN MOBILITY VALUES; THE HYBRID OPTION DID NOT *"The Mayor is not ready to make a quantum leap in urban thinking."*

- Kristyn Wong-Tam, Toronto City Councillor

The decision council faced was framed as a tradeoff between city building and traffic congestion, and councilors had to determine which was worth prioritizing. The Hybrid option maintained the expressway connection to the DVP and had a lesser-projected impact on congestion, both during and after construction; to a large degree, it maintained the status quo, essentially "doing no harm" to the current state. The Remove option meant reenvisioning the access to and development of Toronto's waterfront; one councillor said required "a quantum leap in urban thinking", a willingness to experience the city in a different way, and the adoption of new city-building values. In Toronto, bringing about a real change in mobility values is challenged by the historical and existing role of the car, a significant suburban population, and the recent legacy of Rob Ford.

The Context of Automobility in Toronto

Toronto's most rapid period of growth and development occurred after WWII as cars became ubiquitous and when transportation planning focused on constructing highways to allow people to live in suburbs and drive downtown to work. Now, about sixty five percent of the Toronto population lives in a part of the city that developed around automobile transportation and, as one of my informants noted, a principal at an architecture and urban planning firm, driving is usually more efficient and convenient than the public transit options. A reduction in road capacity is viewed as an affront to their way of life and ability to access downtown. Not only has the way of life for many Torontonians been linked with the car, but so has the regional economy and employment. The Greater Toronto region is the centre of Canada's automobile industry and the whole region plausibly has a stake in the success of this sector (Boudreau, Keil, & Young, 2009; Walks, 2015a). An efficient vehicular transportation system helps reduce the cost of goods movement and contribute to the success of various business sectors that have thousands of employees. Moreover, just east of the section of highway under consideration is Toronto's industrial port that relies on trucking for manufacturing and distribution. Already many of these industries have moved outside of Toronto where highway and airport access is better. Therefore, congestion is not just an individual daily struggle, but also an economic concern as it impacts the efficiency of these other industries.

The ingrained relationship that individuals and businesses have with automobility overshadows the traffic congestion, long commute times, local air pollution, greenhouse gas emissions, and health impacts that are a direct result of planning around vehicular transportation in cities (Hill, 2010). While the more urban segment of the population has largely recognized the value of developing a transportation network that is less reliant on the car, suburban populations have not. As a result, the conversation about reducing car capacity in a small, lesser used, section of the Gardiner is very contentious.

Remove option is counterintuitive

"There is a paradox: if you're someone who needs to drive, you want to get non-essential drivers off the road, by pushing for alternatives"

- Ken Greenberg, an architect and urbanist in Toronto

The Remove option is counterintuitive because it replaces a highway with a lower capacity road, removes the limited access elevated expressway connection to the DVP, and the section in question is in an area where the population is expected to increase. It is counterintuitive to think that replacing a highway with a boulevard will only minimally increase travel times. As expressways were designed with higher speed limits and without traffic lights for the purpose enabling fast vehicular travel, it is generally faster to drive on highways than arterial roads. Moreover, as cities have grown, highways have typically been widened to increase vehicular capacity in attempts to curb congestion. Therefore, although there is currently excess capacity on this section of the Gardiner Expressway, even at peak periods, intuition says reducing road capacity and having more intersections will increase congestion and slow down traffic. However, this expected increase in congestion has not resulted in cities that have removed highways or allotted road space away from cars. In some cases where highways and road capacity have been removed, such as with the Cheonggye Cheong Restoration project in Seoul that turned the downtown highway into a linear park or with the reallocation of roadspace to pedestrians and cyclists in New York City, travel times have actually decreased (Chung et al., 2012; Ullman, 2013).

Scholars and planners attribute this to the increasingly documented concept of induced demand, where people's choice to drive is influenced by the amount of road space for vehicles (Goodwin, 1996; Noland, 2001). An increase in road space increases demand for driving, while a decrease in road space decreases demand. This "disappearing traffic"

phenomenon has been observed repeatedly when driving lanes have been blocked off or removed (Cairns et al., 1998). Attempts have been made to model this reduction to account for changes in travel behaviour, but these predictions still fall short of actual observations (Watling et al., 2012). Despite this growing body of data, successfully convincing people with a counterintuitive argument is difficult, especially when the results oppose their experience of driving.

It is also counterintuitive to think that traffic congestion will not be greatly increased if the connection between two highways is brought to grade. This eastern section of the Gardiner Expressway connects to the DVP, forming part of Toronto's "ring road"¹ as called by Toronto's car lobby, and, as one informant, a representative of the GIC, said: "maintains that continuous flow of traffic between the two expressways." Ring roads were originally built to allow drivers to avoid downtown and central city roads in order to more quickly reach their destinations. Even though key informants, including representative of the GIC, acknowledged that Toronto does not have a true ring road, as the Gardiner Expressway and DVP cut through the city rather than around it, removing this expressway connection from the highway network that the City does have opposes the purpose of the ring road and breaks the continuous link between highways. One interviewee, a representative of the GIC, compared the potential impact on congestion of the Remove option to the traffic where Allen Road (a highway in Toronto) ends at a T-intersection with Eglinton Ave West, a main arterial road, and there is almost always a large back up of drivers turning left. Although the

¹ Unlike other cities with ring road highways, such as London, UK, that go around the central city, the Gardiner Expressway and DVP cut through the city as the city is on a lake. Nevertheless, the name "ring road" does give the sense that it goes around the city and is a link that should not be cut.
Remove option would maintain a road connection between the two highways, and not create a T-intersection, this comparison is one example of personal experience that makes the Remove option even more counterintuitive.

Thirdly, it is again counterintuitive to think that the transportation needs of a growing population can be accommodated if a highway is removed and road capacity is reduced. The population in the study area is expected to greatly increase in the future with the development of the Port Lands, Villiers Island, the Waterfront, and the Unilever lands, all previous industrial areas with significant room for development. Proponents of the Remove option tried to explain that by creating intersections drivers would have alternate routes available to them, allowing increases in volume to be absorbed by extra capacity on nearby roads. Additional Remove proponents argued that new urban development will be designed to be walkable with good cycling and transit infrastructure, to enable more people to choose non-driving options for local trips.

Despite this evidence however, trying to change a person's "innate understanding" of how something works is very difficult. Confronting these intuitions was thus a key challenge to convincing people of the merit of the Remove option and creating a shift in mobility values.

Compounding the challenge of shifting mobility values, the Gardiner Industry Coalition crafted a narrative that appealed to "common sense" and competed with evidence the Remove proponents put forward. One key informant, a representative from the GIC, claimed that the City should not get rid of a "vital piece of the transportation network" and questioned whether this area could truly be redeveloped into a walkable, livable area. Representatives of the GIC dismissed the success of precedent case of freeway removal by

claiming during interviews that the "Toronto context [was] different", such as Toronto having fewer highways than in other cities and no alternative expressway routes. While this comparison is true for San Francisco, this is not clearly the case in New York and Seoul. Furthermore, the GIC changed the economic argument by saying that the Remove option was more expensive once the cost of congestion was accounted for, and that the additional capital cost of the Hybrid option would be offset by this savings (De Silva, 2015). They highlighted the increased fuel consumption and emissions which would result from cars and trucks having to stop and start at lights, thereby pushing aside a discussion about a broader modal shift (Toronto City Council YouTube Channel, 2015; Turnbull, 2012). They changed the safety argument from the Remove option being safer for pedestrians, as people could cross at controlled intersections (ie. traffic lights) along the boulevard, to the Hybrid option instead being safer for pedestrians, as they were separated from fast moving cars (Toronto City Council YouTube Channel, 2015). While these arguments overlooked things like the health and environmental externalities in cost calculations and the danger for pedestrians and cyclists when crossing uncontrolled elevated highway on- and off- ramps, these contrasting explanations made it harder to know which outcome was actually better and therefore harder for decision makers to have an evidence-based understanding of the impact of their choice.

The coalition also commissioned a study by the University of Toronto Transportation Research Institute that used different parameters for the study area and thus generated a different travel-time delay (Abdulhai, 2015). One informant, a representative of the GIC, claimed that the GIC wanted "another review of the data" by an independent group with an "extremely credible reputation." Another informant, also from the GIC, said that city councillors who did not believe the EA wanted further research done by a private

organization. Even though the travel time studies did not contradict (due to different assumptions in modeling), according to one interviewee from City Hall, having this additional study cast doubt on the validity of the EA. Again, this increased the amount of data decision makers needed to consider and increased the challenge of choosing which option was more correct.

The Rob Ford Legacy

In 2010, Rob Ford was elected Mayor of Toronto with a key campaign slogan to "stop the war on the car" (Walks, 2015b). Although he supported replacing the raised transit line in Scarborough with a subway, he single handedly halted his predecessor's already approved city-wide light rail oriented *Transit City* plan (D'Cruz, 2010), greatly reducing any ability for Toronto to improve transit. During his four years as Mayor, Ford emphasized the differences between urban "elites" who had subways and the "good suburban taxpayers" who needed to drive. He perpetuated the primacy of the car and the division between Toronto's urban and suburban populations following amalgamation. This polarization of issues made it even more difficult to bring about a shift in mobility values.

Rob Ford ran again for Mayor of Toronto in the 2014 election, but had to withdraw due to health issues. His brother, Doug Ford, replaced him part way through the campaign and Rob instead ran for a ward councillor. Although John Tory was elected mayor, he received 40% of the popular vote, while Doug Ford, Rob Ford's brother, had 34% (National Post Staff, 2014). Even though Mayor Tory won the election in 2014, Rob Ford continued to draw a lot of attention to fight the "war on the car" as a councillor. Clearly there remained a strong segment of the population that supported the Ford brothers and their ideology.

According to six key informants, including councillors and people involved in the stakeholder advisory committee meetings, there was a fear of alienating these suburban voters in any way as politicians tried to gain or maintain their support. Consequently, councillors and lobbyists who appeared to represent citywide (i.e. suburban) interests were considered more seriously than those who were seen to represent local interests.

Some interviewees, who supported the Remove option, as well as a journalist, thought Ford's legacy might have been the impetus for Tory's campaign promise to not increase congestion, a campaign promise he made only seven months before announcing his support for the Hybrid option. Tory himself continually argued that not adding to congestion was a regional interest so traffic can flow within the city. One interviewee, a prominent real estate developer in Toronto, interpreted this statement as the Mayor's appeal to constituents outside central Toronto who have an interest in maintaining highways. Several other interviewees speculated that Tory feared losing the large suburban vote necessary to be elected, and that he feared upsetting the car lobby. One informant, who works in City Hall, noted that even when Councillor McConnell proposed clear congestion management strategies that would use technologies to reduce travel times with the Remove option, the Mayor was unwilling to entertain to these suggestions. Ultimately, the Mayor would not take a political risk to support the Remove option and bring about a change that would be unpopular with suburban voters and broader regional interests.

3. GREATER UNCERTAINTY AND RISK WAS PRESENT IN THE REMOVE OPTION THAN THE HYBRID OPTION

"[This] could have been a big move for [the Mayor] to take leadership, but there isn't a ribbon cutting for rebuilding an elevated expressway." - Kristyn Wong-Tam, City of Toronto Councillor

As the Remove option diverged from the last half-century of transportation planning theory and practice, it required accepting the risk of making a large, irreversible change to the road network. Compared to the Hybrid option, which essentially maintained the status quo, there was more uncertainty surrounding the outcome of the Remove option. This uncertainty related not just to traffic and economic impacts, but also to urban and street design, and to safety, environmental, and health outcomes. It was also impacted by Toronto's history of indecision and inaction on expanding public transit. These additional risks and uncertainties made the Remove option a much more difficult option for Council to choose without clearly widespread support from constituents and business interests.

Comparing uncertainties between the two options

In maintaining the existing separated highway link and road capacity between the DVP and the Gardiner Expressway, the Hybrid option presented less future uncertainty compared to the existing situation than the Remove option. This reduced the perceived risk of increased congestion and the associated impacts on goods movements, commute times, and Toronto's employment sector east of the site. Furthermore, it would open up some land for development, both east and west of the Don River.

In contrast, the outcome of the Remove option was more uncertain because it would be a more significant change to the transportation infrastructure. Not only were there doubts

about the modeled increases in travel times, but there also were questions about the degree of benefits it would provide and what it would actually look like. For example, questions that arose in the media and through interviews included:

- Would an eight-to-ten-lane boulevard really be safer for pedestrians than a separated highway?
- Would it really feel like University Avenue, a well-used eight-lane arterial road in downtown Toronto, as the Remove proponents suggest?
- Would retail businesses really open along such a wide and highly trafficked boulevard?
- How would this option really help the environment?

Whereas the current safety, traffic, environment, and urban design of the existing situation could be observed and applied to the Hybrid option, those same impacts for the Remove option had to be described in drawings, making it harder for decision-makers, stakeholders, and constituents to conceptualize.

Although congestion impacts for both options were presented in familiar monetary and time measures in the EA, the less tangible impacts were not translated into market terms. As a result, there was no measurable basis for comparison with the high costs of congestion and delay. In the absence of such a comparison, the value of the benefits of the Remove option and the opportunity costs of the Hybrid option were less clear than they could have been.

Reframed in terms of certainty, the Gardiner Expressway East decision was a choice between a clearly understood, certain outcome – the Hybrid option – and a less clear, more uncertain outcome – the Remove option. The Hybrid option would result in little change to traffic congestion and travel times, expensive maintenance costs, an unsafe pedestrian environment, and an ugly piece of infrastructure. In contrast, the Remove option would have the potential to create a more environmentally friendly, sustainable, safer, and better-designed area at a lower cost. Although the Hybrid option has some negative outcomes, these impacts were all more certain and easy to understand given the existing transportation infrastructure. The Remove option instead required decision-makers to opt for projected, but less certain, future benefits and risk worsened traffic congestion and slightly longer travel times.

Toronto's poor transit record created additional uncertainty

Increasing transit by adding capacity or new lines in the waterfront area is supposedly equally included in both plans, but the risk was whether and which transit investments would actually occur. Toronto has a poor recent track record for transit investment and execution; there has been a lot of debate – from Mayor Miller's Transit City to Mayor Ford's Scarborough Subway to Mayor Tory's SmartTrack concept – with little result. At the provincial level, things are not much better; planned investments in the Move 2030 plan were reduced, delayed, or cancelled in 2010 (Government of Ontario, 2010). One informant, who works in City Hall, commented that transit alternatives were not presented alongside the Gardiner decision as transit planning has been so disconnected from reality and from a steady predictable approval process. This informant said: "no one could argue that [transit] was going to be an alternative because [the City] was still arguing about different aspects of the transit plan." Consequently, the reliance on transit to replace any vehicular capacity lost to the Remove option was yet another significant risk.

It was this uncertainty in particular that the GIC leveraged in their favour. They consistently argued they could not support the Remove option since there was no transit alternative in place for commuters if road capacity was reduced.

Political risk that accompanied uncertainty

While the Remove option was expected to provide a wider variety of benefits for the nearby area than the Hybrid option, the uncertainty of the Remove option made it a politically riskier choice for the Mayor to support. Mayor Tory came out in favour of the Hybrid option during his election campaign – before the environmental assessment was complete – and made a promise to reduce traffic. Changing his position on the Gardiner after the election and supporting the Remove option could be perceived as reneging on this promise. It could also be considered abandoning the constituents who had elected him with the belief he would support the Hybrid option. Since the next election will happen in 2018, before the Gardiner is reconstructed and impacts of the decision can take effect, this sort of change could negatively impact the Mayor's reelection prospects. Furthermore, the public participation sessions about the Gardiner decision did not clearly indicate that the public overall preferred the Remove option to the Hybrid option (Lura Consulting, 2015). Some participants valued city-building and prioritized the urban design, environmental, and overall economic benefits of the Remove option, while others would have liked that "in theory", but not at the expense of road capacity and increased commute times. The lack of clear direction from Torontonians precluded the consultation results from being undeniable support for Remove option. Mayor Tory could then argue that, based on the election results, he was acting on the wishes of his constituents.

In addition to the challenge of trying to determine the public's view on the decision and the political risk of rescinding a campaign promise, three key informants, a City Councilor, an architect and urbanist, and a prominent real estate developer in Toronto, noted that it is generally politically easier to choose the option closest to the status quo than to push

for change. "Doing nothing is the easy way out... Doing something means you have to do work and that takes political courage, conviction, and perseverance," said one informant. All of these informants mentioned the "political courage" needed to risk the potential impacts of the Remove option for the anticipated benefits. The necessary political courage was even greater because of the opposition from the GIC and the fear of losing the suburban vote. Even though the EA provided clear evidence for the Mayor, and other councillors, to support the Remove option, the uncertainty of the traffic impacts from a change to the transportation network made it politically more palatable and popular to vote for the Hybrid option.

The Gardiner Expressway decision demonstrated a key challenge in public policy and planning: the attempt to compare very different impacts and values, particularly when the impacts have not been brought into market terms, have different time scales, and are not equally easy to conceptualize. This decision highlighted the impact of past transit decision inaction on current transportation decisions and also demonstrated the risk averse, slow, and conservative nature of elected governments when faced with the opportunity to make a significant change.

4. Additional factors

In addition to the above major factors, a number of smaller issues played a role: the lack of greater policies and plans to guide transportation decisions, no real discussion about cost and funding mechanisms, a lack of a recommended option from city staff, and the language framing the discussion.

A lack of greater policies and plans

Toronto's Official Plan, adopted in 2006 and most recently amended in 2015, focuses on good urban design to improve the public realm and sustainable development and growth that reduces the reliance on cars. It provides clear instruction on a smaller scale, but the City does not have an overall transportation and transit plan and lacks guidance on how to prioritize projects and impacts on a larger or networked scale. This made it more difficult to assess the Gardiner Expressway East decision within a greater planning and transportation context.

Since transportation megaprojects are rare occurrences that require separate plans and funding sources (Altshuler & Luberoff, 2003, p. 267), they do not necessarily warrant an explicit directive. However, it would have been helpful to have some directive on how to prioritize waterfront projects, transit policies, and highway infrastructure. For example, Waterfront Toronto, funded by the federal, provincial, and municipal government, has spent \$965 million on improvements to the waterfront (Waterfront Toronto, 2015b); many people in the public consultations felt that the Hybrid option would diminish the value of those investments (Lura Consulting, 2015). A comprehensive planning policy that positioned the transportation network within Toronto's overall development would have helped determine how to negotiate these potentially conflicting actions.

Without this guidance, councillors, and to some extent planning staff, were left to determine their own priorities based on their interpretation of the policies and what they had heard from the public. While this flexibility is important, it limited the City's ability to have a clear discussion about long-term values and future aspirations. Furthermore, it enabled

short-term thinking typical of politicians who will seek reelection before the impacts of their decisions are realized. Successfully executed megaprojects have been found to need a continually supportive political base through both elections and economic cycles (Altshuler & Luberoff, 2003). The lack of continued support has been demonstrated in both Toronto and Ontario's plans for a transit network, making long-term thinking about this decision seem like a lofty goal.

Cost not central in the discussion

Whereas often a preferred planning decision has a higher cost, such as the preference for rail transit compared to the less expensive bus rapid transit, in this case the Remove option had a significantly lower cost that the Hybrid option. This cost differential, however, was ultimately not central to the decision. One reason for this is the expectation that funding will be found for projects the Mayor champions, regardless of the cost, particularly for "necessary" transportation infrastructure. A second reason is that concerns about congestion and the impacts on businesses featured more centrally than the need to do a cost-benefit analysis of the construction and opportunity costs of the two options. Consequently, the question of how the City could differently spend the additional money needed for the Hybrid option, for example on underfunded transit projects, was not seriously considered. This is problematic as the simultaneous increase in transit investment and infrastructure was an important element in other elevated highways removals (Iskandar, 2014). Indeed, several councillors who supported the Remove option brought forward the need to contextualize this decision and determine revenue sources for it, but the GIC deflected such questions as "out of scope" when asked directly (Toronto City Council YouTube Channel, 2015). With the

GIC, Mayor and suburban councillors all deferring the discussion of how to fund the Hybrid (both options exceeded the available funds, the Hybrid by much more), cost played a limited role in this decision.

Lack of recommendation from City staff

While Waterfront Toronto and the City of Toronto Planning Department recommended the Remove option to the Public Works and Infrastructure Committee in 2014, they deferred to Council for the Hybrid vs. Remove decision. Despite the Hybrid option being very similar to the "maintain" option from 2014, which was the least preferred design, City staff presented the two options to Council as equally worthwhile under different criteria. A lack of recommendation from City staff is uncommon in transportation planning decisions. One interviewee, who worked in City Hall, noted that City staff were in a "precarious position" because the Mayor's office was strongly lobbying for the Hybrid option and recommending the Remove option would directly oppose the Mayor's position. Such a recommendation would exacerbate an already the "bitter tension" between the Chief Planner and the Mayor, as described by another key informant, a principal at a private planning firm who had interactions with the Mayor's office. This context likely made it difficult for City staff from formally providing a professional judgment of how to weigh criteria.

Language framing the decision

The names "Hybrid" and "Remove" have different connotations and may have impacted how people perceived the two options. "Hybrid" suggested a compromise while "Remove" suggested a loss. As politics is often a question of developing a compromise to please as many people as possible, "Hybrid" was an attractive framing. Indeed, this option was a hybrid of designs, but not a compromise of transportation values. When Keesmaat recommended the Remove option, she called it a "grand boulevard". She reframed the loss of a piece of infrastructure as creating a boulevard. By that point however, the "Remove" term was widespread, so the impact of this change was likely limited.

Lastly, in the report to council, the decision was framed as a choice between city building and traffic congestion. While one interviewee, a Hybrid option proponent, thought this framing clarified the problem, three others, Remove option supporters, thought it oversimplified and misled decision-makers into thinking that the Hybrid option could solve congestion. Yet another interviewee, who supported the Hybrid option, thought that this framing wrongly suggested that the Remove option would build a better city. This dichotomy was also problematic because "city building" encompassed many more criteria in the EA than did "traffic congestion", suggesting that the multiple criteria in the urban design, environment, and economic lenses combined had a similar value to traffic congestion criteria alone. This thus emphasized the importance of vehicular transportation and diminished the value of city building. Finally, this framing also did not clearly address the role of overall mobility in the decision, which made it harder to refer back to the original study goal to balance mobility options to help inform a decision for the Gardiner Expressway East.

Conclusion

This chapter demonstrates the challenge proponents of the Remove option faced as they tried to lobby councillors to vote in their favour. The uneven power between

stakeholder groups, the need for a shift in transportation values away from automobility values, and the risk and uncertainty that surrounds change, all presented significant barriers. In fact, three key informants, proponents of the Remove option both within and outside of City Hall, were impressed by the number of votes the Remove option received given these challenges, the Mayor's public declaration of support for the Hybrid, and the lobbying of councillors by his staff

In addition to the clear impact of automobility and uncertainty as discussed in Chapter 2, this analysis also reinforces the role of politics in transportation megaprojects. All four crucial tenets for a successful highway removal – a political champion, the support of business interests, a window of opportunity, and a long-term transportation plan – were missing from this case. Mayor Tory championed the Hybrid option rather than the Remove option; the GIC was strongly in favour of the Hybrid and argued the Remove option would harm their businesses; there was not a window of opportunity for this decision as in previous cases, such as political alignment, a ballot measure, or the collapse of the highway; and there was not a long-term transportation and transit plan. As alluded to by the informal hold due to "timing" that Waterfront Toronto placed on the EA prior to the 2010 election, the necessary window of opportunity may have existed in the years before Rob Ford was Mayor, when the EA was initiated and the study goals were determined, but closed as Ford created the "war on the car" slogan and instilled the need for other politicians to win over his substantial suburban voting contingent. Moreover, the inability to delay a decision about this crumbling piece of infrastructure prevented the window of opportunity from being reopened in the future when political interests may again align with the removal.

Together, the uneven balance of power, entrenched mobility values, and uncertainty and risk aversion illustrate why the concern of a small increase in travel times for a relatively small number of users outweighed all the other benefits the Remove option could provide. This Gardiner Expressway East case also exemplifies why it is so difficult to rethink a fairly small and underused piece of the transportation system. Chapter 6 will further explore this question by providing key takeaways for planners that flow from this research and will also recommend strategies to tackle these challenges.

CHAPTER 6: DISCUSSION AND TAKEAWAYS FOR PRACTICE

This research elucidates why the recommendation from the majority of planners, including Toronto's Chief Planner, to remove the eastern portion of the Gardiner Expressway was not followed. The decision about whether to remove or rebuild the eastern portion of the Gardiner Expressway in Toronto epitomized the tension around shifting mobility priorities. After several years of analysis, Toronto City Councillors had two options to choose between for the eastern portion of the Gardiner Expressway: the Remove option, which would remove the elevated highway, and the Hybrid option, which would maintain the expressway. The Remove option was preferred under the urban design, environment, and economics study lenses of the Environmental Assessment and better met all five study goals; the Hybrid option was preferred only under the transportation and infrastructure lens, primarily for its lesser impact on traffic congestions and automobile travel times.

While planning professionals overwhelmingly favoured the Remove option for its ability to revitalize the waterfront, improve the quality of life in the area, and invest money in other priorities, the Mayor and the Gardiner Industry Coalition argued that rebuilding was necessary to mitigate increases in traffic congestion and associated negative economic impacts. However, despite a thorough environmental assessment that supported removing the highway, Toronto's City Council ultimately voted 24-21 to rebuild the highway.

It is important for planning research and practice to understand why city councillors did not follow the recommendation of planners in the Gardiner Expressway East decision. This decision demonstrates that while planners are trained in city and transportation planning, their professional expertise is not the only factor in decision-making. Especially as

planners are trying to move towards people-oriented transportation planning instead of caroriented transportation planning, this decision highlighted some key factors that create barriers to a shift. The factors include the uneven power between stakeholder groups, the need for a shift in transportation values away from automobility values, and the risk and uncertainty that surrounds change.

To conclude, this chapter begins with three important implications that follow from the research. First, while planning theory has moved past car-centric planning, society has not. Second, the burden of proof for a change lies with the proponents of the change. And third, the uneven balance of power that favours the Mayor and business interests calls into question the role of the planner in the decision-making process. After discussing these takeaways, I provide suggestions to work past these challenges. Finally, I describe the limitations of this research and further questions.

1. PLANNING THEORY HAS MOVED PAST CAR-CENTRIC PLANNING, BUT SOCIETY HAS NOT

The values underlying people-oriented transportation and land use planning conflict with the automobility values underlying car-centric planning. This difference in values impacts planning practice because people and decision-makers will be more sympathetic to a change if it aligns with their values than if the change conflicts with their values and everyday lived experience. Especially for a large, expensive, and irreversible change in transportation infrastructure, like a highway removal, the values against which decisionmakers weigh their options must clearly align with the benefits of the proposed change. Moreover, these values must take precedence over automobility values in order to take on the risk of potential consequences from an option that brings about significant change.

Crucially, the differences in the acceptability of congestion in a city and the space devoted to vehicles are central to current transportation planning decisions. Many, though by no means all, urban residents and place-oriented businesses view congestion as acceptable, even good, in a city as it indicates prosperity and desirability. In contrast, businesses and citizens who rely on the highway network for transportation view increased congestion and reduced vehicular capacity as unacceptable. As many large businesses have historically succeeded with the current automobile-oriented transportation system, they did not seem interested in even discussing a change to the highway infrastructure at any – public – expense. The recent poorly executed dedicated streetcar route along St. Clair Avenue West in Toronto added justification to the fears of changing the current road infrastructure, especially for place-oriented businesses who rely on the roads and on-street parking for deliveries and clientele. Similarly, suburban residents have limited alternative transportation options, making not only the actual removal of a highway difficult to imagine but also the benefits that would flow from the removal. Alternatively, some people may have adopted values for a more sustainable city, but apply them differently. One planner interviewed for this research holds a different view on how transportation should work in a city: people drive to the ring road that surrounds the central area, but within that ring road transit, walking, and cycling are prioritized.

While it is very challenging to convince someone of a change in transportation infrastructure when it opposes their mobility values and convictions, this is a necessary step to move past car-centric planning and towards people-oriented planning.

2. The greater uncertainty and risk associated with a change places the burden of proof on proponents of the change

The Gardiner Expressway East decision demonstrates that even strong analysis that supports a change in infrastructure may not be enough to successfully steer transportation planning decisions. As the potential impacts of a large-scale change are uncertain, and therefore riskier, the burden of proof falls on the supporters of the change rather than the supporters of the status quo. Not only must the analysis seek to reduce uncertainty, but it must also justify any potential harm to existing stakeholders as a result of the change. Moreover, when a strong case *is* built, individually small but collectively important points may be questioned and slowly undermine the analysis. Will traffic actually only slow by a few minutes? Will it really be safer? Will transit actually be built? Who would want a café near that road?

Unfortunately, this burden of proof makes it more difficult to develop a case for the change and hinders the ability of planners to move away from car-oriented transportation planning in practice. Consequently, the endorsement of a major change to infrastructure requires decision makers and politicians to accept the risk of the change and possible political ramifications.

3. THE UNEVEN BALANCE OF POWER HIGHLIGHTS THE IMPORTANCE OF THE MAYOR AND BUSINESS INTERESTS TO THE DECISION OUTCOME AND CALLS INTO QUESTION THE ROLE OF PLANNERS IN THE DECISION-MAKING PROCESS

This case reinforces the findings in previous cases of freeway removal and transportation megaprojects demonstrating the power and importance of the Mayor's position and the support of business interests. When planning and politics are not aligned, the political agenda is more powerful, particularly if backed by businesses. One interviewee who worked at City Hall noted that the single thing that could have influenced council to vote for the Remove option was having the Mayor's support. Some interviewees, all members of the Gardiner Industry Coalition, also felt the support of the Mayor was important, but instead framed the Mayor's support as listening to his constituents. Recognizing the weight of the Mayor's position in decision-making, planners can strive to work more directly with the Mayor. Additionally, when the political interests clearly align with planning interests, planners must act quickly to bring about change before this window of opportunity closes.

This uneven balance of power tilted towards the Mayor, as well as the business interests that influence the Mayor, also calls into role of the planner in the decision-making process. What value is planners' expertise and knowledge in large-scale decisions? Is their knowledge more or less valuable than the daily users of the infrastructure? Are planners "unaware and uninformed of the realities of the [manufacturing, courier and logistics] industry" as one interviewee, a member of the Gardiner Industry Coalition, claimed? If so, should all matters relating to highways simply defer to the industry and their understanding? Should planners provide a clear recommendation based on their best judgment of balancing interests even if it conflicts with the political agenda? If planners are not seen as experts in their field, it becomes even more difficult to bring about meaningful change in cities.

HOW SHOULD PLANNERS RESPOND TO THESE CHALLENGES FOR PRACTICE?

While the above challenges are not insignificant, there are several strategies planners can use to reduce them: focusing on changing mobility values, creating a long-term transportation plan through which to evaluate decisions, and using language that positively frames the change.

Most important, but also most difficult, is that planners need to work to change citizen values in order to build political support for change. Planners should disseminate knowledge broadly and consistently about transportation planning in general to try to influence overall societal values away from car-oriented planning. Crucially, this should include suburban populations and vehicular oriented industries. "Planting seeds" about different transportation values can help opposing groups reflect on how they think about mobility and develop a willingness to think about it otherwise. For a large-scale decision, planners should encourage politicians to visit other cities to experience firsthand the impacts of similar decisions. This can be an important additional piece of information when politicians weigh the criteria in their decision.

Second, as transportation planning decisions have far reaching impacts, these decisions should not be made in isolation. It is crucial to develop a comprehensive transportation plan and policy so that decisions can be judged within a greater context. Whenever possible, related decisions should be tied to each other and framed within a

greater context – cost, funding sources, other transportation infrastructure provisions, other services, and a clear impact on future budget. This would more clearly emphasize the tradeoffs between decisions. Lastly, if the cost of one externality, such as congestion, is monetized, then other externalities should be too – environmental impacts, health, safety, etc. – to more fairly represent the anticipated impacts.

Third, the language framing the change should indicate what the change would bring rather than what would be lost. This can help reduce uncertainty about potential impacts because at least one outcome of the decision, for example the creation of a "grand boulevard", will be frequently referred to in discussions.

A shift in transportation values will take work and require multiple tactics to create change, but is necessary as cities continue to grow and the existing transportation system is no longer sustainable nor efficient.

STUDY LIMITATIONS

The Gardiner Expressway East debate is still fresh. As such, it is a good time to analyze it because it is within people's recent memory. At the same time, certain potentially insightful actors were unwilling to speak with me about it, including the Mayor's office and planners from the city of Toronto. While this is a limitation in determining why exactly the Mayor endorsed the Hybrid option over the remove and limited understanding what took place behind the scenes at City Hall, the extensive media coverage and involvement by stakeholders through the Stakeholder Advisory Committee and at public deputations, in addition to interviews, provided sufficient information on the case and the key factors that influenced the decision outcome.

OUTSTANDING QUESTIONS

While this research focused on the key factors underlying the decision to remove a portion of an elevated expressway, it raises a few additional questions with broader applicability.

1. What implications does this public debate have for future transportation planning decisions in Toronto?

Although the Gardiner Expressway East debate publicized tensions at City Hall and between different stakeholder groups, there may have been some good outcomes to this polarization. The debate and media attention engaged citizens about the issue and encouraged them to think about transportation planning. Councillors received countless emails from constituents, and councillors themselves were informed about the impacts of the two options. That six suburban councillors voted for the Remove option demonstrated an attentiveness to the results of the environmental assessment and a shift in their own mobility values on a regional scale. It also shed light on the power of the car lobby.

Following the Hybrid-Remove decision, the Mayor pushed City of Toronto staff to develop different design solutions for the Hybrid option. The Hybrid design has since been modified to address key concerns of the Remove supporters – the impact on the waterfront and urban design qualities. In fact, the chosen option is most akin to the design originally proposed by David Jerofsky, the developer of the land just east of the DVP, that instigated the assessment of the Hybrid option and prolonged the EA process. The highway will run very close to the railway tracks and have a sharp curve to join the DVP – the curve that was originally deemed unsafe and therefore infeasible by engineers as it required too great of a

change in speed leading up to the turn. This design, however, will be much more expensive to build.

Had this revised hybrid design been deemed safe by engineers prior to the Hybrid-Remove decision, the debate would likely not have been as polarized around urban planning and transportation issues. Two possible outcomes of the vote then could have been that the Remove option got more support for its lower cost, or that it received less support because the waterfront and urban design elements could have been achieved with either alternative.

While the great tension between advocates of the two options was not necessarily desirable, hopefully the heated debate and discussion about transportation planning have set the stage for more sustainable transportation planning decisions in Toronto's future.

2. Had Rob Ford not been Mayor from 2010-2014 would the impact on automobile travel times have played such a central role in the debate?

Rob Ford has left a lasting legacy on Toronto after his time as Mayor, and now even since his passing. He shaped the conversation around the car, appealed to "common sense", and had a very strong following called "Ford Nation". Even today, some councillors restate Ford's "war on the car" slogan as part of their speeches at council and committee meetings. Given this context, Rob Ford's rhetoric may have been a key obstacle to removing the highway.

In certain ways, Toronto's city council would have been expected to vote to remove the eastern piece of the Gardiner Expressway. The City of Toronto has creative city ideas in its policies and has strong financial, insurance, and real estate industries; this combination is usually indicative of a city successfully choosing to remove a highway (Iskandar, 2014). Toronto had removed another section of the Gardiner Expressway in 2001 and the removal of the entire length of the Gardiner had been previously proposed in 2006, but failed primarily due to cost. Additionally, the Remove option fit with the almost \$1 billion the three levels of government had invested in the redevelopment of the waterfront while the Hybrid option did not. Was Rob Ford "the elephant in the room" that led to councillors to vote for the Hybrid option?

While we cannot know for sure how the debate would have played out under other circumstances or with another mayor during this time period, Rob Ford significantly increased the attention placed on the car. His campaign slogan to "stop the war on the car" meant that a councillor was either for or against cars on decisions that would impact drivers or suburban residents. This context is likely to have impacted the debate and outcome at a few points.

First, the EA was initiated before Rob Ford's election, when the City of Toronto had a more "left-leaning" Mayor, David Miller. Then shortly before the election in 2010, Waterfront Toronto put the EA on hold to be able to, apparently, bring councillors up to speed on the issue (Grant, 2012); however the Gardiner Expressway East decision did not resurface until late 2012 when pieces of concrete fell from the elevated structure onto the road below, and a decision about its future could not be prolonged. While the official reason from City staff that the Gardiner Expressway East decision remained on hold was that there were other construction projects needed funding (Grant, 2012), this pause could also suggest that there was concern amongst staff about that Rob Ford would lobby councillors to vote against removing the section of highway.

Next, during the 2014 elections, the main candidates all said they would favour the "Hybrid" proposal, including the more liberal, urban-oriented ones. The Hybrid, as Jerofsky

presented, provided with an option that would not alienate suburban voters. Moreover, since it aligned with the "pro-car" side of the Gardiner Expressway East debate, it removed Doug Ford's (Rob Ford's brother who replaced Rob Ford during his mayoral campaign due to health issues) leverage on that election issue.

Finally, even though Rob Ford was only a councillor – not Mayor – in 2015 when the vote occurred, several key informants from within City Hall mentioned that some city councillors feared Rob Ford's intent to run again for Mayor and the possibility that he might be reelected.

While the ultimate extent of the impact of Rob Ford is unclear, that Rob Ford was part of the conversation and a reason to vote for the Hybrid demonstrates his lasting influence on decision-making in Toronto and the obstacle of overcoming the "war on the car".

3. How can planners better deal with uncertainty to help bring about the shift in values?

This is a crucial question that is generalizable to other cities and almost any transportation or large scale planning issue as there will always be uncertainty and risk in planning decisions. Pilot projects can work for bike lanes and pedestrian infrastructure, but highway removals are harder as they irreversibly alter the built form. Is it time for planners to express with more certainty that cities cannot continue down the same path as they did in the postwar period, and that we must change from our past decisions?

4. To what extent is it the role of planners to shift values?

While planning professionals now largely agree that we need to shift to peopleoriented planning, planners also once thought that building highways and slum clearance were needed – against the opinions of communities that were then eradicated and sent off to 'better' high-rise housing. Planners have to deal with this legacy and explain why the current consensus is more correct than the one reached by modernist planners in the 1950s and 1960s. Moreover, if a public wants to maintain its automobility values, is trying to change their values is truly in their best interest? Is it the planner's place to try to change their values to something planners view as better? At the same time, if the core values of a population don't change, how can planners be continually asked to provide a professional recommendation based on current practice but then their expertise not be heeded?

5. How can we determine what the minimum necessary highway network is?

Highways have historically had a positive economic impact in North American cities. However, as more highways are built, new highways do not provide additional long-term economic impact. While previous experiences have shown that smaller portions of highways can be removed to create better neighbourhoods, it is less clear what a minimum necessary network of highways is and therefore what can be removed without clear detriment to the economy. An answer to this would provide additional evidence to support – or not – removing an inner-city highway.

Conclusion

More than ever before, planners are realizing the impact of transportation planning on quality of life, health, sustainability, and the environment. While transportation planning theory has shifted away from car-oriented planning to people-oriented planning, how to bring about this transition in practice remains a crucial question for planners. Understanding and effectively working within the political context in which planning operates will help planners face the challenge of changing mobility values and better put planning theory into practice to create more efficient transportation systems and sustainable cities.

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APPENDIX 1: FTHICS APPROVAL

Strail McGill

Research Ethics Board Office James Administration Bldg. 845 Sherbrooke Street West. Rm 429 Montreal, QC H3A 0G4

Tel: (514) 398-6831 Fax: (514) 398-4644 Website: www.mcgill.ca/research/researchers/compliance/human/

Research Ethics Board I Certificate of Ethical Acceptability of Research Involving Humans

REB File #: 330-0116

Project Title: Assessing the key issues and actors in the June 10, 2015 Gardiner Expressway East decision in Toronto

Principal Investigator: Lindsay Vanstone

Department: School of Urban Planning

Supervisor: Prof. David Wachsmuth

Status: Master's Student

Funding: SSHRC CGS

Approval Period: February 4, 2016 to February 3, 2017

The REB-I reviewed and approved this project by delegated review in accordance with the requirements of the McGill University Policy on the Ethical Conduct of Research Involving Human Participants and the Tri-Council Policy Statement: Ethical Conduct For Research Involving Humans.

Deanna Collin Ethics Review Administrator, REB I & II

^{*} All research involving human participants requires review on at least an annual basis. A Request for Renewal form should be submitted 2-3 weeks before the above expiry date. Research cannot be conducted without a current ethics approval. * When a project has been completed or terminated, a Study Closure form must be submitted.

^{*} Unanticipated issues that may increase the risk level to participants or that may have other ethical implications must be promptly reported to the REB. Serious adverse events experienced by a participant in conjunction with the research must be reported to the REB without delay.

^{*} Modifications must be reviewed and approved by the REB before they can be implemented.

^{*} The REB must be promptly notified of any new information that may affect the welfare or consent of participants.

^{*} The REB must be notified of any suspension or cancellation imposed by a funding agency or regulatory body that is related to this project.

^{*} The REB must be notified of any findings that may have ethical implications or may affect the decision of the REB.

APPENDIX 2: INTERVIEW GUIDE (SEMI-STRUCTURED INTERVIEWS)

Overall guiding question: why did council ultimately vote for the Hybrid option?

- What was your role in the decision making process and the debate leading up to the decision?
- Who do you view as the key actors in the debate and the decision-making process?
 - Why were they key?
 - What did they do that made them influential?
 - Were there any actors who weren't involved but could have played an important role?
 - Which groups were the biggest winners and the biggest losers?
- What do you view as being the critical issues in the debate and decision-making process?
 - Was this a decision between traffic congestion and city building as written in the council documents?
 - Were there serious attempts to move away from Toronto's city vs. inner suburb divide in council?
 - Was it a good decision to not weight the different criteria in the EA?
 - How did not having a regional or long-term transportation plan for Toronto influence the decision?
 - Why was the cost of the two options minimally discussed?
- To your knowledge, how did Mayor Tory get the councillors on board with the Hybrid option? Did he do or say anything in particular?
- From your understanding, what happened between Mayor Tory and Jennifer Keesmaat and the City Planning Staff?
- A few elements exist for past freeway removals and megaprojects, do you see these as key issues in this debate?
 - These elements are:
 - Do no harm
 - Political risk and outcome uncertainty
 - Value of mobility less than the value of something else, like economic development
- What would it have taken for council choose the Remove option?
- Was there anything that surprised you about this decision process or outcome?
- What, if anything, do you think was overlooked in the debate and decision-making process?
- What could have made the decision making process better or been done differently?