## **VOICES IN FAVOUR:**

## A STUDY OF SUPPORT FOR A THIRD CROSSING OF BURRARD INLET

by

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## <u>ABSTRACT</u>

Planning theorists often espouse the value of citizen participation and the sharing of ideas and opinions in planning processes, and encourage collaborative discussions between professionals and the public. On the issue of sustainability planning, there can be many differing beliefs and opinions within society. In order to construct meaningful dialogue around sustainability goals, it is important for planners to understand the diverse opinions of the public.

This thesis examines the belief systems of people who support the idea of building a "third crossing" of Vancouver's Burrard Inlet, looking to draw conclusions that could be useful in planning for similar transportation infrastructure projects. I interviewed nine third crossing supporters using two theories from psychology and social psychology, Leon Festinger's notion of *cognitive dissonance* and Daniel Yankelovich's definitions of *mass opinion* and *public judgment*, to identify conflict within beliefs and evaluate the quality of opinion.

I discovered that cognitive dissonance, or conflict between an individual's beliefs, was not reflected significantly in the views of crossing supporters. They also exhibited high quality opinion, as defined by Yankelovich using his criteria of responsibility, stability and consistency. Further, in comparing the interview responses to transportation policies contained in the Greater Vancouver Regional District's Livable Region Strategic Plan, I determined that two conflicting visions, which I refer to as the mobility vision and the sustainability/livability vision, lie at the heart of this transportation debate and likely others with similar foundations. With the knowledge that crossing advocates have a well-developed and logically constructed vision, planners must think about ways to establish constructive dialogue and address the fundamental values and assumptions upon which the two visions are based in order to foster social learning on the issue of sustainability-oriented transportation.

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**1 INTRODUCTION** 

"One of the universal characteristics of culture is that a number of people share sets of linked ideas which persist over some period of time and to which people are committed. These systems of belief are neither fleeting perceptions, nor are they private fantasies. In very simple societies there may be only a few, but usually there are many; in urban societies the variety can be bewildering."

(Borhek and Curtis 1975, p.3)

"Cultivating an understanding of what psychologists know about how our emotions, values, beliefs and behaviours are all tied together may help planners gain insight into the very personal nature of some of our grand visions for a sustainable future."

(Jones 1996, p.57)

In planning school we learn about the importance of listening to the voices of the public when making decisions. We discuss the notion of sustainability and how it can be realized. We contemplate the difficulty of accounting for diverse voices and negotiating conflicting views. The relationship between planner and public has been a contentious one over the last few decades, with planning students studying it and many contemporary planning theorists writing of the challenges and the value of this aspect of the profession. Most would probably agree that planners and public should co-operate to the mutual benefit of both, though agreement on how to do this is hard to come by.

Planning is about making places for people; its purpose is to create the best possible living environments for us, within the context of the ecosystems in which we live. Discourse in planning recently has focused on the concept of sustainability: of making responsible decisions so as not to place a too heavy ecological, economic, or social burden upon future generations. Planning for sustainability is challenging in that the ultimate decisions aren't made by planners at all: a society's sustainability rests upon the

choices made by individuals. If sustainability is the objective stated by society, then a planner's role is to guide policy and development as closely to that direction as possible. The greater an understanding we as planners have about the opinions, attitudes, values, and visions of the public, the more able we will be to provide advice that suits the collective need and to encourage sustainable choices.

## 1.1 Ideas on the ground: transportation projects and the third crossing

Since I began to study planning, and planning for sustainability as an ideal goal, I have been struck by how often the views that I have come to hold differ from those I perceive to be held by members of "the public." Nowhere does this discrepancy seem as apparent as when discussing issues related to transportation.

Transportation projects can be contentious and divisive because they have the potential to affect people in significant ways. Some stand to be directly impacted by the proposed location of new infrastructure and see new projects as a threat or an opportunity affecting their lifestyles or housing and employment choices. Many feel passionate about transportation projects as indicators of a desirable or undesirable future for their region. And almost everyone can detect a relationship between their own personal freedoms and their access to transportation.

I grew up in North Vancouver, a suburb of Vancouver, British Columbia, and have lived most of my life there. It is notable in this community how so many discussions on transportation veer inevitably towards the idea of building an additional crossing connecting North Vancouver to the City of Vancouver across the Burrard Inlet. This idea is referred to as the "third crossing" and has been an object of public interest for several decades.

Casual conversation on the North Shore will often turn to the topic of traffic, bridges, or the third crossing specifically. Local newspapers are peppered with letters to the editor touching on the same topics. Collectively, North Shore residents seem to see traffic congestion and their own access to mobility throughout the region as pressing issues

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that must be addressed eventually. Through casual observation, it is obvious that many people see the solution lying in the addition of more automobile capacity.

There certainly are those who oppose the idea of building another crossing of Burrard Inlet, as there are with any transportation infrastructure project. But for the most part, opponents of the plan remain inactive and unheard, not stepping forward until the idea comes to the political fore and there is something concrete to oppose.

Advocates of a third crossing, however, have been more active in publicly espousing their views in order to garner popular support. It is this group of third crossing proponents who are of interest in this study.

As a planning student, I am familiar with the arguments supporting more sustainable transportation choices, most often in favour of limiting the expansion of infrastructure devoted to the private automobile. These are the arguments of those who do not believe that building another crossing of Burrard Inlet is a good idea, arguments expressed in the Greater Vancouver Regional District's Livable Region Strategic Plan. What was unfamiliar to me prior to conducting this study was the reasoning of those who do support increasing capacity for private vehicles, even in the face of "sustainability" arguments. This group has a strong voice on the North Shore in advocating the construction of a third crossing. Because the issue appears to be significant to many North Shore residents, and because as a future planner, I believe it is important to learn more about the public's views, I was interested in investigating the foundations of these beliefs.

## **1.2 Purpose of this study**

The third crossing is a topic of importance to residents of the North Shore and others who frequently travel over Burrard Inlet. Though the idea of building another crossing waxes and wanes in its political significance, it simmers in the minds of the public much more consistently. Though the third crossing is a significant issue to many in the Vancouver area, similar conflicts between support and opposition are observed around other transportation projects here and elsewhere.

The purpose of this study is to gain a greater understanding of the dynamics of support for transportation infrastructure projects that seem to work against sustainability by examining the reasoning behind the pro-third-crossing point of view.

If public officials have concluded that constructing a third crossing to allow additional vehicular access across Burrard Inlet does not coincide with the transportation goals of the region according to the GVRD's Livable Region Strategic Plan (LRSP), which is intended to serve sustainability, and have chosen on at least two separate occasions not to pursue it as an option, from where does the continual and strong popular support originate? What factors and values are at the heart of public support for transportation projects? Broadly, why do some people believe that projects like the third crossing are so important? And what can planners learn from understanding this point of view, which may conflict with sustainability policies?

### **1.3 Research questions**

The objective of this research is to help us understand the factors and values that lead people to support new transportation projects, with specific reference to a third crossing of Burrard Inlet, that may seem to conflict with sustainability goals. Are the reasons for supporting such projects consistent with other views supporters may hold about transportation more generally? Does this support coincide or conflict with their overall systems of beliefs, attitudes and values? Does cognitive dissonance, as defined by Leon Festinger, exist in the formation of these opinions? Further, can such opinions be considered good quality public opinion in the sense defined by Yankelovich? The theories behind these questions will be discussed in Chapter Three.

## 1.4 Study outline

Chapter Two gives some background on the history and significance of the idea of a third crossing. Chapter Three outlines the literature review I conducted on public

participation in planning, belief systems, cognitive dissonance and public opinion. Chapter Four presents an overview of the research methods used and why. Chapter Five discusses the responses I received to my interview questioning. Chapter Six answers the research questions and goes further to examine two conflicting visions for transportation in the region. Finally, Chapter Seven explains how and why this information can be meaningful to planners.

# 2 BACKGROUND

## 2.1 What is the third crossing?

A "third crossing" refers to another bridge or a tunnel spanning Burrard Inlet in Vancouver, British Columbia. At present the third crossing does not exist, though the desire for it to one day be built thrives healthily on the collective wish list of many residents of Vancouver's North Shore. Currently, two bridges span Burrard Inlet, which separates the City of Vancouver from its neighbouring North Shore municipalities (See Map 2.1). Many regular users of these crossings fear deteriorating traffic congestion as demand for their use grows. The idea of a third crossing has been circulating for a number of years; the concept is one that never falls far from the consciousness of those who regularly travel over Burrard Inlet.



Map 2.1: Existing Automobile Crossings of Burrard Inlet

#### 2.1.1 Location

The most common incarnation of the third crossing idea places a tunnel between the current Lions Gate (First Narrows) and Ironworkers Memorial Second Narrows Bridges, though other locations may also be considered, for example between Deep Cove and Port Moody. For the purposes of this project, no location or form for the crossing will be specified; it is discussed as a broad concept only.

Currently, vehicles may cross Burrard Inlet at two points: the Lions Gate and Second Narrows Bridges. The Lions Gate Bridge feeds traffic between the North Shore and downtown Vancouver through Stanley Park while the Second Narrows, as part of the Trans-Canada Highway, connects the North Shore to the eastern edge of the City of Vancouver. The Highway passes out of Vancouver and into Burnaby to the east, and westward through North and West Vancouver, connecting to the BC Ferries terminal at Horseshoe Bay and the Sea to Sky Highway north to Whistler.

#### 2.1.2 Seabus

In a sense, a "third crossing" of Burrard Inlet already exists. Though the two bridges remain the only two automobile crossings of the Inlet, there is also a public transit service, called the Seabus, which crosses the Inlet between the bridges. A small ferry, the Seabus carries only foot passengers between Lonsdale Quay in the City of North Vancouver and Waterfront Station in Vancouver. Being part of the Greater Vancouver Regional



Image: Seabus Source: <u>www.vancouver.ch</u> 2004

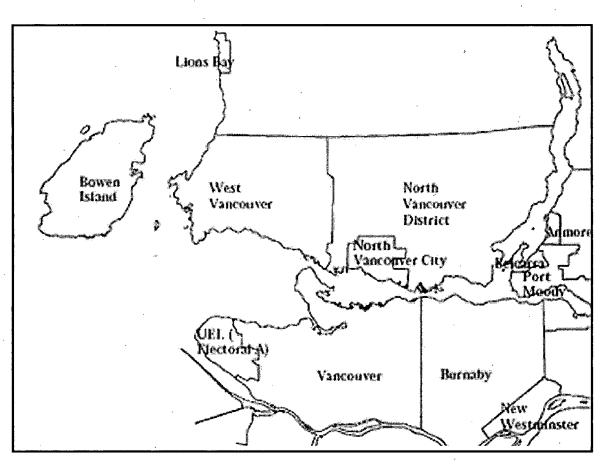
District's public transit system, Seabus fares are the same as any two-zone fare in the region, and transfers are available to other forms of transit on either side of the crossing.

Common reference to an unbuilt "third crossing" is even more of a misnomer when one considers that there is also a rail bridge adjacent to the Second Narrows Bridge: in essence an existing fourth crossing.

#### 2.1.3 North Shore municipalities

Though the region's North Shore is often referred to as one area, it in fact comprises several separate municipalities. The three largest North Shore municipalities are most relevant to the discussion of a third crossing: these are the District of West Vancouver, the District of North Vancouver, and the City of North Vancouver. Though the smallest of the three, the City of North Vancouver is the most dense, comprising the Lonsdale corridor commercial area and surrounding neighbourhoods. The two districts are less dense; though they do contain a large amount of commercial land and some denser areas, they are made up mainly of single family housing.

The other two municipalities located in the area referred to as the North Shore are the Bowen Island Municipality and the Village of Lions Bay, to the west and north, respectively, of the District of West Vancouver. Both have small residential populations and while their residents certainly do contribute to traffic using the existing Burrard Inlet crossings, neither one stands to be physically impacted by the infrastructure associated with the construction of a new crossing. Thus, discussion of the North Shore for the purposes of this research will focus primarily on the three larger municipalities.



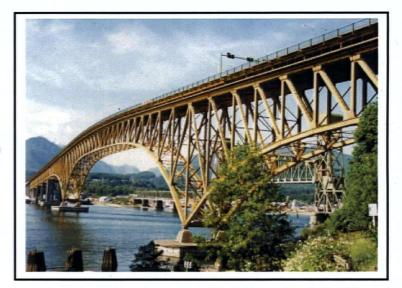
Map 2.2: North Shore and Surrounding Municipal Boundaries Source: Greater Vancouver Regional District 2005

## 2.2 Histories of the existing Burrard Inlet vehicle crossings

As the city of Vancouver has grown, and with the emergence of automobile use through the early part of the 20<sup>th</sup> century, the North Shore municipalities have become popular bedroom communities, housing many who work on the south side of the Inlet. Ferry service preceded the construction of the two bridges that currently span Burrard Inlet at its two narrows.

#### 2.2.1 The Second Narrows Bridge

The Second Narrows Bridge was first constructed in 1925 (Harris 1997) and for years suffered numerous collisions by boats that were attempting to pass beneath it. It was often disabled as a result, one time for a stretch of four years. The original bridge was built for both rail and automobile use. The current Second Narrows Highway Bridge was opened in 1960,



accommodating three lanes of automobile traffic in each direction.

**Image: Second Narrows Bridge with rail bridge behind** Source: Buckland and Taylor Bridge Engineering 2004

It is now officially named the Ironworkers Memorial Second Narrows Bridge in commemoration of the 18 men who were killed when it collapsed during construction. The bridge was seismically upgraded in 1995. In 1969 the old rail bridge was replaced by one larger and heavier, still in use today (Harris 1997).

#### 2.2.2 The Lions Gate Bridge

The Lions Gate Bridge, built over the inlet's First Narrows and the westernmost of the two bridges, was opened in 1938. It is certainly the most recognizable and picturesque of Vancouver's bridges, its image adorning many postcards and travel brochures. It was built privately with financial backing from the Guinness family who were interested in developing the land they owned in West Vancouver. That area was developed with large homes and is known today as the British Properties (Harris 1997, Transport Canada 2002).

Though the Lions Gate was built as a toll bridge, the B.C. government purchased it in 1955 and removed the tolls in 1963. Originally, the bridge was designed for one wide lane of traffic in each direction. Soon, however, the deck was modified to provide three

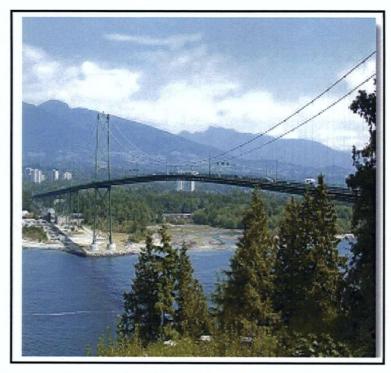


Image: Lions Gate Bridge Source: University of Calgary Faculty of Engineering 2004

narrower lanes. This system of three lanes still exists today, with the middle lane serving as a counterflow, changing directions throughout the day depending on traffic volumes.

As the Lions Gate Bridge deteriorated, major repairs and upgrades were needed. In 1993 the provincial government began to look at different options. The Province evaluated over 90 technical reports and concluded that "a major

rehabilitation of the existing Lions Gate crossing was 'clearly superior' to other options, for reasons of cost effectiveness and compatibility with existing road networks on both sides of the span" (Transport Canada 2002). In exchange for permission to widen the causeway through Stanley Park, the Vancouver Parks Board requested that private automobiles be removed entirely from the park by 2030 (Hamer 2001). Construction began in July 1999 to widen and repair the existing lanes and sidewalks and seismically upgrade the structure. It was completed in 2002 amidst much public controversy over the value of the repairs versus the alternatives.

## 2.3 History of the third crossing proposals

Any political discussion of Burrard Inlet crossings is necessarily complex due to the large number of parties involved. The District of West Vancouver, District of North Vancouver, City of North Vancouver and City of Vancouver are all directly impacted by the current crossings and all stand to be affected by the possibility of future crossings. A great deal of waterfront land bordering the Inlet's north shore is owned by First Nations bands, who

must also be involved in any plans. In addition, the Vancouver Port Authority has a stake in the crossing due to the Port status of Burrard Inlet. Finally, the Vancouver Parks Board must be involved in bridge discussions that may impact Stanley Park. In addition to these direct stakeholders, other GVRD municipalities stand to be impacted by the increase in vehicular traffic that may result from the construction of a third crossing. Most indirectly, people all over the planet could be affected by potentially higher levels of pollution generated by additional road capacity.

It seems that the discussion of building another crossing began almost immediately following the completion of the Lions Gate Bridge back in 1938. Serious political consideration of the idea, however, did not emerge until around 1960.

Traffic congestion on the North Shore was viewed as a problem at this time, and various solutions were explored to address it. In 1965 the possibility of creating an express-bus route across the Lions Gate Bridge was considered. This proposal was not long-lived however; the Technical Traffic Advisory Committee on the First Narrows Bridge announced its disapproval, arguing high costs and lack of parking availability at the North Shore end of the bridge (City of North Vancouver and District of North Vancouver 1972). Discussion of creating a park and ride system continued as a vital counterpart to the third crossing debate for many years, though nothing ever came of it.

Discussion of a third crossing continued throughout the 1960's, with much disagreement among the many different parties involved. It was difficult to agree upon the form the crossing would take, its location, funding sources and in turn how to meet the demands and conditions of all involved.

In 1969 the engineering firm Swan Wooster -CBA submitted a report to the City of Vancouver entitled *Notes on the Burrard Inlet Crossing Project: City of Vancouver Approaches.* Citizens groups provided input on the report, selecting between several options that Swan Wooster presented (Architectural Institute of British Columbia 1969, Building Owners and Managers Association of Vancouver 1969, Community Arts Council 1969, Composite Committee on Regional Transportation 1969, Vancouver Junior Chamber of Commerce 1969). The North Shore Transportation Committee, a citizens group commissioned by the District of West Vancouver, was formed in response

to the Swan Wooster report and opposed the construction of another crossing, favouring rapid transit, park and ride and alternate options instead. In 1971 a multi-volume report written by Swan Wooster entitled *The Burrard Inlet Crossing* was made public.

In 1972 the GVRD, endorsed the construction of a third crossing in a 27-26 vote. In the same year, the Planning Institute of British Columbia (PIBC) stated its opposition (PIBC 1972). There was much public debate around the issue at this time, with many citizens' groups coming out against the idea of a third crossing, including the largest citizens organization in Vancouver at that time, the Vancouver and District Labour Council (Vancouver and District Labour Council 1972).

This chapter in the life of the third crossing was essentially laid to rest in September 1972, however, when the NDP defeated the Social Credit party in a provincial election. The new priorities of the provincial government led to the shelving of the third crossing proposal. The Seabus began running in 1977, though the idea of building another automobile crossing did not resurface again in any seriousness until the mid 1990's.

In 1993 it became apparent that the Lions Gate Bridge's state of disrepair could be overlooked no longer. The bridge needed to be seismically upgraded and deck and sidewalk repairs were necessary. It was at this point that the provincial government began examining the available options, loosely grouped around a few possibilities: repair the existing Lions Gate Bridge, or build another bridge and/or a tunnel under Burrard Inlet (Transport Canada 2002).

In 1997 the Province announced its plan to either replace or restore the existing bridge, and put out a call for proposals in 1998 (City of Vancouver 1997, Transport Canada 2002). A resurrection of public interest for building another crossing led to the creation of a pro-third crossing committee called TransVision. The committee's chairman was and is West Vancouver councilor John Clark. The Vancouver Park Board, Vancouver Board of Trade, Vancouver Economic Development Commission, Lower Mainland Chamber of Commerce transportation committee and the North and West Vancouver chambers of commerce all have had representation on the TransVision committee (Becker 2000). TransVision still exists, though is has remained relatively inactive since the completion of the Lions Gate upgrades in 2002.

The final decision to restore the existing Lions Gate Bridge rather than build a new crossing has been hailed by some as progressive and derided by others as a waste of time and money. Though the issue of the third crossing is no longer in the political limelight, it never falls far from public consciousness amongst North Shore residents. Evidence of this can be noted in situations ranging from casual conversation to letters to the editor of the North Shore News, the area's local newspaper.

In March, 2001 Vancouver City Council voted unanimously to "defer consideration of a new crossing until the next review of its long-term regional strategic plan, due in five years" (Hamer 2001). Staff recommended that a new crossing would not be needed before 2021. John Clark of TransVision, however, stated in 2001 that he was optimistic that another crossing would be built before 2010 (Hamer 2001).

## 2.4 Relevance of the Burrard Inlet crossings to North Shore residents

Burrard Inlet separates the North Shore municipalities from the rest of the Lower Mainland. Residents of the North Shore traveling south must cross the Inlet via either the Lions Gate or Second Narrows bridges or the Seabus. Though the actual distance is not great, this body of water can create a sense of separation between its north and south shores.

Current infrastructure and physical geography mean that for those traveling by automobile, there are only two south and/or eastbound routes off of the North Shore. At rush hour, particularly in the afternoon, and at times on weekends, there is significant congestion on the two bridges.

Some residents of the North Shore seem to fear an escalation in traffic congestion and speak of the importance and the necessity of building a new crossing to accommodate increasing demand. In reality, however, traffic levels on the existing bridges have remained largely consistent over the last few decades. This trend can be explained by the fact that there have been very low levels of population growth in the North Shore

municipalities during the same time period. Though the data in Chart 2.1 span only a few years, the lack of change in traffic patterns on the Lions Gate Bridge is apparent. Though there is slightly more variation, a similar trend can be observed for the Second Narrows Bridge in Chart 2.2.

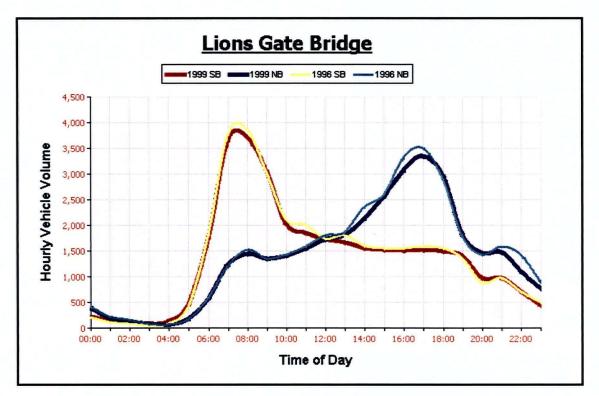


Chart 2.1: Traffic Volumes on Lions Gate Bridge (1996 and 1999) Source: GVTA Strategic Planning 1999

In January, 2002 TransVision commissioned Ipsos-Reid to conduct a poll asking respondents how often they used the current Burrard Inlet crossings and what their opinions were about the construction of a third crossing. It should be noted that at the time the survey was taken construction was ongoing on the Lions Gate Bridge, creating much higher levels of congestion and inconvenience than have been typical before or since the construction period.

The Ipsos-Reid poll found that 82% of North Shore residents surveyed use the Lions Gate or Second Narrows Bridge at least one day per week, with 42% using a bridge 5 or more days per week. This is far greater than the GVRD average, where only 14% of people surveyed crossed at least one day per week and only 3% used the bridges 5 days or more (See Chart 2.3) (Ipsos-Reid 2002).

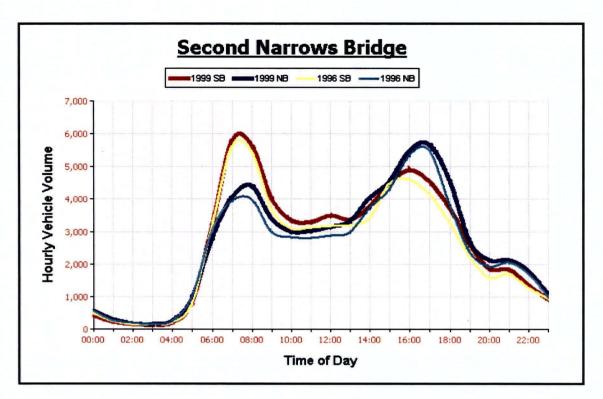


Chart 2.2: Traffic Volumes on Second Narrows Bridge (1996 and 1999) Source: GVTA Strategic Planning 1999

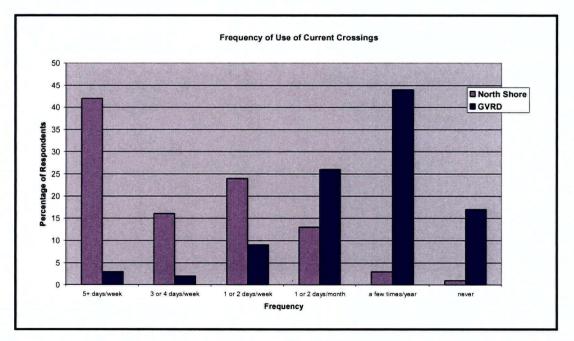


Chart 2.3: Frequency of Use of Current Crossings Source: Ipsos-Reid 2002

North Shore residents are extremely dependent upon the crossings and are naturally resentful of the time they spend sitting in traffic. In this light, it is possible to understand the root of many people's desire to build another crossing.

## 2.5 Current context

In the same Ipsos-Reid poll, 93% of respondents said they traveled by car for the majority of their trips over Burrard Inlet, 6% used transit and 1% traveled by other modes. (See Chart 2.4). In viewing these numbers, one must question whether the future of transportation from the North Shore lies with transit or with the private automobile. As there is very little existing capacity to add additional cars to the road network, a possible solution would be to add more people-moving capacity in the form of public transit.

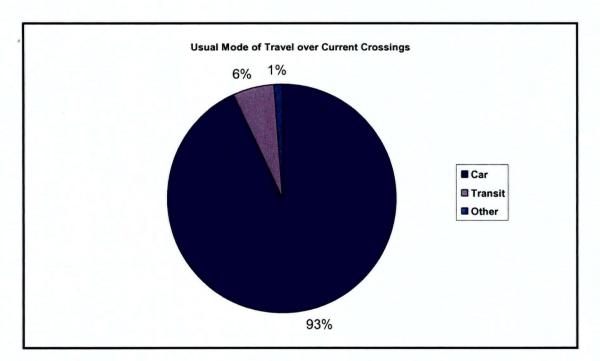


Chart 2.4: Usual Mode of Travel over Current Crossings Source: Ipsos-Ried 2002

The GVRD has stated in its Livable Region Strategic Plan (LRSP) that a goal for the region is to decrease its dependence on private automobiles in favour of cleaner forms of transportation: "As the region's population continues to grow, our dependence on the

private automobile needs to be reduced if we are to have any chance of addressing the issues of air pollution, congestion and the spiraling public costs associated with them" (GVRD 1996, p.13).

The North Shore is not located within the LRSP's Growth Concentration Area and is therefore not expected to require significant additional road capacity if development in the region occurs according to the policies contained in this plan. A possible factor, however, affecting the area's transportation future is the Sea to Sky Highway, which connects to the Trans-Canada but falls outside of the LRSP area; it is currently being upgraded to allow for more cars to travel between Whistler, Squamish and Vancouver. If the capacity of the new highway overwhelms the current Burrard Inlet crossings then pressure may increase for the provision of additional vehicle capacity in crossing the Inlet.

## **<u>3 THEORETICAL FRAMEWORK</u>**

"Because planning professionals can create deliberative spaces, they must have the strength to listen to strongly held but conflicting views. Always seeking to learn as they go by asking questions, they must be able to distinguish deeper concerns from more superficial rhetoric, so they must be able to listen perceptively and come to see issues anew"

(Forester 1999, p.64).

As will be explained in further detail in Chapter Four, I conducted interviews with third crossing supporters to obtain information about how they view and weigh the issues surrounding the construction of more automobile infrastructure generally, and the third crossing specifically. A survey of the literature on belief systems, values, opinions, and behaviour led me to conclude that the work of two authors would be useful in this study of public opinion of transportation projects. In order to gain an understanding of the elements comprising the value systems of crossing supporters, the interviews will be examined through the perspectives of two complementary theories of personal and public belief systems: Leon Festinger's *cognitive dissonance* and Daniel Yankelovich's *public judgment*. But first, this chapter contains an examination of the views in planning theory on the value of public participation.

My research aims to determine the fundamental reasons for support of transportation infrastructure projects and whether public beliefs on the issue are consistent. I will ask whether cognitive dissonance is a significant factor in the relationships between different beliefs held by supporters of the third crossing. Also, I will evaluate whether or not support for a third crossing, as a collective belief, falls within Yankelovich's definition of "good quality" public opinion, referred to as public judgment. An understanding of crossing supporters' beliefs in relation to these two opinion theories will help planners integrate this point of view into public policy.

## 3.1 Valuing the public voice

Contemporary planning theory is infused with the notion that a good planner should solicit and respect the diverse opinions and interests of the public. Many writers, including Forester (1999), Healey (1997), Sager (1994), Hoch (1994) and Sandercock (1998) have espoused the value of public participation in planning processes. Though the issue of what public participation means and how it should be organized can be a source of debate and discussion within the planning profession, there does appear to be considerable support for the notion that citizen input has value and should be encouraged.

#### 3.1.1 Planning within a democracy

At the root of democratic political systems such as Canada's is the premise that the public should have a voice. The voice of the public is never homogeneous; it is a cacophony of complementary and conflicting messages. It is sometimes organized but often not, sometimes loud though it may also be quiet. Despite the complexity, it is the responsibility of the planner as shaper of the physical environment to listen to the public's disparate voices regarding the forms they would like to see their society and their surroundings take.

It is difficult to understand the opinions and beliefs of another person or group, particularly when those views differ from one's own. Nevertheless, it is a planner's job to respect a diversity of ideas. If planning is to be, or even approach being, democratic, inclusive and participatory, it is important for practitioners to understand, as best as they can, the dynamics of public thought and public opinion. The more we can understand these dynamics, the better poised the planning profession will be to create processes that encourage dialogue, which in turn may deepen understandings of the ways that our social systems and choices often conflict with sustainability goals. John Forester, in his book *The Deliberative Practitioner*, examines the daily work of a number of planners and highlights the important role that citizen interaction plays within the profession. He notes that,

"unlike many other professionals, planners and policy analysts have to be astute bridge builders, negotiators and mediators at the same time. As they try to see past problems and future opportunities through the eyes of many different actors, planning analysts try to build critically informed but pragmatically viable agreements" (1999, p.3).

This statement highlights the importance of not only listening to, but understanding the diverse views of the public. Forester goes on to say that,

"working among conflicting parties, planners and policy advisors must be able to recognize in detail the perspectives of others, their stories and accounts, their feelings and stakes, without necessarily agreeing with any of them" (1999, p.12).

It is with an effort to understand these perspectives and their significance for fostering social learning that I am conducting research on the pro-third-crossing point of view.

Patsy Healey (1997) discusses the reasons why members of the public often feel very passionate about planning issues. She claims that people are aware of the issues affecting their environments, though at the same time wary of "progress" and often in disagreement about what the desired outcome of this progress should be.

"Conflicts over what we want local environments to be like are a routine part of our experience. If we are not actively concerned with the potential impacts of a new project in our neighbourhood, town or region, we hear of such conflicts, through street gossip, in newspapers and television programs.... The idea of progress, of the benefits of industrial and technological development, which so preoccupied people in the early twentieth century, now seems to be turning back on us, so that we are neither sure if there will be progress, or if there is, whether we will

like the outcome. Local environmental conflicts affect us not just in terms of the defence of a particular material interest.... They also have the potential to arouse fears and feelings about the way we live now, about the way our society is going" (Healey 1997, p.31).

Though neither Forester nor Healey speaks specifically of public input into transportation projects, the conflict that often surrounds them indicates the strong views held by many on these issues. Consequently, this research will be helpful in giving planners a greater understanding of the opinions held by crossing supporters with respect to these kinds of projects, the dynamics by which these opinions are formed, and the implications for developing planning processes that contribute to social learning on sustainability challenges.

Planning theorists advocate the consideration of all of the public's many voices in inclusionary processes. In its narrow scope, this study examines only one point of view: that of the pro-crossing advocate. By no means is this meant to suggest that other voices should not be heard in the third crossing debate, or in any similar public discussions. The opinions of crossing advocates have historically been strong and high-profile, and, in my opinion, under-examined, which makes the subject an obvious choice for study. If successful and meaningful dialogue can be established between planners and vocal third crossing supporters, then the climate for public discussion will be favourable for other voices to be heard as well.

#### 3.1.2 Combining planning and psychology

In constructing this research, with an aim towards understanding the belief systems of third crossing supporters, I looked to psychological theory. Little has been written about the potential contribution psychology may have to sustainability planning. Alice Jones (1996) supports the combination of the two disciplines:

"Although some planners are familiar with certain attitude-behaviour psychology research, on the whole this body of work has not crossed over into the planning literature. Cultivating an understanding of what

psychologists know about how our emotions, values, beliefs, and behaviours are all tied together may help planners gain insight into the very personal nature of some of our grand visions for a sustainable future. This insight could make the sustainability discussion more productive and may help us design policy programs that will give people the appropriate motivations for adopting the behaviour changes that will make our visions reality" (Jones 1996, p.57).

This comment, offered by a planner, highlights the importance to planners of not only considering public input, but also of taking the time to understand the dynamics of belief systems. Jones believes that planners could benefit a great deal from studying basic psychological theory on belief systems and attitude formation. I have believed since beginning planning school that because the practice of planning is so dependent upon the tide of public opinion, it must be in the collective best interest of the profession to understand the dynamics that create that opinion as much as possible. I designed this research while keeping in mind the potential understanding that may be gained by drawing insights relevant to planning from the fields of psychology and social psychology.

My research might help planners develop more constructive dialogues between supporters of projects such as the third crossing and opponents who claim to adhere to a sustainability vision. More broadly, it may contribute to similar understandings of conflicting visions in other transportation projects.

## 3.2 Cognitive dissonance

The concept of cognitive dissonance can be used to evaluate consistency within interview responses. The term is described in Leon Festinger's 1962 book *A Theory of Cognitive Dissonance*<sup>1</sup> as follows: "Two elements are in a dissonant relation if, considering these two alone, the obverse of one element would follow from the other"

<sup>&</sup>lt;sup>1</sup> A Theory of Cognitive Dissonance by Leon Festinger was originally published in 1957 by Row, Peterson and Company. The same text was reissued in 1962 by Stanford University Press. All references in this thesis will be to the 1962 copy.

(p.13). In other words, the term refers to a situation in which an individual holds two related beliefs, or "cognitions" that are in conflict.

Festinger's basic hypothesis has two parts. First, he believes that "the existence of dissonance, being psychologically uncomfortable, will motivate [a] person to try to reduce the dissonance and achieve consonance." Second, "when dissonance is present, in addition to trying to reduce it, [a] person will actively avoid situations and information which would likely increase the dissonance" (1962 p.3). The concept of dissonance *as a motivating factor* is relevant only if dissonance is present to begin with. I will begin by using Festinger's definition of cognitive dissonance to determine whether it exists in the belief systems of third crossing supporters. Only if I find this to be the case will the motivational properties of dissonance be of interest.

Since the publication of Festinger's book, others, for example Harmon-Jones and Mills (1999) and Beauvois and Joule (1996, 1999), have made minor adjustments and updates to his theory. These modifications, however, do not alter the substance of his work and have no significant effect on the way in which the original theory of cognitive dissonance is applied to this research.

Festinger (1962) states that people consistently aim to reduce dissonance internally by modifying their beliefs, or "cognitions," so that they coincide with each other as much as possible. A cognition is defined as "any knowledge, opinion or belief about the environment, about oneself, or about one's behaviour" (p.3). Therefore a cognition need not be a verifiable truth, but may also include more subjective elements such as opinions. According to Festinger, a certain amount of dissonance will always exist given the multitude of relating cognitions one possesses, but in general consonance is sought in an attempt to reduce the discomfort of internal conflict.

One aspect of cognitive dissonance that Festinger does not explicitly address, but that would presumably be relevant to many planning issues, is the relationship between a person's individual preferences and his or her social values. It is likely that dissonance occurs quite frequently between these two potentially conflicting ideals, and this may indeed be the case here with the issue of the third crossing. For example, someone might feel quite strongly about the amount of his own time that he spends as an

automobile driver sitting in traffic on the Lions Gate Bridge and would, for personal reasons of time and convenience, be very happy to witness the construction of another crossing that would accommodate private vehicles. He might even say that he is in favour of the construction of this crossing. This same person, however, might also appreciate the broad societal value of moving towards more sustainable transportation systems in the region and support the allocation of resources towards this goal. These two beliefs would exemplify cognitive dissonance if the beholder sees them as being in conflict.

In applying the concept of cognitive dissonance to the third crossing, it is the objective of this study to address the following questions: to what extent is cognitive dissonance present in the minds of third crossing supporters? And how does dissonance affect their attitudes regarding a potential third crossing?

## 3.3 Public judgment

Daniel Yankelovich discusses many issues related to cognitive dissonance in his book *Coming to Public Judgment* (1991). The difference between his work and Festinger's is that Yankelovich focuses on how the concept can be applied more generally to the public, rather than the individual. Of course "the public" is a collection of individuals, each having his or her own beliefs; Yankelovich's discussion of opinion asks how we may evaluate public opinion as a whole by examining the quality of individual beliefs. *Coming to Public Judgment* (1991) explores the ways in which one may distinguish good quality public opinion from poor quality public opinion. The concept of cognitive dissonance plays heavily, though not explicitly into Yankelovich's work.

According to Yankelovich there are different degrees of public understanding of any particular issue. He gives the term *mass opinion* to a relatively superficial and potentially malleable view on a subject, a first impression. He classifies *public judgment*, however, as being something superior: the product of careful consideration, exhibiting stability, consistency and responsibility.

25

Yankelovich is interested in finding ways to improve the quality of public opinion by converting mass opinion into public judgment. He sees public judgment as a more advanced form of belief, one that is educated, thoughtful, and synchronous with other elements within a belief system. For the purposes of this research I use Yankelovich's definitions and categories for mass opinion and public judgment, rather than his theories on the societal process of moving from one to the other.

Yankelovich's theories explore aggregate beliefs among groups of people, usually a broad group referred to as "the public." The collection of third crossing supporters examined in this study is much smaller and in some senses may not possess a collective identity. Through this research, I aim to determine the ways in which strong crossing advocates can be considered as a collective, and the ways in which they cannot.

#### 3.3.1 Elements of quality in public opinion

In considering whether cognitive dissonance exists within the belief systems of third crossing supporters, I will also consider whether the pro-crossing stance represents good quality public opinion or not, in terms of Yankelovich's definitions. By understanding the characteristics of the beliefs of those in favour of transportation infrastructure projects, and the reasoning that produced them, planners will be better able to engage in meaningful dialogue with groups such as this, and will also be better able to devise planning processes that encourage reflection on the relationship between these beliefs and sustainability goals.

To summarize, Yankelovich explains mass opinion as "poor-quality public opinion as defined by the defects of inconsistency, volatility and nonresponsibility" (1991, p.42). By contrast, his definition of public judgment is "good quality public opinion... that is stable, consistent and responsible" (p.42). The qualities of responsibility, stability and consistency all relate in some degree to Festinger's cognitive dissonance, as discussed below.

#### Responsibility vs. nonresponsibility

Though responsibility, stability and consistency as they pertain to public opinion are all related to each other and none stands alone, Yankelovich describes the notion of responsibility as the "basic criterion" of quality public opinion.

Having a responsible opinion means being aware of and accepting the consequences of one's views. The term *non*responsibility is used to indicate the condition of being unable or unwilling to accept these consequences (as opposed to *ir*responsibility), in order to distinguish this specific meaning of responsibility. Someone who is nonresponsible, or displaying poor quality opinion, might hold other beliefs that conflict with the one in question, therefore making the acceptance of consequences difficult. As a result, he or she might also take measures to avoid situations in which the implications of these beliefs are made explicit. According to Yankelovich, "the single most important reason people have for failing to accept the consequences of their opinions is their difficulty in resolving their own conflicting values and ambivalences" (1991, p.30).

#### Stability vs. volatility

The terms 'stability' and 'volatility' can be taken literally when applied to public opinion research. The claim that good quality public opinion is stable while that of poor quality is volatile refers to the degree to which beliefs vary or change within different contexts and at different times. Both stability and consistency are, according to Yankelovich, "related to the basic criterion of whether or not people are taking the consequences of their opinions into account" (1991, p.31).

A stable, well thought out judgment is likely to elicit the same type of response regardless of how many different ways or times one is asked about that belief, given a constant level of knowledge of the subject. On the other hand, a volatile opinion may fluctuate dramatically depending on the context within which it is placed, or the time at which it is considered. Relating to responsibility, as both stability and consistency do, a person who has accepted the consequences of his beliefs will be familiar enough with those implications to exhibit stability on a given issue.

#### Consistency vs. inconsistency

Consistency refers to the act of making appropriate connections between related aspects of an issue. It is defined as "the extent to which [an opinion] contradicts other views the person holds" (Yankelovich 1991, p.31). Whereas volatility is exhibited by a change in opinion from question to question, often over time, inconsistency appears in the form of a contradiction. Like stability, consistency is also closely related to responsibility. Someone who has accepted responsibility for his beliefs on a given subject will be familiar enough with the issue to make the necessary connections and display consistency. Consistency is not limited to the strictly logical, but also includes psychological consistency, or the existence of consonant opinions.

According to Yankelovich, inconsistency occurs when people have "compartmentalized" their thinking, failing to see the connection between different beliefs that they may hold. Frequently, he says, compartmentalization occurs around highly publicized issues where particular words or phrases may be politically loaded.

The three elements of public opinion mentioned above will be used to evaluate whether third crossing supporters are, as a group, displaying mass opinion or public judgment. With this assessment, it may be easier for planners to determine how to begin to develop meaningful discussions among various parties of the public on issues such as this one.

## 3.4 Opinions, attitudes and values

Yankelovich outlines a hierarchy of opinions, attitudes and values within a belief system, values being the deepest and most unwavering, opinions the shallowest and most likely to shift, while attitudes fall in between. See Figure 3.1. Often, people can develop opinions and attitudes, be it through the influence of culture, the media or acquaintances that are discordant with the values that they hold to be true.

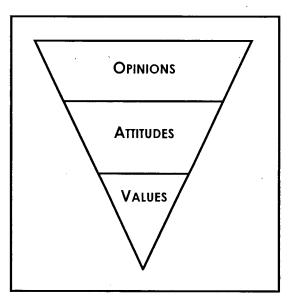


Chart 3.1: Hierarchical pyramid of opinions, attitudes and values Source: Yankelovich 1991

As Yankelovich defines them, "opinions are the most unstable, values are the most solid and enduring, and attitudes are in between. Opinions are more specific than attitudes; attitudes are more specific than values" (1991 p.122-3)

Opinions are shallower and more plentiful than either attitudes or values. Though they can be malleable, they aren't necessarily so. Often they can be held very firmly, though firm opinions tend to be those that are consonant with related attitudes and values.

According to Yankelovich, the opinions, attitudes and values of any individual are often in conflict, an idea that relates back to Festinger's work. These types of beliefs to not often derive from each other, rather they are absorbed from society, culture and the media, which helps to explain how they can often end up in conflict.

> Most opinions and attitudes do *not* derive from values. People acquire many of their opinions and attitudes from other sources, which is why opinions so often clash with values... This point means that the pyramid is not self-enclosed but is, in fact, wide open to the influence of others and to the day-to-day experience. Most opinions and

attitudes derive from the larger culture, reflecting social norms and information conveyed by the media.... People's values also derive from the larger culture but are rooted in early life experience where the culture is mediated through parental and peer influence. People can and do change their values from time to time. But compared to shifts in attitudes and opinions, these are rare occasions (1991 p.124).

For the purposes of this study, opinions, attitudes and values will be examined to the virtual exclusion of behaviour. Many factors and circumstances contribute to a person's behaviour, in addition to that person's beliefs. This study aims to understand more about the elements that contribute to a person's belief system and how these elements relate to one another. Though the relationships between beliefs and behaviour are certainly relevant, the scope of this study encompasses only the examination of belief and value systems. Other literature may be consulted in seeking to explain the interactions between belief and behaviour.

### 3.5 Information vs. judgment

Yankelovich clearly points out the distinction between exchanging information and forming judgment. Current faith in science and the apparent dominance of scientific thinking in modern discourse lead many to conclude that more and better information logically leads to the creation of better policies. Yankelovich argues, however, that judgment plays a strong role in creating sound policies as well. Good information and bad judgment can easily lead to bad decisions. Judgment is important and not necessarily of high quality, even when information is sound and useful (1991).

"The desirability of giving the public more *information* is never questioned. Improving the *judgment* of the public is, however, an unfamiliar and alien concept... I am not implying that being wellinformed is a negligible asset. We could not survive in our complex world without specialized information; information is indispensable for what experts do. But what experts do and what the public does is not at all the same. Experts seek answers to technical questions.

The public makes judgments that go beyond technical matters... [F]actual information plays a narrower role in helping people to arrive at their judgments than is commonly presupposed" (Yankelovich 1991, p.193 –original emphasis).

With respect to Yankelovich's theories, this study aims to better understand the level of judgment involved in people's beliefs surrounding issues such as the third crossing. Are opinions of crossing supporters based on well-considered beliefs or do they reflect only more volatile opinion? And if the latter, is Festinger's cognitive dissonance a factor in shaping opinion on issues such as the third crossing?

# 4 METHOD

## 4.1 Interviews

To understand the belief systems of third crossing supporters, I conducted interviews with nine vocal crossing advocates. I felt that interviews, as opposed to a survey, would allow for more depth. My results bear no statistical significance because the size of my study group was very small.

I had hoped that a deeper but narrower study format would offer more insight into the dynamics of the pro-crossing ideology. I wanted to find out how the opinions of crossing supporters related to the opinions they hold about transportation systems in general.

## **4.1.1 Interview questions**

The interview consisted of 14 questions and, depending on the length of the respondent's answers, took anywhere from 25 minutes to 1 ½ hours to complete. I began the interviews by making explicit the fact that in referring to a third crossing, I was treating the idea very generally in terms of form, location and other details. The only element I specified in the discussion of a third crossing was that it would cross Burrard Inlet and link the North Shore with the City of Vancouver. The proceeding interview questions were as follows:

- Do you have anything you would like to add or discuss about this general reference to a third crossing?
- I understand that you are in support of the idea of such a crossing?
- Can you tell me briefly why?
- How often do you, yourself, make use of the existing Burrard Inlet crossings in one week, on average?
- What mode or modes of transportation do you generally use when crossing the Inlet

In your opinion, what form would the third crossing ideally take?

(For example, what kinds of transportation should it accommodate, where should it be located, etc.)

- How do you imagine a third crossing would affect, positively or negatively or both,
  - The North Shore?
  - The City of Vancouver?
  - o The Lower Mainland?
- How familiar are you with the GVRD's Livable Region Strategic Plan, specifically its policy to increase transportation choice in the region?
- What do you think about policies such as this one that aim to reduce private automobile use?
- Do you see any conflict between those policies and the construction of a third crossing?
- Is there any information of public action that would lead you to change your opinion?
- Is there anything else you would like to add?

## 4.2 Selecting respondents

As I have chosen to study only the pro-crossing movement for this research, I selected potential interviewees on the basis that they had spoken out publicly in favour of the idea in the past. Almost all interviewees have been associated with the group TransVision, an organization whose mission is "the development of political consensus for the professional study, at a regional level, or a Mid-Harbour Tunnel" (Transvision 2001).

From an examination of newspaper articles, municipal council meeting minutes, newsletters and other public documents, I identified eight potential interviewees, each of whom I sent a letter requesting a meeting. I then used a "snowball" method whereby I asked those who participated to suggest names of others who might also be willing to be interviewed. The response I received was gratifying: of the original eight letters, one was returned undeliverable and I received six responses resulting in five interviews (one man initially expressed interest but never returned any of my later calls). These five respondents gave me six more names of people who might agree to be interviewed. Out of my second round of letters one was also returned undeliverable, and my result

was four more interviews. From the response rate, it is possible to infer that supporters of the crossing as represented by those whom I contacted are extremely open and willing to discuss the subject of the third crossing. I would suspect that they also had a certain level of empathy for a graduate student trying to complete her research and thus offered their assistance gracefully.

# 4.3 Other methods

In analyzing the interview results I decided that I would like to investigate the contents of the transcripts beyond simply answering my research questions. Therefore I adopted the "grounded theory" method in order to extract more information from the interview transcripts. This method will be discussed at greater length in Chapter Five.

# **5 INTERVIEW RESULTS**

# 5.1 Expected results

I designed this research based on a feeling I had after a series of casual conversations with North Shore residents about the idea of a third crossing. There appeared to be, from informal conversation, widespread support for the crossing and for an expansion in automobile access to Vancouver, without much consideration given to the far-reaching consequences of such an investment.

Going in to the interviews, I thought I would find that, though many people would come forward in support of the idea of building a third crossing, there might be some conflict within their belief systems. I was expecting to uncover cognitive dissonance, a conflict between some respondents' personal desires for convenience and their wish for a more sustainable future. Discovery of the existence of dissonance could be helpful to planners in thinking about ways to create constructive dialogue around such issues.

I anticipated that each interview respondent would fall into one of two general categories. One possibility was that participants would believe in the long term value of decreasing automobile use in the region, but would also support the construction of a third crossing in the hopes of reducing their own personal commuting times. This scenario would entail cognitive dissonance. The second category I had anticipated would belong to interviewees who might not see any value in trying to restrain automobile use in the GVRD, and therefore who would support the third crossing just as they would support other initiatives to increase vehicle mobility. In this case cognitive dissonance would not play a major role.

# 5.2 Interview respondents

In targeting potential interview respondents, I chose only people who had spoken out publicly in favour of a third crossing. Of the nine interviews I conducted, every one was with a white male between the approximate ages of 50 and 65. All were professionals and most, but not all, had a personal connection to the North Shore through either residence, employment or both.

Interestingly, not all of the men I interviewed were wholly in support of the crossing. Some spoke to me on behalf of organizations, for example the Vancouver Board of Trade, and indicated rather than wholesale support, their organization's desire simply to investigate the matter further. Also, one interviewee had reconsidered his position between the time his name appeared publicly in favour of the crossing and the time he spoke to me, and had decided that he no longer supported the idea. It has been interesting to consider his responses to my questioning in relation to those given by other, more firm supporters of the idea.

Because my sample of nine interviews is small, and because my target research group is not a broad "public" of crossing supporters but instead a small group of more vocal advocates, my results cannot be representative of any group other than that which I am studying. However, a deeper awareness of the beliefs of this small population will paint a picture of the highest level of support for the crossing and will help planners to see the spectrum of opinions that exist in relation to such infrastructure projects.

The responses I received to my interview questioning are related below.

## 5.3 A look at the responses

Though I went into the interviews expecting to meet a variety of different people with a variety of ways of looking at a potential third crossing, I found that the conversations I had were more different from each other than I had anticipated. The rest of this chapter will be devoted to summarizing the information I have extracted from my interviews.

## 5.3.1 Reasons for supporting a third crossing

Respondents offered a long list of reasons justifying their support for a third crossing. Some of these reasons were personal, others were not. Many were expressions of each man's vision for what he would like to see the Vancouver region become. Some beliefs were held passionately, while others were more detached. Table 4.1 provides a list of the reasons for support given to me during the interviews. This is followed by a more thorough examination of each reason.

Reasons stated for supporting another crossing, in decreasing order of emphasis
bypass route
goods movement
tourism and recreation
growth management
public transit
- air pollution
population/existing capacity
early planning
causeway closure
Olympics
business
commuting time

Table 4.1: Reasons given by interviewrespondents for supporting a thirdcrossing

#### Bypass route

Seven interview respondents stressed their desire for a re-routing of traffic that is not destined for downtown Vancouver, and they saw a third crossing as an opportunity to accomplish this task. The alignment of the existing Burrard Inlet crossings forces all traffic to and from the Lions Gate Bridge to pass through downtown Vancouver, regardless of its destination. The hope amongst many crossing supporters is for a bypass route that carries vehicles directly through to Main Street or a similar location,

removing that volume from Georgia Street and the downtown core. Though few respondents mentioned it, this new route would of course dramatically increase traffic on Main Street and in surrounding neighbourhoods.

As was stated by one respondent, "[A third crossing] could have a positive impact on taking all of that traffic out of downtown Vancouver because there's a tremendous amount of traffic that moves from the North Shore south, out to Richmond, out to Surrey and everywhere else. And if you could take that out of downtown and give some relief to the Second Narrows, which is backed up every morning up the Upper Levels Cut, it's just another option that gives people several ways of moving south from the North Shore."

Another, more emphatic advocate of a bypass route argued that "Vancouver would have to allow access to the crossing through some streets in Vancouver, which would mean that they'd have to go with some sort of limited access road system. And they'd have to wake up to the fact that the majority of people using the crossings do not want to go through Vancouver; they want to bypass it. And if this is the case, which all the studies have indicated that it is, then there has to be some decent bypass routes, either by or through. Forcing people to move through Vancouver has been to try to benefit the Vancouver business community and this has proven that it doesn't work because the business community has moved outside of Vancouver because of the traffic. Downtown Vancouver for shopping purposes right now is a dead zone."

A third interviewee pointed out what he considered to be the importance of maintaining a connection with the City of Vancouver even while creating a bypass route: "[A reason for supporting the crossing] is to create a bypass for downtown Vancouver that diverts through traffic from the City and the West End, but still retains a viable Vancouver central business district. I think that's important. To bypass it completely... is part of, frankly, the city's own proposal, which is to build a third crossing alongside the existing Second Narrows, to augment that in fact. Provide a third crossing there that completely bypasses downtown Vancouver. I think that would be so counterproductive. It doesn't make any sense to me to sort of cut out Vancouver. Because then you probably put Burnaby, Metrotown, right on the map as the main urban centre for the region. And one has to then sort of question the motives and such of the people who are doing that." A

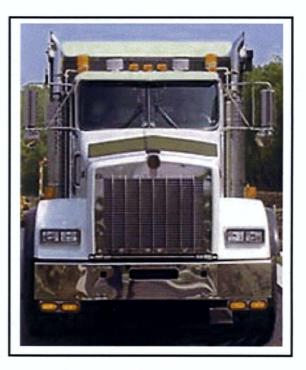
perception of the need for a bypass route is one that was shared by a majority of interview respondents, though opinions differed on how it should occur.

## Goods movement

Another frequently noted reason, given five times, for supporting a third crossing was the perceived need for additional capacity for goods movement within the GVRD. The City

of Vancouver boasts a major international shipping port on Burrard Inlet and a large amount of container traffic is moved by truck through the region. General discussion of the relationships between road capacity, transit and private automobile use often excludes consideration of commercial goods movement on city streets.

It is important to take into account the economic impact of traffic congestion on goods movement, a fact that was pointed out several times during the interviews. The response of one participant when asked about his reasons for supporting the crossing was as follows: "One of the



Source: Siouxland Economic Development 2005

biggest [reasons] is a number that was published a couple of years ago by the BC Trucking association. They estimated that the cost is somewhere between 900 million and 1.3 billion dollars per year more than necessary, in other words over and above regular trucking costs, to move goods around the Lower Mainland. And as a result, we wind up as consumers and taxpayers paying for it and paying for it and paying for it, no matter which way you approach it. From the cost of your car, the cost of your gas, environmental damage, the cost of goods on a shelf in any store. Obviously they cost more because it costs that much more to move the product and bring it into the market." The financial numbers may be different according to another respondent, but the message is the same. "It's costing approximately, I'm told, 12-15 million dollars a year in excess travel costs to transport goods from where they're landed, and the border crossings, across here to North and West Vancouver, to the Sunshine Coast, Whistler, etc, because of the delays in getting across the bridges and the fact that the only method of transportation is trucks. And trucks are restricted on the Lions Gate Bridge, so there's only one other route." Loss of efficiency in goods movement in the region has the potential to affect everyone personally through higher prices of consumer goods, and also may more broadly impact the economic health of the region. The importance many people place on these impacts is evidenced by the number of times that goods movement arose as a reason for supporting a third crossing.

## Tourism and recreation

The importance of tourism and recreation to the Vancouver area, and to the North Shore in particular, was also pointed out by five interviewees. The North Shore mountains attract skiers, snowboarders and other snow enthusiasts in the winter and hikers and mountain bikers in the summer. The North Shore municipalities also boast beaches with access to various water sports and activities. Residents of Greater Vancouver take advantage of these recreational opportunities, contributing to high volumes of traffic on existing bridges on the weekends, but tourists also come to Vancouver from farther away to enjoy what the city has to offer. Tourist and recreational traffic also affects the North Shore because access to Squamish, Whistler and the BC Ferries terminal at Horseshoe Bay is via these municipalities.

One respondent emphasized his belief in the need to consider the behaviour of this tourist traffic when planning transportation infrastructure: "there's a very serious conundrum in the thinking in Vancouver and the GVRD's transportation system. When they're looking at pulling numbers of cars, we are a tourist destination. We're a large tourist province. Tourism, I think right now is the second largest industry in the province, if not the largest. Tourists are not going to take ground transportation. They're going to drive their cars because most of the tourism is from the US. Those getting off airplanes will use transportation to a hotel if that's where they're staying and then they'll take taxis

or other transportation but that's a minority..... Ferry traffic from Horseshoe Bay. Within three years traffic to Sechelt will be just as heavy as traffic to Nanaimo. Those people do not want to come through Vancouver. I think the GVRD knows all of this; how to implement it is another question." He went on to say, "I think they [the GVRD] feel that they don't need a third crossing if they have enough people movers in the way of... light rapid transit or something like that. But I disagree because there we have our people that are moving to and from Vancouver for work. That's not tourist traffic. It's not the recreational traffic. It's the daily traffic." This man believed that while initiatives to promote transit for commuters are well-founded and should be encouraged, there is also a large volume of tourist traffic in Vancouver that will continue to use automobiles and should be accommodated.

Another interviewee suggested that the recreational opportunities to the north of the city are going to continue to contribute to traffic volumes crossing Burrard Inlet. "There is a huge volume of traffic that leaves from the south of this area to the north of this area and back again. So it's a flow and ebb from south to north, not from north to south. Evidenced by the growth in popularity of Whistler, the growth in popularity of Cypress Bowl, a million and a half visits a year to Cypress Bowl. They're not all from the North Shore."

### Growth management

Four respondents saw a third crossing as a potential tool that might be used to target population and development growth within the region. Most of these wanted to see more development to the north of the City of Vancouver: on the North Shore and along the Squamish/Whistler corridor, even on the Sunshine Coast and Vancouver Island. Some expressed this in terms of a simultaneous desire to have development pressure eased in the Fraser Valley so as to more easily protect agricultural lands.

One respondent offered the following when I asked him what positive effects he would expect a third crossing to have on the region: "I think first of all it would impact the region in allowing more growth through the Sechelt to Powell River Corridor and through the Whistler to Pemberton to the Interior corridors with more accessible transportation and

the transportation of goods at a lower cost. And it would preserve the Lower Mainland. From that standpoint it would have a positive effect on preserving farmland. Because right now we're eroding farmland in the Fraser Valley simply to build more houses, and we've got to find a place to put people that want to move to Vancouver."

Another interviewee took the idea that transportation infrastructure can foster growth one step further. Though his comment is not directly related to the third crossing, it offers an insight into the philosophy behind this man's support of this type of transportation project. "In today's paper they're talking about giving a contract to a Finnish or a German firm to build more ferries. Well, the argument is that the business should stay here and the ferries should be built here, but in fact we shouldn't be building more ferries. We should be building a bridge to the Island. And then some of the people who are forced to live on cheaper land up the Fraser Valley could live in Ladysmith or in Duncan because it would be 30 minutes away. Closer." The scale of his vision is vast, but this same type of widespread transportation planning and large scale infrastructure was desired by three interview respondents.

Others recognized the potential of a third crossing to affect growth management, but were more reserved in judging its desirability. One interviewee offered this: "I guess it would contribute to growth on the North Shore both in terms of population and the economy. I don't know if that's positive or negative. There are those on the North Shore who don't want to see it growing more. But then you look across there and you see the blight on the mountain, where they keep knocking down trees and putting up houses; somebody wants to see it grow. And I think that if we're serious about the Sunshine Coast and Squamish-Whistler corridor's future economic growth potential, then you'd probably require [a third crossing]."

#### Public transit

Almost every interview respondent expressed a belief that a third crossing should offer new opportunities for public transit to and from the North Shore. Though this research was intended as an examination of opinions on building another crossing for automobiles over Burrard Inlet, in the eyes of most interviewees, private vehicles and

transit should be considered hand in hand as users of an additional crossing.

Three respondents indicated improved transit connections, particularly rapid transit as their primary reason for supporting the crossing, but most of the men I spoke suggested that, while the crossing should serve automobiles, it would also be conducive to public transportation.

According to one interviewee, "the goals are to create a mid-harbour tunnel that augments the services of the two existing bridges, and running a passenger and freight rail service as well as an important new regional link in the main road network.... At the moment the public transportation options to and from the North Shore, across that piece of water, are very limited. Very limited. To take a bus from here [Point Grey] to the North Shore alone, it's a very long and tedious journey. And similarly, taking a bus from here to Whistler is a long and tedious journey. It's even more of a long and tedious journey to take a bus or the train from, say, Richmond to Whistler." This statement is representative of many crossing supporters who consider it to be only one potential link in a larger regional transit scheme, possibly stretching north towards Whistler and the Sunshine Coast. This same respondent pointed out that "at present...there's no passenger rail connection [from south of Burrard Inlet to the north]. So regionally, you'll now have a passenger rail connection through the North Shore. To and through, I would say, the North Shore. And you'll have a third means of access. That's a fifty percent increase in the opportunity and accessibility. That's a big uptake. Fifty percent is a huge increase."

Two ideas for using a third crossing for transit provision were particularly large in scope. Said one respondent, "Ideally, the third crossing should be, I think it should be a tunnel. Now, I think a tunnel is environmentally better than a bridge. You could run rapid transit through the tunnel, whereas it might be much more difficult to put it high up on a bridge... And you could then run light rail or rapid transit from the peripheral boundaries of Greater Vancouver, right through to Whistler and then further up into the interior. So ideally I think a tunnel would be best suited with space for a train and some space for automobiles." Other visions were considerably more conservative, namely constructing a crossing with road space for automobiles, buses, possibly rapid transit, and potentially bike routes.

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### Air pollution

The environmental impact of vehicles left idling in congested traffic was cited three times as a reason for supporting the concept of a third crossing. This argument can be a problematic and controversial one because the comparisons must be considered between the cost of air pollution from vehicles idling on existing streets and the additional traffic that stands to be generated from new roads and increased automobile capacity, potentially leading to idling on this new infrastructure. Nevertheless, it is an idea that was raised more than once.

One respondent listed air quality concerns as his primary reason for supporting the third crossing: "First and foremost [I'm a supporter of the third crossing] because of the environment. Standing cars. It came to light two or three years ago when we had the transit strike. We took some pictures during the strike and after the strike from the North Shore mountains and you could see the pall of yellow smoke hanging over the city." Again, this argument could be seen as problematic, as the solution to this respondent's concerns appears to lie in an increased use of transit. He completed his argument by indicating his support for the inclusion of transit as part of a third crossing.

Another interviewee argued that air quality can be improved through the construction of a tunnel, because of the possibility of treating that air. "There are great advantages in tunnels in you remove the noise, you remove the disruption, you remove the pollution. You take it underground and you concentrate it underground and you bring it out at certain points, and where you bring it out you treat it. As opposed to just generally letting it dissipate right into the atmosphere. It's far superior. And it's usually forgotten, the advantage for handling pollutants."

### Current population and existing road capacity

Three of the men I interviewed held a strong belief that a third crossing was necessary simply because the existing Burrard Inlet crossings are presently too busy. They believe that the number of people currently using the Lions Gate and the Second Narrows

bridges, combined with expected future growth in population and number of automobiles, is cause enough to invest in constructing new transportation infrastructure.

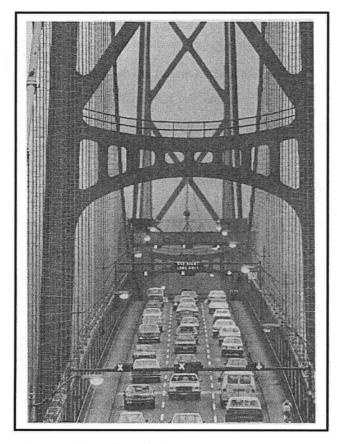


Image: Lions Gate Bridge Source: Davis 1997

"Great amounts of traffic flow from the south to the north and then go back home at the end of the trip, whether it's a day or a week later or whatever. The cost of emissions would go down [with a third crossing]. Any way you look at it, the so-called gridlock situation, it would just make it easier for everybody to live. There is the other argument that if you build it they will come. More volume. But in fact, the automobile population in the Lower Mainland is growing at a faster rate than the human population in the Lower Mainland. It seems absolutely bizarre, but it's true. So maybe if you build it they will come, but if you don't build it, what we have is only going to get worse and worse and worse."

This respondent felt very strongly about the issue of a third crossing and believed that it should be built as soon as possible. He perceived the existing traffic as bad enough to warrant its construction.

Another interviewee offered a similar opinion about the current capacity of existing Burrard Inlet crossings: "I live south and I work in the north so I travel the bridges every day. And despite assurances of everybody that we are not at capacity yet, I feel that you never will be at capacity with the infrastructure you have for each bridge. But the backups will be on the infrastructure [on- and off- ramps], not on the capacity of the bridge. So to say that the bridge isn't at capacity is very misleading." Yet another respondent offered a simple observation that is no doubt shared by many commuters: "the concept of an improved crossing to facilitate transportation to the North Shore, to the Sunshine Coast and to the ferry terminals would be ideal in light of the fact that during peak hours there is significant congestion on both sides of the bridge.... And so I think that traffic is already high and stands if nothing else to continue to increase and will definitely continue to add to congestion at what is the existing bridge head at the north end of the Lions Gate." This differs from other reasons in the belief that current , rather than potential future conditions, are enough to justify the addition of another crossing.

## Early planning

Two interview participants spoke of the need to plan early for such large infrastructure projects. In contrast to those above who believed that current traffic necessitated a new crossing now, others conceded that another crossing may not be needed immediately, but if planning for its location and logistics were not undertaken soon, then the project may eventually become an impossibility, or certainly more difficult to accommodate in the future due mainly to the limited number of places that such infrastructure could fit in around existing development. Many respondents simply did not want to eliminate, for lack of foresight, the chances of a crossing ever being built.

One man argued quite passionately the need for early planning when asked about his reasons for supporting the crossing, "This is something which we've had so much difficulty getting past the faces of the municipalities, is early planning for major pieces of infrastructure like this. It is so important, but they say, 'we can't afford to put people on it.' I say, 'you can't afford not to put people on it.' To at least define the path. It may not happen for 10, 20, 30 years, but if the pathway is known, all other planning decisions will fall out and around that piece of known future infrastructure. And you will not have to then fight an ad hoc case at a later date when options are being foreclosed..... No one has ever said this will never happen. They've said, 'oh, but it's a long way in the future.' Think about it now. Sure, it can be a long way in the future but it's much better if you think about it now and acknowledge that. Then you can take advantage of it and you can build on it."

A second respondent pointed out that options for the location of a third crossing are already very limited: "there is only one place left for a tunnel that could still go through. I don't know if you're aware of that. That's just a little west of Main Street. Other than that, since this whole idea was suggested, the waterfront has been built up, and we have the foundations of the buildings built so deep into the soil that putting up any kind of tunnel is out of the question. There's no room... That's the only place left where there's no foundation, no pillars. So once it's built up... then there's no longer an option for a tunnel and anything else would have to be overland. Once you start to go overland or over the water again...then again you get into a lot more land for access and egress on both sides."

The value of early planning for large projects is quite clear. Though it cannot be seen as a convincing reason for the need for another crossing, this attempt at foresight does offer some understanding as to why crossing supporters remain committed to the issue.

## Causeway closure

In the late 1990's when discussion of Lions Gate Bridge upgrades was underway, the Vancouver Parks Board bargained, in exchange for the rights to widen the existing three lanes of the causeway, the removal of all private vehicles from the Stanley Park causeway by 2030 (Hamer 2001). There has since been very little public discussion of this commitment and no official plans have come forward outlining how such a dramatic adjustment in the road network might happen. Nevertheless, two crossing supporters referred to the conditions of this bargain in arguing for the necessity of another crossing. If the causeway closure does proceed as agreed, this is quite easily the most convincing reason for constructing a third crossing soon.

In fact, the one man I interviewed who had withdrawn his support for a third crossing, did qualify his new opinion by saying that he only felt the crossing would be necessary in the event of a permanent causeway closure: "if we're looking down the road thirty years from now, probably if we closed off Stanley Park, which is what they want to do and I don't blame them because that's [a] jewel of the world, then we might be preparing for a

crossing that might be a necessity. Just a timely necessity to do, not because it would do anything other than move people. And we really should be preparing somewhere along the way now for at least looking at that.... that in time, that park would only be walkable and for cycling and no automobiles. So what's the alternative? Only one bridge across? That's not good enough."

While one other interview respondent mentioned the possible causeway closure as a reason to begin looking at options for a third crossing immediately, interestingly only the two respondents brought up the issue at all.

## Olympics

With Vancouver/Whistler hosting the Olympics in 2010, many people believe that our current transportation infrastructure will not be adequate to serve the large numbers of people who will participate in this event. Some view the Olympics as an opportunity to prioritize what they see as much-needed development projects in the Vancouver/Whistler area.

According to one respondent, the idea of planning transportation infrastructure to meet the demands of the 2010 Olympics is closely tied to the concept of early planning, discussed above. "[A third crossing would work] to meet the opportunities and demands presented by the winter Olympics. Ensure through early planning that ongoing local land use decisions... neither compromise nor are compromised by the selected alignment." Another interviewee, however, offered his opinion that large infrastructure decisions such as this one should not be made based on the requirements of a two week event.

## Business

The idea that a third crossing might be good for business is similar in a way to stating commuting time as a reason for supporting the crossing: both indicate a personal involvement in the issue and a view towards personal benefit from the addition of another crossing. Again, surprisingly, this reason for support fell very low on the list,

with only one respondent citing it as an important factor when considering building another crossing over Burrard Inlet.

The reasoning given by that one interviewee was as follows: "obviously in the business that we're in [shipping], we have trucks coming in and out and [traffic on the bridges] does affect our service to the shippers. It also affects the perception that it's more difficult to get to the North Shore than it is to any other place. We had a recent customer who decided to ship their cargo through Fraser Surrey Dock on the south shore of the Fraser River because there were two less bridges to cross." It is interesting to note that this reason fell so far down the list. Though this position of low priority suggests that many crossing advocates do have business reasons for supporting its construction, it may also mean that those I interviewed do not have businesses that would be strongly impacted by a third crossing.

## Commuting time

To my surprise only a minority of the men I interviewed (three out of nine) commuted over the existing Burrard Inlet crossings: two from the North Shore to Downtown Vancouver, and one from south of the Inlet to work on the North Shore. The remainder both lived and worked either on the North Shore or to the south of Burrard Inlet. I had expected that commuting time would have been a driving force behind many crossing avocates' opinions of why a third crossing is necessary. However, commuting time fell surprisingly low on the list of reasons for support. This observation may or may not be indicative of the general population of crossing supporters, but it was certainly evident in the results of my interviews.

Though commuting time was not given frequently as a reason for support, a few respondents spoke of their belief in the importance of facilitating commuting. "I think [a third crossing] will positively affect in that ... one of the detractions for living on the North Shore is that there are more people living here than can work here. So they must commute to the south shore. Now, for some of them a bus is fairly convenient, but at rush hour times the bus suffers just as much as the traffic...So that's the positive side, I think, for the North Shore... There's more and more people living in Lions Bay,

Squamish, and the Sunshine Coast, and commuting, so as long as that happens then I think we need to improve the access and egress from the city to the North Shore." (FV)

Someone else had a different view of the commute over Burrard Inlet: "my travel time from West Van to Downtown Vancouver [by car] is probably shorter today than it was 20 years ago when I started. Whether that's because of an aging population on the North Shore and fewer students going to UBC or whatever, I don't know. But I can say that the backup on that bridge is less than when I first started working downtown. I think that's part of the justification for why we think long term it may be required but certainly not in the short term." (BW) This comment can be seen in contrast to those mentioned previously, proclaiming the immediate need for another crossing. Though surprisingly few of the men I spoke to commute, most do use the bridge at least once a week.

# 5.3.2 Perception of relationship between third crossing and LRSP goals

In the interviews I asked a series of questions addressing the GVRD's Livable Region Strategic Plan (LRSP), and specifically the policies contained within it designed to decrease automobile use in the region by "increasing transportation choice." As stated in the LRSP, "as the region's population continues to grow, our dependence on the private automobile needs to be reduced if we are to have any chance of addressing the issues of air pollution, congestion and the spiraling public costs associated with them" (GVRD 1996, p.13).

I asked interview participants if they were familiar with these GVRD policies, and how they saw them interacting, either contributing to or conflicting with the desire to build a third crossing of Burrard Inlet. Some interview participants were more familiar with the LRSP policies than others, but all were willing to offer an opinion about the potential for conflict.

Three respondents didn't believe that the LRSP policy and the push to build a new crossing conflicted fundamentally, primarily because they saw the crossing as a major opportunity for a transit link to the North Shore. One man declared quite emphatically

when asked if a conflict existed, "Absolutely not. No, [the third crossing] is completely aligned with it [the LRSP policy]. This was not designed or conceived of as an automobile crossing."

Two interviewees conceded that there were potential areas of conflict surrounding, for example, limited funding. One respondent offered the following when asked if he thought there was a conflict: "Yes, I do, in that there's only a certain amount of funds available. So that obviously a third crossing would be a very expensive ticket item. And everybody's competing for those few funds that are available. And as I say, in the GVRD you've got people that are competing for the bridge over the Fraser and the South Perimeter Road and the RAV<sup>2</sup> and the Northeast Sector Line. Everybody's competing for the bucks. So yes, I can see that there would be a problem in that if they're trying to make a super bus service then they're competing for the dollars too. So yes, there would be a conflict in that respect. But as far as a conflict in the idea of it, I don't think there would be so much. Because I think anybody that has a tunnel that's only for vehicles, cars, I think... that's the wrong concept. You must make it for buses... for every type of transportation really."

Four others did believe that there was a conflict, and three of these participants also believed that the LRSP policies were ill-founded or problematic. Two quotations can be used to represent the responses from those who did perceive a conflict. One man replied, "Sure, I think there is [a conflict], you know, if one was totally successful, the other would probably be negated. But I don't think we live in an ideal world and in the end I think we're a couple of generations away from getting away from the freedom of the individual automobile. You know, we were brought up in North America on the freedom to move... You saw what we went through to get approval of the RAV line... Everyone wants to get rid of the automobile but everybody's got a different view of how we're going to make people move in order to do it."

Another respondent stated his opinion more bluntly: "They [the LRSP policies] are not working. They've never worked yet and they won't work in the future. Because they're not realistic. It's just, it's so simple. Why is common sense so uncommon? You know,

<sup>&</sup>lt;sup>2</sup> RAV (Richmond-Airport-Vancouver) refers to a north-south Skytrain line that has been approved but not yet built.

it just, it just simply won't work.... Yeah, there's bound to be [a conflict] because the policies are ill founded. They weren't thought through in terms of 50 or 80 years out. You know, when you build a tunnel or a major highway, you're not talking about the next 10 years... You literally have to think 100. And if you can't think 100 then don't start thinking."

Two out of the nine respondents indicated that they weren't familiar enough with the specific contents of the LRSP to judge whether or not a conflict exists. All in all, respondents offered a variety of opinions about the potential for conflict between a third crossing and the policies of the LRSP.

## 5.3.3 Potential to change one's mind

The final question I asked in my interview was whether there was any information or public action that might lead the respondent to change his opinion about the necessity of a third crossing. Some interviewees, unwavering in their beliefs, stated that they could not foresee ever having a change of opinion on the subject. Others admitted that they might change their minds based on the financial or business projections for the project, the technical feasibility of actually constructing the crossing, or changes in the perceived need for this type of infrastructure.

The one respondent who had already changed his opinion on the issue had done so, he said, because he foresaw the demand being dealt with in other smaller ways. He supported the GVRD policy to reduce automobile use and believed that taking steps towards providing more transportation choice would ultimately benefit the region better than another crossing would.

## 5.4 Some unanticipated interview results

As I have mentioned above, the interviews did not generate the results I expected, in more than one respect. As elaborated below, results were notable in the areas of

commuter behaviour, emphasis placed on the private automobile, level of commitment of the respondents' support, and range of reasons given for that support.

## 5.4.1 Commuter behaviour

Due to the level of support the third crossing seems to garner amongst North Shore residents, and given that this group uses the existing crossings more frequently than residents of other GVRD municipalities (Ipsos-Reid 2002), I had expected that most if not all vocal crossing supporters would live in North or West Vancouver and commute over Burrard Inlet to work. This was not the case within my sample.

In fact, less than half of the men that I interviewed claimed to commute over Burrard Inlet. The majority, six men, did live on the North Shore, but there was also quite a significant voice for crossing supporters who live south of the Inlet. I was surprised to find that only three of the nine interviewees commuted regularly over the existing crossings, two from north to south and one from south to north.

5.4.2 Emphasis on the private automobile

While every respondent believed that a third crossing would provide access for private vehicles over Burrard Inlet, there was much higher emphasis given to transit access than I had foreseen. Almost every interview revealed a desire to see a third crossing built as a link in an expanding public transit or rapid transit system for the GVRD. Visions for this transit network varied a great deal, but did exist in some form in every interview.

Some interviewees expressed a desire to see transit and road infrastructure expand significantly northwards from Vancouver, towards the North Shore, Squamish, Whistler and the Sunshine Coast. Others focused more on the potential to tie the third crossing in with the existing Skytrain, bus or rail networks in Vancouver. Not a single respondent believed that a third crossing should be built to accommodate only automobiles.

## 5.4.3 Level of commitment to support

Interviewees displayed a wide range of commitment, or passion for the idea of constructing a third crossing. Though all respondents were selected because they had publicly demonstrated their support for the crossing, they did not all exhibit the same enthusiasm for the idea. Almost all participants were associated with a group called TransVision, whose goal is "the development of political consensus for the professional study, at a regional level, of a Mid-Harbour Tunnel" (TransVision 2001). The chair of the committee has taken a strongly pro-crossing stance and the group has made presentations to councils in attempting to gather public and political support for the idea.

Despite the affiliation of many interviewees with this group, not all supported the idea to the same degree. Some had been involved with TransVision on behalf of another organization and spoke to me of the interests and involvement of their organizations in the issue. For example, one man replied, when I asked him if he supported the crossing, "Not necessarily. We're supportive of having a good hard look at the need for it and the affordability of it. I think that as the transportation needs of the Lower Mainland go, so goes the economic development and growth of the province. And I think that that's important to understand because this is a gateway both into and out of British Columbia for exports."

Also, one participant had, as I mentioned above, been supportive of the idea of a third crossing in the past but had changed his opinion and no longer advocated its construction. This made for a broad spectrum of commitment levels amongst interview respondents.

Of the nine men to whom I spoke, I would consider four to have been unwavering in their support for a third crossing. The remainder, with the exception of the one respondent who had discontinued his support, were generally in favour of the concept though admitted an interest in investigating the matter further. These interviewees indicated that they might be more enthusiastic about some incarnations of the idea than others, and would need more information before backing the plan wholeheartedly.

## 5.4.4 Range of reasons for support

There was a broad range of reasons given by the interviewees for their support of a potential third crossing. Because most of these men were part of the same organization I expected more uniformity in their reasons for support than I observed. Some reasons were shared by the majority of respondents while others came up only once or twice during the course of the nine interviews.

I had expected that, most men being associated with TransVision, they would offer me roughly the same reasons for supporting a third crossing. In fact, only one man referred to any documentation produced by TransVision in responding to my questions and generally, most appeared to be motivated either by their own personal visions for the region, or the interests of the particular organization they officially represented.

6 ANALYSIS

## 6.1 Answering the research questions

Political decisions in a democracy ideally take into account both the desires and best interests of the public, and in planning we place a heavy emphasis on public consultation and value highly the diverse interests of society. In designing this study, I did so with the hope that my research might help to uncover certain characteristics about public opinion. Namely, I wanted to examine how strong supporters of a project like the third crossing came to hold their opinions, whether their beliefs reflected Festinger's cognitive dissonance, or conflict among ideas, and whether they could be said to constitute, in Yankelovich's terms, "mass opinion" or "public judgment."

It can only be beneficial to understand the dynamics of public opinion surrounding such controversial subjects as the third crossing and similar types of infrastructure projects. It is helpful to know why people hold certain beliefs, where these beliefs might originate, and how they may relate to other aspects of a more complete system of opinions, attitudes and values. Even though this research is not representative of a wider group, understanding the opinions of vocal crossing supporters will help to enrich planners' awareness of the nature of many conflicts surrounding transportation issues.

Going back to the introduction and theoretical groundings of this research, the objective was to determine if cognitive dissonance was an important factor in the dynamics of opinions, attitudes and values of third crossing supporters. Further, could support for the crossing be considered well-thought-out *public judgment*, or more hasty *mass opinion*? Determining some of the characteristics of support for a third crossing by answering these questions will hopefully help planners in understanding and discussing the public's point of view on such issues.

What I discovered is that cognitive dissonance was not as evident as I had anticipated that it would be. Though I believed that crossing supporters would likely be

characterized by both a personal desire for increased road infrastructure and a broader societal desire for more "sustainable" transportation, I did not find this to be the case. Rather, assuming that interviewees were being honest with me about their beliefs, the third crossing advocates with whom I spoke do not, in general, have conflicts between their personal interests in the issue and their visions for the crossing that are largely based upon their wishes for society. Interviewees generally gave consistent responses and did not contradict their own arguments. Crossing supporters appeared to have carefully and logically prepared their opinions, though they did not always agree with the arguments of others. Evidence of these well-considered visions can be seen in the interviews and will be discussed later in this chapter.

It must be said that although these conclusions may be drawn about the group of men with whom I spoke, they may not be indicative of the larger population of third crossing supporters. The motivation for my research grew out of casual conversations I had had with a number of people who supported the idea of a third crossing. In conducting the research for this project, it was easiest to target those whose support was public, though there may not be a link between these men and the broader "public" of supporters. Therefore, any conclusions drawn from the interviews may not apply to a more general grouping of less vocal crossing supporters.

Even though the opinions of crossing advocates examined here are not representative of the public, it is still beneficial for planners to gain an understanding of the views of this smaller group. Thinking about ways to establish collaborative dialogues with vocal crossing supporters can lead to a basis for beginning discussion with other public groups who may hold similar beliefs. Though the results of this study are not statistically significant, it is possible that the reasons crossing advocates give for their support are also reflected in the beliefs of a broader public.

# 6.2 Cognitive dissonance and public judgment among third crossing supporters

As mentioned above, cognitive dissonance is not as apparent as I had thought it would be. Indeed, the views expressed by the interviewees conform more closely to Yankelovich's conception of informed *public judgment* than to his definition of mere *mass opinion*.

## 6.2.1 The absence of cognitive dissonance

The interviews indicate that the opinions, attitudes and values of crossing supporters are, for the most part, consonant within each individual. The men with whom I spoke all seemed to have given thought to their arguments and ensured that they were consistent. The absence of dissonance in this research can be attributed to two factors. First is the fact that personal stakes in the issue were quite low amongst vocal third crossing advocates, and second is the general lack of perceived conflict between the third crossing and LRSP transportation goals.

Though I expected that the majority of crossing supporters would be regular commuters over Burrard Inlet who would stand to benefit in terms of reduced travel times from the construction of another crossing, in fact I discovered that very few interview respondents commuted. This relative absence of commuter behaviour or even of frequent personal use of the existing crossings revealed a low potential for personal impact from the addition of a third crossing and therefore an absence of cognitive dissonance in the form that I was anticipating finding it.

Secondly, as mentioned in the previous chapter, interviewees did not generally perceive a conflict between the construction of a third crossing and the principles behind the LRSP transportation goals. This was primarily because they saw the crossing as an opportunity to provide an additional transit link to the North Shore and beyond. Some other respondents did acknowledge a conflict, but did not agree with the LRSP policies. In both cases, the beliefs of third crossing supporters are consonant and cognitive dissonance does not exist.

## 6.2.2 Public judgment or mass opinion?

In evaluating the interview responses to determine whether in the aggregate they exhibit public judgment or mass opinion, I considered Yankelovich's three criteria: responsibility, stability and consistency.

## Responsibility

Yankelovich cites responsibility as the key determinant of quality in public opinion. High quality public opinion, he says, occurs when people accept responsibility for the consequences of their views. This means acknowledging and confronting the implications of one's beliefs rather than avoiding those implications. In other words, responsibility entails investigating and accepting the interrelation of a particular belief with other values, attitudes and opinions that one might hold. It involves the resolution of cognitive dissonance in the formation of a stable and well-thought-out belief. Yankelovich considers this attribute to be the "basic criterion" of good quality public opinion, or public judgment.

Through the interview questioning, I attempted to determine whether or not crossing supporters had accepted the implications of their views. The questions, "how do you imagine a third crossing might affect the North Shore, Vancouver, and the Lower Mainland?" were designed to assess whether or not a respondent had acknowledged and accepted the potential positive and negative consequences and farther-reaching effects of a third crossing, and incorporated these into his evaluation of the idea. Interview responses led me to believe that most supporters did have a clear idea of the consequences of the construction of a third crossing and were ready to accept these, from development and infrastructure pressures to economic impacts to traffic management issues. The interviews did occasionally exhibit a few conflicts between elements a belief system and a handful of problematic arguments, but in general respondents were aware of the implications of their opinions.

Similarly, questioning regarding LRSP policies to decrease vehicle usage as potentially conflicting with the idea of building another crossing were asked with the purpose of determining if supporters had considered the relationship between the two ideas. I

found that almost all respondents either saw value in both concepts and did not believe there to be a notable conflict between the two, or believed that the notion of reducing vehicle use in the GVRD was ill-founded and the region would instead be better off with a third crossing and other similar projects. Either way, these men would appear to accept responsibility for their beliefs, giving an indication therefore that they have developed good quality public opinion with an absence of substantial cognitive dissonance.

## Stability

Stability refers to the tendency of a person's opinions to change, or how easily their opinions may vary depending on the way a question is worded or an issue presented. Stability is related to responsibility in that, if someone is has considered an issue and is willing to accept the consequences of his beliefs, he will more easily remain firm in those beliefs, given a constant level of knowledge of the issue.

Though my interviews were not specifically designed to detect volatility in beliefs, as it also includes an element of change over time, I did ask respondents to discuss possible negative impacts of a third crossing and potential conflict with stated GVRD goals. It was notable from the responses I received that most interview participants remained unwavering in their support for the crossing regardless of the context of my questioning.

## Consistency

Consistency is the final factor in Yankelovich's theory of quality in public opinion. It is closely related to both responsibility and stability and is defined as the capacity to "make the proper connections" between related aspects of an issue (1991, p.30). If one's beliefs are consistent, then one cannot maintain contradictory opinions.

In the case of the third crossing, I aimed to detect consistency from respondents on the issue of providing additional road capacity for automobiles in the region. Supporters gave no indication of having "compartmentalized" their thinking, in other words voicing

contradictory opinions, because of a failure to connect related ideas. In general, they did provide consistent responses throughout each interview. Interview respondents can be said, for the most part, to have displayed consistency on this issue, leading again to the conclusion that they have achieved public judgment and consonance of beliefs.

#### Conclusion

Revisiting Yankelovich's definitions from Chapter Two, he defines mass opinion as "people's top-of-the-mind, offhand views" (1991, p.ii), or "poor-quality public opinion as defined by the defects of inconsistency, volatility, and nonresponsibility," where *non*responsibility refers to "people's failure to take the consequences of their views into account" (1991, p.42). Once again, these do not appear to be the qualities of the belief systems of crossing supporters.

The belief systems expressed in the interviews resemble far more closely Yankelovich's public judgment, which he defines as "the state of highly developed public opinion that exists once people have engaged an issue, considered it from all sides, understood the choices it leads to, and accepted the full consequences of the choices they make" (1991 p. 6), or "good quality public opinion... that is stable, consistent and responsible" (1991 p. 42).

Though the belief systems of third crossing supporters may not coincide with a "sustainability" point of view, the interviews demonstrated those belief systems to meet all of Yankelovich's criteria: stability, consistency and responsibility.

# 6.3 Competing visions: sustainability/livability vs. mobility

I chose to use the *grounded theory* method to draw more information from the interview transcripts. According to Barney Glaser, one of the founders of grounded theory, this method "is the systematic generation of theory from data acquired by a rigorous research method" (1998, p.3). He goes on to say that the method does not provide

'findings', rather "an integrated set of conceptual hypotheses" (1998, p.3). The method's co-founder, Anselm Strauss offers the following: "the grounded theory approach is a qualitative research method that uses a systematic set of procedures to develop an inductively derived grounded theory about a phenomenon" (Strauss and Corbin 1990, p.24).

In using grounded theory, I re-read and coded the interview transcripts in an attempt to draw out relevant information. I also pursued related literature, focusing on theory surrounding the generation of belief systems and world views, and current transportation policy in the Vancouver region.

Given that my research did not yield the results that I had expected, what else can be learned from the information that I gathered during my interviews? What are the significant themes and ideas that present themselves? How can the belief systems of third crossing supporters be understood? What is the relevance of this research to planners?

Using the grounded theory method to analyze the interviews, I detected two competing transportation visions emerging from my research, both espousing what are, in the eyes or their supporters, the best interests of the region.

## 6.3.1 Two visions

The competing views do not appear to be based on conflicts within each person. The conflict demonstrated through the interviews and literature appears rather to be based upon competing visions for transportation in the region: one I refer to as the *mobility* vision and one that can be called the *livability/sustainability* vision. The contents of these two visions, including areas of conflict and similarity, are discussed below.

#### Mobility

The vision held by the crossing supporters I interviewed was one focused generally around the importance of *mobility*. While the views of this group cannot be considered to be entirely homogeneous, it is this similarity upon which I would like to focus here.

Though I had expected at the onset of this research to find that the desires of crossing supporters would be held mainly to an increase in automobile-oriented infrastructure, I was proved incorrect. Many interview respondents held strong concerns about goods movement through the region. Not a single interview respondent advocated the construction of a third crossing for the sole use of private vehicles. All were in favour of the inclusion of public transit, stating with varying degrees of specificity their opinions on how transit should be incorporated.

This support for higher capacity in all forms of transportation is the foundation of the mobility vision held by my interviewees. The vision is a result of high quality public opinion, as defined by Yankelovich (1991) and is held with the belief amongst its proponents that mobility should be promoted for the best interests of the Greater Vancouver region. As stated in one interview, "[A third crossing] certainly would have a positive impact on people wanting to move from south of the Fraser to the north, whether it's just to the North Shore or to Whistler, or to the Sunshine Coast, or to Vancouver Island through Horseshoe Bay. Anything that is done to improve the mobility and decrease the travel time I think is a positive."

## Livability/sustainability

In a different vision for this region that stands in contrast to the views espoused by the interview respondents, the GVRD has outlined growth concentration areas where development of employment, housing and transportation are to be focused. The North Shore is not one of them. Inherent in the principles of the Livable Region Strategic Plan is the intention that the policies have been created and should be respected for the health and livability of the region as a whole.

## As stated in the LRSP,

"Past trends saw Greater Vancouver's growth come in the form of relatively low density sprawl, interspersed with pockets of higher density that were largely unconnected by effective transportation services. This pattern of growth meant a gradual loss of available farmland and green space, reduced air quality, ever-increasing distances between where we live and work, and increasing reliance on the automobile. Reversing these trends while maintaining Greater Vancouver's high quality of life remains one of our greatest challenges... The Livable Region Strategic Plan's primary task is to help maintain regional livability and protect the environment in the face of anticipated growth" (GVRD 1996, p.6, 8).

As mentioned in Chapter Two, LRSP policies aim to decrease use of the private automobile in the region by "increasing transportation choice."

Since the creation of the LRSP, the GVRD has also developed the Sustainable Region Initiative (SRI) which they describe as "a comprehensive approach to building a pleasant, prosperous and resilient future for the citizens of Greater Vancouver (GVRD 2005). Though the initiative is not a policy document like the LRSP, it supports a variety of sustainability-oriented projects throughout the region, several of which are aimed towards decreasing automobile trips and encouraging walking, cycling and transit. Through both the LRSP and the SRI, the GVRD promotes a vision for the region founded upon livability and sustainability, which has the potential to conflict with the mobility vision espoused by third crossing supporters.

#### Differences and similarities

In many ways the two visions of mobility and livability/sustainability are in conflict, but there are also some points of similarity between the two. Differences and similarities are examined below.

Fundamentally, both the ideas of mobility and of livability/sustainability are based on the notion of access. Both seek to make access to services and amenities easier. In the mobility argument, access should be achieved by facilitating movement, and according to livability/sustainability proponents, encouraging development of "complete communities" on a walking scale will ease access by making longer distance travel less necessary. Also, the two visions have come to light with what their proponents see as the best interests of the region in mind. Supporters of both visions believe they are acting to improve the future of this area. Though the elements of their goals are different, the perceived foundations are the same. Other, smaller points of common interest will be discussed at the end of this section.

Aside from the basic goal of improving access, the two visions do have diverging interests. The difference was highlighted quite clearly in many interview responses. As part of the questioning, I asked participants to offer their opinions about the LRSP policies that aim to decrease vehicle use in the region. Answers were of course varied, but a majority of respondents held the belief that current transportation management strategies were not working and instead more infrastructure was the solution to the region's traffic woes.

One interviewee offered the following when asked about the impact of a third crossing on the region: "When you look at the major cities in North America, our infrastructure as far as the major roads are concerned is very poor. Very substandard. You go down south to Seattle, you go farther to Portland, you go anywhere and certainly the traffic is a problem, absolutely... but if you go outside of the commuting hours, then north-south is so easy.... I think [a third crossing] would be a definite benefit because the infrastructure is just terrible, I feel, in the Lower Mainland." Other respondents gave similar comments, such as this one, "The theory has been long held here... the more expensive you make it, the more difficult you make it for people driving vehicles, the less they will drive. Well, day by day we're proving that to be absolute folly. I mean, it just doesn't work... So the whole tradition of regional transportation has been quite a joke in the eyes of anybody that has any common sense and anybody that really knows anything about transportation." Only one man I spoke with, the one who had decided that he no longer supported the third crossing, spoke of livability or sustainability in responding of my interview questioning.

This conflict between the desire for more road infrastructure and more mobility versus encouraging other forms of transportation to the exclusion of the private automobile can also be observed in the pages of the LRSP. "The regional transportation objectives need time, money and patience to become reality," it says. "The Strategic Plan recognizes that the private automobile will continue to be the dominant way of getting around the region for the foreseeable future. At the same time, it relies on public transit and other high occupancy forms of travel to provide the additional transportation capacity needed to respond to population and economic growth" (GVRD 1996, p.13). This statement highlights the GVRD's reluctance to support the construction of additional vehicle capacity, opting instead to channel growing transportation demand into public transit.

The discrepancy between these two points of view was highlighted very recently, on February 10<sup>th</sup>, 2005 in the Vancouver Sun. The visions of mobility and livability/sustainability come into conflict, as examined in the article, between the provincial government's "Gateway Program" aimed to build more highway infrastructure and the GVRD's Livable Region Strategic Plan (Bridge 2005). Bridge's article points to five specific infrastructure projects, though the third crossing is not one of them, and explains how the provincial government's plans are in conflict with the GVRD's policies. In the article, the GVRD expresses concerns that the Province's plans "could exacerbate congestion... and possibly even increase overall vehicle kilometres traveled" (p.B1). The two visions examined in the Sun are coincident with the two visions that emerged from my research, indicating that the conflict between these points of view extends beyond the realm of any one transportation project. The article ends with a quote by Langley's mayor in defense of the Gateway Program that echoes the sentiments of many third crossing supporters: "The reason for supporting the twinning of the Port Mann Bridge is not to make it easier necessarily for people to commute to their jobs out of Langley, but to have the businesses in Langley still being able to move their goods and provide their services throughout the region" (p.B4).

Fundamentally, the two visions differ in their beliefs about the future of transportation in general. The mobility vision appears to be based upon the assumption that automobile transportation will continue as the dominant mode of transport. For various reasons,

including arguments for high density development and questions about the future of fossil fuel availability, the sustainability/livability proponents avoid making that same assumption.

In light of their differences how can these two visions together contribute to the future of transportation in this region? It is logical, if one believes that automobiles are not the way of the future, to dismiss the idea of a third crossing: we should instead put transportation planning resources into facilities that encourage other modes of travel. But some crossing supporters did endorse the idea of reducing private automobile use. They saw the way to do it in modern high-speed systems, making use of a tunnel under Burrard Inlet. "I don't think buses have proved to be the way that people are prepared to get out of their automobile," stated one respondent. Others said that the region needs to remain economically viable in order to support an efficient public transit system, and the way to do that is through effective goods movement and healthy economic systems. "A vibrant economy requires people to be able to be mobile. You have to have trucks coming and going. You have to have the ability to serve our airports and seaports," said a study participant.

Despite fundamental conflicts between these two visions, they are not so different as to have nothing in common. The notion of long-term planning, for example, is a principle that both visions endorse. Some interviewees admitted that a third crossing may not be necessary immediately, but they did not want to see, for lack of examining the possibility, all options to build one in the future fall away. Also, public transit is an interest common to both camps. The creation of a potential transit link was a reason cited often for supporting the third crossing, and promoting public transit is a stated goal of the GVRD's. Similar linkages can also be found between the two visions on the issues of air pollution and growth management. It is worth identifying these commonalities in order to understand that, though the visions may be different, they are both seen in the eyes of their proponents as being in the best interests of the region.

# 7 IMPORTANCE TO PLANNING

With the discovery that cognitive dissonance does not play a significant role in belief systems that support the construction of a third crossing, and the further realization that two competing visions surround transportation infrastructure projects such as this one, the question becomes, how and why can this information be useful to planners? It is my opinion that obtaining an understanding of public opinion, and in this case the opinions of one segment of the public, is always desirable for planners working within a democracy in order to foster constructive dialogue, and also to dispel potentially incorrect assumptions. Also, this research shows us that in working towards sustainability in transportation planning, discussion must begin to focus on the fundamental values associated with these two visions.

## 7.1 Working through assumptions

In designing this research, I had assumed that some crossing supporters would hold conflicting beliefs and values about regional transportation, and they might exhibit personally motivated reasons for their support. I found neither expectation to be true, and in making that realization I became aware of how much of an assumption, pure and simple, they actually were.

Considering the interactions planners have with such a variety of public groups holding different opinions and beliefs, mutual assumptions about the nature of people's beliefs and motivations surely happen often. The dynamics of public opinion are often complex, though too easily simplified by those seeking a quick understanding of others' points of view. In conducting this research I have realized the value of trying to understand that complexity in the interest of avoiding a reliance upon assumptions, which may very well prove to be false.

# 7.2 Thinking about fundamental values

This research has shown that planning for transportation projects such as a third crossing means considering two competing yet well-developed and logically constructed visions. Thus, if planners are interested in pursuing sustainability-oriented transportation, discussion of the issue must begin with the fundamental values and assumptions upon which these visions are based.

Arguments opposing the construction of projects to accommodate higher numbers of private automobiles will cite the rise of greenhouse gases and finite global oil supplies as reasons to move away from this type of transportation. In contrast, in the interviews, respondents indicated their desire to see the future of transportation include higher levels of mobility for the automobile. As one interviewee stated, "We have to make availability for people to move the way they want to move or we get gridlock. Now, if we can get the highways improved... we're pulling this traffic in. We have to move it and we have to move it where it wants to go." Because these two visions have such different bases, planners need to think about ways to foster social learning in order to generate constructive dialogue around the subject of sustainability-oriented transportation and to challenge the assumptions upon which the mobility vision is based. An understanding of the beliefs of third crossing supporters indicates that the achievement of sustainability goals may only be successful if a shift is made in these assumptions.

## 7.3 What to do from here?

What are the planning implications of these results? With respect to planning and the process of coming to mutually acceptable conclusions, what can be done about conflicting visions? Where can the discussion begin?

This thesis has revealed some of the characteristics of the beliefs of those who support transportation projects such as the third crossing, but has not gone so far as to suggest how best to integrate those beliefs into the planning process. Many planning theorists

discuss the possible methods that can be used to encourage and benefit from public participation. Healey states that,

"...ways of moving beyond interest group conflicts are being explored drawing on principles of conflict mediation and consensus-building. These emphasise the potential for collaborative discussion of shared concerns about local environmental changes, through which people can come to learn about potential impacts and possible ways of valuing and addressing them. Through such discursive practices, people learn about each other, about different points of view and come to reflect on their own point of view. In this way a store of mutual understanding is built up, a sort of 'social and intellectual capital' which can be drawn upon when dealing with subsequent issues" (1997, p.33).

She goes on to point out that,

"[Collaborative discussion] also helps to build up, across the diversity of ways of living and ways of thinking, an institutional capacity to collaborate and co-ordinate. It also serves to build 'institutional coherence' through which shared problems about the way urban region space is organized can be collectively addressed. The hope of the new ideas in planning theory is that, through such a process of 'learning how to collaborate', a richer understanding and awareness of conflicts over local environments can develop, from which collective approaches to resolving conflicts may emerge" (Healey 1997, p.33).

Healey, along with other planning theorists speaks of the need to engage in collaborative discussion. I was inspired to write this thesis when I realized how little I understood of views that stand in opposition to the lessons we learn in planning school. It is my belief that this kind of knowledge is necessary in establishing meaningful discussion on any issue and to encourage social learning with respect to conflicting visions around sustainability issues; as well it is my hope that I have gained an understanding of belief systems that will assist me in my future practice as a planner.

Through this research I have learned that the public can exhibit high quality public opinion, as defined by Yankelovich (1991) on the subject of transportation planning, specifically in support of infrastructure projects. In addition, those who are in favour of such projects may subscribe to a transportation vision that is different from that of policy makers.

Planning theorists have made the case that urban centres are places of diversity, home to a variety of voices that should be heard and considered in the planning process. With the realization that a difference in vision lies at the heart of the third crossing debate, and may also exist in other similar planning issues, what can be done to incorporate and respect this difference within the planning process, while also working towards sustainability goals?

Emphasis must be placed here, in response to this question, upon the need for future and continual learning. The relationship of the planner with the public can be complex and difficult and it may be up to each individual planner to determine how to make this relationship most meaningful. The product of this research can help us to understand the dynamics of opinion regarding not only the third crossing, but other transportation projects as well. Further effort will be needed by all of us to put this understanding into practice and to create constructive dialogue around differences in fundamental values.

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