



Urban Highway Connector
Program Policy Review

**Ministry of Highways and
Infrastructure**

Prepared by:
McNair Business Development
3419 Pasqua Street
Regina S4S 7K9
Telephone: 789-2912



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Executive Summary

The Urban Highway Connector Program (UHCP) was developed by the Ministry of Highways and Infrastructure to address inconsistencies in service and funding levels to Saskatchewan Urban Municipalities (UMs). The program was developed based on guiding principles of safe and efficient movement, transparency and equity. In the two and a half years since the program's launch the Ministry has run into a number of issues that have adversely impacted the success of the program. The issues are varied and include problems with jurisdictional control, the voluntary nature of the program and the uncertainty surrounding the ability of towns to pay for their roadways. MHI engaged McNair Business Development Inc. to conduct a policy review related to the UHCP and to present options for potential policy changes.

The McNair research approach included considerable consultations with Ministry officials and urban municipalities, as well as a jurisdictional review to identify best practices across Canada. Consultations with Ministry officials indicated a need to modify the program to address jurisdictional issues and unique challenges being faced by cities and towns. Consultations with urban municipalities revealed significant differences in issues facing cities and towns. Discussions also provided the following key focus areas that generated a great deal of discussion:

Cities	Towns
Differences of Opinion	Ability to Pay
Equity & Transparency	Nature of the Roadway
Relationship with MHI	Capacity to Manage
Custom Work Agreements	Jurisdictional Control
Long-term Uncertainty	Lack of Consultations
	Voluntary Nature of Program

The general theme from consultations with municipalities is that towns are unable to fund their portion of roadways under the current UHCP, but that cities are willing partners under the existing UHCP framework. Both parties cited a need for consultations and a collaborative process in making adjustments to the program. Both groups support the objectives of equity and transparency, with cities particularly supportive of the UHCP policy model.

The jurisdictional review identified a variety of approaches across Canada related to urban connector roadways. Alberta and Manitoba have policies in place that provides significant funding to municipalities under 10,000 people. British Columbia and Ontario transferred significant responsibilities to municipalities in the late 1990s and provide very little support today. Quebec roadways are also the responsibility of municipalities, although the province does

not have a formal program or policy framework to handle these roadways and seems to have multiple funding programs that support local infrastructure.

The policy review identified three key areas that need to be addressed:

- Funding to Towns
- Regulatory (or Jurisdictional) Control
- A mechanism to handle unique situations

The review outlines program adjustment options for these issues. Funding options for towns include changes based on population based funding adjustment or classification level funding adjustments. A population based alternative could see the minimum threshold increased from 1,000 and could include a staggered system. A classification level alternative would involve modifying the funding percentages for various levels including fully funding Level 2 roadways and bridges to 100% in towns.

The program adjustment options also detail potential alternatives for addressing issues related to legislation, regulations and jurisdictional control. The first option would be a change to modify legislation to provide MHI with more control over certain roadways. This process would require considerable legislative work and could take over two years. However, it would allow for clear legislative direction on the responsibilities between the Ministry and the municipalities. A second option would be to modify regulations under the Highway and Transportation Act to provide MHI with jurisdictional control over select matters on critical roadways. This process would be streamlined, would not require modifications to other regulations and provide the same level of control as a legislative change. A third option would be to explicitly provide MHI with control through the UHCP agreements. This would allow agreements to be developed without formal changes to legislation or regulations.

The final program adjustment focuses on the need for a mechanism to handle unique situations. The mechanism would be based on equity and transparency and provide Urban Municipalities UMs with an opportunity to present a unique situation for review by a program steering committee. This process would allow for MHI to evaluate extenuating circumstances and would help address stalemates that have developed with some UMs.

The policy review confirmed some outstanding issues with the program, but also showed support for the intentions behind the program. By making a few critical program adjustments, MHI should be able to develop a transparent and equitable system that strikes a reasonable balance between the needs of internal and external stakeholders.

Background

The Urban Highway Connector Program (UHCP) was launched by the Ministry of Highways and Infrastructure (MHI) in June, 2008 to provide a consistent policy framework for handling public highways that are located in Urban Municipalities (UMs) that connect two provincial highways, which the Ministry labels as “urban connectors”.

The vision and guiding principles that establish the foundation of the UHCP are:

- Promote the safe and efficient movement of people and goods through an urban municipality, while
- Providing a transparent and consistent framework that supports the equitable management of urban connectors.

The UHCP follows a general framework that provides varying levels of funding depending on the provincial level of interest on a roadway. There are five classification levels for roadways impacted by the UHCP:

Provincial Level of Interest	MHI Funding	UM Funding
Level 1	100%	0%
Level 2	75%	25%
Level 3	50%	50%
Level 4	25%	75%
Non-connectors	0%	100%

Since inception of the program, the Policy Division at MHI has been working with communities to sign individual agreements to join the program, which is voluntary. There are 58 eligible urban municipalities in the province that meet the minimum threshold of 1,000 people. Of the 58 communities, 15 are cities and 43 municipalities are towns. As of September 20, 2010, 17 UMs had signed the framework agreement, 7 UMs had agreements under development, 14 were engaged in discussions, 7 required further information and 13 had declined to join the program.

In an effort to address certain issues that have arisen during negotiations with municipalities, MHI engaged McNair Business Development Inc. in November of 2010 to conduct a policy review of the program. During initial discussions about the program, MHI communicated the following issues that were limiting the program’s success:

- The province’s lack of legislative authority in UMs
- The voluntary nature of the program that has caused inconsistencies between UMs that signed agreements and those that did not
- The population threshold of 1,000
- The function of an urban connector (urban vs. provincial)

- The desire for UMs to maintain jurisdictional control, but pass off operation & maintenance work and rehabilitation responsibilities
- Issues with bridges

McNair’s research approach for the project included the following key activities:

- Consultations with Ministry of Highways and Infrastructure officials;
- Consultations with urban municipalities; and,
- A jurisdictional review across other Canadian provinces.

McNair used the findings of extensive stakeholder consultations and a review of similar programs across Canada to develop key issues with the existing program and recommended changes that would improve the overall success of the program. McNair worked with the project steering committee throughout the process to provide updates, clarify issues and discuss potential alternatives. The steering committee is comprised of MHI officials from the Policy Division, Engineering Standards Branch, Infrastructure Policy and Safety, Operations Division, as well as a representative from Municipal Affairs and a representative from the Saskatchewan Urban Municipalities Association (SUMA).

Impact of the UHCP on Cities vs. Towns

The following table outlines the kilometres of roadway under each UHCP Provincial Interest (PI) Level. The table includes separate data for Cities and Towns to show how the program is impacted each group differently. For each level, the table details how many KMs had been traditionally managed by MHI and by UMs. This traditional split was based on the ad hoc approach that developed over the course of several decades that lacked a consistent application of rules and regulations. When looking at the table it is important to note that cities have more than double the KMs of connector roadways relative to towns.

URBAN HIGHWAY CONNECTORS ROAD LENGTH											
		LEVEL 1 NHS & Level 1 100%		LEVEL 2 75%		LEVEL 3 50%		LEVEL 4 25%		Non-Conn 0%	TOTAL
		MHI (pre-UHCP)	UM (pre-UHCP)	MHI (pre-UHCP)	UM (pre-UHCP)	MHI (pre-UHCP)	UM (pre-UHCP)	MHI (pre-UHCP)	UM (pre-UHCP)	MHI (pre-UHCP)	
C I T I E S	ROAD LENGTH (km)	64.16	1.00	149.69	155.93	28.36	33.23	7.21	32.73	30.12	502.43
T O W N S	ROAD LENGTH (km)	44.64	0.00	98.33	16.24	18.13	14.14	0.00	0.00	21.03	212.51

The table shows that prior to the UHCP, MHI had been maintaining virtually all roadways that eventually became Level 1s under the UHCP. It also shows that prior to the UHCP, the maintenance of the roadways that eventually became Level 3s were relatively evenly split between MHI and the communities, although cities were maintaining more than 50% and towns less than 50%.

You will notice that towns do not have any Level 4 roadways, which are funded 75% by municipalities. The reason is that “Size of the Municipality” is one of the factor used in determining Provincial Interest (PI) levels. The size of the municipality is used to measure roadway functionality, because municipality size can be related back to traffic mix, as in smaller communities typically generate a small volume of local traffic as compared to the highway's through traffic. In this formula, municipalities with a population under 5,000 just happen to receive enough points in this category to have an overall score higher than a PI Level 4. And since a population of 5,000 is one of the considerations in regards to obtaining city status, typically Towns just happen to receive enough points in this category to have an overall score higher than a Level 4.

The two important classification levels are highlighted in red – Level 2 roadways and, to a lesser extent, non-connectors. The table shows that the maintenance of the roadways that eventually became Level 2s under UHCP had been relatively evenly split between MHI and the cities, but that MHI had been maintaining roughly 86% of the roadways that eventually became Level 2s in towns. Given that MHI now provides 75% funding for these roadways under the UHCP, the variation between cities and towns will lead to a significantly different financial outlook for Level 2 roadways. When looking at non-connectors you will notice that while cities have more total KMs of non-connectors, they make up a larger percentage of total roadways in towns. Since under the UHCP these roadways are not funded beyond the initial rehabilitation, it places greater funding requirements on towns. Non-connectors are generally access roads and service roads off other connectors.

Financial Implications of the UHCP

The financial implications of the UHCP are best understood by evaluating the above table that displays the historical differences between cities and towns. The roadways that eventually became Level 2s are now funded 75% by MHI that results in greater funding for cities and less funding for towns. However, the long-term analysis of the financial impact of the program on municipalities omits a significant financial incentive provided by MHI.

The other critical element to the UHCP that needs to be highlighted is the value of the initial rehabilitations that are 100% funded by MHI under the program. These rehabs are available for all roadways and bridges historically maintained by MHI that need to be brought to near new condition. Ministry officials indicate roughly 95% of these roadways and 70% of these bridges that MHI was maintaining are eligible for the initial rehabilitation. In calculating the financial impacts of the program, the initial rehabilitations become a substantial bonus for UMs because it ensures they will not have to fund any portion of rehabilitations for 20-40 years on roadways and

50-100 years on structures (bridges). The initial rehab is more valuable than future rehabs based on the time value of money principle.

The financial implications of the UHCP are different for each individual community. Some communities traditionally received a great deal of funding and support from MHI on UHCP roadways, while others received less support. The Appendix to this report provides some high level financial summaries of the impacts of the program on cities and towns. It also explains how MHI determines Net Present Value (NPV), which explains why the initial rehabilitations are so valuable for UMs. However, in reading the remainder of the report it is important to keep in mind that feedback on the program from municipalities is often based on their individual circumstances.

Legislation, Regulations and Jurisdictional Control

The UHCP was designed in part to address inconsistency between funding and service levels in urban municipalities, but also to address inconsistencies with legislation and regulations. Therefore, it is important to understand the legislation and regulations behind these roadways. The provincial Government has *'ownership'* over all roads and streets in the province. However, they created legislation to handle the direction, control and management of roads within municipalities.

Through legislation established in municipal acts, urban municipalities are responsible for all roadways within their boundaries. The issue was further addressed through the Provincial Highways Designation Regulations of 1990 that stated public highways situated within the boundaries of an urban municipality that has a population of 1,000 or more is deemed not to be a provincial highway. This regulation created a population threshold of 1,000 as MHI managed public highways in communities under 1,000. In essence, MHI was not required to provide any funding for these roadways in communities with populations of 1,000 or more. So, by legislation, UMs should have been funding and managing 100% of all roadways in their communities including all connector roadways.

There are three municipal acts that detail the responsibility for municipalities to manage all roadways within their boundaries:

- Cities Act
- Municipalities Act
- The Northern Municipalities Act

A sample regulation from the Cities Act that outlines responsibility is as follows:

"12(1) Subject to this or any other Act, a city has the direction, control and management of all streets within the city."

It is important to understand what "subject to this or any other Act" means in the context of other provincial legislation. The Highways and Transportation Act governs Highways, Public Improvements, Transportation and Transportation Systems and making consequential amendments to other Acts. So, while the municipal acts include regulations that detail

municipalities are responsible for roadways in their communities, the Highways and Transportation Act states that MHI is more broadly responsible for transportation in the province. The following comes directly from the Highways and Transportation Act:

“3(1) The minister is responsible for all matters not by law assigned to any other minister, department, branch or agency of the Government of Saskatchewan relating to highways, public improvements, transportation and transportation systems.”

Within the Highways and Transportation Act there is a “Regulations” section that details that the the Lieutenant Governor in Council may make regulations related to a variety of transportation-related issues. In practice, the Lieutenant Governor in Council is represented by Cabinet. By creating regulations around transportation issues, the Highways and Transportation Act can circumvent other acts, like the Cities Act, and provide powers to the Ministry of Highways and Infrastructure to handle the given issue. As an example, the Highways and Transportation Act has several regulations related to weight limits.

The fact that urban connector roadways are often critical elements of the provincial transportation network creates a grey area between municipal legislation and the Highways and Transportation Act. This grey area was historically addressed through ad hoc funding and management of urban connector roadways that varied by municipality. In turn, the matter of jurisdictional control to address issues including speed limits, access roads, signage and street lights was also a grey area. For the most part, municipalities worked in partnership with MHI to make adjustments to matters of jurisdiction. However, decisions on these matters could be different depending on the municipality.

The lack of clear understanding of who should have final say over jurisdictional control was one of the reasons the UHCP was introduced. The program sought to address the issue without having to modify regulation or legislation. Changing legislation is a decision that needs to be carefully considered since changes may affect multiple pieces of legislation. It is also a process that needs to get through a variety of approvals and can take over two years to complete.

Consultations with Ministry Officials

An important aspect of the policy review involved consultations with Ministry of Highways and Infrastructure officials to get their views on some of the key issues related to the Urban Highway Connector Program. We spoke with officials from Policy, Operations and Corporate Services in order to get a broad view of the program. We encouraged officials to speak openly and talk about their role in development or delivery of the program and how they think the Ministry should position itself on issues including regulatory control, funding to various communities and internal program management. We also spoke with officials from the Ministry of Justice and Municipal Affairs to get specific information about legislation and regulations.

Since we encouraged officials to speak openly, thoughts and opinions expressed did not necessarily reflect the position of the Ministry. However, we did want to highlight some of the key themes that resulted from the consultations:

- For the sake of safety and mobility of road users, it is critical that there is consistency on the National Highway System and other strategic routes. MHI could provide this consistency if they managed the system. If UMs are to manage portions of these roadways then there needs to be a mechanism to ensure consistency.
- When asked about modifying legislation and regulations, some officials stated that there should be greater MHI control for NHS and other strategic routes while other indicated a shared responsibility was a good model.
- Some officials felt that there was varying levels of capacity to manage roadways depending on the size of the municipality. In some cases, smaller communities do have sound internal expertise. However, larger municipalities generally have more technical expertise on staff that allows them to make more informed decisions on roadways and bridges. A lack of capacity to make informed decisions could create problems for proper road maintenance that could impact on road users.
- Discussions with Ministry officials focused on the MHI principles of safety and mobility. Some stated that smaller communities likely had more challenges to manage the roads due to a smaller tax base, but others stated that the length roadways in communities would determine financial pressures.
- Ministry officials that had been exposed to the program in the past stated that an important aspect of modifying the UHCP would be managing expectations. If the program can be adjusted to meet the needs of all municipalities, then it needs to be communicated that it will take time for each community to be brought into the program. It takes a great deal of time and effort to finalize agreements for both MHI and the UM. It also takes time for all the rehabs on UHCP roadways, which is a multi-year process. MHI needs to work with UMs to identify needs and provide realistic timelines for those needs to be met given the annual demands on MHI resources.

Consultations with Urban Municipalities

Consultations with Saskatchewan municipalities were a central element to the research process for the policy review. Consultations included two roundtable sessions with towns, a follow up survey with towns and individual conference calls with each city. The consultations included a great deal of discussion around unique needs of communities, but certain key themes surfaced. There was also a noticeable distinction between the views of towns and cities. Separate summaries outlining the key themes for towns and cities provide insight and guidance in outlining existing problems and possible solutions.

Towns

For the most part, towns seemed to be disappointed with the Urban Highway Connector Program. Towns that were generally content with the program were those that received funding for roadways that their UM had already been managing. The towns voiced their concerns with a number of aspects of the program, which breakdown into 6 key themes. It is worth noting that financial concerns significantly outweighed other concerns and is the central issue towns have with the program.

Ability to Pay

The ability for a town to pay for its portion of the funding required under the UHCP was the biggest problem towns had with the UHCP. Small towns argued that they did not have the capacity to fund even 25% of the urban connectors. Some cited increasing pressure and downloading of other infrastructure needs as a contributing factor, but most simply stated that the amount of money required to fund a rehab was far too high. On the issue of capital improvements, virtually all communities stated that it was not even in the realm of possibility.

The maintenance grant provided to communities was also cited as causing financial pressure since it was too low. Towns felt that the grant was dictated to them and the lack of consultations in developing the formula left them under-funded. However, these concerns were less pronounced than those related to rehab costs.

Nature of the Roadway

Among the most vocal issues with the UHCP is the idea that “a highway is a highway.” Historically, MHI funded and controlled extensions of the highway system that did not turn into high traffic local roads (Main St., etc.). The UHCP brought several connectors into the program that towns had never considered anything but highways which they felt should be controlled by MHI. When the program was rolled out and it was communicated that these roadways were technically under town jurisdiction, it caused considerable uproar among towns. There was virtual consensus during consultations with towns that urban connectors that were extensions of a highway and did not become Main St. (or a similarly busy local street) should be funded by

MHI. Towns did understand the need for a partnership on connectors that turned into Main St. or similarly busy roads with primarily local traffic.

Capacity to Manage

Most towns that were taking on connectors that had previously been managed by MHI cited an inability to maintain highways as another problem with the program. The towns felt that they did not have the necessary equipment or expertise to maintain the roads. They also noted that their sections were often small blips on an extensive road being maintained by highways and that splitting off responsibility to towns created “maximum pain for minimum gain”.

Jurisdictional Control

There was a great deal of confusion over who ultimately had jurisdictional control over the UHCP roadways. For the most part towns believed they supposedly had the ability to make decisions, but that everything had to be approved by MHI. Others felt they had control and said the idea of modifying regulations in order to get more support from MHI had come up. All in all there was a great deal of discussion around the issue during both consultation sessions, but the talks did not end the confusion and frustration among towns.

Towns generally would like to have the ability to set speed limits, administer lighting and set up accesses on roadways within their community. However, when asked the relative importance of having jurisdictional control versus the cost of financing the roads, virtually every town stated that the financial implications were significantly more important than having jurisdictional control. Survey results also showed that some towns feel MHI should maintain jurisdiction because they have the necessary expertise.

Lack of Consultations

While the aforementioned key themes make up the fundamental problems towns had with the program, they also were upset about the lack of consultations during the process. There seemed to be an expectation that the roll out of the UHCP would be simply a funding announcement that would benefit municipalities across the board. The lack of consultations prior to the launch caused significant distrust when the program outlined a series of new roads that towns would have to support. The towns cited inclusion in the policy review as a positive first step, but that they should be consulted when program adjustments are being considered as well.

Voluntary Nature of Program

Another contentious issue was around the voluntary aspect of the program. Towns do not consider the program truly voluntary and most feel that they will eventually have to sign on in order to maintain a minimum level of service on their roadways.

Cities

Discussions with officials from cities across Saskatchewan presented a more positive view on the UHCP, although there were still several issues identified with the program. A key difference

between towns and cities is that cities generally feel that the bulk of their issues have already been addressed through on-going discussions with MHI. Another difference is their willingness to provide joint funding for UHCP roadways as they admit they have a role to play in funding connectors through their communities. Although some of the key themes are the same as those from towns, cities certainly had less pronounced issues with the program.

Differences of Opinion

There were general differences of opinion on several aspects of the program, namely: Operation & Maintenance Grant, “near new condition”, signage and Provincial Interest (PI) levels. Although towns felt that the O&M grant was too low, this issue seemed to be far more top of mind for cities. Several cities considered the grant considerably low and felt that it would impact their budgets. However, cities felt that MHI was taking steps to address this issue by having an independent third party review the grant.

In addition to a difference of opinion on the O&M grant, cities seemed to disagree with MHI on a few other issues. One issue was whether or not a roadway was in “near new condition” when it was turned over. This issue came up on a couple of occasions when discussing access roads. Signage was also an area of disagreement as some cities felt that signage should be maintained by MHI and others felt the regulations regarding signage were inefficient.

Another area where a number of cities disagreed with MHI was on the specific ranking levels of their roadways. Several cities felt that certain connectors in their communities were ranked too low and that MHI should provide higher levels of funding for those roads. Some noted that PI levels on their roads had been modified after they requested they be re-evaluated.

Equity & Transparency

Virtually all cities felt that the UHCP was a positive step in creating equity and transparency throughout the province. They valued the system MHI had developed for ranking roadways and felt that all communities would be under an equitable system going forward. Cities felt that historical levels of service were often dependent on relationships UMs had with local MHI staff or politicians.

Relationship with MHI

Cities were very positive when discussing their relationship with MHI. Cities said they were initially unhappy that they were not consulted prior to the roll-out of the program, but that MHI made adjustments to the program based on feedback after the initial rollout. Most cities were happy with the level of service they were receiving from MHI and also cited that they had positive historical experiences with the Ministry as well.

Custom Work Agreements

Another positive aspect of the program for cities is the Ministry’s willingness to enter into custom work agreements that allow municipalities the opportunity to take on maintenance tasks

in areas they have capacity, while sub-contracting others tasks back to MHI. This has allowed cities to retain tasks it has historically performed, while making additional tasks optional rather than mandatory. A few cities also mentioned this provides the opportunity to add “common sense” to the agreements and adjust to an individual city’s needs.

While custom work agreements are available to towns, there seemed to be a lack of awareness and understanding of how they would work. Towns also lack expertise in certain maintenance areas, which makes it difficult to not only perform the tasks, but makes it similarly difficult to understand custom work offers from MHI.

Long-term Uncertainty

While the feedback from cities was generally positive, several cities cited long-term uncertainty as an outstanding issue. Cities said they would have to take a wait and see approach to determine if the program will be a net benefit to the community. Uncertainty around the approval of rehab and capital projects is an outstanding concern. Several cities cited different budget cycles as another potential area of concern, although cities feel that they can take MHI at their word if they get initial approval for projects in the fall preceding the Saskatchewan Government budget announcement.

Key Takeaways

The general theme from consultations with municipalities is that towns are unable to fund their portion of roadways under the current UHCP, but that cities are willing partners under the existing UHCP framework. Both parties cited a need for consultations and a collaborative process in making adjustments to the program. Cities generally spoke highly of their relationship with MHI during consultations, while towns were split on whether or not they had a good working relationship. Both groups support the objectives of equity and transparency, with cities particularly supportive of the UHCP policy model.

Another theme that came out in discussions with both groups was the need to evaluate unique situations as they present themselves. While municipalities supported the Ministry’s efforts to create a fair system, they consistently mentioned that there needed to be some level of flexibility in order to handle unique circumstances of select communities. When discussing this idea in greater detail, communities had a hard time agreeing on a suitable process for evaluating unique circumstances. However, most agreed that “common sense” needed to be applied and that the principles of equity and transparency needed to remain central to the evaluation of unique situations.

All in all, towns and cities came across as two considerably different groups during consultations, which warrant evaluating unique alternatives to meet the needs of each group.

Consultations with Engineering Firms

In addition to speaking with Ministry officials and urban municipalities, we also spoke with two engineering companies that provided a private sector perspective on some of the key issues related to the UHCP. Feedback from discussions can be summarized under two key themes.

Capacity and Expertise

Private sector officials agreed there is often a lack of technical expertise in smaller communities. A lack of expertise brings up safety concerns and municipalities that lack internal expertise must ensure they are making decisions with the support of engineering and transportation planning studies. They also mentioned that there is little interest in smaller communities in developing transportation planning studies, although regional studies are starting to become more popular based on a Municipal Affairs Grant from the Planning for Growth Fund. The White City/Balgonie/Pilot Butte/Edenwald study was mentioned as an example. On the funding side of things, private sector officials mentioned informally that they were aware that small towns lacked funding for work on these roadways, but did not have sufficient information to discuss further. The private sector officials also mentioned that smaller communities that lacked expertise also struggled to draft quality RFPs and that MHI should lend support in this area.

Jurisdictional Control

The private sector engineering officials we spoke with stated that the best interest of the road user must be considered when determining who should have jurisdictional authority over roadways. They brought up some examples of times when decisions related to access were made by municipalities that helped foster development adjacent to the roadway, but did not fully consider the safety of road users. They also mentioned that connector roadways near major MHI infrastructure like interchanges needed to be closely monitored to ensure that access decisions were not devaluing the investment.

Discussions also brought up the point that jurisdictional decisions made in municipalities that do have sufficient internal expertise are sometimes made at the city council level.

Recommendations from city administration that consider the safety of road users like those related to access points may be overruled by council if they are trying to push a development forward. They mentioned that this was a tricky issue and even occurred in the biggest cities that have a great deal of internal expertise.

Summary

Our private sector consultations did not include discussions with developers or business owners that would have a different point of view on the issues surrounding access points. One problem these groups have is a lack of appreciation for the technical aspects of road user safety.

Engineering officials at MHI and UMs need to reflect on how to best communicate technical safety details to individuals that lack technical expertise.

Jurisdictional Review

A nation-wide jurisdictional review was conducted that resulted in detailed summaries for Alberta, British Columbia, Ontario, Manitoba and Quebec. The jurisdictional review found that urban connector roadways are handled differently by each and every province. The review found that some provinces provided very little support to UMs, while others provided a great deal of funding and control. These divergent policy approaches made it difficult to establish best practices, but did provide significant insights into possible approaches with urban connector roadways.

British Columbia

British Columbia underwent a fairly significant policy change related to urban connector roadways in the late 1990s that resulted in the province un-designating several roadways and returning those roadways to municipal responsibility. B.C. refers to provincial highways that run through a municipality as arterial highways, although there are also rare occasions when an arterial highway begins within a UM (i.e. airport road that is the only access to the airport).

Jurisdiction

In the late 1990s the province conducted a thorough review of its arterial highway network that resulted in the un-designation of several of the roadways. These un-designated roadways were returned to the municipalities who became responsible for funding and regulatory control. The province felt that several of the roadways it had been maintaining did not have provincial importance and were mainly local roads. B.C. officials indicated that municipalities were displeased with the change and felt that the province was downloading responsibility to UMs. In some instances municipalities were provided transition funding, but B.C. officials indicated this was done on a case-by-case basis.

The Ministry has the ability to designate any highway within a municipality as an arterial highway through an Order in Council, which would shift responsibility and jurisdiction of the roadway to the provincial government. This allows the province to maintain roadways of provincial significance and ensure the continuity of the highway system.

In B.C., cities and towns are generally treated the same with the exception of towns under 1,500 people that are deemed not to have capacity to adequately maintain roadways. The province provides grant funding to towns under 1,500 people on a case-by-case basis and ensures that roadways in these communities are maintained to a suitable standard.

Funding

The Canada-British Columbia Municipal Rural Infrastructure Fund provides matching funding to local governments from the federal and provincial governments to help meet infrastructure needs. Since its inception in 2006, the federal and provincial governments have contributed over \$149M to the fund, although specific allocation for transportation infrastructure is unknown.

The federal gas tax program provides an estimated \$1.485B to British Columbia (for 2007 – 2014) and B.C. has five funding programs to pass on those dollars to local governments. This seems to represent the bulk of the funding available to municipalities, although there are other grant programs for green initiatives and planning initiatives.

Conclusions and Potential Changes

B.C. has a program that provides the Ministry of Transportation with a great deal of control in selecting municipal roadways that it wishes to control and maintain, by designating them arterial highways. Funding programs are available to support municipal infrastructure needs, primarily through Gas Tax funding, but generally municipalities are responsible for funding and maintaining all non-designated arterial highways within their boundaries; except for UMs under 1,500, which have access to case-by-case transportation grants.

Alberta

Alberta provides some form of financial support to all communities and has a distinctive policy split between cities and towns. Alberta funds and controls the primary highway network in towns. The Alberta provincial primary highway network features over 30,000 kms of roadways, roughly half of which was added to the system in 2000 when the province took control over what was then the secondary highway network.

Jurisdiction

The towns threshold is set by Municipal Affairs and features a 10,000 population threshold. However, towns that grow beyond 10,000 need to apply to become cities and most recent estimates indicate there are nine towns that are eligible to become cities. The province controls and funds the primary highway network in towns, which includes the roadways that were taken under provincial jurisdiction in 2000 (what was then the secondary highway network). The province maintains jurisdictional control of the primary highway network in towns including access roads, although development control adjacent to highways is unregulated. When a town applies to become a city the province provides transitional funding on roadways and turns over roads “in reasonable shape”.

All roads belong to cities within their municipality unless the Minister of Transportation takes the roads out by agreement. The Ministry has negotiated with cities to take over jurisdiction on roadways that carry a significant provincial interest. This has occurred in 8-10 cases in the province and agreements have been reached using a collaborative approach. Alberta officials have indicated they have never had problems getting cities to agree to turn over the roadways and that the primary driver has been money.

Discussions with Alberta officials indicated that 25 years ago the Ministry was quite involved with cities through its Urban Transportation Branch. They provided grant funding to develop arterial roads (urban connectors). The policy change to turn over control to cities was made

based on rising costs and the conclusion that cities were adequately equipped to manage the roadways. The Ministry was also frequently at odds with cities over development standards, which remains a hot button issue today. Largely unregulated development adjacent to highways has caused significant problems for the Ministry, including an emerging situation in Olds, Alberta. The Ministry said there has been a ten year problem with development adjacent to Highway 27 through Olds and will require roughly \$50M of investment in order to manage congestion.

Funding

As mentioned, the province funds the primary highway network in towns. The province also provides \$60 per capita funding to towns, which is allocated to infrastructure needs at the discretion of each town. Towns receive additional core infrastructure funding from Municipal Affairs through the Municipal Sustainability Initiative (MSI).

Cities receive \$60 per capita of annual funding for infrastructure work from the Ministry of Transportation. The cities set their own priorities for allocating funding dollars. Discussions with an official from Lloydminster indicated that this was an effective mechanism since it provided reliable long-term funding that the municipality could count on and develop long-term priorities around. In lieu of per capita funding, Calgary and Edmonton receive a portion (\$0.05) of the provincial fuel tax for purchases within their municipalities and Alberta officials indicated this typically equates to roughly \$100M in annual funding for Calgary and \$90M in Edmonton.

Conclusions and Potential Changes

Based on reviews of maps and discussions with Alberta officials, Alberta is funding and controlling roadways equivalent in nature to Saskatchewan's Level 1s and 2s (Alberta's primary highway system) in towns. Alberta has turned over urban connectors to cities completely while providing predictable per capita funding to the cities to handle infrastructure requirements. The province works in collaboration with cities to identify roadways that have a significant provincial interest and take over control of those roadways. Alberta officials indicated they have a relatively strong relationship with municipalities, but admitted that relative to other provinces they are providing UMs with "buckets of money". Officials cited unregulated development adjacent to highways and emerging public transit issues to bedroom communities as areas of concern for the Ministry.

Ontario

Much like British Columbia, the province of Ontario made a significant shift in the 1990s by "getting out of municipal infrastructure" and passing on significant funding responsibility to municipalities. This policy change impacted all areas of infrastructure and was met with significant resistance from municipalities. The province refers to urban connectors as connecting link highways and currently has a small annual funding program for these roadways through municipalities.

Jurisdiction

In 1995 the province of Ontario made a policy shift to get out of municipal infrastructure. Up to that point, the province had a municipal infrastructure program that totalled more than \$1B. Municipalities are now responsible for provincial highways that transverse their municipality, which Ontario calls connecting links. The province maintains jurisdiction over what it calls the “King’s Highway Network”. The King’s Highway Network includes the 407, which is Ontario’s only toll road.

Ontario municipalities are divided into different structural tiers. A "local municipality" may be called a city, a town, a township, a municipality or a village and can also be referred to as a "lower tier" municipality. Local or lower tier municipalities are also part of a higher level of municipal or "upper tier" government such as a county, region or district. A county or regional government is a federation of the local municipalities within its boundaries. An example of an "upper tier" municipality is the Region of Waterloo, which is composed of 7 local municipalities. Both levels of municipalities receive revenues from taxation.

Typically, municipalities are responsible for roadways in their municipalities. Lower tier municipalities will be responsible for a roadway that goes through its boundaries and responsibility for that roadway will shift to the upper tier municipality once the roadway leaves the lower tier boundary.

Funding

Ontario does have an annual program for connecting link highways that has a budget of \$15M from the Ministry’s \$3.1B annual budget. The Connecting Link program provides funding for capital projects and funding is allocated at the discretion of the province. Funding varies depending on the size of a community: cities receive 75% funding from the province, towns over 2,500 people receive 90% funding and towns under 2,500 people receive 100% funding. Discussions with Ontario officials indicated that the program typically goes over-budget and receives \$23M-\$24M. Based on the small amount of funding for the connecting link program, Ontario officials indicated that municipalities need to plan several years in advance and that the Ministry maintains a large queue of projects.

Ontario officials indicated that the province does provide transfer funding to municipalities if it identifies a provincial need. They indicated that these situations are rare and tend to be focused around large international events. The province also supports small municipalities in areas that are considered “unorganized territories” and typically do not have technical capacity. They have a program that includes 50/50 cost sharing and 100% funding for capital and bridge work.

Conclusions and Potential Changes

Ontario officials indicated that municipal infrastructure is the most talked about public policy issue in the province. There is a great deal of media coverage about the infrastructure deficit in the province, which was estimated at \$100B by the provincial Minister of Infrastructure

Renewal. Ontario officials indicated that the province is currently evaluating how they can help meet municipal infrastructure requirements in a fiscally responsible manner. Cabinet is working with the Association of Municipalities in Ontario to look at infrastructure as a whole and come up with a long-term plan for dealing with issues including roadways, water, sewer, education and long-term care.

Manitoba

The province has a very simple system for handling urban connector roadways that is made easier by the small size and number of municipalities. Winnipeg is the economic engine of the province with a census metropolitan area of roughly 700,000 residents, which accounts for over 60% of the province's population. Brandon is the province's second largest city with roughly 43,000 residents and the province only has 3 other communities over 10,000 people. This provincial structure has allowed the province to develop a system that is favourable for municipalities and also generally well liked by the Ministry of Transportation.

Jurisdiction

Since connector roadways are often the most important roads in Manitoba municipalities, the municipalities value jurisdictional control over the roadways. Manitoba created a system where it creates "designated highways" that designate the municipality as the traffic authority. The UM takes over responsibility for setting speed limits, lighting and access roads, while weight limits are controlled by the province. The province continues to provide funding for access roads off the connectors and for lighting. Discussions with Manitoba officials indicated that access points were a contentious issue, but that it had never led to roadways being undesignated. There are no hard and fast rules for a UM becoming eligible to take over jurisdictional control and Manitoba officials indicated that it was handled on a case-by-case basis and that it depends on "the density of the urban section".

Funding

The province of Manitoba provides funding to the boundary of Winnipeg and the City of Winnipeg is responsible for the roadways thereafter. The province has partnered with the City within the UM and does so on a case-by-case basis. In all other communities, the province maintains and funds urban connector roadways. All roadways are funded regardless of the size of the community. The province also funds "provincial road access roads" (600 series), which are roads from the highway system that feed into the central business district of communities adjacent to the highway.

Manitoba officials indicated that there have been instances where municipalities have felt an upgrade to their connector roadway was critical, but it was not a priority for the province. In these instances, municipalities have offered to pay a portion of the cost and the province has made agreements on a case-by-case basis.

Conclusions and Potential Changes

Manitoba has jurisdiction over all urban connector roadways, outside of Winnipeg. However, jurisdictional control has been designated to the UM on several of those roadways. The Manitoba model is the most beneficial model for UMs in the country based on the provinces we evaluated.

Quebec

Discussions with the province of Quebec indicate that they do not have a detailed program to handle urban connector roadways beyond regulations for funding in municipalities that are larger than 10,000. Like Ontario, Quebec has multiple levels of municipalities that generally follow a two-tiered structure with Regional County Municipalities (RCM) and local municipalities. Legislation states that UMs are responsible for roadways within their boundaries and Quebec seems to have some of the most extensive funding programs available for support.

Jurisdiction

Discussions with officials from Transport Quebec indicated that they do not have a specific program to deal with these roadways. They indicated that UMs are responsible for these roadways within their boundaries, but that the Government of Quebec has the power to take over jurisdiction of these roadways. In municipalities of more than 10,000 people, the Ministry only maintains jurisdiction over one “connecting link” that will be a freeway or expressway. In smaller municipalities, UMs are responsible for the roads but have access to a variety of funding programs to support their infrastructure needs.

Discussions with Ministry officials provided insights into jurisdictional control as well. The province maintains exclusive jurisdiction over weight limits. The province maintains jurisdiction over access roads, although at times they transfer that jurisdiction to third parties including the Ministry of Natural Resources and Hydro Quebec. The UMs have jurisdiction over speed limits, lighting and signage, but they must either conform to provincial standards or get approval from the Ministry (speed limits).

Funding

Transport Quebec has several funding programs available for municipal infrastructure including:

- assistance to land passenger transportation;
- assistance to municipalities;
- assistance to transportation research and development:
 - transportation scholarships;
 - university research program in road safety;
- assistance to air service for remote or isolated regions;
- assistance to maritime transportation;
- assistance to development of La Route Verte;
- assistance to improvement of railway transportation infrastructures.

In addition to funding from the provincial government, Quebec municipalities have benefitted from a 2005 Gas Tax Agreement between the Federal and Provincial governments. The agreement was for the period of 2005-2015 and including \$1.34B in funding during the first five years of the program. The funding is to be earmarked specifically to municipal infrastructure as outlined in the agreement as follows: “ensure that this funding is added to provincial funds currently available to municipalities and municipal bodies for financing municipal and local infrastructure.” A breakdown of spending between varying types of infrastructure (water, wastewater, transportation) was not available.

An amendment to an additional funding program was announced in 2005 that saw the Federal Government provide \$28.9M in 50/50 matching funding under the Outaouais Road Agreement. The 2005 funding was additional funding for the program that started in 1972 and upon completion of the program total federal investment is estimated at \$537M. The Outaouais Region is the Quebec territory directly adjacent to Ottawa and has roughly 341,000 residents.

Conclusions and Potential Changes

Overall Quebec was the most difficult province to evaluate based on language challenges with documentation and the variety of funding programs available to support municipal infrastructure. Much like Ontario, Quebec officials mentioned that support for municipalities was currently under review. Also, in 2008 Quebec took over responsibility for more than 4,000 bridges in communities of less than 100,000 inhabitants. The province intends to invest more than \$100M a year in order to ensure the safety of these bridges. This was a reactive measure that was enacted after a 2006 bridge collapse killed five people.

Summary Findings

Jurisdictional findings are summarized in the following table:

Province	Funding for UMs +10,000	Jurisdictional Control +10,000	Funding for UMs +5,000	Jurisdictional Control +5,000	Funding for UMs -1,500	Jurisdictional Control -1,500	Does the province maintain highways within UMs?
Alberta	Some	UM	Full	Province	Full	Province	Yes
B.C.	Very Little	UM	Very little	UM	Full	Province	Yes
Manitoba	Some (Full outside Winnipeg)	UM (Through agreement)	Full	Depends	Full	Province	Yes
Ontario	Very Little	UM	Very little	UM	Depends	Depends	Yes
Quebec	Very Little	UM	Very little	UM	Unclear	Unclear	Yes

Discussions with officials from other provinces indicate that the funding they provide typically extends to both O&M and rehab and capital work. A significant unknown in the table is the amount of funding UMs receive from other funding sources, both provincially and nationally.

Quebec municipalities seem to have several programs and agreements that provide funding to UMs. B.C. also has several programs dedicated to municipal infrastructure, but it is difficult to find information that separates funding by infrastructure type as water and wastewater likely demand significant funding dollars.

All in all the jurisdictional review did not present any clear best practices regarding urban connectors. However, Saskatchewan's neighbouring provinces are both providing significant support to communities and fully funding or maintaining urban connector roadways in communities under 10,000. They are also smaller provinces and it is likely that the sheer volume of UMs in B.C., Ontario and Quebec would make a similarly generous program unmanageable. Saskatchewan's relatively small population indicates a stronger ability to manage municipal needs.

Program Adjustment Options

Through consultations with Ministry officials, consultations with Saskatchewan municipalities and a jurisdictional review of similar programs across Canada, there were several issues identified with the Urban Highway Connector Program (UHCP). Many of the smaller issues are already being addressed by MHI including disagreements around the Operation & Maintenance Grant and the lack of UM consultations.

The research identified three critical areas that still need to be addressed. Those critical areas are:

- 1) Inability for towns to fund the UHCP in its current form
- 2) Lack of clear regulation and legislation around jurisdictional control
- 3) No formal mechanism for handling unique situations

Inability for towns to fund the UHCP in its current form

The policy research indicates an inability for towns to fund the UHCP in its current form. Without providing further funding to towns, MHI risks having a long-term adversarial relationship with towns and risks having select roadways deteriorate. Providing more funding for towns is also supported by current practices in Alberta and Manitoba.

There are two high-level strategic alternatives for providing more funding for towns:

- Population Based Funding Adjustments
- Classification Level Funding Adjustments

Population based funding adjustments will look at modifying funding levels by moving the minimum threshold up from 1,000, or by creating a staggered model where funding levels are modified based on a few population thresholds. Classification level funding adjustments will modify the percentage of funding currently being allocated to UHCP classification levels. The critical levels to consider are the 75/25 funding for Level 2 roadways and bridges and the 50/50 funding for Level 3 roadways.

Adjusting the population threshold or the classification level funding model will also provide MHI with the opportunity to address the jurisdictional control issues with the towns. That issue should be carefully considered in conjunction with any decision made to alter the UHCP funding model.

The research conducted during the review supports the Ministry's decision to turn over non-connectors to municipalities. A review of these roadways showed that they tend to be urban access roads and that the bulk of the traffic is either local traffic or traffic heading directly to

local businesses. Non-connectors are still included in the analysis of alternative funding for towns, but MHI would be justified in maintaining the existing framework with non-connectors.

Population Based Funding Adjustments

A population based alternative will provide more funding to towns based on either moving the current 1,000 threshold to a higher number, or by creating multiple thresholds. The following table breaks down towns into five categories based on population thresholds. The table shows Level 2, Level 3 and non-connector roadways, while also showing the pre-UHCP split to provide context for decision-making. The table shows how many KMs of roadways are in each threshold and shows the annual financial impact of O&M and rehabs on those roadways.

Impact of Various Population Thresholds for Towns

Population	# of Towns	Category	Level 2 (pre-MHI)	Level 2 (pre-UM)	Level 3 (pre-MHI)	Level 3 (pre-UM)	Non-Connector
1,000-1,499	19	Road Length (KMs)	31.77	3.83	4.92	3.54	7.76
		Road O & M (\$/yr)	\$155,361	\$17,266	\$22,179	\$15,958	\$17,491
		Road Rehab (\$/yr)	\$428,895	\$76,600	\$66,420	\$70,800	\$104,760
1,500 – 1,999	11	Road Length (KMs)	16.90	2.46	7.46	4.83	3.48
		Road O & M (\$/yr)	\$76,185	\$11,090	\$33,630	\$25,479	\$7,844
		Road Rehab (\$/yr)	\$228,150	\$49,200	\$100,710	\$124,000	\$46,980
2,000-2,999	9	Road Length (KMs)	31.23	7.79	4.42	4.57	5.96
		Road O & M (\$/yr)	\$165,617	\$36,037	\$19,925	\$20,602	\$13,434
		Road Rehab (\$/yr)	\$423,563	\$162,600	\$59,670	\$91,400	\$80,460
3,000-3,999	1	Road Length (KMs)	8.40	-	-	-	0.79
		Road O & M (\$/yr)	\$48,222	-	-	-	\$1,781
		Road Rehab (\$/yr)	\$113,400	-	-	-	\$10,665
4,000-4,999	3	Road Length (KMs)	10.03	2.16	1.33	1.20	3.04
		Road O & M (\$/yr)	\$67,343	\$9,737	\$5,996	\$5,410	\$6,852
		Road Rehab (\$/yr)	\$135,405	\$43,200	\$17,955	\$24,000	\$41,040
Total	43	Road Length (KMs)	98.33	16.24	18.13	14.14	21.03
		Road O & M (\$/yr)	\$512,728	\$74,129	\$81,730	\$67,450	\$47,402
		Road Rehab (\$/yr)	\$1,329,413	\$331,600	\$244,755	\$310,200	\$283,905

1) Change the 1,000 population threshold to “City Status” and fund all UHCP roadways in towns

Changing the threshold to “City Status” and fully funding all UHCP roadways is the favoured alternative among towns and the suggested change from SUMA. In effect, the UHCP would only apply to cities and towns would receive funding for all UHCP roadways. Selecting this alternative would provide significantly more funding to towns in the long-term, especially in funding rehabilitations after the initial rehab.

From a MHI perspective, the program would provide certainty that these roadways would be maintained to a minimum level of service. Given the significant addition of funding, it would also create an opportunity for MHI to take full jurisdictional control over the roadways. However, by taking on all UHCP roadways in towns, the Ministry would be taking on responsibility for several roadways of urban character. It would also be taking on significantly more roadways than it had prior to the UHCP being launched.

The following table shows the net financial impact of taking on all UHCP roadways in towns. The net financial impact considers only the added cost beyond current funding levels. Note that MHI is already funding 75% of Level 2 and 50% of Level 3 roadways in towns.

Impact of Funding all Towns to 100%

Population	# of Towns	Category	Level 2 (pre-MHI)	Level 2 (pre-UM)	Level 3 (pre-MHI)	Level 3 (pre-UM)	Non-Connector
Total	43	Road Length (KMs)	98.33	16.24	18.13	14.14	21.03
		Road O & M (\$/yr)	\$512,728	\$74,129	\$81,730	\$67,450	\$45,621
		Road Rehab (\$/yr)	\$1,329,413	\$331,600	\$244,755	\$310,200	\$283,905
Total by Classification Level		Road Length (KMs)	114.57		32.27		21.03
		Road O & M (\$/yr)	\$586,857		\$149,180		\$45,621
		Road Rehab (\$/yr)	\$1,661,013		\$554,955		\$283,905
Net Financial Impact of funding all UHCP roadways to 100%		Road O & M (\$/yr)	\$586,857(.25) = \$146,714		\$149,180(.5) = \$74,590		\$47,402
		Road Rehab (\$/yr)	\$1,661,013(.25) = \$415,253		\$554,955(.5) = \$277,478		\$283,905

The tables shows an added O&M cost of \$146,714 and rehab cost of \$415,253 annually for fully funding Level 2 roadways. The tables shows an added O&M cost of \$74,590 and rehab cost of \$277,478 annually for fully funding Level 3 roadways. Another key consideration in funding all towns to 100% is that there are three cities below or near the 5,000 population cities/towns threshold. If MHI will be providing added funding to towns near the 5,000 population threshold they need to consider equity to the corresponding cities around that size as well. Those communities would need to be consulted as the process is developed.

2) *Move the population threshold to 2,000 or 3,000*

Another alternative is simply moving the minimum population threshold up to a higher population figure. As the summary table shows, most UHCP towns fall between 1,000-1,999 people and only 4 towns are 3,000 or more. Focusing on providing more funding for smaller towns reflects a focus on the 'Ability to Pay' problem. It also goes without saying that moving the population threshold up to 2,000 or 3,000 will represent considerable added responsibility for MHI since the bulk of the UHCP roadways in towns are in the smaller towns.

3) *Create a staggered model with towns that includes multiple population thresholds and varying levels of funding.*

A staggered model of funding would create multiple thresholds based on population, which would create a system designed around “Ability to Pay”. A sample model could include:

- Provincial highways in communities under 1,000
- Funding Level 1, 2 and 3 roadways to 100% in communities under 2,000
- Funding Level 1 and 2 roadways to 100% in communities under 5,000, or city below stature

There are further adjustments that could be made to the model, including varying the funding of Level 3 roadways from 50/50 to 75/25 for communities between 2,000 and 5,000. This solution would take into account the ability to pay principle and satisfy the needs of smaller towns.

One issue with the model is that it adds a layer of complexity and creates the potential for issues arising over the various threshold numbers. Towns slightly above the 2,000 threshold would likely be upset about having to fund a larger percentage of roadways relative to similarly sized towns. The thresholds would again be set somewhat arbitrarily without a deep analysis of what population levels indicate an ability to pay. It would also create a system that has several thresholds that will require adjustments after each census.

Classification Level Funding Adjustments

Focusing on modifying the % of funding for each classification level puts an emphasis on the ‘Nature of the Roadway’ concept that came up continuously during consultations. These alternatives do not consider population at all, but as discussed in the background section “Size of the Municipality” is one of the considerations in determining Provincial Interest (PI) levels.

4) Fully fund Level 2 roads to 100% in towns

Fully funding Level 2 roads to 100% in towns would provide significantly more support to towns since Level 2 roads in towns total 114.57 KMs, which accounts for roughly 54% of all UHCP roads in towns. Level 2 roadways also tend to be extensions of highways that do not have significant urban character and in cases where there is build up along the highway it is almost always low density developments.

Funding for level 2 roads could also extend to bridges, which would move all bridges in towns under the control of the Ministry. This is similar to how things just happened to work out under the pre-existing ad hoc system, and does allow MHI to ensure safety and security on these structures

Fully funding Level 2 roads in towns will allow MHI to maintain the existing policy framework and provide additional support to 38 of the 43 eligible towns. It will also bring up the number of towns being funded 100% for UHCP roadways (outside of non-connectors) to 25. The net additional cost to MHI for taking on Level 2 roadways would be:

- \$146,715 annually for O&M (roads)

- \$415,253 annually for rehab (roads)
- \$2,600 annually for O&M (bridges)
- \$13,583 annually for rehab (bridges)

5) *Fully fund Level 2 and Level 3 roads to 100% in towns*

Funding Level 3 roadways in addition to Level 2 roadways would provide an additional level of support to towns covering an additional 32.27 KMs of roadways, or 15.2% of total UHCP roads in towns. This would serve to appease an additional number of towns that have several KMs of Level 3 roadways. Taking on Level 3 roadways does present a problem of taking on roads of urban character. Level 3 roads are often times connectors that turn into Main St. or otherwise busy urban streets. However, this is not true for all Level 3 roadways. A review of the UHCP maps provided this high level analysis on whether or not the roadways are of “significant urban character”:

Town	Does the town of a Level 3 road of significant urban character?
Assiniboia	Yes
Canora	No
Dalmeny	No
Foam Lake	No
Fort Qu'Appelle	Yes
Gravelbourg	Yes
Hudson Bay	No
Indian Head	No
Kamsack	Yes
Kerrobert	Yes
Langenburg	No
Maple Creek	No
Moosomin	Yes
Regina Beach	Yes
Rosthern	No
Unity	No
Wadena	No
Warman	Yes

This analysis represents a very subjective view and several of the roadways represent a grey area between yes and no. Overall, of the 18 communities that have Level 3 roads, roughly 8 of those roadways have significant urban character.

The financial implications of taking on Level 3 roads would be:

- \$74,590 annually for O&M (roads)
- \$277,477 annually for rehab (roads)

Regulatory Control

Our consultations with UMs and Ministry officials included a great deal of discussion around funding, but there was nearly as much discussion over regulatory or jurisdictional control of urban connector roadways. There were a number of key themes that emerged, including:

- A desire within the Ministry to have consistency on the National Highway System and other strategic routes
- Commentary from Ministry officials, private sector officials and some UMs themselves that select UMs lacked the technical expertise to make decisions related to jurisdictional matters
- General sentiment among towns that they would like final decision-making authority on their roadways, although it was not nearly as important as funding issues. Also, in towns that had roadways they felt were clearly “highways”, several people indicated they lacked the know-how to maintain these roadways
- Sentiment among all stakeholders that the ‘Nature of the Roadway’ should be used as a criteria in determining jurisdictional control

There were also some key takeaways from the jurisdictional review related to the matter:

- Manitoba was the only province that fully funded roadways yet relinquished regulatory control by agreement
- While decisions are made in partnership, Alberta recently changed regulations to give the Ministry final say on regulatory matters
- Access was by far the most contentious regulatory control issue

Overall, MHI needs to strongly evaluate the issue of regulatory control when making adjustments to the UHCP. There are a few high-level alternatives when considering changes to how regulatory or jurisdictional control is handled on these roadways:

- 1) Change legislation to dictate jurisdictional control over roadways that includes speed limits, signage, lighting, access control, etc.
- 2) Create regulations that dictate jurisdictional control over roadways that includes speed limits, signage, lighting, access control, etc.
- 3) In agreements with UMs, indicate that MHI has final say on jurisdictional matters for roadways the Ministry funds to 100%

Change Legislation

Changing legislation will require consultations among officials from the Ministry of Highways, Ministry of Justice and Municipal Affairs. In addition, proposed changes would need to be communicated to municipalities. This would be a complex process that would require evaluation of all existing legislation, development of proposed changes and evaluation of the change

through the Government of Saskatchewan process. The process is likely to take over two year to execute if and when all parties can agree on the proposed changes.

While the process to change legislation can be extremely onerous, it would provide clarity on the issue. It will be important to consider all areas of jurisdictional control and ensure that there is support through the Ministry to take control over issues including speed limits, signage, lighting and access roads. It will also be important to consider each class of roadway and determine what level of jurisdictional control is suitable. Should MHI take control of all Level 1 roadways? Should MHI take control of all roadways it funds to 100%? These issues need to be fully evaluated and the long-term operational ramifications need to be fully considered.

Change Regulations

Discussions with officials from the Ministry of Justice indicate that the Ministry has the ability to modify regulations to provide the Ministry with final say over regulatory matters. This would be done by creating regulation in the Highways and Transportation Act that explicitly provides the Ministry with control over a given issue. If the Ministry wants to set speed limits over a given class of roadway, they can do so by creating regulation that states that. The Ministry of Justice has indicated that if a regulation change is flagged as a priority, it could be done within a few months and would be vetted through the Ministry of Highways, the Ministry of Justice and Cabinet or a sub-committee of Cabinet.

There is internal support to modify regulations in order to gain full control over the national highway system and other strategic routes. However, discussions internally and externally indicate that cities are capable of managing their roadways. Also, virtually all parties agree that roadways of an urban character in towns should be maintained by the towns themselves. On the other hand, Ministry officials, private sector officials and some UMs themselves indicate that MHI has a stronger level of expertise to make regulatory decisions on roadways of rural character in towns.

If MHI decides to modify regulations it will need to find a system that allows it to take over regulatory control over some UHCP roads, but not others. There is also disagreement in cities over whether or not MHI should maintain control over portions of the National Highway System that pass through larger cities. Some cities agree with Ministry officials and believe provincial continuity should be a priority, while others believe they are more than capable of managing them. Alberta has taken the approach of identifying priority roadways and working in partnership with UMs to turn over regulatory control to the Ministry. However, they indicate those agreements also include funding the roadways to 100%.

Modifying Control by Agreement

An alternative to modifying regulations is to add a clause in the UHCP agreements that deals specifically with regulatory control matters. The general sentiment from consultations is that MHI should have jurisdiction over roadways it funds to 100%. This approach would require an

on-going relationship with the Ministry of Justice to identify when these agreements are signed and who maintains control over each roadway in the system. MHI should strive to create a consistent system where it handles classes of roadways the same in each agreement.

Unique Situations

Perhaps the most difficult issue to address is finding solutions for those unique circumstances that may warrant creating exceptions to the rules and regulations outlined in the policy. While all municipalities we spoke with were supportive of the Ministry creating a program around equity and transparency, they also discussed the need for a mechanism to handle truly unique situations. UMs stressed the need to display good judgement and use “common sense” to handle unique situations. Discussions with Ministry officials supported the idea of allowing for exceptions, as multiple officials indicated that no system could be designed perfectly to address all UHCP roadways.

Amending the UHCP policy to include a mechanism for handling unique situations could be integrated provided it allows the policy to maintain its principles of equity and transparency.

A mechanism that maintains equity would include:

- A process that is open to all eligible UMs
- A process that is uniformly applied across all UMs

A mechanism that maintains transparency would include:

- Public documentation of decisions, including rationale
- Public documentation of discussions related to the unique situation

It is recommended that the UHCP policy be amended to include a mechanism whereby UMs can apply to have unique situations addressed that may include agreements that do not entirely conform to UHCP policy standards. UMs should be permitted to present their case before a steering committee, explain their rationale and provide a recommended solution. Once the committee reviews the application, they can then approve or deny the changes, but must provide rationale for their decision. Their decision should then be posted publicly on the MHI website to ensure full transparency during the process.

There is strong sentiment among UMs that there needs to be municipal representation on a steering committee of this kind. Ministry officials indicate there is a similar mechanism in place to handle rural highway matters. The rural committee includes RM representation and third-party expertise. The committee would also need to develop a ‘Terms of Reference’ that details what types of request it will evaluate. This mechanism is likely to take considerable time and effort, so it should be reserved for larger, more important issues.

Conclusion

Prior to undertaking the policy review, MHI had identified the following issues that were limiting the program's success:

- The province's lack of legislative authority in UMs
- The voluntary nature of the program that has caused inconsistencies between UMs that signed agreements and those that did not
- The population threshold of 1,000
- The function of an urban connector (urban vs. provincial)
- The desire for UMs to maintain jurisdictional control, but pass off operation & maintenance work and rehabilitation responsibilities
- Issues with bridges

The research findings detailed in the report confirmed virtually all of the program issues that had been identified by MHI prior to the review. Consultations with Ministry officials confirmed a lack of legislative authority over the National Highway System was a major issue, that the voluntary nature of the program caused several operational problems and that the population threshold may be too low. Consultations with UMs focused on the population threshold and 'Ability to Pay', but also discussed the function of a connector with a focus on the 'Nature of the Roadway'. A new theme that arose from consultations indicated a need for a mechanism for handling unique needs that would allow UMs to present their unique case and have it heard by a committee that included MHI and their UM peers.

The jurisdictional review outlined unique approaches being implemented by each province that included levels of support for UMs that varied significantly. Reviews of similar programming in Saskatchewan's neighbouring provinces showed significant support for towns under 10,000 people. Insights gathered from consultations and the jurisdictional review outlined three key areas that need to be addressed in order to improve the UHCP.

The review provided several alternatives for providing more support for towns that focused on either a population based change, or a change to funding allocation for each UHCP classification level. Any decision made regarding funding needs to be made in conjunction with decisions related to regulatory control, since this issue is top of mind internally at MHI. Developing a mechanism for unique situations to be evaluated will help to end stalemates and ensure UMs that disagree with MHI decisions are given an equitable and transparent process for making decisions. Finally, addressing outstanding internal issues will ensure adjustment made to positively move the program forward are supported by exceptional program delivery.

Despite outstanding issues identified with the UHCP, the policy review supports the general framework and the intentions behind the program. Several UMs, led especially by cities, indicated that the program was a positive step in the right direction to creating a transparent and equitable system for all UMs. Many stated that after initial challenges with the rollout of the

program, they have had a positive working relationship with MHI. Those that feel they still have a strained relationship have indicated that modifications to funding levels and the introduction of a mechanism to handle unique situations will alleviate most of their concerns. UMs have a keen desire for on-going consultations and for the ability to work with MHI to develop a policy framework that works for all parties.

The UHCP is based on principles of transparency, consistency and partnership with urban municipalities. However, creating an equitable system for a program that deals with unique communities and historical differences is challenging. The review provides background research and municipal feedback that should help MHI improve the program and address internal and external concerns. Solutions to the program's critical issues will provide a long-term policy framework that should contribute to a strong long-term partnership between the Ministry and the province's Urban Municipalities.

Appendix

This Appendix to the report provides financial information related to the Urban Highway Connector Program (UHCP). Here is a breakdown of the Appendix information:

- The 1st table provides annualized cost information for roadways under the UHCP program. It splits information under each level of interest between roadways that had been maintained by MHI before the UHCP was created, and those that were maintained by UMs. This is reflected by the term ‘pre-UHCP’.
- The 2nd table provides the same information as the first table, but is exclusively for bridges.
- The 3rd table quantifies the value of transitional rehabilitations for UHCP roadways. This reflects all roadways that had been maintained by MHI pre-UHCP that are not in near new condition, which is estimates as 95% of all roadways.
- The 4th page in the appendix explains the Net Present Value (NPV) calculation that is used by MHI to generate the value of transitional rehabilitations. Net Present Value (NPV) details that work performed in the future is less valuable than work performed in the present based on the ‘time value of money’ principle.
- The 5th page in the Appendix shows the financial difference to UMs between:
 - The pre-UHCP system vs. legislation (that dictates UMs are responsible for all roadways within their boundaries)
 - The UHCP vs. legislation
 - The pre-UHCP system vs. the UHCP
- Note: the 5th page Appendix includes the NPV calculation

URBAN HIGHWAY CONNECTORS O&M AND REHAB (ROADWAY SUMMARY - annualized)

	LEVEL 1 NHS & Level 1 100%		LEVEL 2 75%		LEVEL 3 50%		LEVEL 4 25%		SUB-TOTAL	Non-Conn 0%	
	MHI (pre-UHCP)	UM (pre-UHCP)	MHI (pre-UHCP)	UM (pre-UHCP)	MHI (pre-UHCP)	UM (pre-UHCP)	MHI (pre-UHCP)	UM (pre-UHCP)		MHI (pre-UHCP)	TOTAL
C											
ROAD LENGTH (km)	64.16	1.00	149.69	155.93	28.36	33.23	7.21	32.73	472.31	30.12	502.43
ROAD O&M (\$/yr)	\$603,361	\$9,764	\$1,223,873	\$1,337,588	\$197,211	\$229,974	\$32,503	\$224,498	\$3,858,772	\$64,577	\$3,923,349
I											
ROAD REHAB (\$/yr)	\$858,735	\$20,000	\$1,996,313	\$2,954,800	\$391,838	\$705,500	\$97,335	\$763,600	\$7,788,121	\$386,775	\$8,174,896
T											
ROAD LENGTH (km)	44.64	0.00	98.33	16.24	18.13	14.14	0.00	0.00	191.48	21.03	212.51
ROAD O&M (\$/yr)	\$427,776	\$0	\$512,728	\$74,130	\$81,730	\$67,449	\$0	\$0	\$1,163,813	\$47,402	\$1,211,215
N											
ROAD REHAB (\$/yr)	\$593,055	\$0	\$1,329,413	\$331,600	\$244,755	\$310,200	\$0	\$0	\$2,809,023	\$283,905	\$3,092,928

NOTE: O&M rate is \$9,764/km on principal system, and \$4,508/km on regional system, and are adjusted by the number of driving lanes

- Roadway rehab estimated at \$270,000/2-lane km on MHI pre-UHCP (assumes rural cross-section), and \$400,000/2-lane km on Urban pre-UHCP (assumes urban cross-section)
- roadway rehab cost annualized for a 20-year life cycle (i.e. 1/20 of network rehabbed each year)
- assumes 95% of MHI maintained connectors are eligible for a transitional rehab
- Transitional rehabs already completed on non-connectors under the UHCP are included
- Inflation is not included

	LEVEL 1 MHS & Level 1 100%		Lvl 1 > Int PI > Lvl 2		LEVEL 2 75%		Lvl 2 > Int PI > Lvl 3		LEVEL 3 50%		Lvl 3 > Int PI > Lvl 4		LEVEL 4 25%		Lvl 4 > Int PI		TOTAL	
	MHI (pre-UHCP)	UM (pre-UHCP)	MHI (pre-UHCP)	UM (pre-UHCP)	MHI (pre-UHCP)	UM (pre-UHCP)	MHI (pre-UHCP)	UM (pre-UHCP)	MHI (pre-UHCP)	UM (pre-UHCP)	MHI (pre-UHCP)	UM (pre-UHCP)	MHI (pre-UHCP)	UM (pre-UHCP)	MHI (pre-UHCP)	UM (pre-UHCP)		
C	BRIDGES (#)	10	0	8	0	13	20	7	16	2	3	0	19	0	1	0	0	99
I	BRIDGE O&M (\$/Yr)	\$16,000	\$0	\$12,800	\$0	\$20,800	\$32,000	\$11,200	\$25,600	\$3,200	\$4,800	\$0	\$30,400	\$0	\$1,600	\$0	\$0	\$158,400
T	BRIDGE REHAB (\$/Yr)	\$253,940	\$0	\$107,950	\$0	\$187,470	\$763,980	\$136,640	\$364,500	\$21,840	\$20,000	\$0	\$457,500	\$0	\$12,000	\$0	\$0	\$2,325,820
E																		
S																		
	BRIDGES (#)	4	0	1	0	6	0	0	0	0	0	0	0	0	0	0	0	11
T	BRIDGE O&M (\$/Yr)	\$6,400	\$0	\$1,600	\$0	\$9,600	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$17,600
W	BRIDGE REHAB (\$/Yr)	\$20,210	\$0	\$7,380	\$0	\$50,640	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$78,230
N																		
S																		

URBAN HIGHWAY CONNECTORS O&M AND REHAB (STRUCTURE SUMMARY - annualized)

NOTE: O&M rate is \$1,600/structure
 Rail/way-maintained structures not included
 Structure rehab estimated at \$10,000/2-lane m
 - structure rehab cost annualized for a 50-year life cycle (i.e. 1/50 of network rehabbed each year)
 - assumes 7% of MHI maintained structures are eligible for a transitional rehab
 Inflation is not included

Net Present Value Calculation

Net Present Value (NPV) is a common economic tool used for appraising long-term cash flow, by converting future expenses into present value (i.e. today's dollars). This includes a discount rate, which accounts for the benefits that were lost out on because the funds were not invested in an alternative. Example – the funds could have earned interest if they were invested in a savings account.

The following is the NPV equation:

$$NPV = \frac{\$}{(1+i)^t}$$

Where:

NPV = net present value

\$ = the dollar amount at that particular time

i = discount rate (commonly is 4% in Saskatchewan)

t = the time that that dollar amount is being evaluated

Example:

Costs from 2011:

$$NPV = \frac{\$270,000}{(1+0.04)^{(2011-2011)}} = \$270,000 \text{ in 2011 \$'s}$$

Costs from 2021:

$$NPV = \frac{\$270,000}{(1+0.04)^{(2021-2011)}} = \$182,402 \text{ in 2011 \$'s}$$

Urban Municipality's Roadway Savings (PNV - 60yrs)

		Existing Adhoc vs. Legislation	UHCP vs. Legislation	UHCP vs. Existing Adhoc
C I T I E S	Connectors (2011 \$)	\$5,193,000	\$194,705,000	\$72,512,000
	Studies (2011 \$)	\$0	\$340,000	\$340,000
	sub total:	\$5,193,000	\$195,045,000	\$72,852,000
	Non-Connectors (2011 \$)	\$10,211,000	\$6,134,000	-\$4,077,000
		\$15,404,000	\$201,179,000	\$68,775,000

T O W N S	Connectors (2011 \$)	\$72,157,000	\$75,072,000	\$2,915,000
	Studies (2011 \$)	\$0	\$113,000	\$113,000
	sub total:	\$72,157,000	\$75,185,000	\$3,028,000
	Non-Connectors (2011 \$)	\$7,495,000	\$4,503,000	-\$2,993,000
		\$79,652,000	\$79,688,000	\$35,000

Urban Municipality's Structure Savings (PNV - 100yrs)

		Existing Adhoc vs. Legislation	UHCP vs. Legislation	UHCP vs. Existing Adhoc
CITIES	Structures (2011 \$)	\$18,914,000	\$43,514,000	\$24,600,000
TOWNS	Structures (2011 \$)	\$2,348,000	\$2,160,000	-\$189,000
		\$21,262,000	\$45,674,000	\$24,411,000

It is quite obvious that UMs benefit from MHI contributions on connector roadways, which is reflected in substantial savings when compared to legislation. The third column shows the net benefit to cities of transitioning from the historical ad hoc approach to the UHCP approach. However, the data shows a net negative impact on towns. Much of this difference can be explained by the historical funding of Level 2 roadways outlined earlier in this section. This table also includes the impact of structures (bridges) on both cities and towns. MHI provides further funding for structures for cities, but towns had not historically been provided any funding for structures and under the UHCP are required to cost share on a select few.

To fully understand the financial impact of the UHCP it is necessary to review the annualized operations and maintenance (O&M) and rehab costs for each classification level. This information is included in the tables in Appendix A. The tables provide annualized information, detailed information on structures, the value of transitional rehabs and the Net Present Value (NPV) formula that was used to calculate the net impact of the program.