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REPORT

Public Consultation – Additional Study for a Dedicated Public Transit System Between Gatineau's West End And The Downtowns Of Gatineau And Ottawa – Integration into Ottawa

Presented to

Société de transport de l'Outaouais (STO)

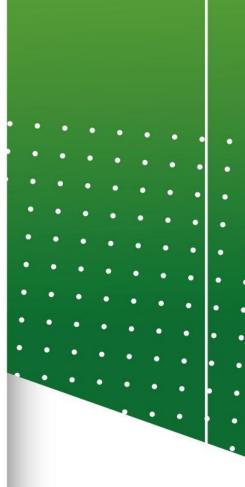


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Summary

The Société de transport de l'Outaouais launched an online consultation from June 22 to July 19, inviting residents of Gatineau, Ottawa and neighbouring municipalities to comment on scenarios for the installation of the STO's transit system in downtown Ottawa. A total of 1,503 people completed the online questionnaire, primarily from Gatineau (60%) and Ottawa (38%). 2% of respondents came from neighbouring municipalities (Chelsea, Cantley, Ange-Gardien, Brockville, etc.)

Overview of Results

First of all, respondents were of the opinion that the transit system must adequately serve both downtown Ottawa (87%) and downtown Gatineau (86%). This involves improving transit service along the outskirts and local streets of both cities. According to respondents, the transit system must also be integrated with the O-Train (84%).

Next, three elements emerged from the survey as being most important when introducing the transportation system to Ottawa; performance of public transit (84%), the presence of a safe and pleasant environment for pedestrians (67%), and the quality of service (65%). Respondents expect a system that is reliable, resilient and adapted to the winter conditions of the region. They also want a pleasant and safe environment for pedestrians, with faster commute times, as compared with a car and with a limited number of connections. According to respondents, the least important elements regarding this development were the reduction of disturbances during construction (21%), cost (21%) and access for motor vehicles (16%). These results were the same regardless of their place of domicile.

Respondents were divided on the issue of compatibility of a tramway on Wellington Street with the preservation of the image and patrimonial value of the National Capital and Parliament Hill. One in two (51%) agreed that the two would be compatible, whereas one in three (33%) said they would not. There was a significant difference between the responses of people from Quebec and Ontario on this question, with more Ontario respondents disagreeing with this statement (48% disagreed for Ontario versus 24% for Québec). For many, a tramway would disfigure Wellington Street and would not be appropriate, especially given that the City of Ottawa has spent significant amounts of money to conceal its transit network. For others, a tramway in the National Capital, thanks to its style, would give the city a romantic character comparable to Europe's major cities, and would send a strong message in favour of public transit.

That being said, the preferred option for integrating the STO transportation network into downtown Ottawa from among the three proposed options is the Sparks Street tunnel (60%). Despite the higher costs associated with this option, questionnaire respondents feel it is the most realistic and viable option over the long term. It would also be the option that would best meet the various objectives presented, namely meeting the travel needs of respondents (58%), connecting the STO and OC Transpo transit systems (66%), providing improved access to Sparks Street and the Parliamentary Precinct (39%), although respondents were divided between option 2 (Wellington with traffic) with respect to this latter criterion (37%).

Nearly one in four respondents indicated that options 1 and 2, the tramway on Wellington Street, whether with (23%) or without traffic (22%), was not an acceptable option. On the Quebec side alone, one in three people did not feel these two options were acceptable. The comments collected in the *Other Comments* section sheds light on the respondents' concerns, in that the system is aboveground, on a street that is rather busy and may be subject to celebrations or demonstrations, as well as to winter and weather conditions caused by snow storms that could affect the tram's operation.

Finally, respondents were somewhat comfortable with the reduction in the number of STO buses in Ottawa, although more respondents in Quebec were in favour of maintaining a certain number of buses (53%). Ontario respondents felt that the number of STO buses should be reduced in downtown Ottawa (33%) or removed altogether (22%).

More than 600 respondents completed the *Other Comments* box. A description of these, as well as an overview of some of the comments, can be found in the consultation report.

Some respondents took the opportunity to leave comments that went beyond the questions dealt with in the questionnaire. Many reported being in favour of integrating the two entities responsible for managing transportation in Gatineau and Ottawa in order to ensure consistency and continuity in service. Others reiterated the need to strengthen the availability of public transit services in the eastern and western extremities of cities and in neighbourhoods on the outskirts of the city centres. The environmental impact of the various options was highlighted and finally, many respondents commented regarding the impact of COVID-19 and telework on travel needs of workers to the National Capital. Likely to persist over the long term, changes in the work world call into question the need for large-scale transportation infrastructure to facilitate travel between the two cities.

Context

The Société de transport de l'Outaouais (STO) is currently undertaking the <u>Additional Study for a</u> <u>Dedicated Public Transit System between Gatineau's West End and the Downtowns of Gatineau</u> <u>and Ottawa</u> in order to improve the Gatineau transit network between Gatineau's west end and the downtowns of Gatineau and Ottawa. This project will also improve the connectivity between Gatineau and Ottawa. As part of this study the STO has held a public consultations to give both Gatineau and Ottawa residents a chance to comment on the options for integrating this dedicated public transit system in the downtown of Ottawa that are currently under study. As a reminder, a public consultation was held in June 2019, it enabled citizens to express their opinion, in particular on the scenarios on the Gatineau side.

Note that this project is not a master transportation plan for the two cities and it does not preclude other potential interprovincial connectivity improvements.

Need

Over the past several years, Gatineau's population has grown significantly, particularly in its west end.

The demand for public transit services between Ottawa and Gatineau is increasing, as does automobile traffic. The roads have been at full capacity during peak periods for years, and current public transit services to downtown Gatineau and Ottawa will not be able to meet the needs of the growing population by 2051.

In order to meet this need, the STO is studying the potential for a dedicated public transit system that will effectively link the west of the city of Gatineau to the downtowns of Gatineau and Ottawa.

This study is being undertaken in consultation with the following municipal, provincial and federal stakeholders:

- City of Gatineau;
- City of Ottawa;
- OC Transpo;
- Ministère des Transports du Québec;
- National Capital Commission;
- Public Services and Procurement Canada.

The dedicated public transit system is important from a metropolitan point of view for both Ottawa and Gatineau. There are approximately 200,000 trips every day between the two cities (approximately 25% of which are on public transit).

The introduction of a dedicated public transit system would attract more users to public transit than the STO's current public transit system. This would significantly increase public transit ridership between Gatineau and Ottawa and curtail congestion in both downtowns by reducing automobile growth traffic and the number of STO buses. Studies show that congestion both on the Gatineau and the Ottawa sides will only get worse without a dedicated public transit system from Gatineau. The demand to commute to Ottawa continues to rise and this must be addressed through transit rather than

The Phases Completed to Date Include:

Phase 1: updated and refined the needs and constraints identified in the previous study, both for the current period and for the future.

• Consultation on the issues with advisory comittees members (November/decembre 2018)

Phase 2: identified and evaluated possible solutions in order to keep five.

• Workshops with advisory committees on the solutions to analyse in greater detail (March, 2019).

Phases in Progress:

Phase 3: evaluation of the performance of the five global solutions selected, as well as the implementation options for Ottawa to identify the solution that best meets the identified objectives and constraints;

- Public consultation on the five scenarios selected for the study (June, 2019).
- Public consultation on the insertion options in Ottawa (June/July, 2020)

Subsequent Phases:

Phase 4: refinement of the study's recommended technical solution and the identification of a timeline for gradual implementation and completion.

In addition, in parallel with the rest of the study, the advisory committees will be invited to hold a workshop on the chosen solution. Also, public meetings will be held with the population on several themes identified during the public consultations.

Following the tabling of the final report, the following steps will have to be taken in order to carry out the project within an 8 to 10 years time span:

- Obtain an agreement-in-principle from the Quebec Government for the funding of the project
- Design of the selected scenario
- Obtain the final funding agreement from the Quebec Government
- Public tenders for construction
- Completion of project
- Activation of system

Consultation Process

In the absence of an in-person open-house session, as expected due to COVID-19 restrictions, the consultation took place exclusively online. Participants had access to information organised into different categories and to explanatory videos.

Objectives

The STO wished to consult the citizens of the National Capital Region concerning the options for the installation of the tramway in downtown Ottawa.

The consultation's objectives were as follows;

- Assess the support of the people of Gatineau and Ottawa for the public transit project connecting west Gatineau to Ottawa;
- Inform the population of the study's integration options;
- Understand the acceptability of these different options;
- Gather opinions and preferences to promote reflection on the choice of integration option;
- Understand the importance to citizens of the different aspects of the project when choosing the integration option.

Timeline

June 22, 2020	Documentation posted online
June 22, 2020	Launch of online questionnaire
July 19, 2020	Closing of online questionnaire

Communication Plan

To encourage as many users and citizens as possible to access the information and participate in the public consultation, STO used various communication tools between June 22 and July 19:

STO Digital Tools

- Home page images on <u>sto.ca</u> and <u>m.sto.ca</u>
- Messages on variable message signs in stations and on buses
- Banners on the Transit app
- Message when on hold with Customer Relations at 819-770-3242
- Mention in the July 2 STO Newsletter, sent to more than 16,000 recipients
- Info-alerts by e-mail and text

Social Media

- Posts on the STO Facebook page and Twitter accounts
- Facebook posts that reach 200,000 people and generate almost 7,000 clicks on the link

Newspaper Advertisements

- Le Droit: Saturday July 4 and 11
- Ottawa Citizen and Ottawa Sun: Saturday July 4 and 11
- Aylmer Bulletin: Wednesday July 8 and 15

All of these means of communication invited the public to visit <u>sto.ca/consultation</u>, which posted the consultation information and the link to the questionnaire.

In total, between June 22 and July 19, the consultation web page was viewed 12,750 times. The various explanatory videos were viewed between 150 and 360 times in each language.

Consultation Questionnaire

The consultation questionnaire was developed by STO in collaboration with study partners, including the City of Ottawa. It was posted on the online platform SphinxOnline and was compatible with computers, tablets and smartphones. It was available for 4 weeks from June 22 to July 19, 2020. The questionnaire consisted of 10 questions, including an open-ended question that collected participant feedback. The median time required to complete the questionnaire was five minutes.

Results

METHODOLOGICAL NOTE - WARNING

It is important to note that the consultation is not a survey and is not based on probability sampling. In addition, several biases may have influenced the results:

• The consultation questionnaire was completed on a voluntary basis (self-selection);

• No paper questionnaire was provided, which does not allow us to collect data from the proportion of the population without Internet access;

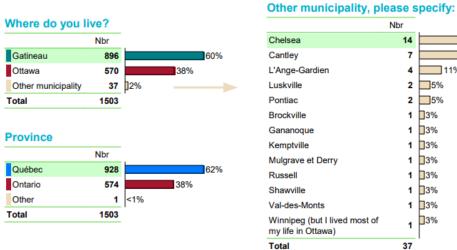
• Results may be influenced by how the consultation was communicated to the public. The respondents are therefore not representative of the citizens or users of the sectors concerned by the study. Therefore, the results presented below reflect only the views of those who participated in the consultation and cannot be extrapolated to the general population.

• In order to ensure the accuracy of the respondents' comments, the comments appear in their original language and typos and spelling errors have been corrected to make reading easier.

Profile of Respondents

A total of 1,503 questionnaires were completed from the online consultation. Of this number, 928 were residents on the Quebec side (896 in Gatineau) and 574 were residents of the Ontario side (570 in Ottawa). People who completed this survey came almost exclusively from the urban centres of Gatineau and Ottawa.

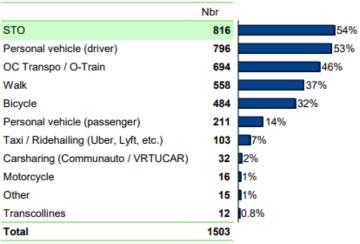
Figure 1- Origin of Respondents



38% 14 7 19% 11% 4 5% 2 5% 2 1 3% 1 3% h3% 1 3% 1 3% 1 3% 1 3% 1 3% 1 37

The three modes of transportation most frequently used by survey respondents were STO (54%), personal car (53%), and OC Transpo/O-Train (46%).

Figure 2 - Most Frequent Modes of Transportation



Which means of transportation do you use most often? Please select up to 3 options.

Results by Question

The online questionnaire included a total of 10 questions, 7 questions dealing with content and 3 questions providing respondent data.

These were either multiple choice questions or checkbox styles. Only one question was openended in nature and was included so respondents could leave their comments. A total of 603 respondents left a comment on one or more aspects of the questionnaire.

Serving Downtown Areas

The purpose of the questionnaire was to determine respondents' opinion regarding the provision of public transit services to downtown Ottawa and Gatineau and on the integration of the public transit system with the O-train. Results are broken down by statement.

Figure 3 - Question 1- Serving Downtown Areas



1. To what extent do you agree with the following statements about the proposed public transit system that would connect Gatineau's west end with Ottawa?

	Agree	Neutral	Disagree	Don't know
The transit system must adequately serve major destinations in downtown Ottawa	0	0	0	0
The transit system must adequately serve major destinations in downtown Gatineau	0	$^{\circ}$	0	0
The transit system must connect with Ottawa's O-Train system	0	0	0	0

Serving Downtown Ottawa

Overall, online survey respondents strongly agreed that the transit system must adequately serves key destinations in downtown Ottawa. 87% of respondents agreed with the statement, 6% remained neutral, 6% disagreed and 0,5% checked *I don't know*.

If we break down the data by province of origin, results are as follows:

- 91% of Quebec residents agree with the statement;
- 80% of Ontario residents agree with the statement.

Figure 4 - Answers for Serving Downtown Ottawa



Serving Downtown Gatineau

In a similar proportion (86%), respondents agreed that the transit system must adequately serve the main destinations in downtown Gatineau.

If we break down the data by province of origin, the results are as follows:

• 85% of Quebec residents agree with the statement;

• 87% of Ontario residents agree with the statement.



Figure 5- Answers for Serving Downtown Gatineau

Here are a few comments collected concerning the service in both city centres. A few people requested adjustments to the route proposed in the various options to provide a more complete service, but overall, few comments were made related to these issues. Here are are a few examples:

Quebec Respondents

- Il faut également que le système de transport en commun structurant soit efficace à Gatineau. Pour le moment, dans l'Ouest (Aylmer/Plateau), les autobus sont pris dans le trafic des boulevards Taché et Allumettières. L'aménagement de ces boulevards devraient être revu pour prévoir des voies réservées sur toute leur longueur.
- J'aimerais que le service au centre-ville de Hull soit maintenu et considéré comme aussi important que les autres secteurs de la ville.
- Pas seulement relier l'ouest de la ville. Hull devrait être priorisé, car central.

Ontario Respondents

 Connections between Ottawa and Gatineau should also reflect a bi-directional flow of traffic. I like that this proposal allows for commuters to go to Gatineau in the morning, possibly replacing many of the OC-Transpo buses. However, connections between Ottawa east of downtown with Gatineau are poor with all options requiring a transfer through downtown. For example, it's shorter to walk or cycle from Beechwood/St. Laurent/Vanier to Hull than it is to take any form of transit. I would love to see STO add routes servicing the east-end of Ottawa in the near future.

Connection with Ottawa's O-Train system

Overall, respondents believed that the favoured transportation system chosen should be connected with the O-train (84%).

If we break down the data by province of origin, the results are as follows:

- 81% of Quebec residents agree with the statement;
- 89% of Ontario residents agree with the statement.

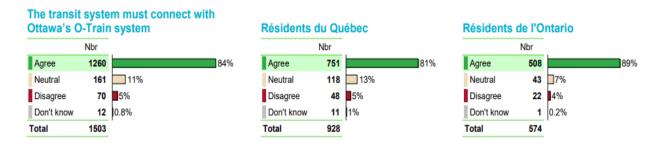


Figure 6 - Answers Concerning the Connection with the O-Train

A number of comments were made regarding the connexion or the integration of the two systems. Here are a few. Several comments concerning the integration of the two systems can also be found in the *Other Comments* section.

Québec Respondents

- Linking up with the light rail system in Ottawa is extremely important. Ottawa and Gatineau should have completely integrated transit, but since that would require agreement between different provinces and cities, it's unlikely to ever happen. So to best serve a population whose lives span both sides of the river we need as much integration as possible
- Chose certaine, la STO doit penser à un arrimage de son transport avec le train léger d'Ottawa avec des aménagements faciles de correspondance si nécessaire. Il faudra un chemin facile d'accès; éviter des rues à traverser serait l'idéal.
- Il faut que les stations de la STO et de OCTranspo soient reliées par tunnel piétonnier. C'est un pays nordique et il faut développer l'Ottawa sous terrain comme à Montréal.
- Une correspondance avec le OC Transpo et le O-Train est aussi absolument nécessaire à tous les niveaux pour faciliter le déplacement des utilisateurs (incluant un accord sur des frais non différenciés et les mêmes types de forfaits et billets).
- La connexion et l'intégration directe, avec un minimum de distance à franchir, entre le réseau de la STO et celui de OC devrait être très important

- It is primordial that, whichever design is favoured, allows for integration with Ottawa's network.
- With respect to costs, it would be great if efficiencies could be achieved by merging/connecting with existing routes/systems/stations in Ottawa side.
- If a tunnel is built, please ensure that there is an underground connection to the O Train.

Preferred Integration Elements

The questionnaire provided an opportunity for respondents to classify the importance of eight elements related to the development of the transit system in Ottawa.

Figure 7 – Importance of Considerations for the Integration Options



2. There are different corridor integration options in Ottawa (on Wellington on the surface, and a tunnel under Sparks Street).

	Very important	Somewhat important	Slightly important	Not at all important	Don't know
Quality of transit service (few transfers)	0	0	0	0	0
Performance of public transit (operating speed, reliability, resiliency)	0	0	0	0	0
Quality of public space (landscaping, benches, etc.)	0	0	0	0	0
Safe and comfortable environment for pedestrians	0	0	0	0	0
Safe and comfortable environment for cyclists	0	0	0	0	0
Access for motor vehicles	0	0	0	0	0
Minimal disruption during construction	0	0	0	0	0
Cost (construction, operations and maintenance)	0	0	0	0	0

In your opinion, how important are the following considerations:

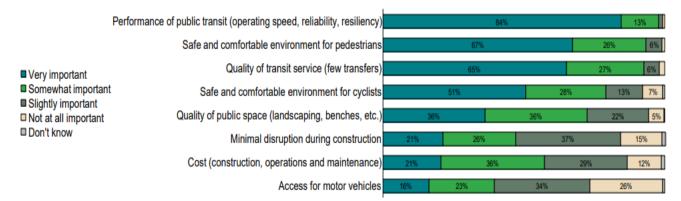
Three elements emerged from the survey as being the most important when considering the development of the transit system in Ottawa:

- Performance of public transit (84 %) ;
- Safe and comfortable environment for pedestrians (67 %);
- Quality of transit service (65 %).

The least important elements were:

- Minimal disruptions during construction (21 %);
- Cost (21 %);
- Access for motor vehicles (16 %).

Figure 8 - Importance of Considerations - Overall



If we break it down by province of origin, the same priorities and non-priorities are reported. The following tables break down the data by respondent's home province.

Figure 9-Importance of Consideration - Quebec

	Performance of public transit (operating speed, reliability, resiliency)		84%		15%
	Quality of transit service (few transfers)		69%		25% 5%
Very important	Safe and comfortable environment for pedestrians		63%		29% 6%
 Somewhat importan Slightly important 	t Safe and comfortable environment for cyclists		46%	30%	14% 8%
Not at all important	Quality of public space (landscaping, benches, etc.)	349	%	36%	24% 5%
Don't know	Cost (construction, operations and maintenance)	22%	38%		28% 11%
	Minimal disruption during construction	20%	27%	38%	15%
	Access for motor vehicles	16%	26%	37%	20%

Figure 10- Importance of Considerations - Ontario

	Performance of public transit (operating speed, reliability, resiliency)		86%		11%
	Safe and comfortable environment for pedestrians		74%		21% 5%
Very important	Quality of transit service (few transfers)		60%	31%	7%
 Somewhat important Slightly important 	Safe and comfortable environment for cyclists		57%	25%	12% 5%
Not at all important	Quality of public space (landscaping, benches, etc.)		39%	36%	18% 5%
Don't know	Minimal disruption during construction	24%	25%	36%	15%
	Cost (construction, operations and maintenance)	18%	34%	32%	14%
	Access for motor vehicles	17%	19% 2	28%	34%

The feedback to this question allowed us to more precisely identify the elements to consider in developing the transportation system in Ottawa. The nature of these comments appear below.

Table 1 - List of Comments about the Considerations

	Québec	Ontario
Safe and comfortable environment for cyclists and pedestrians	15	15
Quality of transit service	14	9
Cost	10	9
Performance of public transit	6	5
Quality of public space	-	3
Minimal disruption during construction	-	1
Total	45	42

For many respondents, it was important to take advantage of the opportunity provided by the construction of the system to build bicycle paths and sidewalks that allow cyclists and pedestrians to move about safely and to use lanes dedicated to their use. Respondents also felt that the system needed to reduce current travel times, either through the use of dedicated transit lanes or through reduced connections.

Quebec Respondents

- Quel que soit le projet, il faut garder le niveau d'accessibilité des autobus ou des TRAM au même niveau actuel dans la zone d'Aylmer et surtout l'accessibilité autour du poste de police. Il faut aussi garder la fréquence des moyens de transport tel quel de telle sorte que les stations desservies vont l'être avec la même fréquence et le même niveau de service.
- Having safe spaces for cyclists alongside any public transportation option is important to me!
- Je voudrais demander de vérifier la sécurité des piétons et des cyclistes et peut-être offrir plus d'espace de stationnement dans les gares routières centrales et les stations de tramway.
- Un système efficace doit être fiable rapide et sûr. Il faut aussi limiter les correspondances et permettre de le faire à l'abris des intempéries.
- Il faut penser au temps de déplacement des usagers, c'est-à-dire qu'il faut que le nouveau système réduise le temps de déplacement des usagers ou qu'il demeure le même.
- The key considerations should be providing efficient, reliable and high-quality service, connecting easily to other transit options (integrating the two systems), serving major destinations and leaving options for future expansions of the LRT network in both scope and passenger volumes.

- Connecting Gatineau and Ottawa with a better transit system should focus primarily on ease of access for pedestrians/cyclists and creating a better future for citizens.
- Having better transfer points (undeground option) will also make the system more accessible for people with reduced mobility.
- Il faut: éviter les correspondances, éviter que le Tramway soit pris dans la congestion, permettre des temps de déplacement plus courts, permettre un futur arrimage avec le Rapibus s'il devient un système par rail.
- Also, as a woman, I've always felt more uncomfortable going underground to take public transport (especially at night) than staying on the public space, waiting for my tram.
- It would be great to maintain or increase public space (parks, cycle paths, etc) along any proposed route or transport method. As well as to ensure that construction of stations does not reduce the already limited green space in downtown Hull

Image Preservation and Patrimonial Value

Respondents were asked to comment on the compatibility of a tramway on Wellington Street with the preservation of the image and patrimonial value of the National Capital and Parliament Hill.

Figure 11- Question 3 - Compatibility with Image Preservation and Patrimonial Value



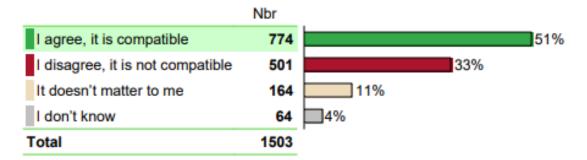
3. Do you agree with the following statement?

Having a tram run on Wellington Street is compatible with preserving the image and heritage value of the Nation's Capital and Parliament Hill.

- I agree, it is compatible
- O I disagree, it is not compatible
- It doesn't matter to me
- I don't know

Respondents were somewhat divided on this statement, with one in two (51%) agreeing with it and one in three (33%) said it was not compatible, whereas the remainder were not interested or had no opinions on the issue.

Figure 12 - Compatibility with Image Preservation and Patrimonial Value - Overall



A significant difference existed in the answers to this question according to province of origin. In fact, 58% of Quebeckers considered that having a tramway on Wellington was compatible with preserving the image and patrimonial value of the National Capital and Parliament Hill, whereas 24% disagreed with this statement. On the Ontario side, a majority of respondents (48%) disagreed with the statement, while 41% agreed with it. We received several comments regarding an aboveground transit system, but few were directly associated with the patrimonial value of the National Capital and Parliament Hill.

Figure 13- Compatibility with Image Preservation and Patrimonial Value - Quebec

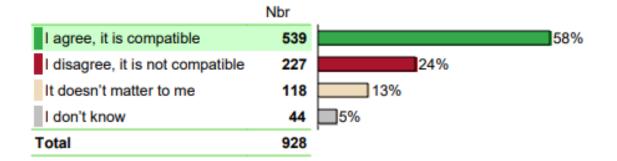
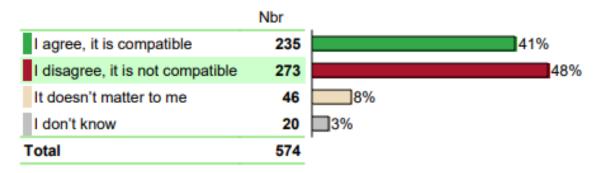


Figure 14- Compatibility with Image Preservation and Patrimonial Value - Ontario



Options 1 and 2, that is a tramway on Wellington Street, were often combined in the comments. There are two competing views on these options, particularly with respect to the image of the National Capital region.

Many would like to highlight the aspect that the National Capital has a major public transit infrastructure and that it values this mode of travel within its territory. For many respondents, it was a matter of prominently displaying their "societal choices" and not hiding them underground.

Others believe that having a tramway in front of Parliament would destroy the image of Wellington Street and that it would be better to conceal the network, especially considering the major investment made by the City of Ottawa to build an underground network.

Here are some of the comments that were received in relation to this question.

Québec Respondents

- The tramway should in some way reference the first tramway line that existed on wellington. This could be done through some historical plaques or a more in depth reference relating to a team station or the tram itself (GA).
- Quoique l'option d'un tunnel sous la rue Sparks est intéressante puisqu'elle limite les impacts sur la circulation automobile, il faut faire des choix de société et en « cachant » l'option de transport en commun sous le sol, je doute que les gens soient motivés ou tentés de changer leurs habitudes de transport. Au contraire, en limitant les automobiles entre Bank et Sparks et en affichant clairement une belle offre de service en transport

durable, les gens n'auront d'autres choix que de modifier leurs déplacements vers le centre-ville.

- Pour le tram, s'il s'agit d'un système avec des fils électriques au-dessus de la rue, ceci aurait un impact négatif sur l'esthétique de la rue Wellington et de son caractère héritage. S'il y a possibilité d'un tram en surface sans fils, ou d'un autobus, ceci serait mon option préférée puisqu'elle offrirait une superbe vue des édifices historiques sur Wellington, pour les travailleurs ainsi que pour les touristes.
- Keeping cars out of the downtown is important for a future tourist destination and green capital experience for residents and commuters as well. A visible tramway contributes to this vision.
- A tram line in front of Parliament hill could be iconic and a great opportunity to make downtown Ottawa even more attractive for tourists and residents. Ottawa would benefit from that tram just as much as Gatineau! Stations would need to be beautiful though: make sure not to cheap out on architecture and design.
- J'ai vécu à Bordeaux pendant quelques années et je suis habituée à la présence d'un tramway dans un environnement patrimonial. Si des stations en surface étaient créées, elles pourraient être effectivement minimalistes (comme à la Place de la Bourse). Toutefois, le climat canadien n'étant pas le même que le climat français, il faudrait réfléchir aux moyens d'adapter ce minimalisme à nos contraintes environnementales (neige, verglas).
- Un système de tramway passant sur la rue Wellington ne serait pas une solution acceptable pour conserver l'apparence de de la zone entourant la colline parlementaire.
- The considerable wiring for trams is visually horrible and would not fit the current landscape of downtown Ottawa.

Integration Objectives

systems

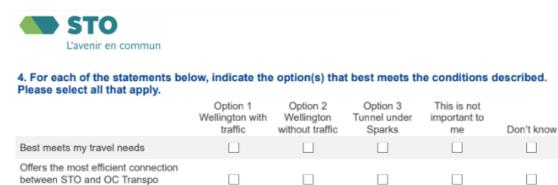
Offers the best connection and/or

access to a revitalized Sparks Street Offers the best connection and/or

access to the Parliamentary Precinct

Questionnaire respondents were asked to select the option(s) that best met STO objectives as part of the integration of the transit system in Ottawa.

Figure 15- Question 4 - Options that Best Meet Objectives



Overall, respondents believed that option 3, the tunnel under Sparks Street, best met the various objectives of the public transit system, regardless of where they live. More specifically, 58% of respondents believed that option 3 best met their travel needs, 66% believed it provided a better connection between the two networks, and 63% believed that the Sparks tunnel provided the best access to Sparks Street, which will be revitalized. However, respondents were more divided between option 2 (Wellington without traffic) and option 3 (Tunnel under Sparks) with respect to the criterion of accessibility to the Parliamentary Precinct, especially among Quebec respondents.

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Figure 16–Options that Best Meet Objectives - Overall



If we break down the data by province of origin, the results are as follows.

The data is similar for both provinces. For both Quebec and Ontario, Sparks Street best meets the first three objectives. However, respondents from Quebec believe that the best access to the Parliamentary Precinct is through Wellington without traffic.

Figure 17- Options that Best Meet Objectives - Quebec

	Best meets my travel needs	20%		30%	54%	10% 5%
 Option 1 Wellington with traffic Option 2 Wellington without traffic O Option 3 Tunnel under Sparks 	ffers the most efficient connection between STO and OC Transpo systems	13%	19%		62%	9% 7%
This is not important to me	Offers the best connection and/or access to a revitalized Sparks Street	11%	19%		59%	15% 5%
	Offers the best connection and/or access to the Parliamentary Precinct	19%		38%	34%	17% 5%

Figure 18 - Options that Best Meet Objectives – Ontario

	Best meets my travel needs	10%	23%	64%	11% 4%
 Option 1 Wellington with traffic Option 2 Wellington without traffic Of Option 3 Tunnel under Sparks 	fers the most efficient connection between STO and OC Transpo systems	s 7%	14%	73%	6% 5%
 Divide optimized optized optimized optimized optimized optimized optimized optimize	Offers the best connection and/or access to a revitalized Sparks Stree	t 6%	17%	70%	11%
	Offers the best connection and/or access to the Parliamentary Precinct	11%	34%	48%	14%

Comments in this section are incorporated into the comments of the next section.

Preferred Integration Options

The main purpose of the questionnaire was to determine which of the three proposed options was preferred by respondents. Respondents were asked to rank the options in order of preference or indicate if an option was not acceptable to them.

Figure 19– Question 5 – Preferred	Integration Options
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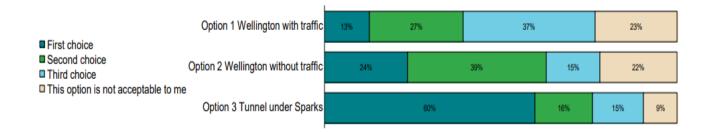
5. Please indicate your order of preference among the 3 proposed options.

	First choice	Second choice	Third choice	This option is not acceptable to me
Option 1 Wellington with traffic	0	0	0	0
Option 2 Wellington without traffic	0	0	0	0
Option 3 Tunnel under Sparks	0	0	0	0

Overall, respondents to the online questionnaire had a preference for option 3, the option of a tunnel under Sparks Street (60%). Nearly one in four respondents indicated that options 1 and 2, the tramway on Wellington Street, with or without traffic, were not an acceptable option for them (23% and 22%, respectively). On the Ontario side, one in three people did not think those two options were acceptable.

However, there is more support for the no-traffic Wellington option than for the one with traffic. Option 3 has the least number of detractors among respondents.

Figure 20 - Preferred Integration Options - Overall



If we break down the data by province of origin, results are as follows.

Figure 21- Preferred Integration Options – Québec

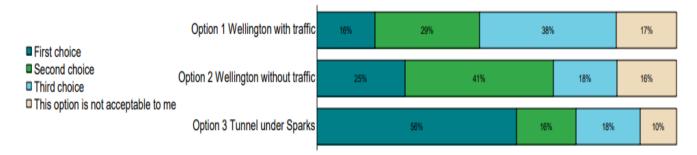
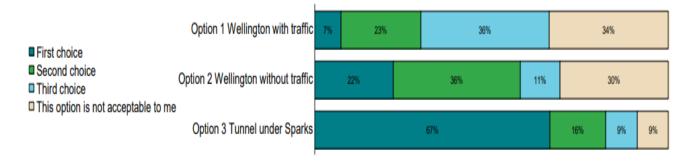


Figure 22- Preferred Integration Options – Ontario



All proposals combined

For some respondents, the three options were not acceptable for several reasons. The following table lists the main arguments against the proposals in the questionnaires.

As can be seen from Table 2, it is mainly the costs that displeased the Quebec respondents who were reluctant to accept the three options. For Ontario respondents, it was felt that it would be better to integrate the system with the O-Train to maximize the use of the existing infrastructure. A few respondents questioned the system's utility, given a context of increasing telework or suggested other alternatives (suspended train, rapid bus service, etc.).

Table 2- Comments – Not in Favour of the Three Options

	Québec	Ontario
High costs (construction, maintenance, etc.)	11	1
In favour of optimizing what already	3	9
exists/integration with O-Train		
Decrease in traffic, increase in telework in a COVID-	7	3
19/post COVID-19 context		
Wellington's options (demonstrations and	3	4
ceremonies, traffic, above-ground level, etc.)		
Preference of another method (bus, sky train, etc.)	7	-
Disagreement with the choice of routes	3	2
Other	9	3
Unspecified	4	-
Total	47	23

Québec Respondents

- Pas de tramway, trop coûteux
- This system should not be built at this time. The problem can be solved with electric buses and with covid19 there will be reduction in traffic for several years. It should be reviewed in 20 years to see if situation changes. Gatineau is not big enough city to built this massive project. Québec city is having protests against their proposed line and we feel the same way here in Aylmer Gatineau.abandon it for now and spend money in more useful way, like adding a bus lane to reduce traffic, instead of tram line. Busses now are empty, it will be several years at least

- This is foolish, to have Ottawa and Gatineau trains built as isolated lines through downtown Ottawa. This should be coordinated with a next phase of the Ottawa LRT, to run through downtown and continue south to serve Ottawa as part of an integrated system
- Why is interlining (using same track) through existing downtown tunnels not considered? Ottawa taxpayers paid a premium to get buses and street cars off the surface to reduce congestion - I can't imagine wellington street would be acceptable at all.

Options 1 and 2 – Wellington (with or without traffic)

When it comes to the development of the aboveground tramway, those in favour of this option indicated that it would be a strong message for the National Capital to send and that the tramway would become a symbol of the City of Ottawa. For the respondents who were not in favour, those from Ontario expressed dissatisfaction given that the City of Ottawa has invested millions of dollars to conceal its transit system and do not accept that an organization from another province would consider an aboveground system.

	AGREEMENT WITH THE TRAMWAY ON WELLINGTON		IN DISAGREEMENT WITH THE TRAMWAY ON WELLINGTON	
	Québec	Ontario	Québec	Ontario
Winter and weather conditions related to the Ottawa climate	10	14		
Frequent demonstrations and celebrations that would disrupt the route	4	6	6	7
An aboveground public transit system			1	5
No automobile traffic			5	7
Development favourable to active transportation	-	8		
Unspecified	4	2	1	2
Other	3	1	3	9
Total	21	31	26	30

Table 3–Classification of Comments Related to Options 1 and 2

IN AGREEMENT

Québec Respondents

• L'option du tram sur Wellington sans circulation est intéressante car elle est plus écologique et sécuritaire. Sparks pourrait être piétonnière et revitalisée et Wellington assurerait l'accès par tram aux travailleurs et touristes.

- Il sera important de favoriser les cocktails de déplacements actifs, c'est-à-dire de faciliter l'arrimage vélo-tramway. C'est pourquoi je préfère l'option du tramway en surface, mais si c'est sous-terre, on devra prévoir des modalités pour faciliter le transport de vélo.
- Wellington sans circulation est la seule solution viable au niveau économique et écologique!
- Busses and trams should not have to share lanes with regular traffic.

Ontario Respondents

- This is a great chance to turn Wellington Street into a more pedestrian friendly street that models the great streets in European cities. Wellington St with no traffic would look better, feel better and link directly to quick transfers to the O Train line as well as Ottawa and Sto busses on connecting streets. It also allows for a possible continued loop East in the future
- All sorts of studies out there showing that getting people out of cars and onto public transit / walking / biking boosts health, revenue for businesses and happiness! I love this plan.
- There is no need for car traffic on Wellington. Making that street solely for the use of a tram system which can have easy connections to Lyon and/or parliament and/or Rideau OTrain stations would enhance the street and make it focused on pedestrian and cyclist traffic as it should be in front of the parliament buildings.
- Wellington sans circulation serait le meilleur scénario: pour le coût, le confort, la fiabilité, l'urbanisme, le paysage, les utilisateurs des transports en commun, les résidents du centre-ville d'Ottawa, et l'image de la capitale nationale.

IN DESAGREEMENT

Québec Respondents

- Transit on Wellington should not be an option. The system should be integrated with Ottawa's system
- The Wellington suggestions sounded like a nightmare. I came here to fill out this survey, just because contemplating driving between Ottawa and Gatineau efficiently without access to Wellington is just... absolute insanity. Those roads are needlessly circuitous to navigate already as it is, please don't make downtown even more of a nightmare to get around. Those options are 100% unacceptable to me.

- Ottawa residents paid a lot of money to get public transit off the streets in the downtown core, it is unacceptable for STO to come along and put more transit on the surface.
- Trams or continued STO buses on Wellington will provide too much congestion with pedestrians, vehicles and cycling traffic through the constantly busy Parliamentary district.

- Having trams on Wellington would make transfers messy because people would have to walk from Wellington to Queen and vice versa. In days of heavy rain or heavy snow, it would make people miserable
- Surface level LRT/Tram in downtown Ottawa is 100% unacceptable.
- The Wellington plan would be too much at risk of delays during protests and events. However, it would be tolerable if the no vehicle traffic plan is selected, as it would make the Parliament Hill area more pedestrian-friendly.

Option 3 – Tunnel under Sparks

Several comments were directly related to the Sparks Street tunnel option. As can be seen in the following table, the majority of comments collected about option 3 demonstrated support for this option, including its potential connection with the O-Train and the fact that the transportation system is not subject to weather hazards nor possible demonstrations or ceremonies on Wellington.

A few respondents used the comment section to express their disagreement with the Sparks tunnel option. Approximately 10 respondents in total indicated that their disagreement was related to the cost of the tunnel option being too high.¹

	Québec	Ontario
Weather conditions and winter	10	12
Connectivity with O-Train	8	15
Underground transport system	2	8
Impact on road traffic	4	5
Demonstrations and celebrations on Wellington	3	5
Allows the development of active transportation	3	2
infrastructures		
Unspecified	13	10
Other	6	8
Total	49	65

Table 4- Classification of Comments for Option 3 - Tunnel under Sparks

IN AGREEMENT

Québec Respondents

• Le tunnel est le meilleur moyen selon moi, d'un point de vue esthétique dans le cadre d'un centre-ville vert et non-bruyant. Aussi pour nos hivers rigoureux et en tant que

¹ These statistics do not include comments from respondents who disagreed with the three options, but only comments that explicitly referred to option 3.

fonctionnaire qui travaille au centre-ville d'Ottawa, d'arriver le plus près du centre-ville sans avoir à marcher une distance supplémentaire dehors, l'option du tunnel est la plus logique.

- Le tunnel sous la rue Sparks est de loin la meilleure idée. Elle coûte plus cher maintenant, mais a un bien meilleur potentiel à long terme, et la correspondance à Lyon et station Parlement de l'O-Train va rendre la connexion entre le système de transit d'Ottawa et celui de Gatineau bien meilleure.
- Mieux vaut investir maintenant dans un système efficace et pratique qui n'affectera pas le paysage urbain de Gatineau et d'Ottawa plutôt que défigurer la rue Wellington en surface pour 10 à 20 ans, soit le temps que cela prendra pour que l'on réalise que le tramway ne suffit plus et que nous aurons besoin d'un vrai système de métro sous-terrain comme chaque agglomération métropolitaine.
- I believe that the tunnel option is superior. It provides the best connections to the OTrain system, is weather-protected, provides for good city-building around revitalizing Sparks Street, and is not vulnerable to event-related service disruptions. Overall, this option provides the best service for customers. The only cons are the higher cost and complex construction, but this can all be addresses with more funding. The Federal and Provincial governments should recognize the advantages of this option and fund their portion of it, enabling the additional money needed to offset the higher costs of experts needed to design and construct the line.

Ontario Respondents

- La construction d'un tunnel sous la rue Spark répond aux besoins ultimes du centre-ville. Les options à la surface de la rue Wellington ne sont que des solutions temporaires.
- The Sparks St tunnel option offers the best quality of service, especially since it is the only viable option with regards to possible direct linkages with O-Train stations. If it were not for cost, I think there would not even be a debate.
- I think the Sparks tunnel option is by far the most desirable, from a functionality, esthetics, and quality-of-service standpoint, it is the clear winner. The tunnel option is the best by a landslide. It allows there to be an integrated public transit system underground and further development of active transportation above ground.

IN DESAGREEMENT

Québec Respondents

- L'option du tunnel est trop coûteuse et prendra trop de temps.
- I am against a tunnel; it is unnecessary and too complex and costly. Trams work well in places like Calgary and are cheaper and easier to implement. More unknowns with tunnel costs and it limits the view of the buildings etc as one travels. It may be possible to have some vehicular traffic with a tram option but vehicular traffic should not be highest priority. Safe bike and pedestrian travel is most important

- There were indications that a tunnel would disrupt the Garden of the Provinces this is totally unacceptable.
- Although adding transportation under sparks is desirable for weather durability & minimal traffic disruption. The construction would be highly detrimental to businesses on sparks and surrounding area & as we've seen with the LRT is not reliable to be done or effective.

STO Buses in Downtown Ottawa

The implementation of a transit system, regardless of the preferred option, will have a significant impact on the number of buses in Ottawa's city centre. Respondents were invited to provide their opinion regarding this question.

Figure 23– Question 6 – STO Buses in Downtown Ottawa



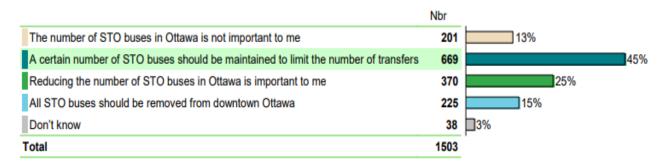
6. There are three transit scenarios under consideration for the corridors in Western Gatineau: one alltram scenario and two hybrid scenarios, which are a combination of trams and rapid bus systems.

Each scenario will still require some STO bus routes to operate on Ottawa streets. The number of buses will be reduced by 30 to 70% from today's numbers, depending on which transit scenario is ultimately selected.

Which of the following best reflects your opinion on this issue?

- O The number of STO buses in Ottawa is not important to me
- O A certain number of STO buses should be maintained to limit the number of transfers
- O Reducing the number of STO buses in Ottawa is important to me
- All STO buses should be removed from downtown Ottawa
- O Don't know

Figure 24- STO Buses in Downtown Ottawa - Overall



45% of survey respondents felt that a certain number of STO buses should be maintained to limit connections, whereas 25% would prefer to reduce the number of STO buses in Ottawa, 15% would like to remove them completely and 16% were neutral or had no opinion on this matter.

Again, the opinions of respondents varied according to city of origin. Respondents from Quebec were more likely to favour keeping a certain number of buses (53%), as compared with respondents from Ontario (30%).

Incidentally, this has an impact on statistics regarding the reduction in the number of STO buses in Ottawa: 19% of Québec respondents want a reduction in the number of buses, as compared with 33% for Ontario. As for the statement to completely remove all STO buses, twice as many Ontario respondents agree with this statement (22% vs. 11%).

Figure 25– STO Buses in Downtown Ottawa - Québec

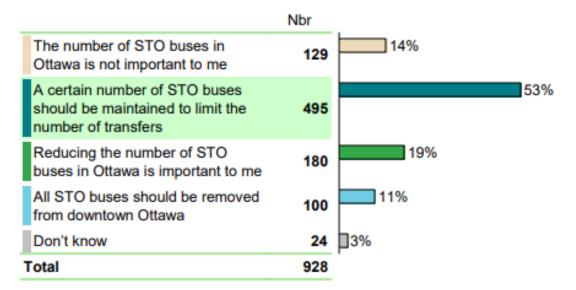
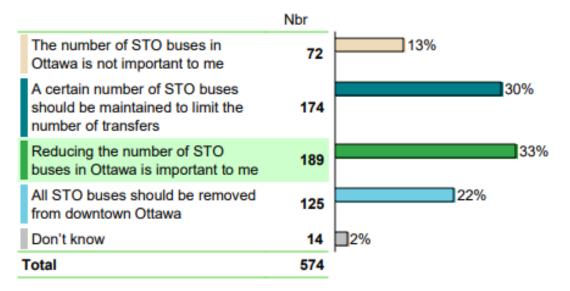


Figure 26– STO Buses in Downtown Ottawa - Ontario



A dozen respondents from Ontario provided comments related to the presence of buses. Half of them believed that all buses should be completely removed from the downtown core and a few suggested keeping them up and running in case of a tram failure or emergency. As for Quebec respondents, 20 respondents commented on the presence of buses downtown. Respondents were divided between the desire to remove buses from the downtown core and consolidating the existing network, adding buses to better serve the Gatineau residents.

Here are some of the comments that were received for this question.

Québec Respondents

- We need less buses in the downtown core and a tunnel will help streamline passengers from one destination to another without interfering with the already crowded downtown roads.
- Éliminez le plus que possible la circulation automobile et autobus au centre-ville de Ottawa et Gatineau. Prioriser la sécurité des déplacements actifs
- Il serait intéressant bien sûr qu'il n'y ait aucun autobus au centre-ville d'Ottawa, par contre comme le tramway ne vise pas Hull, il serait trop désavantageux de n'avoir aucun autobus pour se rendre au centre-ville d'Ottawa. À moins que le temps de transport soit diminué même en ajoutant une correspondance (par exemple autobus de Hull vers le centre-ville de Hull puis tramway vers Ottawa), la correspondance pourrait être intéressante et permettrait de n'avoir aucun autobus. Mais comme ça m'étonnerait, je suis pour l'idée de diminuer le plus possible le nombre d'autobus au centre-ville mais en gardant certaine ligne d'autobus en provenance de Hull.
- Diminuer le nombre d'autobus de la STO tout en permettant un nombre restreint de bus de circuler à Ottawa. Penser à un agencement entre les autobus qui circulent dans le secteur Hull et le tramway pour traverser vers Ottawa et cela en termes de facilité, rapidité et horaires qui s'imbriquent bien les uns aux autres.

- Remove all STO busses, do not add a team. It's 2020.
- We removed Ottawa buses from the streets and thus the STO buses should not be allowed either
- All STO buses should only go as far as LeBreton flats and transfer to the LRT.
- No buses should be allowed on Wellington street.
- It would be strange (and is now) to see only STO vehicles operating along Wellington when OC Transpo has removed most of its service from this corridor.
- The STO buses on Wellington now ruin the street for pedestrians. And they make a mess of traffic. And they stink. And they are noisy. There should be no STO buses there.
- The fewer buses in the downtown area, the better. More space for pedestrians and bike, and it even helps alleviate traffic on other streets such as Queens and Slater.

Other Comments

At the end of the questionnaire, participants were invited to leave additional comments. The following comments were received on topics other than those directly submitted for consultation or that could not be incorporated into the previous sections.

Other Proposals or Modifications

Some respondents suggested alternative route options for both transportation to Ottawa and the integration with the system in Ottawa. Other comments suggested changes to the proposed options, be it the route, number of stops, etc. The following table provides a list of comments by theme.

	Québec	Ontario
Proposed route change and expansion	66	48
In favour of integrating it with the O-Train / In favour of the integration of both organizations	21	40
Questions and proposals regarding the use of the Prince of Wales Bridge	26	21
Requests for local service improvements	51	4
High-traffic, COVID-19, telework	22	9
In favour of an interprovincial loop	8	9
Total	194	131

Table 5- Classification of comments – other proposed insertions or modifications

Proposed Route Change or Expansion

Several respondents (82) provided comments suggesting changes to the proposed options and their routes or suggested scenarios for system expansion on a medium to long term.

Québec Respondents

- La solution privilégiée devrait tenir compte des opportunités et limitations innées en ce qui concerne le potentiel de prolongement de la ligne de tramway dans le futur. Les consultations publiques du passé révèlent un besoin de plusieurs voyageurs de se déplacer au-delà du centre-ville d'Ottawa. Les tracés proposés au centre-ville pourraient permettre le prolongement à l'est vers Vanier ou bien au sud en suivant Elgin. Les implications de ces prolongements potentiels devraient figurer à l'analyse.
- L'option d'une éventuelle boucle via le futur pont Alexandra rapidement évoquée devrait être sérieusement considérée afin d'également faciliter les déplacements vers le marché By (il semble que seuls les déplacements vers le travail sont considérés ici). Une boucle pourrait d'ailleurs permettre une seule voie de tramway (qui irait dans une seule direction), adressant ainsi l'enjeu d'espace sur Wellington et réduisant les coûts, tout en permettant aux Ottaviens se rendant à Gatineau d'accéder facilement au centre-ville. Il n'est aussi nulle part mention de connexion avec le rapibus, qui devrait pourtant être un aspect important. La flexibilité est pour moi bien plus importante que de faire peu de correspondances, et devrait aussi faire partie de ce que vous désignez comme « qualité du service ». Une connexion efficace au rapibus serait d'autant plus importante si le pont Prince de Galles venait enfin à être exploité pour relier l'O-train au rapibus.

- The best integrated system is to start with a tunnel that allows a cross platform connection at Lyon under Sparks Street, then adjust to Albert and Bank Street to enable an integrated system that can end at Mackenzie King and Billings Bridge. At-grade is possible on Albert Street. This minimizes the additional construction costs and maximizes the integration opportunities downtown.
- Pourquoi l'option d'un train n'est pas considérée, tel le O-Train? Un système de rails existe déjà et le pont ferroviaire de la Ville d'Ottawa pourrait être utilisé.
- It could also be nice to link the tram to the new LeBreton flat development and new library in a way that is like the pedestrian zone with tram tracks at Oslo's Akker Brigge area
- I notice a lot of people look for STO busses at Rideau Centre including tourists ... I think the Gatineau Train should start at Rideau Station (Otrain 1) with rail tracks already there and branching off at Lyon Station under ground to Gatineau. If not Sparks St. tunnel will be great just starting at Rideau would be a better starting point. Many individuals from the west, tourists or individuals coming from Orleans that work in Gatineau are not going

to get on a train and go to Bayview Station to catch a train to Gatineau . I find Rideau Centre is the central point of Ottawa of east and west.

The Governance Model and the Integration with the O-Train

Several respondents felt that mobility and transportation within the National Capital Region should be under the control of a single planning body and managed as a single system or, at least, that the National Capital transit systems should be merged.

Québec Respondents

- C'est vraiment dommage qu'il n'y ait pas un seul système de transport public pour toute l'agglomération d'Ottawa-Gatineau. Le fait qu'il ait deux systèmes augmente les coûts, rend la connexion entre les deux villes plus difficiles et moins efficace. Les solutions ici proposées sont intéressantes, mais restent médiocres quand on se prend à rêver à un système de transport public penser comme un tout, et non sur la façon d'arrimer deux services différents (un aurait pu construire qu'un seul tunnel sous le centre-ville, pour accommoder des trains ou trams qui iraient dans plusieurs directions, Gatineau ET Ottawa).
- Les stations STO et O-Train à Lyon et au Parlement devraient être combinées, c'est-à-dire qu'un passager de l'O-Train peut prendre le tram STO sans quitter la station ou repayer, et vice-versa. Cela réduirait aussi le flânage. Une fois dans la zone tarifée, les passagers peuvent prendre l'un des deux trains, acheter un café (comme Happy Goat ou Moca Loca) et utiliser les salles de bain.
- Construire un tunnel est-une excellente solution pour augmenter la surface utile. Il y en a déjà un juste à côté. Il y aura un grand effort à faire pour justifier pourquoi la même infrastructure ne peut pas être adaptée pour servir plus d'usagers.

- I wish STO and OC Transpo would merge you create a single, unified transit system for the NCR. It would make life so much easier and would encourage more cross-border travel by transit.
- Est-il nécessaire de construire un tunnel parallèle au centre-ville d'Ottawa? Avec deux systèmes oui, mais avec un système unifié sous la direction de la CCN, il y aura d'autres solutions plus économiques qui éliminera les duplications.
- A dedicated system as being suggested (in any of the three designs) is both unacceptable and an error in judgement. A unified national capitol region needs a unified transit system, allowing movement to and from all corners of our cities. Extension of the LRT into Gatineau makes the most sense, However; failing that, an interconnection of two different systems at the Bayview LRT station is the only other acceptable choice.

Use of the Prince of Wales Bridge

Many respondents expressed their surprise, misunderstanding, discontent or disbelief in the STO's decision not to consider the use of the Prince of Wales Bridge in developing the Western transit system. According to many, this represents an option that would make it possible to better serve the West without going through the two downtown cores. It would also reduce travel times and integrate directly into the O-Train.

Québec Respondents

- Pouvez-vous également réviser un arrimage avec le pont Prince-de-Galles svp comme une autre façon de se rendre à Ottawa? Ceci permettra d'avoir 2 options, celle du centre-ville et celle du pont aussi?
- Not implementing the Prince of Wales bridge in the land seems to be an oversight; there must be a possibility to increase capacity at Bayview and use the already existing infrastructure versus digging secondary tunnels.
- Le tramway devrait passer sur le pont Prince-de-Galles à mon avis afin de rejoindre le train léger d'Ottawa et non sur le pont du portage. Le pont du Portage est deja sur utilisé et faire passer le tramway à cet endroit ne va qu'empirer la situation de circulation au lieu de l'améliorer. Le pont Prince-de-Galles est la meilleure option selon moi afin de réduire la congestion aux deux centre-villes en heure de pointe

- It is absolutely insane that the Prince of Wales bridge is not being considered for this! The Trillium line should just continue over Prince of Wales to a transfer point in Downtown Hull to connect with the STO system with a cost sharing agreement for that segment of the line. Not everyone would be transferring at Bayview, many would go on to Carleton/Airport/Riverside South and vice versa to work downtown Hull. Ottawa residents paid a lot of money to get public transit off the streets in the downtown core, it is unacceptable for STO to come along and put more transit on the surface.
- Your argument to rule out the Prince of Wales rail bridge is unsatisfactory. All Ottawa to Gatineau commuters like myself will need to always make at least one transfer, and those commuting the other way should expect the same. For commuters traveling from Ottawa's west and south ends, transferring at Bayview to go to Gatineau is more convenient than a downtown STO transfer. East end Ottawa residents will face only a marginal inconvenience to transfer at Bayview in lieu of downtown. The costs to acquire additional O Trains to handle increased Gatineau commuters, along with Bayview station upgrades and infrastructure upgrades to the Prince of Wales bridge would be significantly less than any tunnel option and lower than building new above ground infrastructure across the Portage bridge and on Wellington for an above ground tram. No car lanes on the Portage bridge or Wellington are lost with the Prince of Wales option.

Local Service Improvements

Many respondents indicated that the transit service on local streets, especially on the Gatineau side, needed to be maintained and improved.

Québec Respondents

- Je crois absolument que les transports en commun entre l'ouest de Gatineau et le restant de la ville ainsi que Ottawa sont présentement insuffisants, surtout lorsqu'on considère le volume des usagers du secteur. Il est grand temps qu'un système de tramway connecte le secteur Aylmer au reste de la ville et Ottawa puisque l'ajout d'autobus ne fait que contribuer à l'achalandage des routes déjà insuffisantes pour le nombre de voitures qui y circulent.
- We need a better system to and from Aylmer. This has been an ongoing problem for the last 30 years. You added all the Gatineau 400 buses but fewer for Aylmer. We have the fastest growing population and no infrastructure to support us. There are never enough buses and we are crammed in like sardines or have to watch to completely full busses go past us at rush hour. This will become even more of an issue with the pandemic as we need to social distance and its not possible if there aren't enough buses for Aylmer. People will start driving instead due to concerns for their health
- L'ouest a besoin d'une solution rapide puisque les autobus débordent aux heures de pointe. Pour les usagers qui montent à bord des autobus à Hull pour le retour vers l'ouest, il faut trouver une solution qui permettra de monter à bord d'un autobus ou d'un tramway assez rapidement sans avoir à attendre qu'il y ait de la place pour permettre à l'autobus ou au tramway d'arrêter pour laisser monter ces usagers. En ce moment, les autobus passent souvent sans s'arrêter. On doit attendre plus de 40 minutes pour monter à bord et retourner à la maison. C'est complètement inacceptable compte tenu du prix payé pour une passe d'autobus.

Ontario Respondents

• If possible it would be helpful to connect more efficiently with transit routes that go to federal buildings outside of downtown Hull (e.g. those located on St Joseph, Sacre Coeur, Cremazie etc). The difficulty in transferring from OC transpo to STO routes that reach these destinations efficiently is the main reason I do not use public transportation. It would take at least an hour for me to commute with the current situation as opposed to a 25 minutes drive.

Transport needs in the National Capital Region in a post Covid-19 context

Many respondents questioned the process undertaken by the STO, given the uncertainty resulting from COVID-19. Several suggested that the project be put on hold pending the federal government's position regarding the return to work of its employees. It is their belief that transportation and mobility patterns would be profoundly disrupted, a that situation could last for several years. The initiation of a major transit infrastructure project in such a context left many puzzled. Here are some comments on this subject.

Québec Respondents

- La STO devrait revoir en entier ce projet. Avec la COVID et le succès enregistré au télétravail, le besoin en transport et le nombre d'employé dans les édifices fédéraux sera fondamentalement altéré. La présence sur les lieux de travail deviendra occasionnelle.
- Deux observations: Primo, la Covid-19 a eu comme résultat une diminution très importante sur la nécessité réelle du déplacement des individus. De fait, avec la fermeture quasi-totale des centre-villes de Gatineau et Ottawa, il y aura sans doute de sérieuses discussions à savoir la possibilité de maintenir sur une base permanente le travail-à-domicile et non pas le déplacement vers le centre-ville. Ceci n'est pas une hypothèse voir la décision corporative de la Shopify (avec au delà de 5 000 effectifs) qui a annoncé que cette nouvelle façon de faire sera dorénavant la norme et non pas l'exception. Il serait sage d'entreprendre de discussions avec les gouvernements du Quebec et Canada à cet égard. Secundo, la démographie de l'ouest de Gatineau suggère une plus forte concentration (relatif à l'ensemble de la Ville de Gatineau) de personnes à leurs retraites. Ces personnes (plus) âgées auront besoin moins un service de tramway à vocation de déplacements vers le centre-ville qu'un service de bus de premier-plan à circulation locale. Respectueusement.

Ontario Respondents

• Commuting patterns and volumes may be permanently changed by the COVID-19 pandemic, and additional research should be done to determine if working from home becomes more of a factor in the volume and type of inter-city commuting. Second, there have been significant reliability problems with OC Transpo's LRT service - therefore, STO must seriously examine whether it is efficient and feasible to rely on a catenary wire system and trams that may not be designed for Canadian winter weather conditions

Other Comments

Finally, a few respondents wanted to leave various comments regarding mobility, transportation in general within the National Capital, the environment, etc., which we were unable to classify, in their entirety, within the other sections.

Tableau 6 – Classification of Comments – Other Comments

	Quebec	Ontario
In favour of a long-term vision	6	12
Regarding the reduction of traffic congestion	10	15
Environmental protection	12	3
Connectivity of the two systems	2	12
Previous O-Train problems	10	3
In favour of a quick completion	6	3
With regards to the consultation process	4	1
Regarding the incentive parking lots and the	4	1
Park-and-Rides		
Regarding bilingualism	-	3
Other	25	13

Here are some comments related to these themes.

Québec Respondents

- Il est capital de prendre en considération l'impact sur l'environnement: la solution qui, à plus long terme, aura le moins d'impact sur la qualité de l'air devrait être privilégiée. Il est assez troublant, d'ailleurs, à la vue des enjeux actuels quant au climat, que l'impact environnement de ce système structurant n'est pas été pris en considération en tout, il n'en ait pas fait mention dans la présentation.
- Je crois toujours qu'un 7e pont dans l'est serai la meilleure solution pour régler les problèmes dans les centres-ville.
- The number of parking spaces at POB Rivermead and other planned stations should be increased for people to access the stations and transfer to the bus or tram.

- Please do consider the ecological impact of the tunnel option, also on the long term!
- Long term planning is more important than short term pain. Building a sustainable, well connected public transit system is vital to the long term health of the cities, and any

possible inconvenience in the short term shouldn't be a significant consideration. Price shouldn't be a significant factor either, as public transit is required to combat the climate emergency

Conclusion

In conclusion, after analyzing the data collected via an online questionnaire completed by 1,503 people, mainly from Gatineau (60%) and Ottawa (38%), several trends emerge.

First of all, respondents were of the opinion that the transit system must adequately serve both downtown Ottawa (87%) and downtown Gatineau (86%). This involves improving transit service along the outskirts and local streets of both cities. According to respondents, the transit system must also be integrated with the O-Train (84%).

Next, three elements emerged from the survey as being most important when introducing the transportation system to Ottawa; performance of public transit (84%), the presence of a safe and pleasant environment for pedestrians (67%), and the quality of service (65%). Respondents expect a system that is reliable, resilient and adapted to the winter conditions of the region. They also want a pleasant and safe environment for pedestrians, with faster commute times, as compared with a car and with a limited number of connections. According to respondents, the least important elements regarding this development were the reduction of disturbances during construction (21%), cost (21%) and access for motor vehicles (16%). These results were the same regardless of their place of domicile.

Respondents were divided on the issue of compatibility of a tramway on Wellington Street with the preservation of the image and patrimonial value of the National Capital and Parliament Hill. One in two (51%) agreed that the two would be compatible, whereas one in three (33%) said they would not. There was a significant difference between the responses of people from Quebec and Ontario on this question, with more Ontario respondents disagreeing with this statement (48% disagreed for Ottawa versus 24% for Gatineau). For many, a tramway would disfigure Wellington Street and would not be appropriate, especially given that the City of Ottawa has spent significant amounts of money to conceal its transit network. For others, a tramway in the National Capital, thanks to its style, would give the city a romantic character comparable to Europe's major cities, and would send a strong message in favour of public transit.

That being said, the preferred option for integrating the STO transportation network into downtown Ottawa from among the three proposed options is the Sparks Street tunnel (60%). Despite the higher costs associated with this option, questionnaire respondents feel it is the most realistic and viable option over the long term. It would also be the option that would best meet the various objectives presented, namely meeting the travel needs of respondents (58%), connecting the STO and OC Transpo transit systems (66%), providing improved access to Sparks

Street and the Parliamentary Precinct (39%), although respondents were divided between option 2 (Wellington with traffic) with respect to this latter criterion (37%).

Nearly one in four respondents indicated that options 1 and 2, the tramway on Wellington Street, whether with (23%) or without traffic (22%), was not an acceptable option. On the Quebec side alone, one in three people did not feel these two options were acceptable. The comments collected in the *Other Comments* section sheds light on the respondents' concerns, in that the system is aboveground, on a street that is rather busy and may be subject to celebrations or demonstrations, as well as to winter and weather conditions caused by snow storms that could affect the tram's operation.

Finally, respondents were somewhat comfortable with the reduction in the number of STO buses in Ottawa, although more respondents in Quebec were in favour of maintaining a certain number of buses (53%). Ontario respondents felt that the number of STO buses should be reduced in downtown Ottawa (33%) or removed altogether (22%).

More than 600 respondents completed the *Other Comments* box. Many people reported being in favour of integrating the two entities responsible for managing transportation in Gatineau and Ottawa, in order to ensure consistency and continuity in service, or at least, an integration of the future network serving the West with the O-Train. Others reiterated the need to strengthen the availability of public transit services in the eastern and western extremities of cities and in neighbourhoods on the periphery of inner cities. For many, the Prince of Wales Bridge should be reintegrated into the options in order to take advantage of the already existing infrastructure. The environmental impact of the various options was highlighted and finally, many respondents questioned the impact of COVID-19 and telework on the travel needs of workers to the National Capital. Likely to persist over the long term, changes in the work world due to Covid-19 call into question the need for a large-scale transportation infrastructure to facilitate travel between the two cities.