

Supervised Research Project: A guideline

prepared by

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The Supervised Research Project (SRP) is intended to focus a student's interests on a particular area of enquiry at the end of studies for a Master's Degree in Planning. It should ideally provide the transition into practice or more advanced studies.

Before submitting your SRP please make sure it is clearly written and it follows a clear path. The SRP is an academic paper and not part of an instant messaging chat so please make sure to have full paragraphs with transition sentences between them. It is the final product you are producing as part of your Master's in Urban Planning so it should be a reflection of the skills and knowledge you gained over the course of two years. Accordingly you should be producing a document that you will be proud of and use as a sample of your work when applying for jobs in the near future.

You should be selecting an SRP topic that you are enthusiastic about and you feel it will help you the most in building skills you will need in the future or skills you feel you are missing and would like to build. You should start by identifying the general area you would like to study and then look at previous SRPs as examples to help you understand the amount of work you will have to place in the coming months. The SRP is equivalent to 15 credit hours, so you are expected to be working on it for an entire term full time placing around 45 hours of work per week for 13 weeks if not more.

After defining your area for the SRP, you should start doing some readings about your topic and then draft your abstract. **An abstract** is usually the most important section in an academic paper but in this case you are drafting it to convey your message to your advisor about the importance of your study area and what you want to do. Your abstract should be well written and should include the following:

- **Problem:** (2 sentences). This is the section where you set the stage with the big context, like stating the importance of the field you are discussing in general and why studying this area is important.
- **Purpose:** (1 sentence). This is mostly your goal or research question you are trying to answer in your manuscript. This goal should fall under the umbrella of the big picture discussed in the problem.
- **Methods:** (2 sentences). This section you talk about the methods you will use, the data sources, the sample size etc.

- **Results and conclusions:** (3-5 sentences). This section you should provide the reader with your main findings from your analysis, in some cases you might include numbers about an impact of a variable from your model which is the most important policy variable from your view based on the purpose of the paper. The reader should be able to understand your findings from this manuscript just through reading this section of your abstract. If you are writing the abstract prior to doing the analysis then results and conclusions should be more of a hypothesis section.
- **Takeaway for practice:** (2-3 sentences). Who cares about your findings and why should they care about this paper and what can we do in the future with the findings from your paper in practice.

The abstract is a summary of your paper so make sure it is not longer than half a page single spaced using 12 points font. This way of writing the abstract is adapted from the Journal of the American Planning Association webabstract that was present several years ago, the journal no longer sue it but I still think it is one of the best ways to organize an abstract.

After submitting your abstract to the advisor and discussing it, keep it for your record as it will guide you in the future. Also if you plan on publishing part of your SRP then you will need to use the above method when drafting the abstract for submission.

The next step after the agreement on the abstract and the study area is conducting the research for the SRP and writing it up. The remaining of this document will concentrate on the writing of the SRP and the different contents that should be included in your final version that will go out to the second reader. Please note that your SRP will be always work in progress and you should be working on developing these different pieces as you move forward with your research. For example you will start working on the literature review section in the very early stages and you will revise this section as the research progress in the term.

The following is a list of sections to be included in your final version of the SRP. It is important when working on earlier versions of your SRP to have this outline in mind so the production of the final version is easy. You can leave the acknowledgment, table of contents, list of figures, and list of tables till the final version so you won't be repeating the work. The policy brief is usually the last section you will work on to make sure it reflects your final product.

- 1- Title Page
- 2- Acknowledgment
- 3- One page executive summary
- 4- Table of Contents
- 5- List of Figures
- 6- List of Tables
- 7- Ethics
- 8- Introduction

- 9- Literature Review
- 10- Methodology
- 11- Data if any
- 12- Analysis and Discussion
- 13- Conclusion
- 14- References using APA 5th
- 15- Appendix if any

Note the sections in red can be different and can change depending on your SRP topic and organization. Also they can include subsections if needed for organization.

Please use styles in word as it will help a lot in your final formatting of the document and in generating the table of contents and different lists.

- **Title Page**

The title page should include the following

(Your SRP Title)

Supervised Research Project Report

Submitted in partial fulfillment of the Masters of Urban Planning degree

Submitted by: Your name (big and bold you should be proud of your work)

Supervised by: Name of supervisor (small font he/she should not get much credit)

School of Urban Planning

McGill University

(Date)

- **Acknowledgment**

You need to make sure to acknowledge any funding or help you received from colleagues or people you surveyed in here. This is generally your section to thank people who helped you through the process of doing the SRP.

- **Executive Summary**

This one page executive summary should reflect the findings from your entire SRP. The goal of this one page is to convey the importance of your study in a precise manner for a policy maker or a senior official or any person reading your SRP who is not specialized in your field of study. It should be focused, evidence based, professionally sound, limited and targeted, succinct, understandable, promotional, practical, and feasible. This one page should include:

- A title (usually your SRP title)
- Your name and affiliation
- Context or big picture in one sentence or two at the most to set the stage for the reader about the importance of the topic
- Policy in question or research question or goal from this study
- State your geographic context and scale
- Methods used in answering the question and/or data used in your analysis to reach your goal.

- Previous experiences or lessons learned from other or how others have approached this issue. Preferably in bullet points. This can be absent in some cases if you feel you do not have space, but you need to refer to previous work some how.
- Conclusion of your analysis and results in bullet points. You can use numbers in here if needed.
- Discussion if needed to place your finding in the bigger context or to compare to previous work.
- Policy relevance or recommendations in bullet points.
- Sometimes you can include an Ending sentence or a paragraph to make sure the reader can remember your study.

The following are some advices to help in making a good executive summary or policy brief:

- Use bullet points as much as you can in all sections
 - Use simple figures to show your findings and make sure people will remember your findings.
 - You can use numbers from your analysis, yet do not include a statistical model or statistical significance tests in here.
 - You can use maps if needed but make sure they are readable and at the appropriate scales.
 - Use boxes with colors or different outlines to differentiate between the sections or to highlight sections
 - Make sure you answer the “who cares” and “so what” questions in your summary.
 - Make sure to say why this work matters and to who.
 - Use subheadings and sections to organize your summary
- **Ethics**
If you received ethics approval for your study, please list your ethic approval number and the title of your submission. Please indicate that your questions from the survey or the in depth interviews are included in the appendix at the end of your SRP. **Do not include copy of your ethics approval just the number and title please.**
 - **Introduction**
The introduction section is always used in setting up the stage for the reader. Not every reader is an expert in your field accordingly this section is used to place your research in the larger context and introduce it, in other words, “who cares” about this

work and who should be reading it. The introduction should include your main research question(s) and hypothesis. In addition it should include your specific contribution to this field. If you are conducting a case study, then your study area should be described briefly in this section. Finally the introduction section ends with an outline of your paper and how it will be organized.

- **Literature review**

A literature review is a critical summary of previous research on a topic. It is not just a summary of the previous work. Although it should contain a summary of relevant research, it is important that you evaluate the research being summarized and highlight the relationships between various studies, and how previous research relates to your work. You need to identify which parts of previous research to discuss and how it relates to your work.

“Here are some of the questions your literature review should answer:

1. What do we already know in the immediate area concerned?
2. What are the characteristics of the key concepts or the main factors or variables?
3. What are the relationships between these key concepts, factors or variables?
4. What are the existing theories?
5. Where are the inconsistencies or other shortcomings in our knowledge and understanding?
6. What views need to be (further) tested?
7. What evidence is lacking, inconclusive, contradictory or too limited?
8. Why study (further) the research problem?
9. What contribution can the present study be expected to make?”

Source: *Language Center, Asian Institute of Technology.*

In the literature review section use an appropriate bibliographic referencing system. I would recommend using APA 5th. I would also recommend that you use bibliographical editing software like endnote. It is available for free through the McGill library.

In the transportation field there are many sources that can be used to find articles. Here are some tips obtained from Prof. Robert Bertini’s guide to conduct appropriate litterateur search in transportation planning field.

With the advent of the Internet it is very tempting to think that all necessary resources for a project, thesis or dissertation will be available in full text after typing in a few words at Google.com. This notion should be discarded immediately. For transportation research [TRIS](#) is one of the most comprehensive search engines in the transportation field. If you are searching for Urban Planning topics [EBSCOhost](#) is a reliable source for this field. Some researchers use [google scholars](#), which is another search engine. [Scopus](#) is another good place to search for articles. If you have a specific article and you would like to know other articles that cited it [Scopus](#) is a good place to search as well.

Another way is to search the databases inside certain journals.

- **Methodology**

In this section you should be explaining the methodology that you plan on using in your research and how you are planning to answer your specific research question. If you are using a statistical modeling approach, explain your models and the rationale of having each variable and the expected outcome based on the systematic literature review you did earlier. Linking back your methodology to the literature is an important point. If you will be using abbreviations in the variable names you should define them in this section. If you are working on a complex issue then developing a flow chart or a diagram that explains your research should be helpful in simplifying your methodology.

- **Data**

In this section you need to explain the data you are using in this research. Including a summary statistics is important for quantitative studies. When including summary statistics make sure to limit the number of decimal places to 2. If you are using photos obtained from other sources you should state the source of the picture below it. You can include a map of your study area in this section. The following is a sample of a map that shows route Saint-Michel.

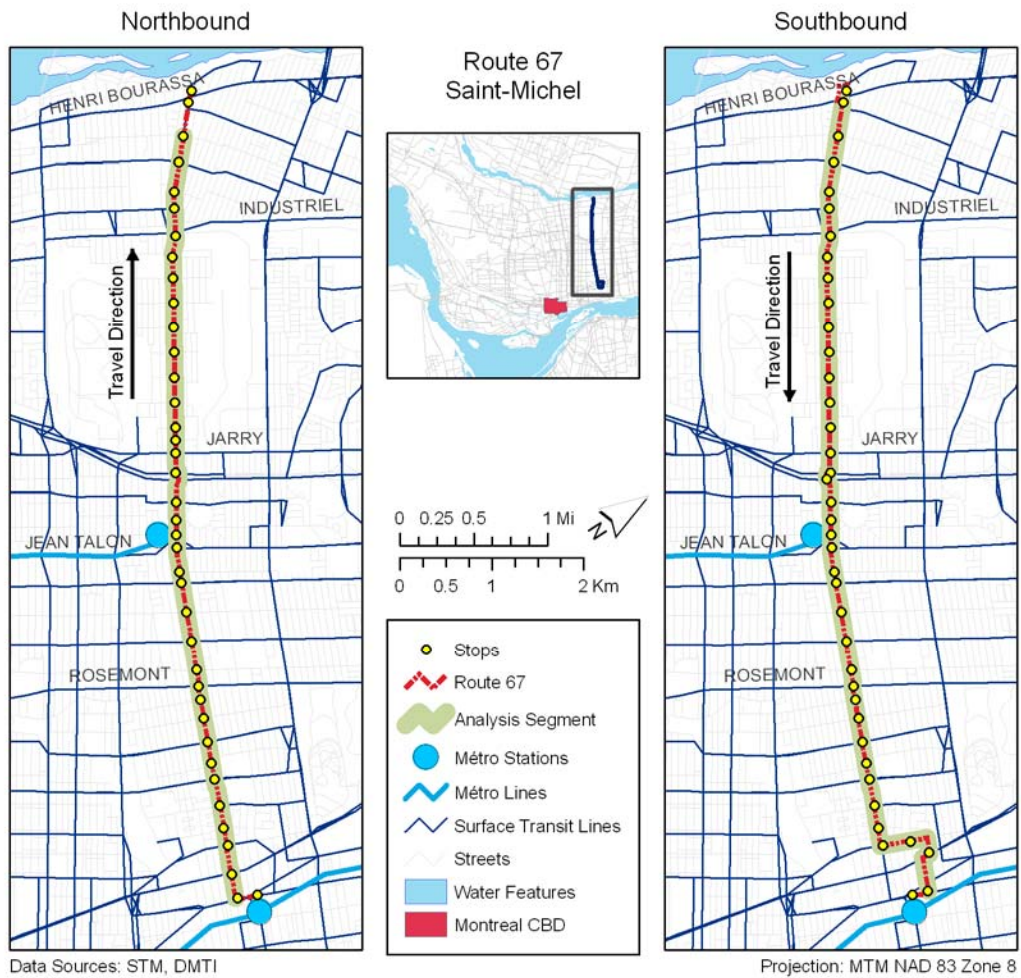
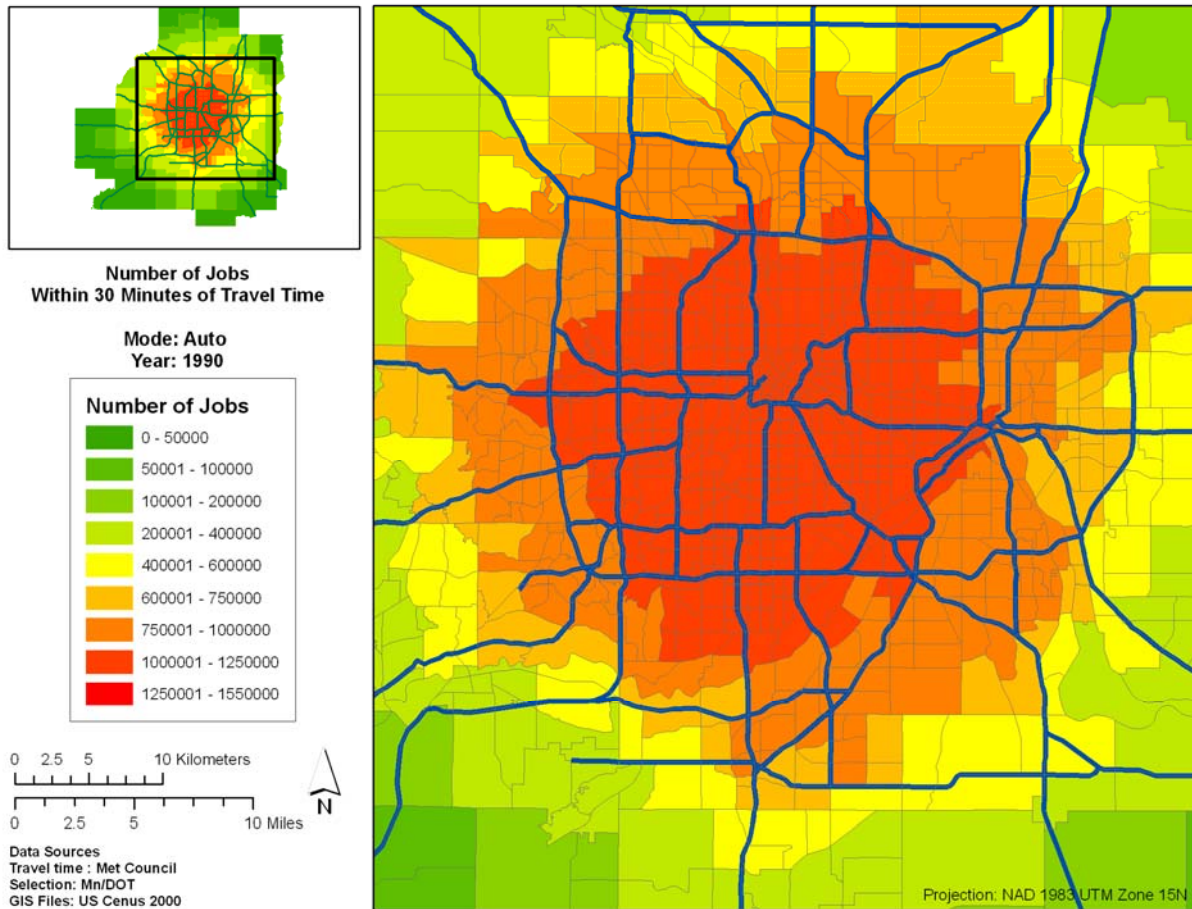


Figure 1: Study Route

It is also important to note a **case study section** can be present prior to the methodology section. Accordingly the data section will be irrelevant in this case.

In some cases you need to display the entire region so you can use something like the below map.



- **Analysis and Discussion**

This section contains the output of your analysis. It should also include a discussion of the statistical output or the developed models. Interpret the meaning of the findings for example what does it mean if a certain variable is statistically significant. Are the result consistent with previous research or what you have in here is a breakthrough since no one has done similar research before. Did the statistical models offer new research questions that need to be addressed in the future. Link back your finding to the literature if you are testing some data or if you are finding similarities in your finding with previous research. If you are not using statistics this section should be more of an in-depth discussion of your research and the findings you are trying to raise. Referencing previous work in this section should be minimum and only when needed.

Here is a sample of regression output

TABLE 4: Trip distance linear regression models

Variable	Car	
	B	t
(Constant)	2.26	0.01
Sex	-221.43	-0.39
Age	7.01	0.34
Number of Trips	-274.51	-2.25**
Shopping Trip Dummy	436.93	0.59
Entertainment Trip Dummy	813.91	1.20
Home Start Dummy	833.36	1.32
AM Trip Start Time Dummy	1403.81	1.76*
PM Trip Start Time Dummy	1177.57	1.62
Saint-Laurent Dummy	2185.84	2.31**
Saint-Hubert Dummy	1930.09	1.66*
Ontario Dummy	1436.74	1.49
Median household income (per \$1,000)	36.38	2.82***
Diversity Index	140.02	1.69*
R Square	0.100	
N	359	

Dependent Variable: Trip Distance (m)

* 90% significance level | **95% significance level | *** 99% significance level

The analysis section can be divided to sections depending on your study. A complex study can be easily presented when it is divided to small sections.

- **Conclusion**

The conclusion is the last section you will be writing in your SRP before you revise your abstract to reflect your final findings. The abstract should include a summary of the findings from this research. Think in terms of generalizations rather than specifics related to your project or case. What can others learn from your paper and what are the general policy implications of your research. Who can benefit from your findings and how he can do so is also important. There is not a perfect study accordingly you should mention your study limitations and assumptions you made to reach these conclusions, if any was made. Future research is an important element to include in your paper, stating the next steps or other analyses that can be generated based on your study. Any general recommendations would you like to make for the general audience should be stated in this section as well.

- **References**

The list of references should be following an appropriate referencing style. You cannot make up your own style. I personally prefer APA 5th. Again using bibliographical software like endnote should help you dramatically in getting this section done easily. You can obtain endnote for free through the McGill library.

- **Appendix**

An appendix should contain any extra work you would like to include to your SRP or paper. Removing the appendix should not have any effect on your document. An appendix should contain any extra work developed in the process or detailed information that helped in generating the study.

Credits

During the preparation of this document in 2011 I did consult several guidelines developed by others, accordingly mentioning their names in here is a must.

- Professor Robert Bertini's Transportation Research Guide.
- Professor Kevin Krizek's writing rules and check lists.
- Professor Raphaël Fischler's A Planners Writing Guide.