

New Mobility Research Grant (NMRG) Program Information Package

(Updated July 17, 2019)

This program provides **academic grants of up to \$50,000** to well-defined projects undertaken by **post-secondary researchers** and their partners. NMRG projects may range from **one year to two years in duration**.

DISCIPLINES

Project proposals can span a range of disciplines, including, but not limited to, engineering, planning and policy, urban design, computer science, environmental and resource science, business, psychology, sociology, and economics.

ELIGIBLE RESEARCH TOPICS & METHODS

All projects must relate to a new mobility theme of local or regional relevance and must be applied research. Various forms of applied research are eligible for NMRG funding, such as:

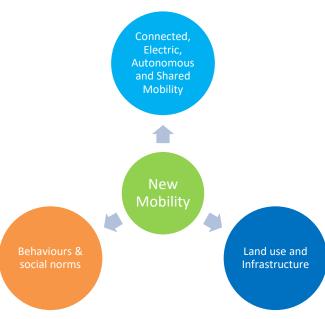
- Consumer and Market Research
- Policy Analysis
- Planning and Design
- Modelling and visualization
- Technology Development, Verification, Demonstration, Prototyping and Testing

A broad range of research methods, both quantitative and qualitative are eligible under this grant program.

New mobility is commonly defined as electric, connected, automated and shared transportation. Broadly, it can be defined as use of technology or other innovations to improve movement of people and goods, both in terms of consumer experience and overall efficiency.

TransLink aims to continuously explore, test, and implement innovative ways to improve mobility in Metro Vancouver and further three key goals:

- Enable seamless and efficient door-to-door mobility for people and goods;
- 2. Promote safe, healthy, clean, and compact communities;
- 3. Ensure affordable and equitable access for all.





On an annual basis, TransLink will host a New Mobility Research Dialogue typically in the January/February timeframe. This Dialogue will showcase research to date and will be a forum for identifying new research needs from participants. These research topics will be given priority in the evaluation; but all topics related to new mobility and which have local or regional relevance are welcome.

The 2019 priority research topics are:

- **Big data in transportation**: More and more information is being generated on how we move. Some of that data is passive (for example, cell phone location data) and other data is more actively created (such as roadway sensors). This data has a lot of potential for improving roadway and transit efficiency and safety, understanding consumer behavior in order to encourage mode shift, and creating a seamless experience for travellers. There are also questions surrounding this data, including coordination, governance and privacy.
- Ride-hailing: TNCs have disrupted most major North American cities, providing a public service
 through an entirely private innovative business model. With ride-hailing set to arrive in BC over
 the next year, there are many questions surrounding how best to govern this new form of
 mobility, including the impact of various forms of regulation. Another stream of inquiry
 surrounds the impact of ride hailing on legacy industries, on other modes of transportation and
 on achieving regional goals of livability, emissions reductions and equity and social inclusiveness.
- Curb management and infrastructure for new modes: With the rise of new forms of mobility (electric, automated and shared), along with growing e-commerce, management of curb space is critical. As such, there is need for research on policy measures to allocate, regulate and value curb space and on design of future curbspace and other infrastructure based on anticipated changing needs.
- MaaS as a mode shift enabler: Mobility as a Service (MaaS) is heralded as a game-changing shift in the way people in the future will perceive of transportation. But will bundling mobility options as a subscription service encourage mode shift? Are there pricing, feedback or incentive mechanisms that could be built into a MaaS system to influence choices? Will more mobility options in a seamless system encourage more people to forego car ownership?

ELIGIBILITY

- All public universities and colleges in Canada are eligible for funding under NMRG Program. The Principle Researchers must be a member of the faculty (full or part-time) at the sponsoring Institution.
- Researchers based abroad, who maintain an affiliation with a Canadian postsecondary
 institution, are also eligible to apply; however, the Principle Researcher must be a
 member of the faculty of a Canadian public university or college.



- Postdoctoral researchers are eligible to be applicants if they have formally established an
 affiliation with an eligible institution at the time of application, and maintain such an affiliation
 for the duration of the grant period.
- Graduate or undergraduate students are not eligible to apply.
- Individuals may apply for only one grant per calendar year.
- A broader research initiative, which involves multiple researchers or multi-year timelines could apply for multiple grants, so long as each grant has a distinct deliverable to be completed within two years, and all other eligibility criteria are met. However, successfully receiving one grant does not guarantee receiving additional grants.

RESEARCH PROPOSAL

Submit a research proposal in English. The research proposal should be in plain, non-technical, jargon and acronym-free language. The page limit is 5 pages. Researcher CVs may be included in the appendix, which will not count towards the page limit. The research proposal should include the following elements:

- 1. Executive summary of the proposed research (150 word limit);
- 2. Statement of the problem;
- 3. Theoretical or conceptual framework for the study;
- 4. Brief review of relevant research, if applicable;
- 5. Research questions, including hypotheses to be tested;
- 6. Description of methodology, including the data set or data collection method, estimated sample size, and proposed analytic method;
- 7. Description of any data needs or requests from TransLink;
- 8. Project budget in CAD dollars (budget table with justification narrative), including leveraged / co-funding and budget requested from TransLink and from other sources;
- Schedule of the activities to be undertaken during the project, clearly identifying deliverables, key milestones and associated dates including work tasks, meetings or presentations, and preparation of the draft and final report;
- Distribution plan for completed research (e.g., journal publication, conference presentation, etc.). Grant recipients will be invited to present their research findings at an annual Dialogue sponsored by TransLink;
- 11. Qualifications of the Principal Researcher in the topic area, especially any qualifications, skills, experience or facilities that are unique or relevant; and
- 12. Research team brief bios, roles and responsibilities. Academic CVs and publications lists may be attached as appendices.

INTAKE & EVALUATION PROCESS

Intake is continuous throughout the year.



TransLink will strike an evaluation panel of TransLink and local government staff experts to review and score incoming applications. The following criteria and scoring schemes are used to evaluate applications:

	Description
Research Priority	Research matches research priority needs for the year.
Purpose and Importance	The importance of the research in contributing to the body of knowledge on new mobility topics, including originality and significance. There is potential to produce a breakthrough or a major advance in some portion of transportation practice.
Local Relevance and Applicability	The research is highly applied in nature and has strong long relevance for this region. There are clear benefits for TransLink, local government or other transportation agencies.
Methodology	The concept has technical and scientific merit. The methodology and theoretical approach is well defined and appropriate to the research question at hand.
Work Plan and	The research plan is well-scoped, with appropriate levels of resourcing and timing, and
Scope	has a high degree of likelihood to complete within the budget and timelines proposed.
Researcher	The applicants and co-applicants are qualified to undertake this research plan and have
Experience	evidence of past success in similar projects, facilities available to them.
Leveraged Funding	The grant funds, if awarded, help to leverage additional funding from other sources. Higher marks if co-funding confirmed.
BC-Based	Lead applicant or members of the project team are researchers at BC-based post-
Researchers	secondary institutions.

The evaluation panel may request clarification of points contained in the proposal of any applicant, by email, phone or personal interview.

Selected research projects will be notified with a letter of award, which will be sent from TransLink to the Principle Researcher within four months from date of receipt of the research proposal. Translink's decision on the research project selected will be final and not subject to review or appeal.

A sponsored research agreement, outlining the terms and conditions of the award and how the funds are to be used, will need to be signed by the applicant and authorized representatives of TransLink and the Institution.

ELIGIBLE COSTS

The award must be used to support expenses that are directly related to the research. These include:

- **Estimated Salaries and Benefits**: Salaries, stipends, and related federal, provincial and institutional non-discretionary benefits for research work performed by research personnel (i.e., students, research associates, post-docs, and technicians).
- **Estimated Equipment or Facility**: Equipment or facility costs directly attributed to the research proposal may be funded.



- Materials and Supplies: Materials and Supplies include materials directly attributable to the
 research proposal such as the purchase of engineering materials. Supplies may include expendable
 materials, printing, photocopying, participant fees and incentives and testing materials.
- **Travel**: Travel and accommodation costs should be included in the budget and in accordance with the Institution's internal guidelines for presentation at TransLink's Annual New Mobility Research Dialogue(s).
- **Dissemination Costs**: Dissemination costs include costs associated with the preparation of the final report for TransLink.

Be sure to justify all expenses and detail any additional funds that will be used for the project. If the budget for the project exceeds the amount available from the award, you should describe the source of the additional funds.

INELIGIBLE COSTS

All costs not explicitly included in the previous section are ineligible for funding, including:

- Travel costs to conferences present the final product, unless those conference presentations were explicitly requested by TransLink;
- University overhead costs.

FINANCIAL ARRANGEMENTS & REPORTING REQUIREMENTS

Awards will be paid to the Institution in one instalment within 10 days of the signing the Sponsored Research Agreement and receipt of an invoice.

Recipients of funds under this program are required to maintain periodic contact with TransLink staff assigned to monitor the progress on the research.

A financial report must be submitted to TransLink by the designated official of the Institution upon completion of the research project. This report will include a full account of purchases and activities financed by the NMRG. It will also include an itemized list of equipment that was purchased in whole or part with the funds.

Any surplus or funds not spent must be returned to TransLink by the Institution. If the research is not started or terminated part way through a project, any unused portion of the research funding must be returned to TransLink within 30 calendar days.

RESEARCH REPORTING / DELIVERABLES

- Interim Report: The Institution shall submit an interim status report every six (6) months to TransLink staff, with project status updates, as well as preliminary findings and results, as available.
- Draft Final Report: The Institution shall submit a draft final report (typically about twenty to eighty
 pages in length) in MS Word format, no later than three months after the end of the funding period
 or after termination of funding by TransLink. The final report shall include sufficient detail or
 reference to other publicly available documents with detail, to transfer new learning to TransLink



staff and to support the technical approach, data, analysis and conclusions of the project if challenged by stakeholders. TransLink may choose to publish the final report publicly through the TransLink Tomorrow website.

 Presentations: The Institution shall prepare and deliver presentations on the funded research for each of the New Mobility Research Dialogues that occur during the funding period and within 6 months following the completion of the project.

ACKNOWLEDGEMENT AND INTELLECTUAL PROPERTY RIGHTS

Researchers are encouraged to publish and present their research findings independently, but must notify TransLink of the research findings and/or conclusions, and/or research outcomes being published or communicated.

As a condition of funding the research project, TransLink shall be granted a non-exclusive, royalty-free license without charge to use or exploit the outcomes and/or conclusions in the research outcomes for TransLink's purposes. In the event the Institution is able to obtain patent protection for any of the inventions, outcomes and/or conclusions in the research outcomes, TransLink shall be granted a royalty-free, non-exclusive license without charge to use or exploit the inventions, outcomes and/or conclusions in the research outcomes with no right to sub-license to third parties. The Institution shall arrange, at its cost, for the execution of the appropriate documents to give such licenses to TransLink.