

## Community Emergency Preparedness Fund

# Evacuation Route Planning

## 2018 Application Form

Please complete and return the application form by **November 30, 2018**. All questions are required to be answered by typing directly in this form. If you have any questions, contact [cepf@ubcm.ca](mailto:cepf@ubcm.ca) or (250) 387-4470.

<b>SECTION 1: Applicant Information</b>	<b>AP</b> (for administrative use only)
Applicant: City of Victoria	Date of Application: November 29, 2018
Contact Person*: Tanya Patterson	Position: Emergency Program Coordinator
Phone: 250-920-3355	E-mail: <a href="mailto:tpatterson@victoria.ca">tpatterson@victoria.ca</a>

\* Contact person must be an authorized representative of the applicant.

<b>SECTION 2: Project Summary</b>
<b>1. Name of the Project:</b> City of Victoria - Evacuation Route Planning
<b>2. Project Cost &amp; Grant Request:</b> Total Project Cost: \$25,000.00      Total Grant Request: \$25,000.00 Have you applied for, or received funding for, this project from other sources? No
<b>3. Project Summary.</b> Provide a summary of your project in 150 words or less. This evacuation route planning project will: <ol style="list-style-type: none"> <li>1. Collect data necessary to understand and validate planning assumptions in the City of Victoria.</li> <li>2. Use collected data to create hazard-specific evacuation route maps compatible with the City of Victoria's mapping system Vic-Map (ESRI);</li> <li>3. Engage stakeholders to address key constraints, thresholds and vulnerabilities in the Municipality;</li> <li>4. Provide public information on relevant findings and consistent messaging for mitigation, preparedness and response actions during evacuations;</li> <li>5. Contribute project findings and a portion of any successful grant funding for a consultant to develop an overall Evacuation Route Framework (for regional evacuation route planning) in the Capital Region.</li> </ol>

- 4. Emergency Plan.** Describe the extent to which the proposed project will specifically support recommendations or requirements identified in the local Emergency Plan.

The City of Victoria currently has an out of date and generic Evacuation Plan that provides a general overview of responsibilities, policies, and procedures. It sets out the command structure to be used in an evacuation following the guidance provided by the BC Evacuation Operational Guidelines of 2009 and includes general checklists for Incident Command Post (ICP) and EOC functions.

The City of Victoria's Emergency Plan requires hazard specific and more detailed evacuation route planning to be included and tested to confirm critical procedures, such as notifying residents of safe routes to follow in an evacuation and adapting evacuation routes to account for road closures or fires.

Under the proposed project, the City of Victoria would contract a qualified consultant to lead the advanced evacuation route planning effort for inclusion in the regional overall response and recovery plan.

The project will also address the need for regional collaboration and cooperation for response during an emergency, specific to evacuation procedures for the region.

#### **SECTION 4: Detailed Project Information**

- 5. Proposed Activities.** What specific activities will be undertaken as part of the proposed project? Please refer to Section 4 of the Program & Application Guide for eligibility.

To build on the City of Victoria's Emergency Plan, the proposed project calls for targeted research and evacuation route planning, including the involvement of individuals and organizations that may be required to assist with a major evacuation of the community. The project anticipates the following activities:

##### **Project Plan**

To initiate the project, a project plan will be developed in conjunction with the City of Victoria including a timeline, research questions, contact identification, and project plan components.

##### **Research, Consultations, and Mapping**

To prepare for the evacuation planning sessions, research will be conducted on the status of existing routes and alternates, including a tour of the community to confirm neighbourhood routes. Activities will include the collection of neighbourhood data, including:

- existing communication options with residents;
- methods of evacuation;
- modes of available transportation;
- potential reception centre sites for evacuees;
- timelines for potential onset of specific hazards.

Meetings will take place individually with stakeholders that may be involved in undertaking an evacuation (Police, Parks, Public works, Greater Victoria Harbour Authority, Transport Canada, BC Transit, etc.) and with adjacent municipalities regarding evacuation support thresholds. Following these consultations, data will be compiled to assist in preparation of maps for use in subsequent planning sessions.

##### **Planning Sessions**



To ensure multi-agency coordination in evacuation, a series of Evacuation Planning Sessions will be designed and hosted, with a focus on evacuation route selection and emergency operations. The results of these sessions will contribute directly to Victoria's Evacuation Plan, and will contribute to planning in other participating organizations, and the Region as a whole.

#### Small Scale Evacuation Exercise

Some elements of the Evacuation Plan will have been estimated or assumed so specific aspects will be tested to validate and enhance confidence in procedures, as well as understand time constraints. These may include:

- EOC communications exercises which test communications to the public, staff, volunteers, and stakeholders.
- Drills to test how long door-to-door notifications take and the time required, taking into account vulnerable areas and populations.
- drills and exercises which test the approximate time it would take to conduct a full evacuation of the community using primary evacuation routes vs the time required to evacuate specific areas that may be in a hazard area such as a tsunami inundation zone.

#### Develop Detailed Evacuation Plan

With the completed research and planning tasks, the consultants will prepare additions and updates to the generic evacuation plan including relevant checklist items for ICP, EOC functions, with additional function aids, such as decision-guides, maps (compatible with online platform - VicMap), and public messaging.

#### Report on Recommendations

Consultants will prepare a Final Report, with recommendations that may include policy direction and a list of action items for future work plans.

#### Regional Evacuation Route Framework

Along with other applicants located in the Capital Regional District, a portion of any successful grant funding will be used to contribute to the development of an overall Regional Evacuation Route Framework. Project tasks are anticipated to be the same as aforementioned but with a regional context. The Regional Emergency Management Partnership has agreed to assist in the selection and contract management of the consultant, as well as coordinating regional stakeholder planning sessions.

The successful proponent will develop a project plan to be agreed upon by contributing municipalities. Regional consultation and research will be conducted with information collated from local evacuation planning efforts to inform regional maps and future planning sessions. Additional consultation with stakeholders, including the Department of National Defense and First Nations, will take place.

Following consultation and planning sessions, a regional evacuation route framework will be developed that will include regional evacuation guidelines. Upon completion of the Framework, a small-scale tabletop will take place to determine if revisions or additions are necessary. Finally, a report on regional recommendations will be provided by the consultant that may include policy guidance, mitigation measures, and public education.

- 6. Rationale.** What is the rationale and evidence for undertaking this project? This may include local hazards identified in the Emergency Plan; threat levels identified in Hazard Risk and Vulnerability Analysis, Community Wildfire Protection Plans, and/or Flood Risk Assessments; and previous emergencies where evacuations were ordered.



The City of Victoria recently updated our Hazards, Risks, Vulnerabilities Analysis which includes multiple hazards that may create the need for evacuations. These include seismic events such as earthquakes and tsunamis, fires, gas leaks, explosions, civil disorder, terrorism, etc.

The tsunami event of January 23<sup>rd</sup> demonstrated the need for a coordinated approach to evacuations, and to regional messaging in case of evacuations and sheltering-in-place. With more recent examples of interface wildfire injuries and deaths among evacuees in similar jurisdictions, such as Washington, Oregon, and California, communities in the Capital Region are motivated to reduce the risks through advanced evacuation route planning.

There are 13 municipalities and 3 electoral areas in the Capital Region and a successful evacuation is dependent on cooperation and coordination with neighbouring local authorities. The collation of the data collected from each individual municipality will be imperative in assisting with evacuations of residents and livestock. There is currently no legislation in place that mandates regional planning for evacuations, and no regional framework has been undertaken. The existing planning efforts that are taking place allow the combination of updating of local plans with the creation of a regional framework, realizing efficiencies in both time and cost. This will also allow us to better understand our limitations regionally in order to make informed decisions and ultimately ensure the safety of residents.

A regional evacuation framework will also enhance the work being done by the Regional Emergency Management Partnership in development of a Regional Hazard Risk and Vulnerability Assessment, and well as a Regional Concept of Operations.

**7. Existing Challenges.** How will the proposed project identify and address existing challenges to successful evacuations in the event of emergencies. Refer to Section 6 of the Program and Application Guide.

Acknowledging the constraints of the physical geography, population fluctuations, limited road networks and bridges, this project will validate planning assumptions for evacuations both locally and regionally, while providing tools and templates to maximize the potential of a successful evacuation.

Regionally, there are several challenges with a large population, limited road networks with daily congestion, and multiple local authorities being located in a small area, each responsible for their own emergency plans. While acknowledging the constraints of the physical geography, population distribution and limited road networks, this project will validate planning assumptions for evacuations both locally and regionally, while providing tools and templates to maximize the potential of a successful evacuation. The results of this project may provide support and rationale for future mitigation efforts both locally and regionally.

This project will also enhance the awareness and preparedness among residents, engage them in neighbourhood resilience, and ensure consistent public messaging across the Capital Region. It is understood that with current resourcing available, any successful evacuation requires the participation of residents. The project highlights the need for and reliance on regional support and coordination in an evacuation, such as during a major wildfire or tsunami warning. The project will identify specific partners among



regional organizations and emphasize their roles and responsibilities to result in a successful evacuation. This example of detailed planning will allow all communities in the Capital Region to increase their potential of a successful evacuation, and increase resilience in the process.

**8. Large Scale ESS Planning.** Describe the extent to which the proposed project will consider large scale emergency social services scenarios.

This project will provide valuable information regarding the overall ESS capacity of local governments in the Region to help plan for large scale evacuations. This information may include communications, potential reception centre sites, supply inventories, and number of volunteers. Data will be collected on the needs for evacuation assistance during a widespread emergency. It would require the use of spatial data in estimating the number of evacuees (and animals) who may require assistance, and generate maps for use during an actual evacuation.

The Evacuation Framework produced under this project will be used to inform residents and staff of their role in an effective evacuation, including neighbourhood preparedness and public messaging on what services can be expected from ESS and local government.

**9. Transferability.** Describe the extent to which the proposed project may be transferable to other local governments and/or First Nations.

The project will address issues that other communities in BC with wildfire and tsunami risk face, including:

- a) Identifying and evaluating the capacity of evacuation route options given a demanding scenario.
- b) Methods of communicating evacuation details, such as safe routes, and consistent public messaging. Methods of communication include mass notification systems, social media, radio, first responders door to door and loud hailers, sirens, etc.
- c) Capability of residents for self-evacuation; requirement for local authority assistance.
- d) Need for site personnel to control traffic on evacuation routes.
- e) Consistent emergency messaging from trusted sources
- f) Time required to evacuate the community, as compared with the potential speed of hazard onset.
- g) Simultaneous use of evacuation routes by evacuees and emergency vehicles.
- h) Control of access via routes into the community, and use of a permit system.
- i) Consistent training and terminology
- j) Integrated local and regional evacuation tools and plans

The Project Plan, test materials, and final evacuation plans and reports will be made available to other local authorities and First Nations in British Columbia.

**Partnerships**

The project team will engage relevant community stakeholders in both the local and Regional projects. This will include representatives from police, fire, and other municipal departments, as well as First Nations and Provincial representatives. The regional aspect of the project will partner specifically with the Regional Emergency Management Partnership and all local authorities contributing to the regional initiative.

**10. Evaluation.** How will the project be evaluated? How will performance measures and/or benchmarks be used to measure outcomes? How will this information be used?

Key deliverables and timelines will be agreed upon between the consultant and the local authority. The completion of these deliverables will be monitored and available throughout the delivery phase of this project.

During outreach and consultation activities, all participants will be encouraged to provide input into the efficacy and relevance of materials developed.

The small scale exercise will use a simulated scenario to assess the materials developed and planning assumptions used. Surveys and after action reports will be used after the exercise.

Upon completion of the project, the consultant will produce a report outlining the findings, deliverables and any recommendations for further research or development for both the local authority and the Region.

**11. Additional Information.** Please share any other information you think may help support your submission.

While we are seeking a fully funded grant, we recognize that if grant funding is limited, the scope of work may be adjusted to allow work to progress with a reduced funding amount.

#### SECTION 5: Required Application Materials

Only complete applications will be considered for funding. The following separate attachments are required to be submitted as part of the application:

- Local government Council or Board resolution, or Treaty First Nation resolution, indicating support for the current proposed activities and willingness to provide overall grant management.
- Detailed budget for each component identified in the application. This must clearly identify the CEPF funding request, applicant contribution, and/or other grant funding.


#### SECTION 6: Signature

I certify that: (1) to the best of my knowledge, all information is accurate and (2) the area covered by the proposed project is within our local authority's jurisdiction (or appropriate approvals are in place).

Name: Tanya Patterson

Title: Emergency Program Coordinator

Signature:

  
An electronic or original signature is required.

Date: November 29, 2018

Submit applications to Local Government Program Services, Union of BC Municipalities

E-mail: [cepf@ubcm.ca](mailto:cepf@ubcm.ca)

Mail: 525 Government Street, Victoria, BC, V8V 0A8