

Wireless Public Alerting Service (WPAS) Pilot Project—Pilot Participant Focus Group Consultation Report

Prepared By:
Earncliffe Strategy Group
330 Bay Street, Suite 505
Toronto, Ontario M5H 2S8

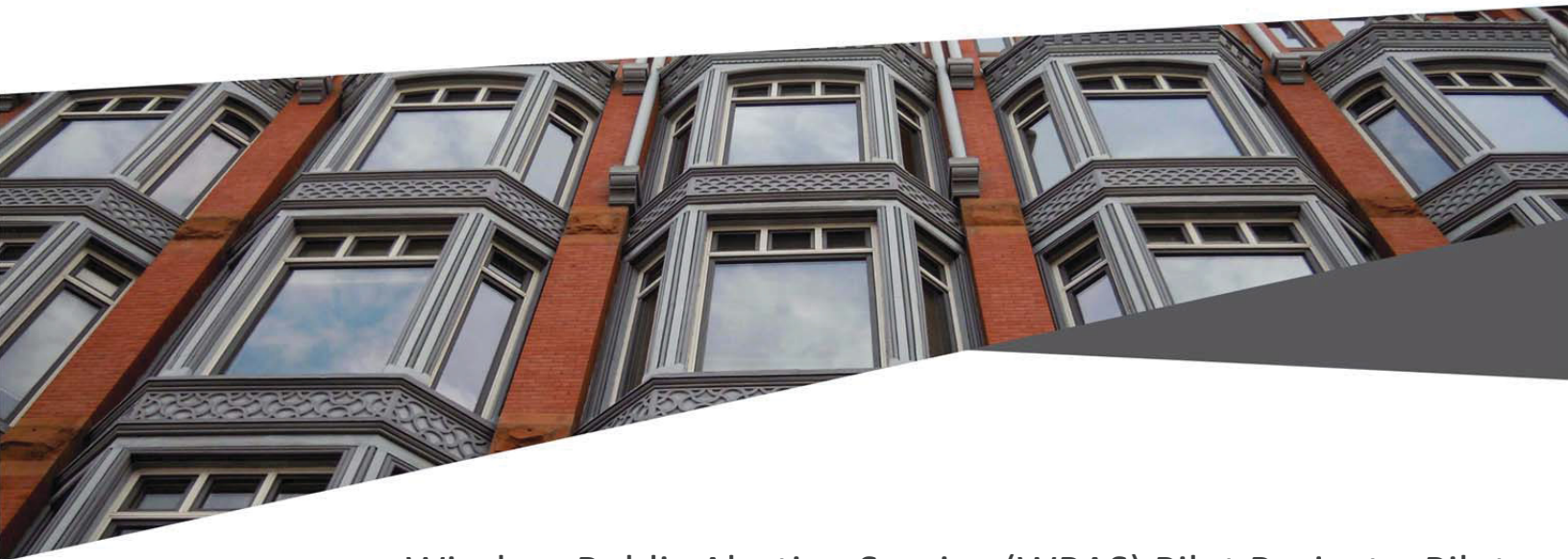
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Prepared for: Ontario Power Generation / Mobility & Wireless Solutions

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Informative Statements

The Wireless Public Alerting Service (WPAS) Development and Demonstration Initiative (WPAS Pilot Project) is supported and funded by the Canadian Safety and Security Program, a federal program led by Defence Research and Development Canada's Centre for Security Science, in partnership with Public Safety Canada. The project is led by Innovation, Science, and Economic Development Canada in collaboration with Public Safety Canada, the Ontario Office of the Fire Marshal and Emergency Management, Ontario Power Generation, Bell Mobility, and Pelmorex Media Inc.

CONTENTS

EXECUTIVE SUMMARY 1

INTRODUCTION 4

DETAILED FINDINGS 5

CONCLUSIONS & RECOMMENDATIONS 12

APPENDIX A: DISCUSSION GUIDE..... 16

EXECUTIVE SUMMARY

Earnscliffe Strategy Group (Earnscliffe) is pleased to present this report to Ontario Power Generation and Mobility & Wireless Solutions summarizing the results of the WPAS Pilot Participant Focus Group Sessions for the Wireless Public Alerting Service (WPAS) Development and Demonstration Initiative.

The Wireless Public Alerting Service (WPAS) Development and Demonstration Initiative (WPAS Pilot Project) conducted a six-month pilot with approximately 85 volunteer pilot participants (recruited directly by the WPAS Project Delivery Team) to test its mobile public alerting system. Following the successful completion of the pilot, WPAS required research to understand pilot participants' experience with the WPAS pilot test; their considerations on the directional (policy) considerations; and, their thoughts on the rollout of a public awareness campaign.

Working in collaboration with the WPAS Project Delivery Team, we conducted a series of six stakeholder consultations. Earnscliffe was responsible for the design, facilitation (including the provision of live streaming), as well as analysis and reporting. The WPAS Project Delivery Team, in turn, was responsible for contacting and recruiting all pilot participants; scheduling the six sessions; and, securing facilities for the sessions.

The consultations took place in communities across the Regional Municipality of Durham: Whitby (October 4); Courtice (October 5); Pickering (October 5); Oshawa (October 6); Whitby (October 6); and, Oshawa (October 7). In each consultation, approximately three to eleven stakeholders participated. The consultation on Friday, October 7th in Oshawa was conducted with Deaf and Hard of Hearing (DHH) persons with the help of a sign language interpreter.

For the purposes of this report, it is important to note that qualitative research is a form of scientific, social, policy and public opinion research. Qualitative research is not designed to help a group reach a consensus or to make decisions, but rather to elicit the full range of ideas, attitudes, experiences and opinions of a selected sample of participants on a defined topic. Because of the small numbers involved the participants cannot be expected to be thoroughly representative in a statistical sense of the larger population from which they are drawn and findings cannot reliably be generalized beyond their number.

The key findings from the research are presented below.

User Experience

- All pilot project participants in every session felt the Wireless Public Alerting Service (WPAS) was a valuable service that should certainly be implemented.
- A fairly high degree of enthusiasm for WPAS was expressed and the system's arrival is greatly anticipated.
- The idea that the wireless system can more subtly geo-target was seen as a particularly valuable characteristic.

- The Canadian Alert Attention Signal (alert tone) and the volume at which it is played are more than sufficient for capturing one’s attention in most circumstances.
- DHH participants made the point that the vibration may not be noticed if the device is in a purse or on a table and that perhaps flashing lights or linking to household alarm system or a wearable device could be incorporated.
- Messages should be stored in intuitive locations, such as the phone’s default text messaging app.
- Participants recommend there be a two-stage acknowledgement in which the first ceases the Canadian Alert Attention Signal and only the second acknowledges receipt of the message itself.
- Consideration should be given to specific circumstances in which the startling nature of the Canadian Alert Attention Signal may be problematic, such as police attempting to be undetected or individuals trying to remain concealed from an active shooter.
- There is a desire for integration of the mobile device’s WPAS alert with vehicle entertainment/information systems.

Policy

- Perhaps the most important policy is ensuring that alerts remain restricted to life-threatening situations.
- Situations such as active shooters, tornadoes, toxic gas, nuclear events and ordered evacuations are all accepted as urgent threat-to-life scenarios that would justify a WPAS alert.
- There is a default preference to be supportive of amber alerts, but the general view was that experience has taught people that they are rarely personally relevant and therefore not treated as urgently as one should treat an imminent threat-to-life situation.
- Participants could accept the inclusion of amber alerts on two conditions: that WPAS means more narrowly geo-targeted amber alerts (making them more likely to be personally relevant); and, that amber alerts can be sent in silence.
- There is widespread concern about how drivers would behave if an alert went off while they were behind the wheel and there is an appetite to learn what the experience has been in jurisdictions where this kind of system is already in use.
- Accessing a WPAS alert deserves the same exemption from distracted driving laws that is granted 911.
- Participants felt that tests would be very effective at teaching citizens about the system and thus felt that few would be necessary, settling on no more than one or two per year.
- There was unanimous and strong agreement that the system must be free for those who receive messages.

- Today’s consumers expect to be able to customize settings of any app on their mobile device and in order to reduce the frustration that may arise, it may be useful to prepare an FAQ that demonstrates an understanding of that desire, but explaining why it cannot be accommodated.

Public Awareness Campaign

- An introduction of WPAS is definitely required and must be undertaken in advance of the launch.
- In announcing the new system, the rationale used in the messaging should be that the lives of you and your loved ones may depend on receiving a warning and minutes may matter.
- Citizens will not only need to know what to do in the event of an alert, but there will also be value in explaining what not to do when it goes off.
- The clear consensus was that this public awareness campaign should be government-branded since it is a government-run service and because that gives it legitimacy.
- Participants recommended collaborating with emergency services (first responders, emergency management professionals) both for disseminating and for endorsement.
- Require carriers to pro-actively educate customers on WPAS.
- The campaign requires diverse and comprehensive placement of the introduction messaging including traditional broadcast and news media, out-of-home placement and social media.
- Seek third parties with whom collaborations can enable access to specific diverse audiences, to help broaden the message delivery.
- Communications should be designed to drive people to an online resource that includes more detailed information on the system.
- DHH participants noted that any video or audio material provided as education, demonstration or training should include ASL (and perhaps SLQ) signing.

INTRODUCTION

Earnscliffe Strategy Group (Earnscliffe) is pleased to present this report to Ontario Power Generation and Mobility & Wireless Solutions summarizing the results of the WPAS Pilot Participant Focus Group Sessions for the into the Wireless Public Alerting Service (WPAS) Development and Demonstration Initiative.

The WPAS Service Development Team conducted a six-month pilot with approximately 85 pilot participants (recruited directly) to test its mobile public alerting system. Following the successful completion of the pilot, WPAS required research to understand pilot participants’ experience with the WPAS pilot test; their considerations on the directional (policy) considerations; and, their thoughts on the rollout of a public awareness campaign.

To meet these objectives, a series of six consultations were conducted with pilot participants. Working in collaboration with the WPAS Project Delivery Team, Earnscliffe was responsible for the design, facilitation (including the provision of live streaming), as well as analysis and reporting. The WPAS Project Delivery Team, in turn, was responsible for contacting and recruiting all pilot participants; scheduling the six sessions; and, securing facilities for the sessions.

The consultations were conducted in communities across the Durham region. The consultation on Friday, October 7th in Oshawa was conducted with Deaf and Hard of Hearing (DHH) persons with the help of a sign language interpreter. The table below outlines the relevant details about each consultation:

Date	Time	Location	Participation
Tuesday, October 4, 2016	9:00 AM	Regional Municipality of Durham Headquarters 605 Rossland Road East, Whitby, ON	11 participants
Wednesday, October 5, 2016	9:00 AM	Ontario Power Generation Darlington Energy Complex 1855 Energy Drive, Courtice, ON	7 participants
	1:00 PM	Ontario Power Generation 889 Brock Road South, Pickering, ON	5 participants
Thursday, October 6, 2016	9:00 AM	UOIT North Campus 2000 Simcoe Street North, Oshawa, ON	8 participants
	1:00 PM	Regional Municipality of Durham Headquarters 605 Rossland Road East, Whitby, ON	8 participants
Friday, October 7, 2016	9:00 AM	Canadian Hearing Society Durham 575 Thornton Road North, Oshawa, ON	3 participants

For the purposes of this report, it is important to note that qualitative research is a form of scientific, social, policy and public opinion research. Qualitative research is not designed to help a group reach a consensus or to make decisions, but rather to elicit the full range of ideas, attitudes, experiences and opinions of a selected sample of participants on a defined topic. Because of the small numbers involved the participants cannot be expected to be thoroughly representative in a statistical sense of the larger population from which they are drawn and findings cannot reliably be generalized beyond their number.

Appended to this report is the discussion guide.

DETAILED FINDINGS

This qualitative report is divided into three sections. The first section presents the findings of the user experience during the pilot; the second section explores views on the directional (policy) considerations; and, the third explores pilot participants' thoughts on the rollout of a public awareness campaign.

Behaviour/Experience

The consultations began with an initial exploratory discussion about pilot participants' experience with the Wireless Public Alerting Service (WPAS).

All of the participants in every session felt this was a valuable service that should certainly be implemented.

Bear in mind, the audience for these consultations were very engaged; all participated in the six-month pilot test.

All participants were familiar with the current system used on television or radio and felt this was a logical, complimentary extension of that system. Many pointed out the difficulty in reaching people through traditional broadcast media channels and volunteered that mobile devices are much more likely to enable instant communication with any desired audience.

Some, particularly those who are responsible for the safety of some population, expressed **a fairly high degree of enthusiasm for the service and greatly anticipate its arrival**. As one put it, "All I could think about was when I can get my hands on the service."

Virtually all of the participants had multiple alert experiences over the six-month pilot testing period and as a collective, each session produced a wealth of feedback based upon a variety of both unique perspective and unique experiences.

There was consensus that **the chosen sound and the volume at which it is played are more than sufficient for capturing one's attention in most circumstances**. Several pointed out that they were startled even after having been trained on what to expect and given advance warning of an imminent alert.

One session was held among DHH participants in consideration of their unique needs. On the alerting, the point was made that the vibration may not be noticed if the device is in a purse or on a table. The hope was that flashing lights could be incorporated or that there could be a linkage to other wireless systems such as the door alert system in their home or a wearable device such as a bracelet or wrist watch.

One valuable piece of feedback that emerged during the discussion of the alert experiences was the way different mobile devices handled the storage and accessibility of the warning messages. Out of a sense of urgency to make the alert tone stop, participants described grabbing their devices as fast as possible and hastily providing whatever acknowledgement was required. However, the acknowledgement was often provided before the user had fully read or understood the information being provided and for some specific devices, the message would disappear from the notification screen.

In these cases, there was a need to subsequently retrieve the message once the alert tone was cancelled and digest the nature of the warning in order to then determine what action, if any, should be taken.

However, **depending on the operating system (OS) of each particular brand of phone used in the pilot test, the message may or may not be stored in intuitive locations** and some participants said they never found where messages were stored. Thus, the alert captures attention, causes an action, but may not necessarily convey the pertinent action required to protect one's life.

As a result, two valuable suggestions were provided for consideration:

- **Store wireless alert message in the phone's default text messaging app; and,**
- **Provide a two-stage acknowledgement in which the first ceases the alert tone, but the message remains visible until a second acknowledgement is provided.**

Relatedly, **participants in every session consistently pointed out a number of specific circumstances in which the startling nature of the Canadian Alert Attention Signal may be problematic.** The most commonly offered scenario was while driving and there were several key concerns raised about that circumstance. First, the alert tone would be distracting – as one put it, "It'll scare the dickens out of (drivers)." Second, that the urge to turn the sound off may cause some people to take some actions that are problematic, such as reaching for or retrieving their mobile device and giving it whatever attention is required to make the sounds stop. Finally, some wondered what the consequences would be of having an earpiece or headphones on when the **Canadian Alert Attention Signal** sounds – worrying about the possible pain and/or potential for hearing damage.

By contrast, if it occurs on a car radio, the sound may be jarring, but the volume can be instantly adjusted and is also followed by whatever information the listener/driver requires in order to stay as safe as possible. It also does not require drivers to interact with a secondary device to receive pertinent information. In fact, many participants suggested that a directive to turn on your radio could help alleviate some of the concerns around alerts and driving.

Discussions also elicited the desire for integration of the mobile device and vehicle entertainment/information systems. Participants hoped that Bluetooth integration may help them manage message alerts on their mobile devices without the need to physically access the device itself. Also, some pointed out their reaction may be to turn on a radio if they hear (and can disable) the mobile device's alert tone, thus accessing the information on what is happening and what steps they need to take without having to read the message on their device. Much of this talk was of an aspirational nature, with participants hoping that the system will ultimately be developed with such integration in mind.

Another scenario that was brought up by participants was when the instantly loud alert tone goes off during sleeping hours. The Canadian Alert Attention Signal is necessary and participants agreed they do not want to remain in an unsafe location if they need to be roused and go elsewhere as soon as possible (i.e., if a tornado is approaching), but several mentioned that alert features on mobile devices can often start with lower volumes and climb to louder volumes if the alert remains unacknowledged. These were described as alerting users in a way that is effective without being unnecessarily irritating, jarring or startling. Thus, **one suggestion that frequently arose regarding the alert tone was that the sound gradually increase in volume** or that there be an option to have it do so.

The idea that the wireless system can more subtly geo-target was seen as a valuable characteristic in a number of ways. Several noted that during the course of the pilot testing period, they had travelled from one area of testing to another and noticed receiving messages specific to a new area they had entered. This was recognized as a proof that the geo-targeting was indeed working and more finite than current TV and radio broadcasting warnings. Participants also commonly noted that more specific geo-targeting means that fewer people would be exposed to irrelevant warnings (warnings that may explicitly be for people living in a certain area, but currently unavoidably disseminated to far more individuals than just those in harm’s way), then there is a hope that it will mean less perceptions of “crying wolf” and more assumption that an alert will be personally relevant and therefore given prompt attention. Those who would be using the system in order to alert populations (rather than simply users who receive the messages) identified the geo-targeting as a valuable feature to more confidently and precisely communicate with the specific neighbourhoods at risk.

There was also a wealth of feedback related to the disruptiveness of the alerts that had more to do with the fact that these pilot test participants were typically the only one in their vicinity whose mobile device was playing an alarming sound. Participants gave examples of being in meetings or at events and causing interruptions and at times, embarrassment. However, in a future scenario where all mobile devices in the vicinity will be going off simultaneously, this uniquely individual disruptiveness will be much less of a factor and in the event that it is, the assumption is that the warning will be something urgent and relevant for any others who feel irritated by the intrusion. Thus, while these comments certainly arose, the participants also reached a consensus that it would not be relevant to the actual implementation of the service.

RECOMMENDATIONS: BEHAVIOUR/EXPERIENCE
OVERALL
<ul style="list-style-type: none"> ▪ Provide a two-stage acknowledgement to permit ceasing the Canadian Alert Attention Signal yet keeping the message visible ▪ Store wireless alert message in the phone’s default text messaging area ▪ Provide a graduated rising volume for the Canadian Alert Attention Signal
CULTURALLY DEAF AND HARD OF HEARING SPECIFIC
<ul style="list-style-type: none"> ▪ Link WPAS with in-home alerting solutions ▪ Link WPAS with wearable technology (i.e. bracelets and wrist watches) ▪ Enable the flashlight so that it blinks and sends a visual alert in addition to vibration

Policy

The consultations investigated the participants’ recommendation for what rules, guidelines or policies should govern WPAS and how it is used.

Each session included a discussion on the policies that should govern the WPAS and the feedback provided in each meeting was remarkable in its consistency.

According to participants, **one of the most important policies that should be put in place is ensuring that alerts remain restricted to life-threatening situations.** The main rationale for such a restriction is the concern that people will learn to ignore alerts if they are exposed to a series of alerts that prove irrelevant. As one put it, “It’s important not to over-alert to avoid complacency.” Some participants familiar with U.S. implementation offered constructive criticism of the over-use of alerting in that country.

Participants were easily able to reach consensus that situations such as active shooters, tornadoes, toxic gas, nuclear events and ordered evacuations are all urgent threat-to-life scenarios that would justify a WPAS alert. While agreeing that these scenarios are appropriate for WPAS alerts, a few participants reiterated skepticism about whether it would remain reserved exclusively for life-threatening situations over the long-term “that’ll expand down the road. Believe me!”

One potential use where there was less immediate consensus was over amber alerts. It was a topic that was driven more by emotion than many other topics discussed in the sessions. Participants certainly all agreed that they want to do whatever they can to help resolve an amber alert situation and for several, the immediate position was that WPAS should include amber alerts among the situations that qualify.

However, others raised opposing views on that inclusion even while they demonstrated feeling immense empathy and willingness to come to the aid of the police in such a situation. The rational arguments against including amber alerts typically included that the experience with alerts is that they are rarely if ever relevant to the situation of the recipient. As participants have noticed with each successive amber alert that, despite quickly making note of the alert and being prepared to be on the lookout, there has never been a chance where they as an individual were anywhere in a geographic area where they could actually help resolve the situation. As a result, participants expressed a tendency to pay less and less attention to the alerts – something which they would definitely not want to have happen with WPAS alerts.

Since there was a desire to be of assistance, two suggestions were commonly offered. One was to use the geo-targeting of WPAS to specifically recruit the assistance of people who are physically situated where there is a realistic chance of being of assistance. Another was to use WPAS to send an amber alert without the audio signal, reserving that for threats to the recipients’ lives.

If it is truly the case that it is impossible to more narrowly geo-target amber alerts and impossible to send a silent alert, more participants tended to prefer that amber alerts not be included as a WPAS alert, often pointing out that amber alerts already arrive over multiple sources of both traditional and social media, so perhaps there is not a need to include this one. One point of note for communications purposes, participants tended to assume and some even firmly believe that the system could accommodate such options as sending either a silent alert and a sonic alert, depending on the nature of the situation. If they are mistaken, it may be worthwhile developing FAQ information to get ahead of any criticism that the system is poorly designed by explaining why such an option is impossible.

On the topic of driving, **participants were clearly concerned about how drivers would behave if an alert went off while they were behind the wheel.** One sentiment that sums up what was often heard was, “If it went off during rush-hour on the 401, I can only imagine the carnage because everyone is going to grab it...and they’re going to contact their family and friends even if they are driving.” Demonstrating an ability to be candid, most agreed their reaction would be to reach for their device despite knowing it constitutes distracted driving and is a real threat to their safety and the safety of others. For one reason, the Canadian Alert Attention Signal is simply too maddening to ignore. For another, they would be anxious to know whether they needed to immediately alter their route (i.e., to avoid a tornado). As well, some indicated they would be worried about loved ones and would want to know what is going on to alleviate their concern or stimulate some action to protect them.

Typically, this part of the discussion included speculation over the long-term integration of WPAS alerting with automotive entertainment systems. On the assumption that such automotive evolution will occur, some participants noted this would be a problem that would likely dissipate over time.

In several sessions, **participants wondered whether there is any empirical evidence of what drivers typically do and what the consequences are when an alert is issued.** The suggestion was that reviewing such evidence would be helpful for developing guidelines relating to drivers.

Regardless of the guidance that will be provided to drivers, **participants agreed that accessing a WPAS alert deserves the same exemption from distracted driving laws that is granted 911.**

Participants felt that tests would be very effective at teaching citizens about the system and thus felt that few would be necessary, settling on no more than one or two per year. When prompted, the concept of five tests a year was virtually unanimously seen as excessive. A few pointed out that unlike TV or radio, given the tendency to constantly have one's mobile in their possession, alerts will be noticed by most citizens every time it is tested. In most sessions, some participant recommended that the first year or two of implementation may require more frequent tests, but perhaps taper the frequency of testing after the first year.

Some participants offered the suggestion that carriers provide texts to customers either giving advance warning of an imminent test or to provide follow-up explaining that the alert that was just issued was a test. Participants also felt there was a role for carriers to provide in informing customers about the alerts at time of purchase – whether in store demonstration or initial test/text as part of the phone setup.

In addition, **participants advised that careful consideration be given to time of day at which tests would take place** with most agreeing it would be wise to avoid rush hour, or times when students walk to/from school. Further, some suggested scheduling should be sensitive to shift workers. With all of that in mind, many seemed to resign themselves to the dinner hour (i.e., 7 p.m.) being the most appropriate.

The final finding on the issue of testing emerged when participants were prompted on whether their opinions would change if they knew the testing was not required for technical performance evaluation, but was strictly being done for public awareness. If that is the case, participants only became more adamant that limited testing was required, particularly over the long-term.

There was unanimous and strong agreement that the system must be free for those who receive messages. Further, some participants pointed out a need to explicitly communicate this point to reduce the fear of rising costs among those with fixed or low incomes such as the elderly and students.

In the sessions that included representatives of police services, **there was a recommendation that certain professionals be able to be exempt from the Canadian Alert Attention Signal (alert tone).** Upon hearing the point raised, participants consistently agreed that for police or others whose lives could be put at risk, or who may lose a tactical advantage, by a loud alert tone emanating from their phone, there should be special consideration for being able to mute the sound.

Similarly, **concern was raised about students hiding inside a locked down school being discovered as a result of the alert tone going off on their phone.** There was less consensus on how to avoid this, but it certainly was agreed that it needs to be avoided.

Finally, the point was raised earlier in the context of a specific finding, but it was clear from discussions that **today's consumers expect to be able to customize settings of any app on their mobile device** and many betrayed an assumption that this app would be customizable to some degree. All discussions found participants

making recommendations for particular kinds of personalization. On the understanding that personalized adjustments to any settings are not feasible, **it may be useful to prepare an FAQ that demonstrates an understanding of that desire, but explaining why it cannot be accommodated.**

RECOMMENDATIONS: POLICY
OVERALL
<ul style="list-style-type: none">▪ Maintain strict discipline that WPAS will only be used for situations involving threat-to-life▪ Testing can and should be limited to no more than twice per year▪ Like 911, WPAS usage should be exempt from distracted driving laws▪ Ensure there is absolutely no cost to consumers/recipients▪ Mitigate the situational risk for harm caused by the Canadian Alert Attention Signal among first responders or those in hiding
CULTURALLY DEAF AND HARD OF HEARING SPECIFIC
<ul style="list-style-type: none">▪ Views on policy did not differ from those expressed by hearing participants

Public Awareness Campaign

The consultations concluded with a review of recommendations for how to raise public awareness of the new Wireless Public Alerting Service (WPAS).

Discussions about the need for and nature of a public awareness campaign drew a wealth of valuable advice that was remarkably consistent from session to session.

Participants agreed that an introduction of WPAS is definitely required and must be undertaken in advance of the launch. The view was that the system is valuable and important and all effort should be made to avoid any surprise, panic or confusion when the system is finally online.

Asked to provide messaging, participants offered numerous versions of the same theme: the lives of you and your loved ones may depend on receiving a warning and minutes may matter. Participants felt people will need to know what the system is, how it will be used and who will be responsible for managing it. The facts that it will be used exclusively in the event of a threat-to-life and that it has the ability to geo-target in order to ensure the messages only go to people who are actually at risk should also be explained. These will help ensure that any alert received is given the urgent attention it requires.

There were suggestions that a communications campaign provide real-life examples of the ONLY kinds of scenarios in which it would be used. In addition, it was suggested that people be informed of the speed of system (instant) and the fact that information will be exactly what emergency officials need each recipient to know (no miscommunication due to media interpretation).

Participants indicated that citizens will not only need to know what to do in the event of an alert, but there will also be value in explaining what NOT to do when you it goes off (i.e., don't slam on the brakes; if you're driving, turn on the radio; remain calm; don't call 911; don't call your cell provider).

In terms of the overall branding of the system and the campaign, the clear consensus was that this should be government-branded since it is a government-run service and because that gives it legitimacy. That being said,

every group produced recommendations on collaborations/co-branding that would be appropriate, welcome and undoubtedly help improve the effectiveness of the education campaign.

Along these lines, **participants often recommended collaborating with emergency services (first responders, emergency management professionals) both for disseminating and for endorsement.** This collaboration is particularly helpful for reinforcing that this is only used when there is a life-threatening risk in your area so people should take any alert they receive seriously.

Another common recommendation was to **require carriers to pro-actively educate customers on WPAS.** Suggestions included providing communications in a variety of ways including point-of-sale explanations, signage, consumer-acknowledgment waivers, bill inserts, and introductory texts with a link to a website to find out more.

Beyond these two common collaborations, sessions also produced a variety that were mentioned less frequently, but provide evidence of how extensive they felt the public awareness effort needs to be. These included suggestions to leverage schools to begin long-term generational education and consider creative collaborations with campuses, grocery stores, insurance companies and any other organization that can help get the word out.

In terms of specific vehicles for communicating, discussions found **participants were in agreement that the campaign requires diverse and comprehensive placement of the introduction messaging.** Recommendations for placement included traditional broadcast media (TV, radio, news organizations), out-of-home media (billboards, transit shelters and vehicles), texts from carriers and social media. As one participant summed it up, “Use every line of communications at first to announce the roll-out.” The advice was that it is important to accept that messaging and approach may need to be tailored to suit a variety of subsets of the population.

Some participants offered some additional creative concepts for campaign tactics designed to build a new habit. For example, in more than one session there was a suggestion to launch an annual reminder campaign such as those used for smoke detectors.

One or two participants also pointed out that travellers arriving within range of the system would benefit from billboards or some other sort of signage or message, in order to educate them on what may occur and what to do if an alert is sent to them.

Participants felt that while these executions themselves should include messaging to some degree, **there was also a clear recommendation that any communications be designed to drive people to an online resource that includes more detailed information on the system** (what it is for, how it works, who has control over it, how to use it, what it will provide), video examples of the experience, FAQ (types of alerts, things that won’t trigger an alert, privacy, cost to citizens, whether it requires data plan) and other sorts of information that may help build understanding of and confidence in this valuable service.

DHH participants noted that any video or audio material provided as education, demonstration or training should include ASL (and perhaps SLQ) signing.

Following the initial exercise eliciting unaided suggestions for a public awareness campaign (marketing strategy), stakeholders were asked to evaluate a series of proposed outreach ideas. The following illustrates reactions to these ideas. They are displayed in order of those who felt each was a “very effective” idea (sorted strongest to weakest).

Your provincial government could run a paid advertising campaign on television, radio and newspapers announcing the new System.		
Very effective	22 of 44	▪ The sense among participants was that this is necessary and it was assumed to be part of the plan.
Somewhat effective	17 of 44	
Somewhat ineffective	5 of 44	
Very ineffective	0 of 44	

The government of Canada could run a paid advertising campaign on television, radio and newspapers announcing the new System.		
Very effective	22 of 44	▪ The sense among participants was that this is necessary and it was assumed to be part of the plan.
Somewhat effective	16 of 44	
Somewhat ineffective	5 of 44	
Very ineffective	1 of 44	

All those involved could start using social media like Facebook and Twitter to spread the word about Wireless alerts.		
Very effective	18 of 44	▪ Social media was widely noted as a channel that must be used, although constructive criticism was offered to ensure that messages be tailored to line up with both target audience needs and social media channel norms.
Somewhat effective	18 of 44	
Somewhat ineffective	6 of 44	
Very ineffective	2 of 44	

The people managing Wireless Public Alerts could produce a video that shows what happens when a wireless alert is issued and post in on a well-publicized website.		
Very effective	13 of 44	▪ The notion of a video was met with some enthusiasm and many participants had suggestions for content (real-life examples) and tone (serious), but it was tempered with some doubt over whether the creative would be done well or up to standards that people find worthy of watching.
Somewhat effective	22 of 44	
Somewhat ineffective	8 of 44	
Very ineffective	1 of 44	

The people managing Wireless Public Alerts could set up a website describing how Wireless Alerts work and encourage people to go to it by taking out billboards and bus shelter advertising.		
Very effective	9 of 44	▪ Although effectiveness ratings for the idea of a website are relatively low compared to other approaches tested, there was unanimous agreement that a website is required. The lower ratings have more to do with the perception of how effective websites are as compared to advertising or public outreach campaigns.
Somewhat effective	23 of 44	
Somewhat ineffective	10 of 44	
Very ineffective	2 of 44	

The people managing Wireless Public Alerts would do interviews with print, and broadcast journalists to let people know about the system.		
Very effective	6 of 44	<ul style="list-style-type: none"> Lower effectiveness ratings here had to do with the pervasive view that traditional media are reaching fewer and fewer people over time. The consensus was that earned media should certainly be part of the communications plan, but on its own it has relatively lower levels of effectiveness than other approaches tested.
Somewhat effective	29 of 44	
Somewhat ineffective	5 of 44	
Very ineffective	4 of 44	

The wireless telephone companies could include information describing how Wireless Alerts work, in the monthly billing material they send to their customers.		
Very effective	6 of 44	<ul style="list-style-type: none"> All participants agreed that communications about WPAS should be included in monthly bills, but the effectiveness of this approach was rated lower on the basis of the fact that most feel bill inserts either go ignored or are not even received by those who use electronic billing.
Somewhat effective	19 of 44	
Somewhat ineffective	11 of 44	
Very ineffective	8 of 44	

RECOMMENDATIONS: PUBLIC AWARENESS CAMPAIGN		
<i>OVERALL</i>		
<ul style="list-style-type: none"> An intensive pre-launch campaign is required, exploiting all variety of communications channels Campaign should be government-branded Main message should be that a WPAS alert can save the lives of you and your loved ones and deserves urgent attention Partnerships, endorsements and collaborations are required, particularly those involving carriers, first responders, emergency management professionals, campuses, and school boards Campaign should announce impending launch of the new system and drive people to a site that provides greater detail and answers all questions 		
<i>CULTURALLY DEAF AND HARD OF HEARING SPECIFIC</i>		
<ul style="list-style-type: none"> Any video or audio communications should include ASL and ideally, SQL translation 		

CONCLUSIONS & RECOMMENDATIONS

In summary, participants in the pilot program were overwhelmingly supportive of the development of the WPAS service and they look forward to its launch with anticipation. Those in emergency services are particularly keen to be able to exploit it to assist in managing future emergencies.

Discussions on the system, the policies that should govern it and how to educate the public on it were robust and fairly consistent, producing a wealth of feedback and guidance.

On the functionality of the system itself, with few exceptions easily excused, participants felt the system worked very well in terms of capturing their attention and much of the feedback was around whether the Canadian Alert Attention Signal could be programmed to escalate rather than be at full volume immediately, in order to avoid unnecessary, undesirable startling. DHH participants recommended the incorporation of flashing and/or the ability to relay a signal to wearable devices or the home alerting system.

Most participants consistently and easily received whatever messaging accompanied each alert, although there appears to be a preference for any mobile OS to store messages in the area where texts are stored by default, in order to ensure it is as easy as possible for users to retrieve the message after they have disabled the Canadian Alert Attention Signal by acknowledging receipt.

There were two recommendations that tie both the volume and message retrieval findings together:

- Provide a two-stage acknowledgement in which the first ceases the Canadian Alert Attention Signal, but the message remains visible until a second acknowledgement is provided; and,
- Store wireless alert messages in the phone's default text messaging app for easy retrieval at an appropriate time after acknowledging to cease the alert sound.

On the policies that should govern the use of the system, the main recommendations from participants are:

- Ensure that alerts remain exclusively restricted to life-threatening situations such as active shooters, tornadoes, toxic gas, nuclear events and ordered evacuations;
- If amber alerts are to be included, they should be more specifically geo-targeted and/or they should not be delivered with the Canadian Alert Attention Signal;
- Testing for public awareness-raising purposes can and should be limited to no more than twice a year, particularly beyond the first year and the chosen hour needs to be carefully considered to cause the least unintended consequences, with 7 p.m. being more often recommended than any other specific hour;
- Viewing a WPAS Alert Message while driving should be granted an exemption from distracted driving laws;
- Ensure the system is absolutely free of charge to mobile users / recipients; and,
- Carefully consider the impact of the Canadian Alert Attention Signal on recipients that may put be at greater risk due to the sound itself, such as police officers or students hiding in a lock-down situation.

In terms of communicating about and educating on the new WPAS service, participants were of the unanimous view that this initiative requires a rather intensive public education campaign – one that combines the exploitation of traditional broadcast media, out-of-home media and social media with tailored messaging to suit each method and a variety of audiences with very different communications needs and behaviours.

In addition, the clear recommendation was that this campaign begin well in advance of the launch of the system, in order to avoid confusion or any other avoidable unpleasant repercussions.

Among the more specific recommendations for a public education campaign were:

- The fundamental message to be delivered about the new system is that the lives of you and your loved ones may depend on receiving a warning and minutes may matter;
- The campaign should be government-branded, but will be much more effective if there are collaborations and co-branding with partners who are either carriers (particularly, providing point-of-sale education); credible in the realm of managing emergency situations (such as police or emergency preparedness officials); or, are valuable intermediaries for connecting with specific audiences (campus organizations, school boards, retail chains, etc.);
- Communications should all be designed to announce the coming of the new system and drive people to an online resource that includes more detailed information on the system including, but not necessarily limited to explanation of what it is for, how it works, who has control over it, how to use it, what it will provide; video examples of the experience; FAQ; and other sorts of information that may help build understanding of and confidence in this valuable service.
- Any video or audio material provided as education, demonstration or training should include ASL (and perhaps an option for SLQ) signing.

APPENDIX A: DISCUSSION GUIDE

User Experience

- Overall, how would you describe your experience participating in the Wireless Public Alerting Service (WPAS) Pilot program? Why do you say that?
- What was the single best thing about the experience? What was the single worst thing?

- [HANDS UP] Before you became part of the Pilot program, were you aware of the Canadian Public Alerts System that operates on radio and television broadcasts?
- Has being part of this Pilot Program changed the way you view Public Alerts? How so?
- Once alerts can be issued on your wireless phones, do you think this will be significantly better, somewhat better, no different, somewhat worse or significantly worse than the current system? In what way(s) will this be better or worse?
- What was the reaction of family, friends or co-workers who may have been around you when the alerts test went off?
 - Was the reaction different depending on where you were when the alerts test went off?

- [HANDS UP] How many of you were in your car when the alerts test went off?
 - What did you do when the alert test went off?
PROBE: Ignored it; pulled off the road, looked at the device while driving
 - Currently there is something called Distracted Driving Laws, which makes it against the law to text or talk on your phone while driving. In certain emergencies, like having to call 911, these laws do not apply. Do you think Wireless Alerts should also be exempt from Distracted Driving Laws?
- What time of day do you think is best to issue the Alerts test? Why do you feel that time is best?
- Over the course of the Pilot Program, did any of you become more likely to have your phone with you at all times, in case an alerts test went off?

Policy

Based on this pilot project - and sometime next year - a national system of wireless alerts will likely be rolled out and real alerts (not just the tests that you have been receiving) will be issued whenever they occur across Canada. All new wireless phones will be equipped with an alert capability at no extra cost to the consumer.

Once the system is up and running, it will have the capability of issuing 31 different kinds of alerts.

- Do you think that receiving all of these alerts should be mandatory or that people should be able to program their phones so that they can opt-out from receiving some or even all of these alerts?

Let's talk in a little more detail about Amber Alerts – these are alerts that are issued by police services when a child has been abducted and it is believed that his or her life is in grave danger.

- [HANDS UP] Who thinks receiving Amber Alerts should be mandatory?
- [HANDS UP] Who thinks you should be able to opt out of receiving Amber Alerts?
 - What is the main reason that some of you thought Amber Alerts should be mandatory/able to opt out?
 - And should they be mandatory ONLY in the geographic area where the child was abducted and is in danger or in a broader geographic area? Province-wide? Nation-wide?

- In the instance of mandatory alerts, who believes that these should supersede your wireless device settings and who believes they should not – in other words, when these alerts are issued, your device would go off, even if your phone is set to silent mode?
 - Why do you feel that way?
 - Now let's say you received a few of these alerts and they were mandatory... What would you do if you received an alert for
 - Terrorism?
 - A tornado?
 - An industrial accident?
- PROBE: Call 911, turn on the television, call friends or family, go to a website, go to a public place etc.

Under the full system, Alert tests – like the ones you've received while participating in the Pilot Project - will still be issued. This is necessary to make sure the system is working and to raise awareness about the system.

- In your view should these tests be mandatory or that you should be able to opt out from receiving them?
- And how many times per year do you think it is reasonable to issue these tests?
- What do you think of the idea of issuing 5 Alert test in the first year the Service is in operation and then scaling back – to let's say 2 – in years thereafter?

Public Awareness Campaign

- Who do you think is behind the Wireless Public Alerts System? In other words, who decided we should have a national wireless public alerts system?
- Is this a system that is essential to public and person safety, important but not essential, not very important or a waste of time and money?
- Given your experience with the Pilot Program, what do you think is the most effective way to let the public know about the new Canadian Wireless Public Alerts System?

HANDOUT

- If you personally were tasked with trying to convince a neighbour that wireless public alerting is something they should get involved with, what would be the argument you would make?
- How important or unimportant do you think it is that there is a public awareness campaign to explain how Public Alerting works, what it means and what you should do in the event of an Alert?
 - Why is this important/unimportant to have a public awareness campaign?

HANDOUT

- How effective or ineffective do you think the following ways would be of making people aware of the new national Wireless Public Alerts System?
 - The wireless telephone companies could include information describing how Wireless Alerts work, in the monthly billing material they send to their customers.
 - The government of Canada could run a paid advertising campaign on television, radio and newspapers announcing the new System.
 - Your provincial government could run a paid advertising campaign on television, radio and newspapers announcing the new System.
 - The people managing Wireless Public Alerts could produce a video that shows what happens when a wireless alert is issued and post it on a well publicized website.

- The people managing Wireless Public Alerts could set up a website describing how Wireless Alerts work and encourage people to go to it by taking out billboards and bus shelter advertising.
 - All those involved could start using social media like Facebook and Twitter to spread the word about Wireless alerts.
 - The people managing Wireless Public Alerts would do interviews with print, and broadcast journalists to let people know about the system.
- And how important or unimportant do you think it is that people know that the Wireless Public Alerting Services is managed by your provincial government and supported by the federal and municipal governments?