



**Written Submission for the Pre-Budget
Consultations in Advance of the 2020 Budget**

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List of Recommendations

- **Recommendation 1:** CNIB Foundation recommends the Government of Canada invest \$12 million over 4 years to transition the 13,000 Canadians with print disabilities who are receiving *DAISY* audio CDs through Canada Post onto a direct to download model using refurbished smartphones.
- **Recommendation 2:** CNIB Foundation recommends the Government of Canada donate smartphones to CNIB's Phone it Forward program as current government smartphones are replaced with newer technology.

About CNIB

Celebrating 100 years in 2018, CNIB is a non-profit organization driven to change what it is to be blind today. We deliver innovative programs and powerful advocacy that empowers people impacted by blindness to live their dreams and tear down barriers to inclusion. Our work is powered by a network of volunteers, donors and partners from coast to coast to coast.

Our work – and our impact – takes many forms. Through Vision Loss Rehabilitation Canada, a new health services organization operated by CNIB, we provide personalized rehabilitation services designed to enhance independence, safety and mobility after a loss of sight. Meanwhile, CNIB Foundation offers community-based services that empower Canadians who are blind or partially sighted to lead rich, full lives, and move us toward a more inclusive world.

Background

Many people don't realize the tremendous impact modern smartphones have in the lives of individuals who are blind or partially sighted. Today, accessible smartphone apps make it possible for people with sight loss to do all kinds of things that may have seemed challenging before.

Smartphones also open a world of literature to Canadians with print disabilities who are unable to read or handle conventional print materials. Accessible audio formats present print materials by having it read aloud by a reading device such as a smartphone or *DAISY* audio player. *DAISY* (Digital Accessible Information System) is a National Information Standards Organization technical standard for digital audio books, periodicals, and computerized text and is designed to be a complete audio substitute for print material.

About Phone it Forward

From school to work to life in the community, smartphones empower people with sight loss with unprecedented levels of information and independence. However, the full-time employment rate for Canadians with sight loss is only 28 percent – making accessing and affording a mobile device difficult for many people who are blind or partially sighted.

Phone it Forward is one of CNIB's newest programs, aimed at collecting and refurbishing used smartphones or tablets and then giving them free of charge to Canadians who are blind, partially sighted, or deafblind. With a smartphone or tablet loaded with a suite of curated accessible apps and one-on-one or small group training, participants can communicate via phone, text, email, voicemail, access information through the internet, travel and navigate exterior spaces, and listen to audio books, music, or podcasts.

Transitioning to direct to player downloads

CNIB Foundation is the contractor that produces *DAISY* CDs for the Centre for Equitable Library Access (CELA). *DAISY* CDs are distributed as Free Matter for the Blind through Canada Post.

In 2018-19, 13,000 Canadians with a print disability received material through Canada Post, totaling over 522,000 physical CDs shipped to users through Canada Post and 473,000 returned to CNIB.

With a Canada Post Express Post shipment averaging \$20 per CD¹ to a library user, the total expenditure to the Government of Canada through Canada Post is approximately \$9.95 million per year.

The number of physical CDs produced and distributed by CNIB and Canada Post to CELA customers has declined significantly in recent years with many Canadians preferring direct to player download over physical CDs. Direct to player downloads work on smartphone apps, or internet-connected *DAISY* audio players. In addition to being more convenient to consumers, direct to player downloads are also significantly less expensive than CD delivery.

Despite how life-changing smartphones can be for people who are blind or partially sighted many people with sight loss still don't own one – at least not one that's advanced enough to consume audio literature or help them in their daily lives. For some people, it's hard enough to make ends meet, let alone purchase the latest smartphone.

Therefore, CNIB Foundation recommends the Government of Canada invest \$12 million over 4 years in CNIB's Phone it Forward program. This investment will transition the 13,000 Canadians with print disabilities who are receiving *DAISY* audio CDs through Canada Post onto a direct to download model using refurbished smartphones.

This investment will be used to provide 9,000 Canadians with print disabilities with smartphones through CNIB's Phone it Forward program. Users can access direct to player downloads of *DAISY* materials, thus virtually eliminating the manufacturing of CDs and all related shipping costs. CNIB will also provide each Phone it Forward participant with individualized training on how to use the smartphone, and outfit it with a suite of accessible apps that will make it possible for people with sight loss to do all kinds of things that may have been challenging before, such as travelling alone safely with GPS, and accessing assistance from sighted volunteers. An investment in CNIB's Phone it Forward program will bridge the gap between those who can and want to transition to direct to player downloads, but are still using CDs because of financial considerations.

However, CNIB recognizes that smartphones are not a viable option for all Canadians with print disabilities. This \$12 million investment also includes transitioning 2,000 Canadians from physical CDs to *DAISY* players, which still allow for direct to player downloads². CNIB estimates approximately 2,000 users will remain on CD service because of connectivity considerations in rural and remote communities that limit their ability to download *DAISY* files onto a smartphone or *DAISY* reader.

¹ Express Post is calculated based on a CD with an envelope weighing 22 grams. Actual price is based on distance. A CD from Toronto to Kingston is \$7.96 and a CD from Toronto to Prince George is \$13.73. Ten dollars per CD is an estimated average, as 40 percent of CDs stay in Ontario. CDs are then returned to CNIB through another Express Post shipment.

² While some provinces provide financial support to purchase assistive technology and equipment, there is no uniform practice across the country.

The need for refurbished smartphones

CNIB has identified a great need for refurbished smartphones. Consultations for our 2018-2022 strategic plan titled Bold Dreams Bright Futures revealed 97 percent of clients surveyed saw accessible technology as important in allowing them to lead an independent life. Seventy percent of clients surveyed identify the cost of accessible technologies as a barrier to access.

An initial investment of \$12 million will see virtually all the 13,000 CELA library users who are receiving material through Canada Post transitioned onto a direct to download model using a refurbished smartphone. As refurbished smartphones have a shorter lifespan than new smartphones, CNIB estimates our deployed smartphones will need to be updated every 2 years.

Therefore, CNIB is also asking the Government of Canada to donate smartphones to CNIB's Phone it Forward program from departments where a secure data wipe adhering to ADISA Standards mitigates any national security concerns. These refurbished phones will be used to update CNIB's fleet of Phone it Forward smartphones as they need replacing.

CNIB also has a great demand for refurbished smartphones from Canadians who are blind or partially sighted that are not captured in the 13,000 CELA users looking to transition to direct to player audio downloads. Though we receive smartphone donations through community giving, third party events and direct mail from corporations and individuals, demand continues to exceed supply. Refurbished Government of Canada smartphones would also be used to fill this gap and put a smartphone in the hands of every Canadian who is blind or partially sighted who wants one.

Environmental impact

Transitioning CELA library users to direct to download models virtually eliminates the environmental impact of manufacturing, producing, and shipping CDs for Canadians with a print disability. In turn, this will greatly reduce the carbon footprint of the CNIB Foundation and Canada Post as fewer physical materials are produced and shipped across the country using manufacturing processes and vehicles that are reliant on fossil fuels.

Additionally, CDs cannot be recycled because they're made of a mix of materials that are difficult to separate into their component parts for recycling. However, because not every Canadian who is blind or partially sighted has the financial means to purchase a smartphone, CNIB Foundation is still producing 522,000 CDs per year for CELA library customers. Ultimately, these CDs end up in the landfill.

At the same time, many Government of Canada departments are upgrading their smartphones each year to newer models. This leaves thousands of smartphones in working order that could be reused in CNIB's Phone it Forward program to fill the gap between Canadians with a print disability who want to move towards a direct to player model, but are unable to afford the latest technology.

According to 2018 research published in the *Journal of Cleaner Production*, a smartphone's energy cost comes from production.³ Manufacturing accounts for 85-95 percent of a smartphone's carbon footprint, because the chip and the motherboard are made up of precious metals that are mined at a high cost.⁴ Further, the study found that less than one percent of smartphones get recycled.⁵

CNIB Foundation is the only organization that is collecting and refurbishing smartphones or tablets to keep them out of the landfill, while changing the life of someone who is blind or partially sighted.

CNIB's Phone it Forward program leverages the remaining lifespan of a smartphone when the current user upgrades to a newer model. Transitioning virtually all the 13,000 CELA library users who are receiving material through Canada Post onto a direct to download model using a refurbished smartphone also saves Canada Post millions in shipping costs and keeps smartphones out of landfills while they still work.

When the refurbished smartphone has reached the end of its lifecycle, Phone it Forward participants will send the phone back to CNIB. CNIB is committed to recycling the smartphone through a registered recycler certified to R2 and NAID standards.

Conclusion

Technology can level the playing field for Canadians who are blind or partially sighted, but only when it's accessible, available and affordable. That's why CNIB has started Phone it Forward, a program aimed at putting refurbished smartphones into the hands of Canadians who are blind or partially sighted.

CNIB is still producing 522,000 CDs per year for Canadians with print disabilities who are customers of CELA. This practice costs Canada Post millions in shipping, creates waste, and is less convenient for consumers. An investment in CNIB's Phone it Forward program will virtually eliminate the manufacturing and distribution required to produce and ship CDs to Canadians with print disabilities. This shift will see a significant reduction in the carbon footprint of Canada Post and the CNIB Foundation.

Therefore, CNIB Foundation recommends the Government of Canada invest \$12 million over 4 years to transition virtually all the 13,000 CELA library users who are receiving *DAISY* audio CDs through Canada Post onto a direct to download model using a refurbished smartphone.

CNIB Foundation also recommends the Government of Canada donate all departmental smartphones to CNIB as they transition to newer models, so CNIB can upgrade deployed smartphones and ensure the sustainability of the Phone it Forward program.

³ Lotfi Belkhir and Ahmed Elmelig. Assessing ICT global emissions footprint: Trends to 2040 & recommendations. *Journal of Cleaner Production*. 2018

⁴ Ibid.

⁵ Ibid.