**Prototype Ideas for hackathon: Co-design session 2**

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| **#** | **IDEA** | **DESCRIPTION** | **GROUP NAME** |
| 1 | [**Smart intersection**](https://cities.inclusivedesign.ca/hackathon/prd/audible-incoming-traffic-warnings/)  [**(Selected for Hackathon)**](https://cities.inclusivedesign.ca/hackathon/prd/audible-incoming-traffic-warnings/) | Poles that have adjustable APS buttons that are at waist level for people in WC or using walker to reach easily. Crosswalk marked with a yellow strip for blind/partially sighted people and vibrates/announces when to cross. The intersection detects person crossing and changes traffic light when person has crossed.The intersection announces the name of the streets at the intersection and allows for pedestrians to ask for directions when navigating the streets ( kiosk or intercom system). | Boulevard |
| 2 | Dynamic Bus/streetcar stops | Stops at the side of the street at a crosswalk instead of in the middle, and bus clearly displays and announces the route it will take so passengers are not confused. The Bus/streetcar stop will announce arrival of a bus/streetcar and flash a red light to signal to the oncoming traffic when people need to cross the street after getting off the transit. what side of the street, how far it is from the cross walk, what if their location could be adjusted based on demand | Boulevard |
| 3 | [**Smart Tactile Strip with audio feedback beacons**](https://cities.inclusivedesign.ca/hackathon/prd/tactile-sidewalk-wayfinding-strip/)  [**(Selected for Hackathon)**](https://cities.inclusivedesign.ca/hackathon/prd/tactile-sidewalk-wayfinding-strip/) | Tactile strip that extends down the centre of the sidewalk, and is distinct from tactile strip on sidewalk and the vehicle lane. Beacons located close to this strip throughout the city that provide auditory description of the location where the individual is standing (street name, shops etc). Street announces a new intersection. | Boulevard |
| 4 | Multimodal navigation app | The beacons can connect to a mobile app that would provide ongoing information about features at a particular location and alert the individual if they are veering off the path. Announces the destination. incorporates different language (ASL+other language and text) | Boulevard |
| 5 | [**Dynamic Braille Trail**](https://cities.inclusivedesign.ca/hackathon/prd/tactile-sidewalk-wayfinding-strip/)  [**(Selected for Hackathon)**](https://cities.inclusivedesign.ca/hackathon/prd/tactile-sidewalk-wayfinding-strip/) | Pavers with divots to allow raise or remove tactile bumps at edges of dynamic streets. walkway is outlined with "braille" and the road is smooth, can change as the street changes, like the LED system on the prototype pavers, changes to pathway based on time/people | Sweet Streets |
| 6 | Kiosk - Avatar wayfinding | A multi-sensory interface located near the intersections and various other locations to provide support to help pedestrian better navigate space safely with other modes of moving through the space. The interface will be A.I. based to help provide information on surroundings as well as help different user style interact (Braille, ASL, CC, facial recognition, etc.) - interface can pair you with a street for safe wayfinding | Relink |
| 7 | Smart garbage bins | pedestrians are able to easily locate them and operate them. | Relink |
| 8 | Community Focused Neighbourhood | colour and texture coded sidewalks based on cardinal directions, information air movement, and landmarks for navigation is placed at entrance of every building and provided through multiple modalities | Side Thoughts |
| 9 | Heat map app | shows which areas are the safest, shows entry to areas, have a bird eye view option | Side Thoughts |
| 10 | Dynamic Street | Location of bus stops can change, bus stops, bike racks, garbage bins can be moved to another location in times of construction. Allocate different areas for different uses of streets (cars, slow walkers, fast walkers, bikes..) | Harmony |
| 11 | Smart parking | parking spot with sensors that will be triggered and alarm if the person double parks to discipline users. | Harmony |
| 12 | Smart sidewalk | Separate lanes for fast/slow walkers and each lane is lined with sensors that detect walking speed and suggest switching lanes if not matching the designated pace of the lanes ( i.e Express lane vs slow). Prompts pedestrian to show "walkers license" and fines people for not having the training. | Harmony |
| 13 | Smart intersection | lights change in response to real-time data on pedestrians and vehicles at the intersection ( i.e extend lights to allow pedestrians to cross) and announce when safe to cross.Video projection of cars that run the red light or pedestrian/cars who cross when not supposed to. Point sytem to give incentive to each pedestrian who waits for the lights to change before crossings ( point that can be used in grocery stores or restaurants etc..) optimized intersection with staggered stops for bikes and cars to prioritize traffic and control use of intersection | Harmony |
| 14 | Smart Intersection App | App in car to interact with smart intersection, provide more information on what is happening at the intersection, pay toll fares | Harmony |
| 15 | Movable Landmarks | landmarks that can be moved around, but each landmark is the same as other landmarks. The landmarks are locatable and tell you information about what is around the landmark | Sweet Streets |
| 16 | Dynamic street hexagon | Tactile variable surface embedded with hole and retractable braille trail that can be placed on in a walking area or removed with technology. Hole filled with moveable landmark with button that can be pushed to provide location details to pedestrian | Sweet Streets |