

EXPERIENTIAL SITE VISIT 01: JOHN & BEN

DATE: Thursday 2nd June 2011, 10am
LOCALITY: Coolibah Crescent, Bayswater to Bayswater Station and Shopping Centre
MOBILITY AID: Electric Wheelchair
UNDERTAKEN WITH: Bonnie Rosen

John is in his early sixties. He has lived with Cerebral Palsy and used an electric wheelchair all his life. John lives with four other men in Coolibah Crescent in Bayswater. He sells the Big Issue in Bayswater Shopping Centre and accesses a day service on weekdays. He travels early in the morning and late at night so lighting is very important to him. He leads an independent life, travelling throughout the Bayswater shopping area, and often catches the train from the Bayswater Station to many locations.

>> What role do accessible, safe footpaths play in John's life?

"John's independence is restricted. He requires a support person to go out with him in order to travel safely, but there isn't enough funding for one-to-one support on a full time basis. If John hasn't got someone to travel with him, he has to take a leap of faith in the ability to travel safely due to the number of hazards in the community. The number of times John and his friends become stuck would reduce if Bayswater was more accessible. The people we support enjoy their independence. It would be great if accessibility throughout Knox was enhanced, and path quality improved, so that people with disabilities could be more independent, with minimal support."

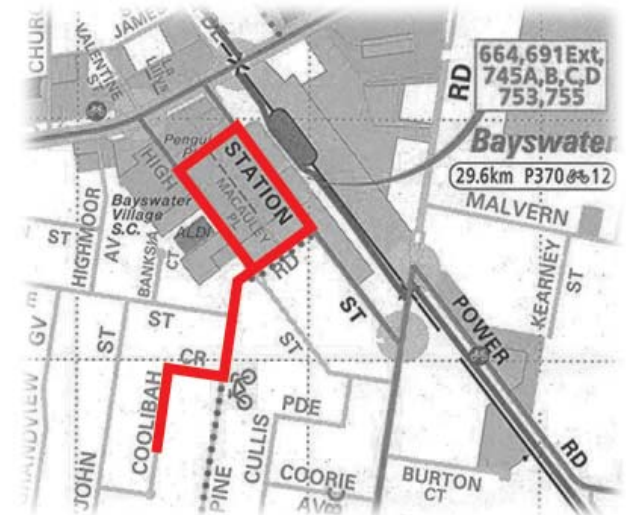
Ben Prys, John's support person

>> What sorts of issues does John encounter along his journey?

- Drop offs on the edges of the footpath often cause John's wheelchair wheels to get stuck
- Trees/ bushes that overhang the footpath make it hard to navigate, and often scratch John
- Often paths are not wide enough to accommodate both John and a passing person
- Steep inclines and gradients are difficult for John to get up
- Bumpy paths cause John's wheelchair to jolt uncomfortably
- Steep, bumpy kerbs often hinder control of John's wheelchair
- Sharp turns create a danger of John's wheelchair tipping over
- Lack of pedestrian crossings present a danger to John's safety



"John's independence is restricted. If he hasn't got someone to travel with him, he has to take a leap of faith..."



>> Journey of issues encountered by John

DROP OFFS ON PATH EDGES

John's wheelchair often drops off the side of the footpath where there is a height difference between the path and grass level [FIGURE 1]. This often causes John's wheelchair to get stuck and it can take him a while to get out [FIGURE 2]. Often John cannot get out and he becomes stranded. Most people in the community help people like John when they become stranded but sometimes in bad weather John or his friends could be stuck for some time. Rain can cause electrical damage to the wheelchair.

The ditches also damage the Castor wheels on the front and back of his wheelchair. When damage occurs, the castors usually have chunks taken out of the wheel which reduces their life span [FIGURE 3].

OVERHANGING BUSHES & TREES

Trees and bushes (on both Council land and private property) often overhang the footpath and are hard for John to avoid without going off the path. As a result, the trees often scratch John's face [FIGURE 4].

NARROW PATHS

Often paths are not wide enough to accommodate John and his wheelchair plus another passing pedestrian [FIGURE 5]. John is a courteous man and usually moves over to let other people pass. There is little room for John to do this without going onto the grass.

STEEP PATH/ KERB GRADIENTS

Steep inclines and gradients are difficult for John to get up in his wheelchair. John's wheelchair has a power limits on it, so if the inclines are too steep, John can get stuck.

Also, a support person pushing someone in a wheelchair can find it difficult to push the weight of an adult in a chair up the incline [FIGURE 6].



>> Journey of issues encountered continued...

BUMPY PATHS

Bumpy surfaces caused by lips, joins, deviations, cracks and weeds in the footpath cause John's wheelchair to bump and jolt. This is not only uncomfortable for John, but damages and reduces the life span of his wheelchair [FIGURE 7].

STEEP, BUMPY KERBS

Steep, bumpy kerbs often hinder control of John's wheelchair. When there are large bumps/ lips in the kerb, John's wheelchair is jolted and he then has trouble controlling his hand movements/ his wheelchair. It can take John some time to regain control of his chair, which often means he is on the road for a period of time. In some locations, Council has done works to reduce the lips in the kerb by grinding them down, which creates a much smoother journey for John [FIGURE 8].

SHARP/ TIGHT TURNS AND BLIND CORNERS

John is in danger of tipping over in his wheelchair when turns are too sharp or corners have minimal room for manoeuvring. Sometimes John or his other friends that use wheelchairs end up on their side, often on the road. Blind corners are also a problem for John [FIGURE 9].

LACK OF PEDESTRIAN CROSSINGS

As is the case with many pedestrians on foot, John often takes risks to cross roads where there is no pedestrian crossing, to save time on his journey. Access across Station Street, Bayswater (from Pine Road to Bayswater Station) is a particular location where John regularly crosses in an unsafe manner [FIGURE 10].

Crossing at the roundabout at the intersection of Pine Road/ High Street, Bayswater was also hazardous for John [FIGURE 11].

PATH MAINTENANCE

Mud is an issue where sealed footpaths are not provided along John's journey, or there is lack of path maintenance. When John enters shops or his own house mud can cover every area John has tracked in his wheelchair [FIGURE 12].



EXPERIENTIAL SITE VISIT 02: LEONIE

DATE: Tuesday 19th April, 930am
LOCALITY: Sykes Avenue, Ferntree Gully to Boronia Station/ shops
MOBILITY AID: Electric Wheelchair
UNDERTAKEN WITH: Kate Pleban

Leonie and her granddaughter visit the Boronia shops at least once a week. Usually they travel together on Leonie's electric wheelchair for the entire 5km round journey. Sometimes Leonie and her granddaughter choose to take the bus for part of the journey.

From Sykes Avenue, Ferntree Gully Leonie and her granddaughter travel north down Burke Road, across Fairpark Reserve, up Hazelwood Road, then east down Springfield Road. At this point, they often get the bus to Boronia Station which leaves from the corner of Springfield Road and Narcissus Avenue. Alternatively, they continue their journey towards the north up Narcissus Avenue, and then east along Boronia Road to the shops.

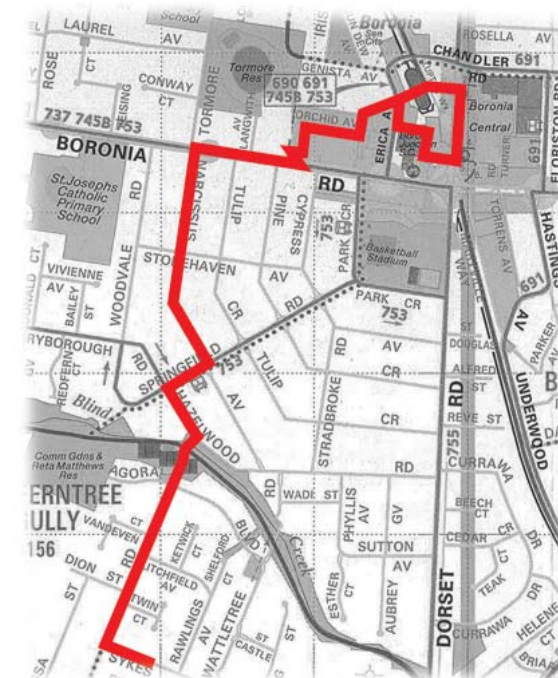


>> What role do accessible, safe footpaths play in Leonie's life?

Leonie is very active and likes to get out and about in her wheelchair on a regular basis. She loves living in Ferntree Gully and thinks that the path network is already fairly good. Leonie thinks that accessibility throughout Knox could be improved if more thought was put into footpath design for people with disabilities early on in the process. Leonie is an active user of the public transport system, particularly the bus network, so accessible bus stops are very important to her. Since Leonie has been travelling with her granddaughter safety has become more important to her.

>> What sorts of issues does Leonie encounter along her journey?

- Gaps on the edges of the footpath often cause Leonie's wheelchair wheels to drop off
- Trees/ bushes that overhang the footpath make it difficult for Leonie to navigate
- Bumpy paths cause Leonie's wheelchair to jolt uncomfortably
- Steep, bumpy kerbs are hard to get up and often Leonie's wheels often get stuck spinning
- Lack of paths make accessing bus stops difficult, particularly when the grass is wet
- Sharp turns create a danger of Leonie's wheelchair tipping over
- Lack of drop kerbs often make Leonie's journey unnecessarily long



>> Journey of issues encountered by Leonie

DROP OFFS ON PATH EDGES

Gaps between the footpath and grass are an issue for Leonie as her wheelchair tyres often drop off the edge [FIGURE 1]. Sometimes Leonie gets stuck because her tyres spin and her wheelchair cannot gain friction to get going again.

OVERHANGING BUSHES & TREES

Trees and bushes (on both Council land and private property) often overhang the footpath and are hard for Leonie to avoid without having to go off the path and onto the grass [FIGURE 2]. This is an issue because when the grass is wet her wheelchair loses friction, her wheels spin, and she sometimes gets stuck.

Often the gap between overgrown planting and the road is just wide enough to squeeze her wheelchair in between, which makes navigating difficult [FIGURE 3]. This particular example is outside Boronia Junction shopping centre on Erica Avenue, Boronia.

BUMPY PATHS

Bumpy surfaces caused by lips, joins, deviations, cracks and weeds in the footpath cause Leonie's wheelchair to bump and jolt. This is not only uncomfortable for Leonie, but damages and reduces the life span of her wheelchair [FIGURE 4].

STEEP, BUMPY KERBS

Steep, bumpy kerbs with high lips are a big issue along the path network for Leonie. She is always leaning forward and looking down in order to safely navigate the kerb and avoid damage to the footplate on her wheelchair [FIGURE 5]. When Leonie encounters kerbs that have high lips, her wheels often get stuck and start to spin, causing her wheelchair to lose momentum and become stuck [FIGURE 6]. This means that Leonie is often left stranded out on the road for a short period of time.



>> Journey of issues encountered continued...

STEEP PATH GRADIENTS

Steep path gradients are a particular issue along busy roads where room for error is reduced and therefore safety is compromised [FIGURE 7]. Paths that have steep gradients also present an issue for Leonie because she has to tilt her wheelchair seat back so that her footplate doesn't hit the ground [FIGURE 8].

CROSSING POINTS THAT AREN'T STRAIGHT

Leonie finds crossing points that are not 'square' with the path are difficult to navigate. Because of the odd angle of the kerb ramp, she often feels as though her wheelchair might tip [FIGURE 9]. This issue could be avoided if the kerb ramp was not located directly at the corner of the intersection, and designed to be 'square' with the path.

SHORT CROSSING TIMES/ NARROW TRAFFIC ISLANDS

Leonie feels vulnerable when she has to wait in the middle of the road on a traffic island, particularly on a busy road such as Boronia Road. A lot of the time, the traffic island is just wide enough to accommodate the length of her wheelchair [FIGURE 10]. The need to wait on the island is due to the fact that the lights do not stay green long enough for Leonie to cross the entire distance.

BLIND CORNERS

Blind corners present a significant danger to Leonie in her wheelchair. There are many examples of blind corners throughout Knox, where Leonie's line of sight is impeded by vegetation, buildings or brick walls. This means that Leonie has to inch out into traffic to see if there are any cars coming. This particular example is in the car park at the Boronia Road shops [FIGURE 11]. There are also a few examples of where narrow, blind corners occur on the footpath [FIGURE 12].



>> Journey of issues encountered continued...

INACCESSIBLE BUS STOPS

Leonie likes to travel on the bus, but she finds that some bus stops in her local area are not accessible for people using mobility aids. In some locations concrete slabs have been installed next to the bus stop, but there are often no paths to link to the stop. This means that it is difficult for Leonie to access the bus stop, particularly in the winter when the grass is wet and muddy. In this particular example on Springfield Road, Boronia, Leonie prefers to wait 10 metres ahead of the bus stop in a private driveway [FIGURE 13]. Similarly, when Leonie is travelling home on the bus, she always asks the bus driver to drop her further ahead of the bus stop in the private driveway, to avoid going on the grass where her wheels spin and she is at risk of becoming stuck.

Leonie always has to call the bus company prior to taking the bus to check that it will be a low-floor bus [FIGURE 14].

LACK OF PATHS ON DESIRE LINES

At some points in her journey, Leonie encounters areas where no path is provided for her to travel on. This means that Leonie has to travel on the grass, putting her at risk of becoming stuck; or on the road, where her safety is at risk. These particular examples are on Springfield Road, Boronia [FIGURE 15] and exiting the Woolworths car park at Boronia, onto Dorset Road [FIGURE 16].

LACK OF DROP KERBS/ RAMPS ON DESIRE LINES

Often Leonie reaches a point where she would like to travel but cannot because no drop kerb/ ramp has been installed [FIGURE 17]. This means that she cannot often take short-cuts that other pedestrians may take. Often Leonie will eventually find a way to access where she wants to go, but it means that her journey is unnecessarily long [FIGURE 18]. In some cases, in order to get to where she wants to go, she needs to go against the incoming traffic for a short period of time. This particular example [FIGURES 17 & 18] is at the Boronia Road shops, where Leonie has to enter the shopping area from Boronia Road via the vehicle access point.



>> Journey of issues encountered continued...

LACK OF SAFE ACCESS THROUGH CAR PARKING AREAS

In some car parking areas throughout Knox, Leonie feels vulnerable in her wheelchair. Often there is no designated path for pedestrians where they can feel safe while moving through the car park. In this particular example at Boronia Village, narrow platforms are provided for pedestrians in an attempt to improve safety and access [FIGURE 19]. However, these platforms are difficult for Leonie to navigate in her wheelchair and add to Leonie's sense of unease.

NARROW PATHS

There are a few occasions where Leonie has to navigate along paths that are not much wider than her wheelchair. This is particularly the case in and around the older shopping areas at Boronia [FIGURE 20].

OBSTACLES/ CLUTTER ON THE PATH

Sometimes Leonie finds it difficult to navigate when there is substantial clutter on the footpath. Objects blocking access on the footpath include rubbish bins, cars parked over driveways, stray trolleys, café chairs and tables, and footpath sale items [FIGURES 21 & 22]. Leonie doesn't find this to be a major problem for her, but mentions that people who are older, or have a mental disability (as well as physical) would struggle to navigate in these situations.

GENERAL MAINTENANCE

Leonie mentioned that general maintenance and care of paths, naturestrips and private gardens could be improved throughout the area. Glass on the path is a particular problem for Leonie as it often punctures the tyres on her wheelchair. Other minor issues include loose stones/ gravel, leaf litter and overgrown naturestrips [FIGURES 23 & 24].



EXPERIENTIAL SITE VISIT 03: ALAN

DATE: Wednesday 27th April 2011, 10am
LOCALITY: Fulham Road (Peppertree Hill Village) - Kellets Road – Dandelion Drive – Wellington Road – Stud Road – Stud Park Shopping Centre
MOBILITY AID: Scooter
UNDERTAKEN WITH: Kate Pleban

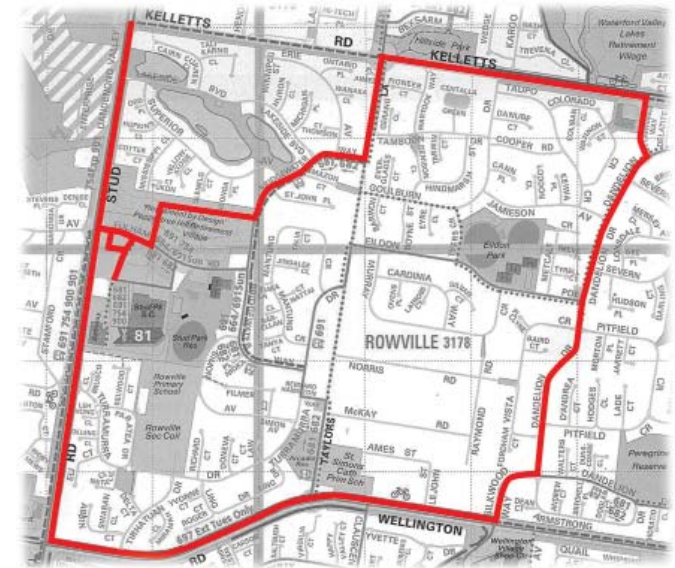
Alan lives in Peppertree Hill Village in Rowville. He owns two scooters which he regularly uses to travel around the local area. Sometimes Alan uses other methods of transport, but he prefers to stay around the local area, using his scooter as much as possible. Alan regularly visits the Stud Park Shopping Centre and the shops along Fulham Road. He also likes to go on longer journeys with his friends. He travels along the shared path network frequently.

>> What role do accessible, safe footpaths play in Alan’s life?

Alan is confident on his scooter, and very familiar with his local area. He thoroughly enjoys travelling on his scooter and is very knowledgeable on scooter technology and parts. Alan often travels alongside other friends who are also scooter users, so continuous, wide paths are very important to him. Alan worries about the damage caused to the life span of his scooter by bumps along the path network. He often travels long distances in his scooter so he would like to see more toilets and recharge points along the path network.

>> What sorts of issues does Alan encounter along his journey?

- Level changes/ steep bumpy kerbs make the journey uncomfortable for Alan and reduce the life span of his scooters
- Raised traffic islands are often hard to navigate, steep, narrow and unsafe
- Overgrown trees and bushes that take up the footpath space
- Paths and crossing points that end abruptly/ lack of access ramps
- Lack of paths in areas where Alan would like to travel on his scooter
- Lack of safe access routes through car parking areas
- Narrow paths and tight turns
- Large drop offs on path edges



>> Journey of issues encountered by Alan

STEEP, BUMPY KERBS

A particular issue for Alan along the path network are kerbs that are steep and bumpy [FIGURE 1]. Where there are level changes, for example at a kerb ramp or traffic island, Alan's scooter bumps and jolts. This is not only uncomfortable for Alan, but it damages and reduces the life span of his scooter. Alan has had to adjust his driving techniques in order to reduce the impact on his scooter.

DESIGN OF TRAFFIC ISLANDS

Alan pointed out many examples of traffic islands that he finds uncomfortable to travel over in his scooter because of the level changes (as discussed above) [FIGURE 2]. As a result, Alan often avoids traffic islands altogether, choosing instead to go around the island, putting his safety at risk. Alan prefers traffic islands that are 'cut out' to be flush with the road, so there is no need for his scooter to navigate bumps and level changes. There are examples of this treatment throughout the local area, as shown here in Lakeside Boulevard, Rowville [FIGURE 3].

Cut out traffic islands are also preferred by Alan as the risk of rolling forward off the median and into the flow of traffic is substantially reduced. Another issue raised by Alan was the narrow width of traffic islands, where sometimes his scooter overhangs onto the road.

OVERHANGING BUSHES & TREES

There were many examples where trees and bushes (on both Council land and private property) were overhanging and obstructing the footpath, making it difficult for Alan to avoid without having to go off the path and onto the grass [FIGURES 4, 5 & 6].



>> Journey of issues encountered continued...

CROSSING POINTS THAT AREN'T STRAIGHT

Alan finds crossing points that are not 'square' with the path are difficult to navigate. Because of the odd angle of the kerb ramp, he feels as though he is at risk of tipping [FIGURE 7]. This issue could be avoided if the kerb ramp was not located directly at the corner of the intersection, and designed to be 'square' with the path.

LACK OF DROP KERBS/ RAMPS ON DESIRE LINES

Often Alan comes across footpaths or crossing points that end abruptly and prevent him from being able to go any further because no drop kerb or ramp has been installed. This is a particular issue alongside the strip of shops on the northern side of Fulham Road [FIGURES 8 & 9]. Another key example is on the road leading into Stud Park Shopping Centre from Fulham Road, where no drop kerb is provided in the central median/ traffic island [FIGURE 10].

LACK OF PATHS ON DESIRE LINES

Alan sometimes encounters areas where no path is provided for him to travel on. Alan would like to be able to get to Caribbean Gardens and some of the shops alongside the west of Stud Road in his scooter, but lack of paths in the area make it impossible for him to get there. This particular example is at the intersection of Kelletts Road and Stud Road, where no path or drop kerb is provided at the western end of the crossing point [FIGURE 11].

STEEP PATH GRADIENTS

Steep path gradients are a particular issue along busy roads where room for error is reduced and therefore Alan's safety is compromised. Often on steep gradients Alan's scooter becomes stuck and its wheels will spin. This particular example is on Fulham Road, outside Stud Park Shopping Centre [FIGURE 12].



>> Journey of issues encountered continued...

LACK OF SAFE ACCESS THROUGH CAR PARKING AREAS

Alan pointed out some examples of car parking areas where he feels unsafe and vulnerable in his scooter. Often there is no designated path for pedestrians where they can feel safe while moving through the car park. This particular example is outside the shops on the northern side of Fulham Road [FIGURE 13].

INACCESSIBLE/ UNSAFE PATHS

Alan is a regular user of the Stud Road shared path network. He finds the width and surface of the path great for travelling along. However Alan feels uneasy about travelling along the section of the path outside the Stud Park Veterinary Clinic. In this section, the path becomes narrow, bumpy and steep [FIGURE 14]. There are also sharp turns and blind corners. When travelling across the steep vehicular entry point to the site, Alan has to lean heavily onto his right side in order to avoid tipping [FIGURES 15 & 16]. This section of the path is highly dangerous and almost untrafficable. There have been many attempts to provide a solution to the hazard, but these are 'quick fixes' that have still not resulted in a safe pathway.

NARROW PATHS

There are a few occasions where Alan has to navigate along paths that are not much wider than his scooter. Often there is not enough room for a pedestrian to pass Alan on his scooter. This is particularly the case along the older shopping areas located on the northern side of Fulham Road [FIGURE 17], and on some sections of the path running alongside Stud Road. Wide, roomy paths are important for Alan as he often travels with a friend in a scooter and they like to travel side by side where possible.

TIGHT/ NARROW TURNS

There are some points along Alan's journey where he has to make tight turns in his scooter. This becomes an issue mostly when Alan is travelling on his larger scooter. This particular example is on the ramp outside the Rowville Health Centre on St Lawrence Way [FIGURE 18].



>> Journey of issues encountered continued...

BLIND CORNERS

Alan encounters many examples where his line of sight is impeded by vegetation. This presents a significant danger to Alan in his scooter as he has to inch out into traffic to be able to see if there are any cars coming. This is an issue at many of the vehicle crossover points along the shared path network on Stud Road and Kelletts Road [FIGURE 19].

DROP OFFS ON PATH EDGES

Gaps between the footpath and grass are an issue for Alan as his scooter tyres often drop off the edge [FIGURE 20]. This is not a major issue for Alan as he is able to get out from his scooter and lift it back onto the path.

GENERAL PATH MAINTENANCE

Bumpy surfaces caused by lips, joints, deviations, cracks and weeds in the footpath cause Alan's wheelchair to bump and jolt [FIGURE 21].

OBSTACLES/ CLUTTER ON THE PATH

Sometimes Alan finds it difficult to get past obstacles and clutter on the path such as rubbish bins and outdoor café tables/ chairs. Cars parked across driveways are often an issue when travelling down residential streets [FIGURE 22].

OTHER ISSUES ENCOUNTERED

Sand, leaf litter, and loose stones/ gravel often cause the tyres on Alan's scooter to lose friction and spin [FIGURE 23].

The spacing between fencing barriers along the path network are often very narrow, and Alan has trouble maneuvering his scooter through/around them. Alan feels as though many of them are not correctly spaced to meet the 1400mm clear access standard. Particular examples were pointed out along the Stud Road shared path network [FIGURE 24].

Alan also mentioned the lack of public toilets in the area as an issue, particularly along the existing path network.



EXPERIENTIAL SITE VISIT 04: Alana

DATE: Wednesday 4th May, 1pm
LOCALITY: Boronia Village, Boronia Station, Knox Leisureworks Swimming Pool, Tormore Reserve, Narcissus Avenue.
MOBILITY AID: Electric Wheelchair
UNDERTAKEN WITH: Bonnie Rosen

Alana is a young woman in her late twenties who has been using an electric wheelchair since she was in her early twenties. She suffers from depression, osteoporosis and has a mild intellectual disability. Alana does voluntary work at a nearby primary school, participates in adult skills training, exercises at Knox Leisureworks and visits family and friends in the area.

>> What role do accessible, safe footpaths play in Alana’s life?

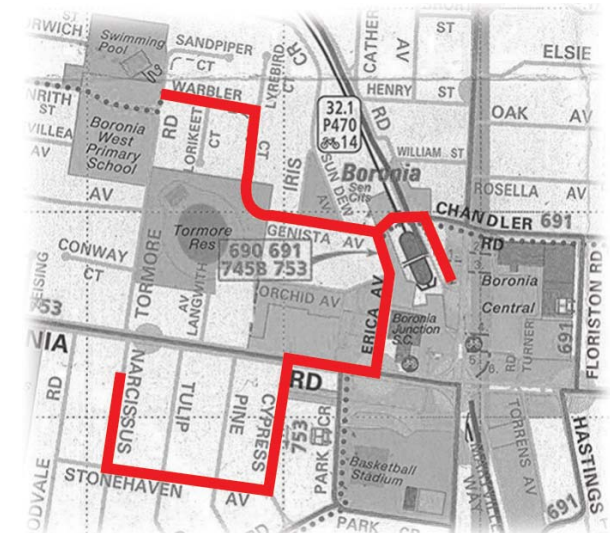
Alana likes to get out and about in her wheelchair on a regular basis. The footpath network determines where she can and can’t go. She often feels vulnerable in her wheelchair, so safety is very important to her. Alana regularly uses public transport, including trains and buses, and has a regular taxi driver who transports her where she needs to go. She often gets angry and frustrated using public transport as “getting to the bus stop is really hard”.

>> What sorts of issues does Alana encounter along her journey?

- Discontinuous paths – paths that end abruptly
- Lack of paths on key desire lines
- Obstacles on the path/ poorly located infrastructure in the middle of the path
- Ditches along path edges put Alana at risk of tipping over in her wheelchair
- Bumpy paths reduce the battery life of Alana’s wheelchair and cause her back to ache
- Steep, bumpy kerbs are difficult for Alana to get up in her wheelchair
- Traffic islands with level changes put Alana at risk of rolling onto the road
- Sharp, tight turns put Alana at risk of tipping over in her wheelchair
- Narrow paths/ entrance ways
- Inaccessible shops



“I have to try and find somewhere safe to cross, then watch for cars at the same time as negotiating the path. It is very tiring... some days I think it’s just not worth it...”



>> Journey of issues encountered by Alana

DISCONTINUOUS PATHS

At some points in her journey, Alana encounters areas where no path is provided for her to travel on. This means that Alana has to travel on the grass, putting her at risk of becoming stuck; or on the road, where her safety is at risk.

Because the path doesn't connect through the reserve on Glenista Avenue, Alana has to either travel on the grass or on the road, where she doesn't feel safe [FIGURE 1].

The footpath opposite the basketball Stadium on Park Crescent, Boronia is discontinuous [FIGURE 2]. The first time Alana used this path she didn't know it would end suddenly and when she got to the end she had difficulty turning her wheelchair around.

LACK OF PATHS ON DESIRE LINES

Often there is no path provided at all. Here footpaths are provided on one side of the road only [FIGURE 3]. This means that Alana has to cross the road to get to the footpath, and then cross the road when she reaches her destination.

OBSTACLES ON THE PATH

Often Alana encounters physical obstacles along the path that make navigating difficult. Trees and bushes (on both Council land and private property) often overhang the footpath and are hard for Alana to avoid without having to go off the path and onto the grass [FIGURE 4].

This is an issue because when the grass is wet her wheelchair loses friction, her wheels spin, and she sometimes gets stuck. Other obstacles include poorly located infrastructure such as light poles [FIGURE 5] and fences/barriers [FIGURE 6] in the middle of desire lines.



>> Journey of issues encountered continued...

DITCHES ALONG PATH EDGES

Drainage channels along the edges of a path are an issue for Alana as her wheelchair tyres often drop off into the ditch [FIGURE 7]. This can cause Alana's wheelchair to become stuck or tip over.

BUMPY PATHS

Bumpy surfaces caused by lips, joints, deviations, cracks and weeds in the footpath cause Alana's wheelchair to bump and jolt [FIGURE 8]. This is not only uncomfortable for Alana, but damages and reduces the life span of her wheelchair. Bumps along the path network are also caused by broken tactile paving, which Alana finds difficult to navigate in her wheelchair [FIGURE 9].

Alana would like to see some of the paths throughout Knox better maintained. She notes that when travelling along poor quality/uneven paths her wheelchair uses more power. This drains the battery life and therefore shortens the available time Alana has to travel.

STEEP, BUMPY KERBS

Steep, bumpy kerbs with high lips are a big issue along the path network for Alana [FIGURE 10]. When she encounters kerbs that have high lips, her wheels often get stuck and start to spin, causing her wheelchair to lose momentum and become stuck. Bumps make Alana's back sore and have previously caused costly damages to the footplate of her wheelchair.

DESIGN OF CROSSING POINTS

Alana pointed out examples of crossing points where she feels scared. Traffic islands where there are level changes are a particular issue because they are difficult for Alana to roll up and she is at risk of rolling backwards or forwards while waiting in the middle of a busy intersection [FIGURE 11]. Alana likes crossing points "where you can't feel the difference between the road and the footpath" [FIGURE 12].



>> Journey of issues encountered continued...

SHARP/ TIGHT TURNS

Alana is in danger of tipping over in her wheelchair when turns are too sharp. This is particularly a problem where a sharp turn is also on a steep incline [FIGURE 13].

NARROW PATHS

There are a few occasions where Alana has to navigate along paths that are not much wider than her scooter [FIGURE 14]. Wide, roomy paths are important for Alana as she often travels with someone, and they like to travel side by side and talk. *“I like it when we can travel side by side and talk. If my mother is behind me, I can’t hear what she is saying”.*

NARROW ENTRANCES

Alana finds that some of the entrance ways are very narrow [FIGURE 15]. *“I would hate to have a wider chair”.*

INACCESSIBLE SHOPS

Alana cannot go into some of the shops in Knox because they are not accessible for people using mobility aids [FIGURE 16]. *“If I can’t get into the shop it means I can’t shop there”.*

STEEP PATH GRADIENTS

Paths that have steep inclines present an issue for Alana because her wheelchair tips forward and she sometimes scrapes and damages the front of her chair [FIGURE 17].

EXPERIENCING PUBLIC TRANSPORT

Alana often gets angry and frustrated when using public transport [FIGURE 18]. She finds getting to the bus stop really hard and that the attitudes of the drivers are often rude. *“I used to feel so confident but not anymore because of the way the drivers treat me. They make me feel like a piece of dirt.”*

