

Guide Dogs for the Blind Association

Before and After Surveys of Changes to New Road Brighton

New Road is a small street in Brighton which is home to the Theatre Royal, Pavilion Dome and a range of shops and services. In the early part of 2007, the local authority carried out an 'enhancement scheme' which involved removing the existing footways and kerbs and providing a shared surface area throughout New Road.

Guide Dogs was invited by Brighton and Hove Council to carry out independent "before and after" surveys with blind and partially sighted people in order to assess the experiences of these individuals before and after the shared surface design scheme was implemented. Participants were first asked to navigate through New Road in its old traditional street layout with kerbs and pavements and then compare this to the new shared surface area.

Participants

Eleven participants took part in the before and after surveys. Two participants were totally blind while the others had some remaining sight. Both guide dog owners (7) and long cane users (4) took part in these surveys. Some of the participants were familiar with New Road while others were not. All participants regularly go out alone in the street environment.

Before surveys

The before surveys were conducted in October 2006 prior to the redevelopment. The participants were instructed to navigate down New Road and to cross from one side of the road to the other. Each participant was asked to do this independently, although a Guide Dogs' Rehabilitation Worker accompanied each one to ensure their safety and to record any comments from the participant.

Navigation

Four of the participants found this street layout easy to navigate. One participant commented that his guide dog was excellent and avoided all the obstacles while the other 3 participants felt that the straight road and use of kerbs made it quite easy to learn a route.

The majority of participants (7) found some difficulty navigating through the area. This was mainly due to the crowded footway and the bicycles, tables and chairs which obstructed the footway. The pillar by the theatre was mentioned as a particular issue as it restricts the width of the footway. However, the participants who found this street layout difficult to navigate commented that the problems encountered were not different from any other traditional street and that while there were some difficulties, it was nonetheless manageable.

Five of the participants said they would find little difference using this street at night. Of these, 2 participants had no sight, while the other 3 had some useful vision at night and noted that the street lights at night enabled them to see things more clearly. The remaining 6 participants said that they generally do not go out at night alone. For 3 of the 6 this was because their vision at night was worse, and the other 3 participants said they generally felt more nervous and vulnerable at night.

When participants were asked to suggest anything to improve the area/street to help them find their way around, 5 participants wanted cyclists to be removed from the area. Other participants mentioned removing the tables and chairs from the pavement.

Safety

All the participants said they felt safe navigating this street, although one participant said they would prefer to be accompanied in new areas. The reasons participants felt safe included good kerb layouts to follow and they were also reassured by the presence of people around of whom they could ask for assistance if needed.

After Surveys

The after surveys were conducted in June 2007 following the redevelopment of the street into a shared surface area. The new street design includes a drain with “tactile” strips on either side of the drain as a guidance path along one side of the road – fig 1. The “tactile” strip used does not conform to the 'Guidance Paving' specified in the Department for Transport’s “Guidance on the use of tactile paving surfaces” either in profile or layout – fig 2. There is no colour or tonal contrast between the “tactile” strips and the surrounding surface. On the other (theatre) side there is no “tactile” strip.



Fig 1
Figures 1 and 2: Tactile strip

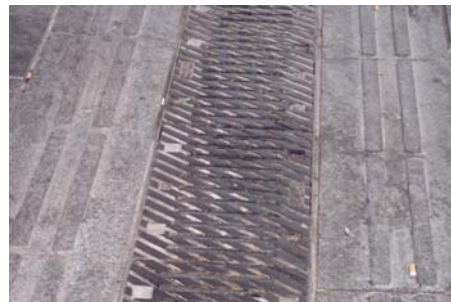


Fig 2

The same group of participants were involved in the after survey. As with the before surveys, participants were asked to navigate their way down the street.

Navigation

In terms of navigation, all participants felt that the area was a lot worse after the redevelopment had taken place.



Fig 3
Figures 3 and 4: shared surface

Fig 4

Participants reported that there were no orientation cues, no boundaries, no colour contrast, and that the “tactile surface” was not definitive enough. Some individuals could not distinguish the “tactile paving” with one saying it felt like ‘stepping on a cigarette packet or crumpled paper’. Others missed the “tactile” completely. The open space with no distinct colour or tonal contrast was noted by participants.

“One huge open space. No clues.”

“The paving looked all white including the table and chairs.”

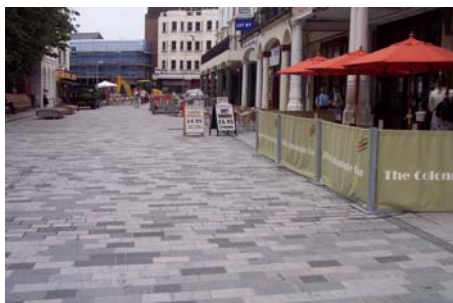


Fig 5
Figures 5 and 6: Café tables and chairs

Fig 6

Café tables and chairs were noted to be obstructing the area between the “tactile” strip and the building line. In some instances they were positioned on the “tactile” strip itself. On the theatre side of the street café tables and chairs were near to the building line, where they created obstructions.

Safety

All participants felt that the new street layout was worse than the previous layout in terms of safety. All the participants regularly go out alone but were afraid using this area. Participants reported that they felt very scared as they could not determine where the cars and other vehicles were – fig 7 & 8. The majority of the participants (63% - 7 out of 11) felt so unsafe that they said they would not come to the area unaccompanied (4) or would avoid the area altogether (3).

Two Guide Dog Owners commented that –

“One car seemed to drive around me and spooked the dog.”

“Cars drove around me. It was like trying to walk through dodgem cars track.”

Participants also commented that:

“There were no defined boundaries, I didn’t know where the traffic was coming from.”

“I could not tell where I was because the pavement furniture pushed me into the road.”

“My dog seemed confused and walked down the middle of the road. He thought it was a wide pavement.”

“Why did the council not put tactile - do they not understand the needs of visually impaired people?”

“I hate what the council have done. Did they not have advice on colour contrast and safety?”

Summary

While some participants had difficulty negotiating the traditional street layout due to street furniture and other obstacles in the footway, they nevertheless felt safe. Navigating the shared surface layout posed considerably more difficulties for the blind and partially sighted participants. It made them feel unsafe, and had a

detrimental effect on their independence. The majority of participants would not use this area alone, or would avoid it altogether.

The removal of boundaries such as kerbs and the lack of other orientation cues in this shared surface area caused all the participants to become confused and fearful for their safety. Furthermore, in this type of shared surface area mobility aids such as guide dogs and white canes can become ineffective or even dangerous. Guide dogs became confused, leading their owners into the road and thus potentially into the path of vehicles, while some users of the white cane failed to detect the “tactile paving” and walked on assuming still in a safe area. On the theatre side of the street there was no boundary to attempt to follow.

It is the professional opinion of Guide Dogs staff that this situation would not be significantly helped by providing the participants with more training because in the absence of orientation cues there would be nothing to base the training around.

Conclusions and recommendations

This study highlights the need for local authorities to take into account the navigation requirements and safety issues concerning blind and partially sighted people when developing and implementing a shared space environment.

We appreciate the willingness of Brighton and Hove Council to work with us to learn from this scheme. The Council gave a commitment to consider making changes if any need is identified. We would make the following recommendations:

- In any future scheme the LA must consider the requirements of blind and partially sighted at an early stage, and throughout the design and implementation stages. We recommend that Brighton and Hove Council help develop and support local access and disability groups to facilitate involvement in all such proposals.
- It is recognised that reverting to a layout with footways and kerbs in New Road is not a realistic option at this stage but, if the area is to remain a shared space with vehicles, the following changes are needed to ensure that this area can be used safely by blind and partially sighted people:
 - A ‘safe space’ should be provided to either side of the area to enable blind and partially sighted people, and other vulnerable pedestrians, to be confident they are away from traffic. The safe spaces must be clearly detectable with a physical surface delineation and colour/tonal contrast.
 - The “tactile” paving to the one side of the street should be replaced with tactile paving which conforms to the profile and layout of the specification for guidance paving in the Tactile Paving Guidance

- (Department for Transport) and clearly contrasts in tone with surrounding paving.
- A tactile demarcation should be provided to the theatre side of the street. This could again be guidance paving. If another form of demarcation is used this should be tested to ensure it is appropriate, that it can be detected by blind and partially sighted people and that it doesn't impede the movement of other disabled people.
 - Street furniture and café tables and chairs should be sited in designated areas, maintaining a clear 'safe space' between the building line and the tactile demarcation. Providing a colour/tonal contrast between street furniture and the paving will be of benefit to people with some residual vision.
- The pedestrianisation of this area has been suggested in the local area, and we understand the Council is considering this. We would support this but would also point out that a suitable pedestrianisation scheme would also have to include measures to meet the requirements of blue badge holders for convenient car parking. It must be noted that pedestrianisation, while removing the safety concerns associated with vehicular traffic, must also include measures to aid orientation and navigation by blind and partially sighted people. Use of the recommended guidance path, i.e. the specification in The Use of Tactile Paving Surfaces (DfT, 1999), may be appropriate.
 - Particular care must be taken at the junctions where New Road meets North Road and Church Street. The junctions are not the subject of this report but there have been separate discussions on these with the Council Project Manager.

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