

Community Perceptions of Vivacity LED Safety Tactiles

Vivacity LED Safety Tactiles (Tactile Ground Surface Indicators, TGSIs) have been installed at the corner of Swanston Street and Little Collins Street in Melbourne as a trial. The trial is funded by the Transport Accident Commission and coordinated by VicRoads in conjunction with Melbourne City Council. The trial is to “...change the behaviour of people who are distracted by mobile phones by bringing them back to reality with visual clues” (Hafez Alavi, TAC¹).

The trial installation has been the subject of social media posts (see Attachment 1: Social Media Feedback). The LinkedIn posts achieved more than 5,000 likes and the Victorian Premier Daniel Andrew’s post achieved more than 2,000 likes and only 11 dislikes. The comments in the posts identified a range of benefits to users well beyond that envisaged by the trial – a selection is shown in the attachment.

In December 2019, SmarterLite conducted a survey about the Vivacity LED Safety Tactiles. Vivacity is a division of SmarterLite.

The survey was online, using a sponsored post and ad in the Facebook and LinkedIn² platforms that targeted people in central and inner-suburbs of Melbourne. Employees of the Department of Transport, VicRoads, Regional Roads Victoria, City of Melbourne and Transport Accident Commission were deliberately excluded from the targeted LinkedIn ads, but may have responded if the ad was shared with them or via the Facebook platform.

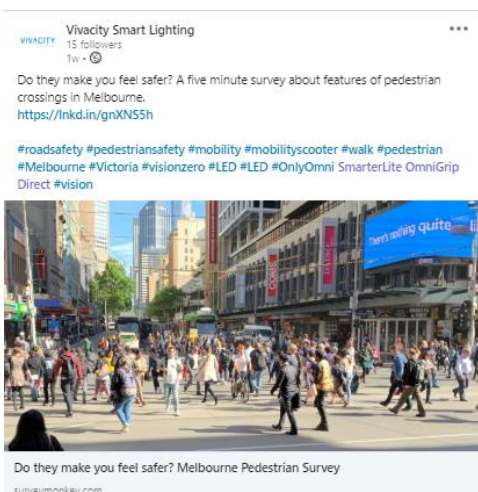


Figure 1: Example Promotional Post from LinkedIn

¹ <https://www.ipwea.org/blogs/intouch/2017/04/02/heads-down-thumbs-up-saving-pedestrian-lives-with-visual-clues>, accessed 18 December 2019.

² <https://www.linkedin.com/company/vivacity-gm/ads/>

The following image was shown to survey respondents.

Footpath LED lights that change colour with the pedestrian traffic light



Figure 2: An image of the Vivacity LED Safety Tactiles was included in the survey.

Respondents were then asked two questions. The questions and the responses are below.

1. Thinking about bright LED lights in the footpath at an intersection with traffic lights, how safe do they make you feel?

Extremely safe	Somewhat safe	Don't know	Somewhat unsafe	Extremely unsafe
29.27%	39.02%	19.51%	6.10%	6.10%
24	32	16	5	5

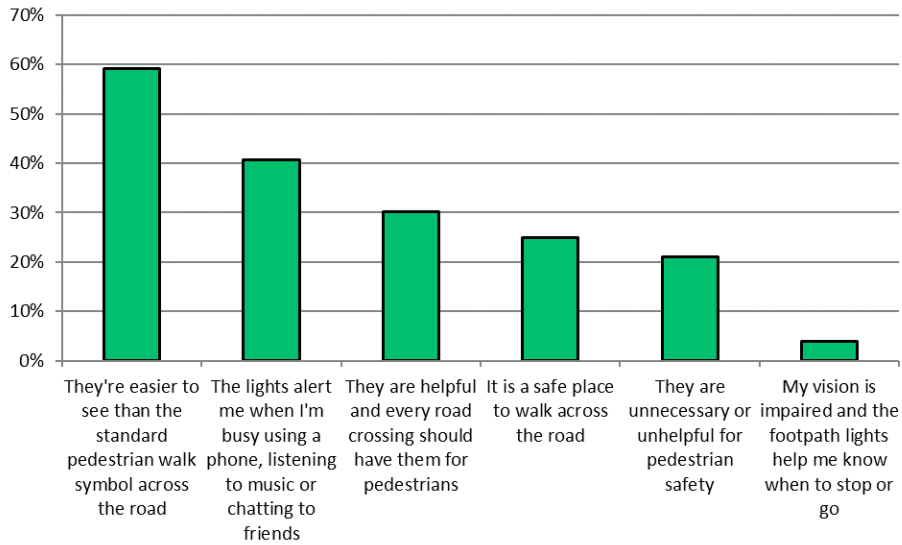
It is clear that the majority of respondents believe that the LED lights in the footpath make them feel Extremely Safe or Somewhat Safe.

2. SELECT ANY of the following statements about LED lights in the footpath at traffic lights that you AGREE WITH.

Statement	Proportion of Responses	Number of Responses
They're easier to see than the standard pedestrian walk symbol across the road	59%	45
The lights alert me when I'm busy using a phone, listening to music or chatting to friends	41%	31
They are helpful and every road crossing should have them for pedestrians	30%	23
It is a safe place to walk across the road	25%	19
They are unnecessary or unhelpful for pedestrian safety	21%	16
My vision is impaired and the footpath lights help me know when to stop or go	4%	3



SELECT ANY of the following statements about LED lights in the footpath at traffic lights that you AGREE WITH.



76 of the 82 respondents chose to agree with one or more of the statements.

The LED Safety Tactiles were originally installed to trial a way to improve safety for distracted pedestrian's safety. **41%** of respondents selected 'The lights alert me when I'm busy using a phone, listening to music or chatting to friends'. This statement was deliberately broader than just pedestrians distracted by technology. Distraction can take any form, and distraction from one task is engagement in another.

Even more respondents, **59%**, agreed that the LED Safety Tactile is '...easier to see than the standard pedestrian walk symbol across the road'. This is an important finding that shows that the LED Safety Tactiles have a benefit broader than just 'distracted pedestrians'.

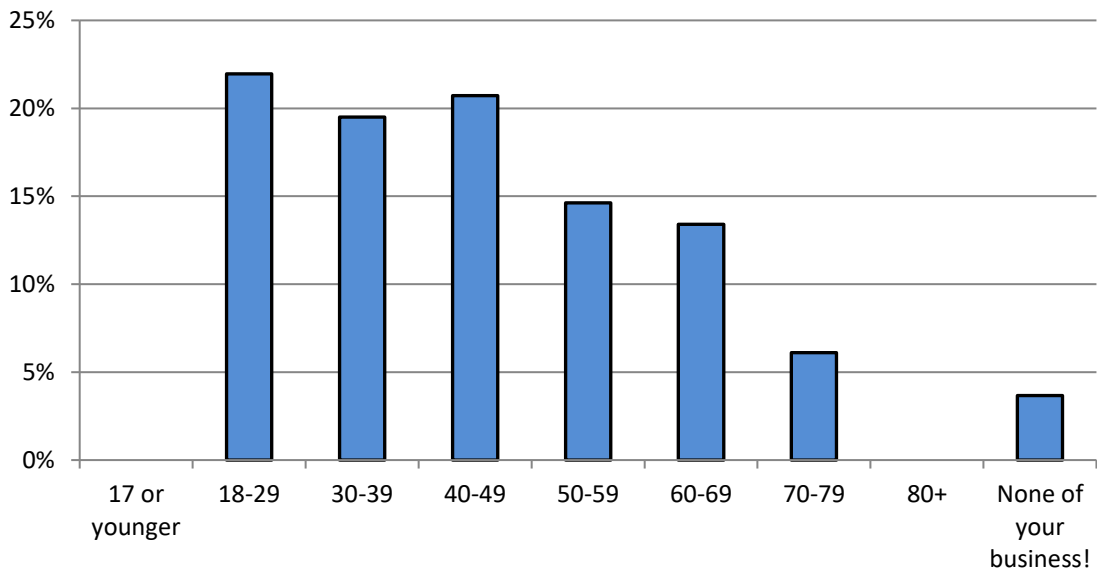
There was also good support for their widespread use, with **30%** of respondents selecting 'They are helpful and every road crossing should have them for pedestrians'.

Who responded?

The survey targeted people aged 18 and over. Respondents were evenly distributed across the 18-29, 30-39 and 40-49 age brackets.



What is your age?



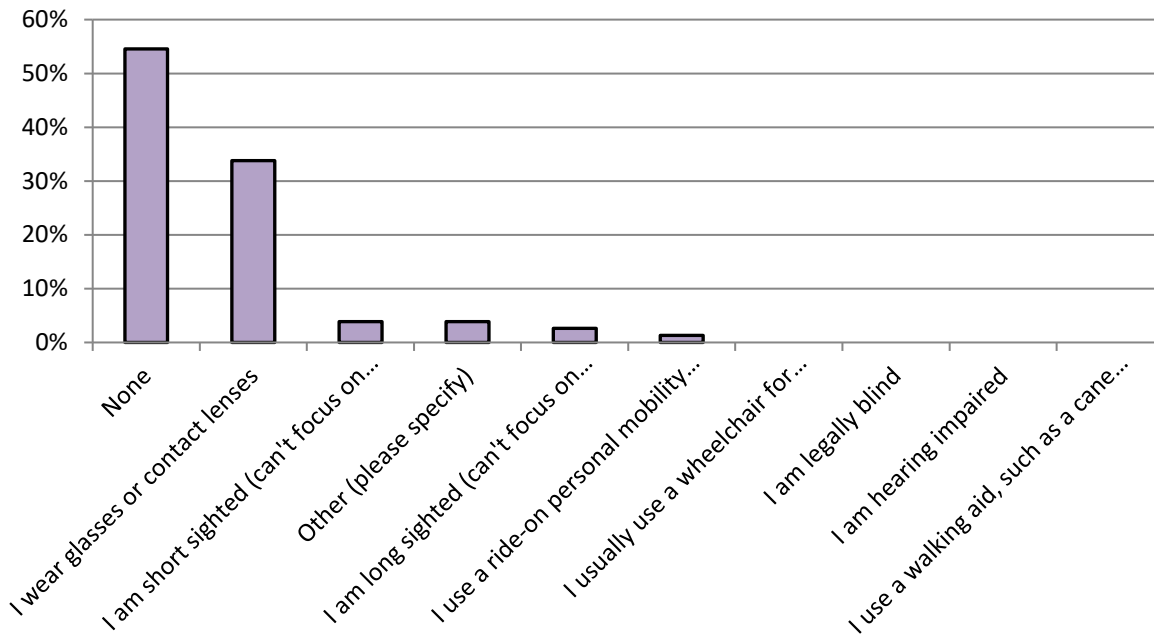
Two respondents were tourists; one from regional Victorian and one from China. Approximately three quarters of respondents were male, and one quarter female.

Respondents were asked whether they had one or more of a range of health or mobility issues that may influence whether they thought the LED Safety Tactiles were beneficial for them. 77 respondents answered the question.

Health or Mobility Issue	Proportion of Responses	Number of Responses
None	54.55%	42
I wear glasses or contact lenses	33.77%	26
I am short sighted (can't focus on things far away) and don't use glasses or contact lenses to correct my vision	3.90%	3
Other (please specify)	3.90%	3
I am long sighted (can't focus on things close to me) and don't use glasses or contact lenses to correct my vision	2.60%	2
I use a ride-on personal mobility scooter	1.30%	1
I usually use a wheelchair for mobility	0.00%	0
I am legally blind	0.00%	0
I am hearing impaired	0.00%	0
I use a walking aid, such as a cane or frame	0.00%	0



Select any of the following apply to you? If none do, then select None.



The Australian Institute of Health and Welfare reports³ that in 2017-18, 55% of the Australian population has one or more long-term visual disorders. Only 30-40% of survey respondents indicated a sight issue, so their views may be under-represented in the results.

Summary

This market research indicates that pedestrians believe that LED Safety Tactiles contribute to their feeling of safety when crossing the road. A particularly useful finding is also that LED Safety Tactiles are easier to see than the standard pedestrian walk symbol that is across the road. This is important when many people have sight related issues – the LED Safety Tactile has increased visibility compared to the pedestrian lantern in the traffic signals. This increases pedestrian's feeling of safety and may reduce the likelihood of a pedestrian walking into the path of traffic.

³ <https://www.aihw.gov.au/reports/eye-health/eye-health/contents/how-common-is-visual-impairment>, accessed 18 December 2019.



Attachment 1: Social Media Feedback

The trial has received significant social media coverage of the trial, with three posts receiving coverage. SmarterLite has periodically reviewed the comments to identify support and opposition to the trial.

The Premier of Victoria, Daniel Andrews, Facebook:

<http://bit.ly/2M7sFlu>

As of the 12 December 2019, there were 2.4K reactions, 830 comments, 183 shares, 78K views. More than 2,200 of the reactions were positive and only 11 negative.

Mitchell Carter, LinkedIn:

https://www.linkedin.com/posts/mitchcartercybersecurityrecruitermelbourne_smartcity-orstupidcity-melbourne-activity-6576078933001936896-aetB

As of the 12 December 2019, there were 4,867 likes, 496 comments and the video had an incredible 269K views.



Andrew Webster FGIA • 2nd

Seizing Opportunity & Growth through Risk | Governance, Risk & Complia...

3mo ...

The need is there. Everyone's attached to their phones; albeit, I love Greg V's Darwinism comment. Would love to see these on crossing that are high volume, high risk - not just those directly outside town hall



Vance Heredia • 2nd

Driving business growth of Cloud, Mobility and IoT services ★ Market Dev...

3mo ...

I think it is also great for small kids. The last few times I've taken my little ones to the city, they haven't always been able to fully see the lights through the hustle and bustle of the crowds. They rely on the sound of the buzzer, but often mistake the sound of the other crossing in their eagerness.



22 Likes



3 Replies



David Maxwell • 2nd

Program Director & Leadership | B.Ap.Sc (Comp), BA (Bus Admin), GCM (F...

3mo ...

Great initiative. Other considerations: could benefit not just phone users, but also children, possibly people with attention deficit, special needs or highly anxious people who have trouble looking up from the ground, possibly guide dogs.

...see more



44 Likes



11 Replies





Gary C Tate

CyberSecurity | AI and ML | Prevention First | Risk Reduction

3mo ...

Love / hate. I'm always angry stuck behind a phone zombie who's bumbling along with no peripheral awareness. Then I find myself rushing between meetings trying to answer 20 WhatsApp messages and emails. It's the world we live in and I'm happy to be kept alive while I live in it. (edited)

 · 7 Likes |  · 1 Reply



Virginia Anderson · 1st

Infrastructure Strategy & Investment | Women in STEM | Equal Parent Adv...

3mo ...

Not just phone zombies. Vision-impaired people benefit too.

 · 2 Likes | 



Abraham Sabedra

EH&S Analyst at Safety Management Group

3mo ...

What a great idea. With most people being distracted by mobile devices, small children, or even pets, why not give another way to help people stay safe as possible. Does it turn yellow like a traffic light too?

 · 1 Like |  · 4 Replies



Emily Beth Rapoport

Creative Editor | Content Developer | Proofreader | Chocolate & ...

3mo ...

Plus, I imagine for anyone who has vision issues, having a larger more immediate color indication is extremely helpful. It also appears there is a brief beep to indicate when it changes, which again, is an incredible safety feature that recognizes we all have various abilities. It would be wonderful if this was standardized. (edited)

 · 1 Like | 



Carl Benevento · 2nd

Channel Manager at Cyberstone Security

3mo ...

Could also help folks with low vision and visually impaired. A bit easier to pick up than the usual walk sign.

 · 6 Likes |  · 1 Reply





Samantha Lines

EA at Fulton Hogan | VP for Auckland's Chapter of AAPNZ

2mo ...

I think these are a great idea - not for the phone zombies, they need to put their devices down when navigating a city - but rather for those that get easily confused in large cities with so many sights, sounds and bright lights going on around them. I'm thinking those with disabilities such as partial visual or hearing impairment, those who feel anxious and uncomfortable in bustling places etc. Even children! They're not as tall as grown ups and at a busy crossing they may be unable to see a changing light, they might even push to the front to get a better view and accidentally step into traffic. It's a great way to keep them safe.

 · 3 Likes |  · 1 Reply



Dave Allen


Health And Safety Manager at Auckland System Management (F...

2mo ...

Definitely a good way of looking after our more vulnerable city users.



Charlotte Meldrum-Hanna

Business Development Director & Moose Enthusiast 

3mo ...

I don't think this is catered just for people on their phones. I suspect this is for a variety of people; hearing impaired, vision impaired (perhaps cant locate the little red/green man and need something brighter), those in wheelchairs who can't see over the heads of standing pedestrians. I think it would be useful for a variety of people. Plus I think it looks pretty cool too!

 · 3 Likes |  · 1 Reply



John Allie · 2nd

Customer Solutions | Product Management and Development | Channel E...

3mo ...

We are all guilty of being face down in our device while walking down the street. Some people I'm sure have had a near miss or been hit by oncoming traffic. This is human centred thinking aimed to keep us safe.

Simple design leveraging materials already present aimed to solve a problem to keep us safe. 10/10.

 · 1 Like | 





Darren Hackett

Marketing Manager at ENDOTHERAPEUTICS

3mo ...

A great example of universal design. Adding an element of enhanced safety and also catering for those with various degrees of visual impairment. Bravo Melbourne. 🍌

👍 · 2 Likes | 💬



Saurabh Tripathi

Data || Azure || BI || Python || Consulting

3mo ...

This is so useful... I've taken the first step many times with the sound realizing a split second later it's not my light.

👍 · 1 Like | 💬



Ethan M.

Senior Network Engineer at Aurecon

3mo ...

I love it. Very useful. Thanking the group who came up with the idea and brought it fruition... Well done, keep up the good work.

👍 · 1 Like | 💬



Eran Guershon, PRINCE2®, CSM®, ITIL® · 2nd

Melbourne IT Lead & Project Coordinator at Object Consulting

3mo ...

I've seen this, it's really great and it will look fantastic if it will be set up all over the CBD

👍 · 2 Likes | 💬



Trudi Alexandra-Phillips S.A.C. Dip

Eagerly needing someone to train me up as a proper Disability Access Au...

3mo ...

WOW. This is great for people who have limited vision. (edited)

👍 · 1 Like | 💬



Peter Fleming

Snr Project Manager - Operations SME Application development and desi...

3mo ...

My son is vision impaired. While tactile tiles are great Along with the audible crossing sounds, these tiles would make crossing roads so much easier for him. The problem that he can't tell if the cars are stopping or not still exists. I get the comments made in this stream around them being there for people who seem to think crossing a road while staring at your phone and how that's perhaps ridiculous. But for those who genuinely need assistance getting across roads, these are brilliant. (edited)

👍 · 1 Like | 💬





Krishna Paruchuri • 2nd
Program Delivery Manager at Auckland Transport

3mo ...

This is awesome! Stands out. **Veenay Rambisheswar**, weren't you suggesting something similar outside our office?

· 1 Like | · 1 Reply



Veenay Rambisheswar • 2nd
Chartered Professional Engineer, adaptable, innovative infrastruc...

3mo ...

Yes, are the current lights on the footpath area on Halsey St is too thin. This definitely stands out and very effective from what I can see.

|



Amy Garraway • 2nd
Office Manager -Events Hire - Decals

3mo ...

Most importantly for the visually impaired and elderly, doesn't everyone else think that? **#visuallyimpaired #elderly**

· 2 Likes |



Michael Wolff
Consulting Enterprise Infrastructure Architect at UTS:INSEARCH

3mo ...

Beyond phone zombies, those tactile indicators are for the Blind or visually impaired. Many below with visual impairments also have auditory impairments (such as Usher's Syndrome). Providing a bright, close proximity visual indicator of a safe time to cross to people with limited vision is a major plus.

· 3 Likes |

Georgina Day, LinkedIn:

<https://www.linkedin.com/feed/update/urn:li:activity:6590873241328418816/>

As of the 12 December 2019, there were 160 reactions and 20 comments.



Georgina Day • 1st
Project Manager, Commercial Manager, Business Development Manager
2mo •

...

Check out these ITS innovations in Melbourne's CBD. The pavement tactiles light up green, red and flashing red, to match the pedestrian signals attached to the poles. There are also raised-visual signs (with raised lettering) on the poles, to assist vision impaired people. Great to see what appears to be a trial of new technology!

