

Evidence review

Date of Review: 09/01/2015	
Author of Review: Daniel Williams	
Prepared for: Nicola Waight, Transport Planning Team Manager	
Question: What are the public health impacts of allowing private hire vehicles / taxis / hackney cabs to use bus lanes?	
Summary / conclusion:	
<p>Little in the way of substantial evidence specifically addressing the public health impacts of allowing private hire vehicles / taxis / hackney cabs to use bus lanes was found by this rapid review.</p> <p><i>Shared-Use Bus Priority Lanes on City Streets: Case Studies in Design and Management</i>, issued by the Mineta Transportation Institute in 2012 found that 'All of the case study cities except New York and Seoul permit taxis to travel in bus lanes. This policy is often based on the premise that taxis are a critical mode that supports residents who choose to live car-free or to use their cars minimally. In essence, these cities see taxis as a component of the public transit system.' It also found that the cities are divided on the question of bicycle use of bus lanes. While buses and bicycles tend to operate at similar average speeds, they have very different perating behaviors, with bicycles favoring maintenance of a constant speed and buses needing to make frequent stops. The result is often a leapfrogging pattern, where each takes turns overtaking the other. On a narrow bus lane, this can be dangerous, but on a wide bus lane, this may be safer than bikes operating in general traffic.'</p> <p>In 2012, Leeds City Council debated a proposed Scheme to Permit Hackney Carriage use of Bus Lanes. Cllr John Illingworth argued that 'There will be two separate effects on Public Health: (1) the proposal may directly increase the number of road accidents, and (2) the proposal is likely to discourage cycling, which is an important form of physical activity, and this will adversely affect health and quality of life. The second effect is believed to be more important than the first.'</p>	
Literature	
<i>All interventions</i>	
NICE www.nice.org.uk	Not searched
NHS Evidence (NB includes NICE & Cochrane as a source) www.evidence.nhs.uk	Nothing found
Cochrane Library http://onlinelibrary.wiley.com/cochranelibrary/search/	Not searched
Other sources	Google - see below
<i>If no or minimal evidence is found via the above sources</i>	

National Library for Health – Healthcare databases advanced search (Medline etc) http://www.library.nhs.uk/booksandjournals/advanced/default.aspx NB requires Athens log-in	Nothing found
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Google searches:

- https://www.google.co.uk/?gws_rd=ssl#safe=active&q=%22public+health%22+impacts+of+allowing+private+hire+vehicles+taxis+hackney+cabs+to+use+bus+lanes
- https://www.google.co.uk/?gws_rd=ssl#safe=active&q=%22private+hire%22+%22bus+lanes%22+health
- https://www.google.co.uk/?gws_rd=ssl#safe=active&q=%22private+hire%22+%22bus+lanes%22+%22public+health%22
- http://scholar.google.co.uk/scholar?hl=en&q=%22private+hire%22+%22bus+lane*%22&btnG=&as_sdt=1%2C5&as_sdtp=

Details of Findings of Literature Review

Proposed Scheme to Permit Hackney Carriage use of Bus Lanes - Capital Scheme Number 16532-000-000

<http://democracy.leeds.gov.uk/mgIssueHistoryHome.aspx?Id=59364>

Key Delegated Decisions - 39175 - Proposed Scheme to Permit Hackney Carriage use of Bus Lanes - Capital Scheme Number 16532-000-000

Letter from Cllr John Illingworth

<http://democracy.leeds.gov.uk/documents/s69314/03-July-2012.Illingworth%20email%20pdfAPX3.pdf>

'I understand that a Request for Scrutiny has been received from the public, and that several other councillors want to call-in this Delegated Decision. I support the proposed call-in and will sign the required forms. Hackney Carriages in Bus Lanes is a policy that could plainly have significant effects on Public Health, but this aspect has not been adequately considered by the decision-makers. "Health" is not mentioned in the published reports.

Public Health in Leeds is worse than the national average and there is an unacceptable gap between the richer and poorer areas of our city. The Health and Social Care Act 2012 imposes new duties on the Council in relation to Public Health. The Council has a new obligation to promote Public Health, and it is already Council policy to do so. These existing Council policies and obligations have not been properly considered and evaluated in the present report.

There will be two separate effects on Public Health: (1) the proposal may directly increase the number of road accidents, and (2) the proposal is likely to discourage cycling, which is an important form of physical activity, and this will adversely affect health and quality of life. The second effect is believed to be more important than the first.

...'

Request for Scrutiny

<http://democracy.leeds.gov.uk/mgConvert2PDF.aspx?ID=69317>

'I wish to make a request for scrutiny of the public health and wellbeing implications of the proposed scheme to permit Hackney Carriage use of bus lanes (Capital Scheme Number 16532-000-000; delegated decision, reference D39175).

As a cyclist and representative of Leeds Cycling Action Group, I am concerned that this decision will have a detrimental impact on levels of cycling in Leeds and therefore on the public health of the city population.

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Shared-Use Bus Priority Lanes on City Streets: Case Studies in Design and Management

<http://transweb.sisu.edu/project/2606.html>

<http://transweb.sisu.edu/PDFs/research/2606-shared-use-bus-priority-lanes-city-streets.pdf>

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REPORT 11-10

Mineta Transportation Institute, April 2012

ABSTRACT

This report examines the policies and strategies governing the design and, especially, operations of bus lanes in major congested urban centers. It focuses on bus lanes that operate in mixed traffic conditions; the study does not examine practices concerning bus priority lanes on urban highways or freeways. Four key questions addressed in the paper are:

1. How do the many public agencies within any city region that share authority over different aspects of the bus lanes coordinate their work in designing, operating, and enforcing the lanes?
2. What is the physical design of the lanes?
3. What is the scope of the priority use granted to buses? When is bus priority in effect, and what other users may share the lanes during these times?
4. How are the lanes enforced?

To answer these questions, the study developed detailed cases on the bus lane development and management strategies in seven cities that currently have shared-use bus priority lanes: Los Angeles, London, New York City, Paris, San Francisco, Seoul, and Sydney. Through the case studies, the paper examines the range of practices in use, thus providing planners and decision makers with an awareness of the wide variety of design and operational options available to them. In addition, the report highlights innovative practices that contribute to bus lanes' success, where the research findings make this possible, such as mechanisms for integrating or jointly managing bus lane planning and operations across agencies.

p.33

'All of the case study cities except New York and Seoul permit taxis to travel in bus lanes. This policy is often based on the premise that taxis are a critical mode that supports residents who choose to live car-free or to use their cars minimally. In essence, these cities see taxis as a component of the public transit system. Similar to the premise that taxis should be allowed in bus lanes because they are a form of transit, all the cities except New York and Paris allow into the bus lanes "jitneys," or privately-owned multi-passenger vehicles that serve a regular route but are not contracted service providers for a publicly owned or managed transit system.'

p.41

3. What is the scope of the priority use granted to buses? When is bus priority in effect, and what other users may share the lanes during these times?

The cities are divided on the question of bicycle use of bus lanes. While buses and bicycles tend to operate at similar average speeds, they have very different operating behaviors, with bicycles favoring maintenance of a constant speed and buses needing to make frequent stops. The result is often a leapfrogging pattern, where each takes turns overtaking the other. On a narrow bus lane, this can be dangerous, but on a wide bus lane, this may be safer than bikes operating in general traffic. New York, San Francisco and Seoul generally disallow bikes from using bus lanes. The remaining cities either allow it, or

determine bicycle access on a site-specific basis. But regardless of whether cities allow bicycles in bus lanes, most of these cities are also making bicycle lane development a strong priority. In New York, for example, the major redesign of the streets hosting the city's busiest bus route also included installation of a separate, dedicated bicycle lane, and included bicycle related performance criteria in its evaluation of the overall street design.

Influence of road markings, lane widths and driver behaviour on proximity and speed of vehicles overtaking cyclists

Shackel-SC & Parkin-J

Accident Analysis & Prevention 2014, 73, pp. 100-8

The proximity and speed of motor traffic passing cyclists in nonseparated conditions may be so close and so great as to cause discomfort. A variety of road design and driver behaviour factors may affect overtaking speeds and distances. The investigation presented in this paper builds on previous research and fills gaps in that research by considering the presence of cycle lanes on 20 mph and 30 mph roads, different lane widths, different lane markings, vehicle type, vehicle platooning and oncoming traffic.

Data were collected from a bicycle ridden a distance of one metre from the kerb fitted with an ultrasonic distance detector and forward and sideways facing cameras. Reduced overtaking speeds correlate with narrower lanes, lower speed limits, and the absence of Centreline markings. Drivers passed slower if driving a long vehicle, driving in a platoon, and when approaching vehicles in the opposing carriageway were within five seconds of the passing point. Increased passing distances were found where there were wider or dual lane roads, and in situations where oncoming vehicles were further away and not in a platoon. In mixed traffic conditions, cyclists will be better accommodated by wider cross sections, lower speed limits and the removal of the centreline marking.