BUS LANES: PRINCIPLES

Bus lanes are commonly used to prioritise buses on roads. This works well provided they are planned. Below is a summary of criticisms (http://www.abd.org.uk/buslanes.htm) from the Association of British Drivers. The right hand column includes my observations, comments and remarks on the criticisms. This along with potential solutions (diagrams 1 & 2) detailed on pages 3 & 4 in my humble opinion form the basic principles that need looking in to while planning bus lanes.

No.	ABD comments	My remarks / Solutions
1	They increase journey times unnecessarily. They increase journey times unnecessarily. They create traffic jams where there were previously none. They inspire traffic to divert onto other roads, often-residential side roads.	There is no proof of this, indeed the resource pack 'Bus Priority – The Way Ahead' gives several outcome measures suggesting this is not the case and that contrary may be true.
2	They turn dual carriageways into single-track roads with no passing places forcing every vehicle to travel at the speed of the slowest.	True to an extent, but this is hardly a problem. In fact if there is a car waiting to turn right – often cars behind when safe (in the absence of an approaching bus) should safely move ahead by temporarily driving on the bus lane.
3	They create bottlenecks at the start of the bus lane, delaying buses as well as other traffic.	This is absolutely true. But there are solutions to this problem (see subsequent pages).
4	They create hazardous situations where vehicles wish to turn left, as illustrated by this photo taken on Bath Road (A4) in Reading: 	If you are turning left and you need to pass over the bus lane, this is allowed. This photo of a stupid driver turning left on to a bus lane (to get in to a off-lane on the left) when a bus was approaching is not a fault of the Bus Lane strategy (it is expected that the car driver makes sure it is safe to turn left).
5	They encourage bus drivers to drive at normal speed past queues of stationary traffic, often without sufficient regard to pedestrians trying to cross between traffic that may be obscuring them from the bus driver's view. They make it more difficult for pedestrians to cross the road by removing the natural gaps that appear in free flowing traffic.	Well pedestrians crossing at points other than signal controlled or zebra crossings is their fault and not that of the Bus Lane or the bus driver. Crossing at 'Natural Gaps' and accidents due to it are the responsibility of the pedestrians (UK law is clear about distances at which safe crossing facilities ought to be available and I am presuming this is being followed).
6	They generate contempt for the law. They divert police resources away from dealing with criminals. They incite road rage.	Absolute nonsense, looks like ABD are making every effort to think of any plausible point to be raised against Bus Lanes.
7	They are often counter-productive in terms of improving the bus service. If more people wait for buses, the more often the bus has to stop, which increases the journey time. Some local authorities putting in additional bus stops that slow the journey even more exasperate this.	Load of rubbish. This should not be a car driver's headache at all.
8	They enthuse some bus drivers to drive aggressively by encouraging them to think they have more right to be on the road than anyone else. Our members have reported a double-decker bus in Birmingham, and a minibus in Dunstable, driven onto the pavement because the driver was not prepared to wait behind cars that were correctly filtering into one lane at the start of a bus lane.	This is problem of law enforcement and managing anti-social drivers (all types of drivers and not just bus drivers are seen doing this). This happens in places of bottlenecks and has little to do with presence or absence of Bus Lanes.

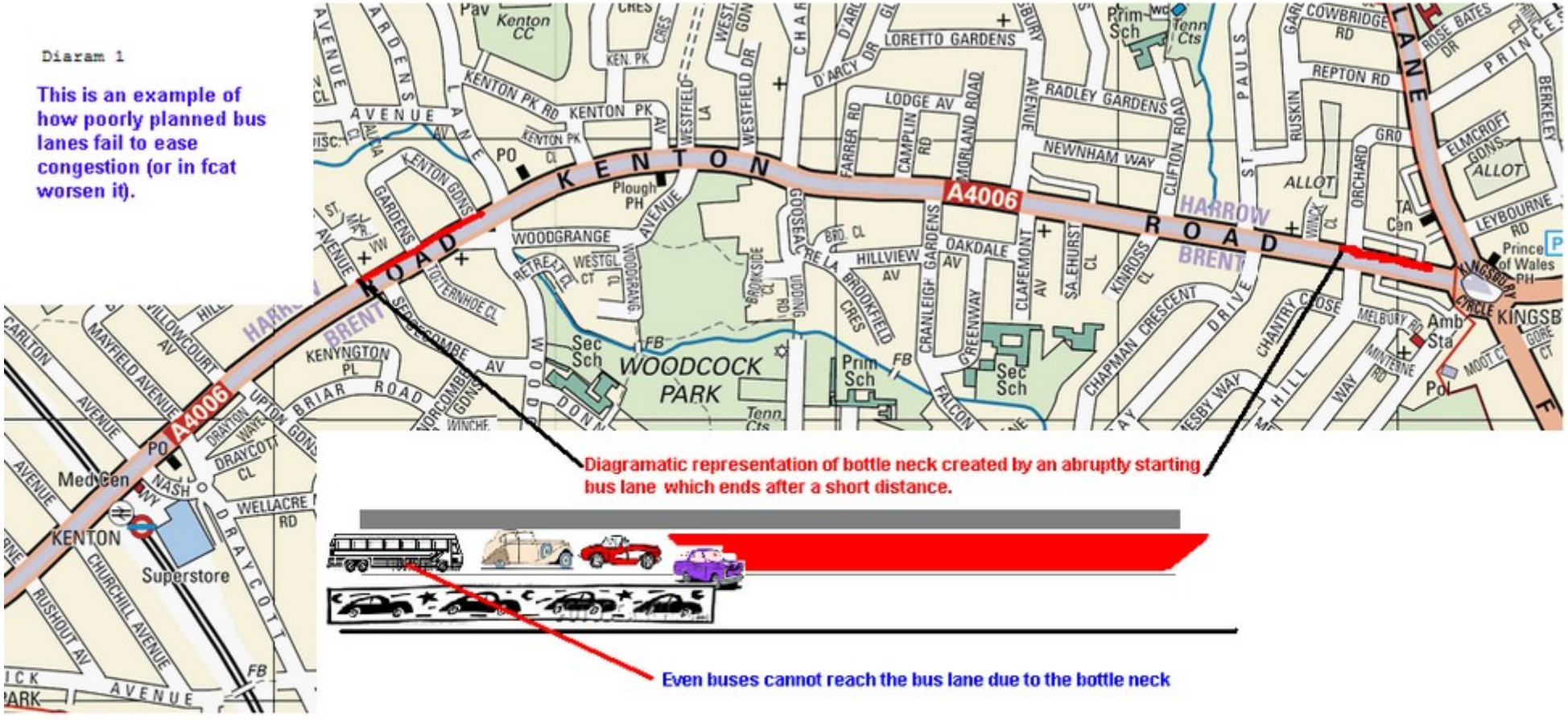
The ABD calls for the adoption of a set of criteria for bus lanes. These and my assessment of them are as under –

No.	ABD comments	My remarks / Solutions
1	Bus lanes should only be used if the road has three or more lanes in the direction of the bus lane.	Highly impractical, even in a very well developed country like UK, 3 or more lanes (on one side) are available routinely only on motorways (freeways or

		express ways as we call them in India). Note that in UK buses for local public transport are (normally) not allowed on motorways.
2	Bus lanes may only be imposed where there is regular congestion in order to allow buses to jump the queue. Imposing bus lanes on free flowing roads in order to maliciously create congestion is totally unacceptable. Bus lanes may only be imposed to allow buses to avoid congestion after all possible remedial measures have been taken to eliminate the cause of the congestion, such as junction improvements.	Totally agree, if this has happened anywhere it only defies logic.
3	Bus lanes should only operate during times when there is an average of at least one bus every five minutes.	Preferable but most routes may already have buses plying every 7-8 minutes.
4	Many bus lanes are enforced during the whole day, when service frequency is low outside rush hours.	Untrue, majority are enforced only during peak hours. The common site is that car drivers are oblivious of the timings and now as a habit avoid bus lanes even when they are not in operation.
5	Bus lanes may only be placed on the right hand side of any road.	It's extremely rare to see a bus lane on right lanes (on rare occasions I have seen this it is only because the bus has to turn right and priority has been given to it).
6	Bus lanes may not be used on motorways.	Only a handful (mostly trials) exists, let's not generalise this as an issue affecting every motorway.
7	Bus lanes must stop at least 50m from any junction to allow traffic to turn left safely.	Correct and I agree. To cause minimal disruption to buss lanes and car users it is preferable to implement some suggestions made in diagram 2 below.
8	Vehicles turning onto a road with bus lanes should be able to use the bus lane as an acceleration lane	Yes but this can be minimised using the suggestions made below.
9	Bus lanes must flow in the same direction as the rest of the traffic. Contra-flow bus lanes are a danger to other road users, including pedestrians who may fail to look in the opposite direction to that in which the rest of the traffic appears to be travelling.	Agree, I have found this concept alien, but to be fair, it's a rare phenomenon and hardly used.
10	Motorcyclists should be allowed to use bus lanes at all times.	May be useful in UK, but NEVER in Pune or India where the 2 wheelers are far too many (you could stand in London all day and end up counting a dozen bikes only).
11	Slow vehicles such as excavators and milk floats should be allowed to use bus lanes to avoid holding up traffic.	These should not be on road during peak hours at all unless the situation demands. It has nothing to do with bus lanes.
12	Traffic islands may not be placed between the bus lane and the rest of the carriageway. Islands used to locate traffic lights with bus priority signalling (pre-signals as described in Bus Priority Resources pack) present a serious and unnecessary hazard at times when the bus lane is not in operation. Even on 24 hour bus lanes, traffic islands may prevent buses and emergency vehicles from overtaking any obstruction in the bus lane, such as a broken down or illegally parked vehicle as this photo shows: 	Correct, get rid of the traffic islands but everything else i.e. use of technology such as pre-signals makes sense. Thus if an idiot was blocking the bus as shown in the picture, the bus could easily pass it on right (if traffic islands were not there).
13	Essential service vehicles shall be allowed to use bus lanes at all times	Totally sensible for all emergency vehicles to use the bus lane (and so they do).

Diaram 1

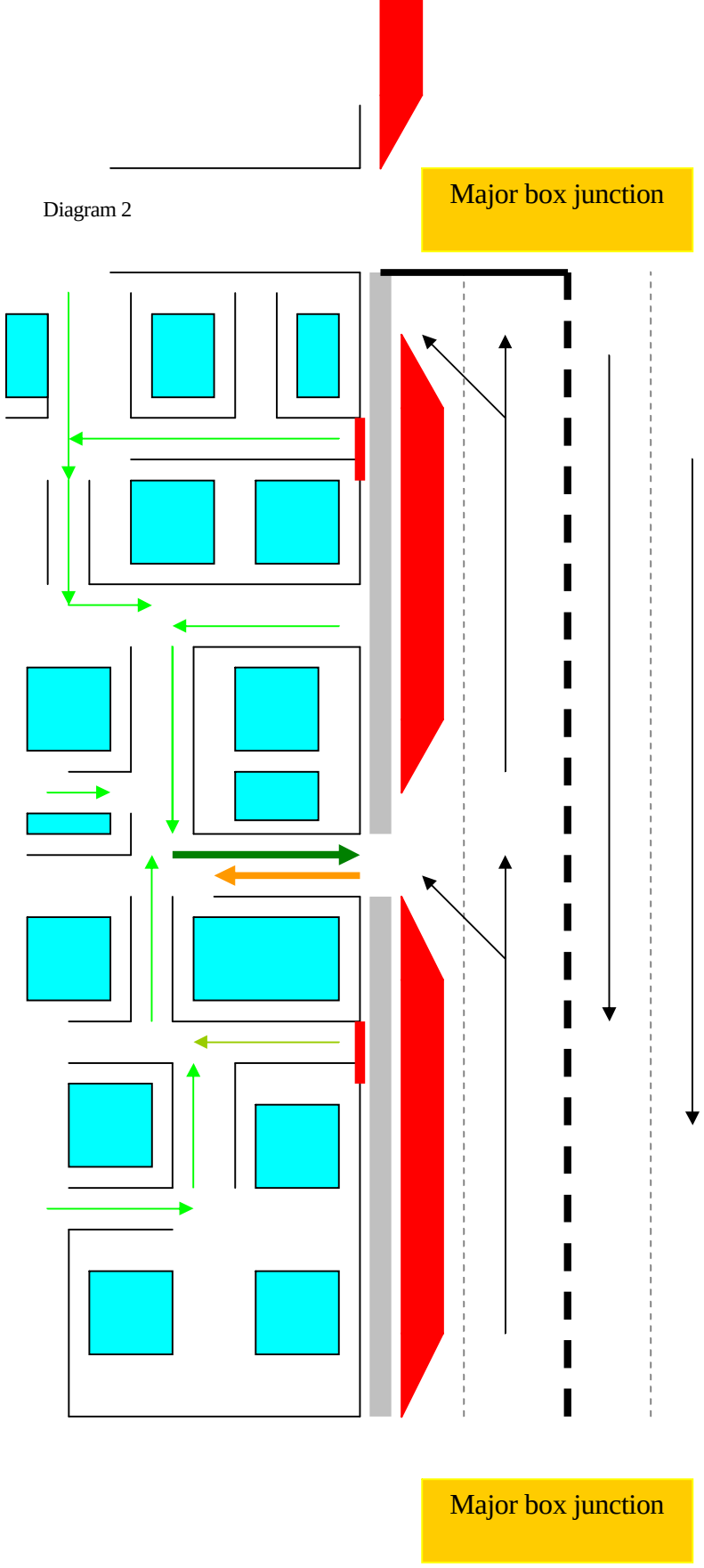
This is an example of how poorly planned bus lanes fail to ease congestion (or in fcat worsen it).



Kenton road in Harrow has 2 lanes on each side. It is wide enough to have a bus lane on the entire stretch. Yet, the bus lane is operational only in 2 small sections. This causes a bottle neck for cars at points where the bus lane begins, slowing down the traffic substantially (as shown diagramatically). The solution is to implement Whole Corridor Approach:

The solution is to implement the Whole Corridor Approach - i.e. the entire road at outset has one of the lanes as bus lanes combined with SVD signal priority. Further as shown in diagram 2, interruptions to bus lanes can be minimised by reducing entry / exits off kenton road to the lanes on left as well as right.

Diagram 2



Notes and key for diagram:

Only one side is demonstrated, same principles may apply to opposite side.

- Box junction controlled by signal
- Bus lanes
- Residential areas connected to each other by small lanes.
- Green arrows show flow of traffic from residential areas towards main road. ***Reverse flow towards residences also allowed.***
- The only way in to the IN to the residential complexes
- Only way OUT for residential complexes.
- Exits from residential complexes BLOCKED to ensure smooth running of BUS LANES.
- Footpaths
- Stop line at signal
- Line dividing road in 2 lanes
- Road divider

Diagram 2

Principles of Bus Lanes:
A diagrammatic representation

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