

Brighton Area Buswatch's concerns about the proposed Valley Gardens scheme.

Looking at some of our issues.

Item 1: London Road/St. Peter's Place junction, and St. Peter's Place itself:

This junction has previously been a source of congestion, yet the current Valley Gardens proposals are likely to increase delays, by forcing the frequent University bendy-buses (and Lewes services) to turn right here. Apart from increased delays to buses at the junction itself (amongst other issues), it would also significantly increase journey time for many north-eastbound buses (including buses to the University).

Item 2: Southbound Grand Parade/Church Street right turn:

Long southbound delays are expected at this junction due to what we believe is a serious design problem. Further communication with the council has done nothing to alleviate our concerns, especially as the council appears to view this turn as only having minor significance!

Currently, the Grand Parade/Church Street right-turn layout consists of two ahead lanes and a right-turn lane. Under the proposed layout, the southbound direction would be reduced to just two lanes. As the outside lane is still likely to be used by traffic wanting to turn right into Church Street, this would halve the number of traffic lanes available to handle southbound traffic, so halving maximum southbound traffic flow. Therefore this is likely to prove a serious problem when the new junctions are said to be close to 100% of capacity.

But it gets worse, because of additional necessary Pedestrian and bus exit movements at the junction, its capacity will be cut further. We believe the **maximum southbound traffic flow would be reduced to nearer one-third of its current level.** While the current junction does have some spare capacity, it is difficult to believe that it could cope with one third of the current maximum level.

These concerns were borne out in a recent traffic survey. This showed the southbound direction to be running fully at capacity, with TWO southbound lanes operating (twice the likely number of traffic lanes). It should not require much imagination to foresee how much disruption this will cause to traffic, and the likely near stationary southbound buses beyond the bus lanes.

Item 3: St. Peter's Bus lanes: There are a number of issues (including the taxi rank), reinforcing each other. This is likely to cause significant delays to buses. Made worse by the University/Lewes services also using these bus stops. While one answer to these problems, is to remove many bus services from these very important bus stops (which is the closest bus stop to Brighton Station for many people). We believe there are better answers. These issues are covered in greater detail, in Appendix A.

Item 4: Bus lane enforcement:

While enforcement of the current bus lanes is very good, the proposal raises many serious concerns. First, with an exception of near St. Peter's Church (on the original proposal), the total lack of road marking- showing bus lane enforcement, means we are totally reliant on road signs, which may not yet have been designed!

Assuming these road signs are adequate to persuade drivers not to use these bus lanes, and are sufficiently robust to be enforced by the courts; we feel there are still serious problems with the bus lane enforcement, as currently set out.

As we understand it. To provide local access, northbound traffic will freely be able to use the 'bus lanes' as far north as North Road, then would be forced to turn right.

At times when the northbound bus lanes are most useful (e.g. evening peak), northbound traffic on the east side of the valley is frequently likely to be almost stationary. This will make using the free flowing 'bus lane' on the west side of the valley very tempting (especially as traffic currently uses this route), even if it is only as far as North Road.

The problem is- once this traffic turns right at the North Road crossover, it will soon hit the near stationary northbound traffic, on the east side of the valley. Especially with additional traffic from North Road, the tailbacks would soon block the so called bus lane, causing significant delays to northbound buses.

It is acknowledged that the potentially worse problem for northbound buses, at the end of the St. Peter Church bus lane, has been changed. Although better, it remains far from ideal. Traffic turning left into Trafalgar Street could still cause delays to buses, and the road is so narrow that an unloading vehicle could entirely block the road; but our main concern is southbound.

Up to the recent change, the planned enforcement of the southbound bus lanes has been good. However by allowing general traffic southbound in the current bus lane, this risks causing problems. First if enforcement south of Trafalgar Street is poor, this risks causing significant delays to buses at the southern end of the bus lane. Second, traffic waiting to turn right into Trafalgar Street could cause extra problems for buses at the St. Peter's Church bus stops.

Third, by allowing traffic to turn right up Trafalgar Street, it creates a potentially attractive new through route into the city. If so, this traffic would go up Trafalgar Street, Frederick Place, then down Queens Road, passing through the Clock tower junction. As this junction has little spare capacity, it will only require a small amount of extra traffic to cause substantial delays to southbound buses in Queens Road (such as the service 7). Our alternative would solve all these problems.

Continuing with more issues:

Items 5: Right turns into Kingswood Street and Morley Street:

With severe capacity restrictions along this section of single lane road, it is difficult to justify allowing northbound traffic to turn right into these two roads. Any vehicle turning right into either road will bring northbound traffic to a standstill. With traffic said to be close to 100% of capacity, this will instantly cause long northbound tailbacks. Even just one car turning right every minute, will cause a dramatic reduction of northbound capacity. This could well cause northbound traffic queues to extend through the Edward Street junction, so affecting buses.

This will become even more likely, as allowing traffic to turn right into Morley Street (etc.), will make this a more attractive through route (as traffic no longer needs to loop back, to use these roads), so this is likely to result in even longer northbound tailbacks, and delays to buses.

Although there are other potential sources of congestion; permitting these right-turns is likely to become the biggest source of northbound congestion.

Item 6: Problems with buses exiting from the southbound bus lane.

Under normal traffic conditions, buses should not have any problems exiting from the southbound bus lane. However on occasions when tailbacks from the seafront (etc.) reach past Edward Street, there is likely to be problems for the second (and subsequent) buses/taxis, exiting from the southbound bus lane. Although the manual over-riding of the traffic signals, could fix to this problem, our alternative offers further help, should this not be possible.

Item 7: Southbound to North Road junction:

Southbound to the North Road junction, was said to be running close to 100% of capacity. Then the council chose to remove the short second traffic lane. It would not be surprising if the junction was running beyond its maximum theoretical capacity. And that is before extra problems, from weekend traffic/time of the year, are taken into consideration!

Item 8: Mixed priority near Church Street:

The original plan included a New Road type 'mixed priority' scheme, where the 'bus priority road' passed close to the Pavilion Gardens. While this idea appears to have been dropped, we would be concerned if it was to be resurrected; as the high number of buses using the route, in combination with a bus 'road' which may not be apparent to pedestrians, would raise serious safety concerns.

Item 9. Road narrowing:

The group should highlight the narrowing of the bi-directional bus lane to just 6.5 metres. This is nearly a yard (0.8 metres) narrower, than the standard 7.3 metre road width! It would be interesting to know why such a restricted width was chosen, especially given that the council has agreed to widen most of the cycle route. With buses approaching nearly 3 metres wide with wing mirrors, this 6.5 metre width gives drivers little room for error when driving. More importantly, the lack of manoeuvring space means an accident is far more likely; should a pedestrian make a mistake, or get too close to the edge of the kerb. With the large number of pedestrians expected to use the garden, this should be an issue, if unnecessary accident risks are to be avoided.

Item 10- Congestion- our big issue:

An overview of our concerns:

Our greatest issue relates to likely congestion problems, and the adverse effect it will have on bus services.

Starting with Restricted traffic flow: There should be no argument that the current Valley Gardens scheme will dramatically reduce maximum traffic flow, through the A23 Valley Gardens. Whether this maximum traffic capacity has been halved (or worse), is open to discussion.

However, Brighton has recently been named by 'Tom Tom' (the Satellite Navigation people), as deteriorating to become the fifth most congested city in Britain (and has gained entry to the top 100 most congested cities on the world). So it is strange the city council is planning to approximately half capacity, on arguably its most important artery into the city.

Our main point is as bus users, we are very aware- that it is at 'busy times' when the city centre (and beyond) becomes very congested, that reliability on bus services deteriorates sharply, making buses far less attractive to use.

Busier times can include weekends and school holidays (particularly during the peak summer holiday season), or the Christmas peak. And to a lesser degree many Friday afternoons.

By the council measuring traffic on an October mid-weekday, this does not take into consideration much heavier traffic levels on many weekends, and at busier times of year.

It may be suggested that it is 'normal' to complete traffic counts (and traffic models) at times such as October, but Brighton's traffic patterns are not normal.

For example in most cities, August is the quietest month of the year, whereas in Brighton it is probably our busiest. It is assumed that the point of traffic modelling, is to see how a selected traffic management design will behave under 'normal busy' traffic conditions. But by the council choosing to model a much quieter time, then it risks failing to identify likely traffic problems. We are after all, a major tourist resort and shopping destination (and this should be taken into consideration).

There are indications that at these 'normal busy' times, traffic could be 25% higher than during Autumn 'peak-time' traffic counts. With some junctions already said to be close to capacity under

current modelling. At these higher traffic levels, it will almost certainly result in extensive traffic queues radiating far beyond the bus lanes, at busier times (badly affecting bus services).

The city already faces severe traffic problems, on a relatively few days per year (causing extensive disruption to bus services- and making some less frequent bus services difficult to use). With the dramatic reduction of junction capacity planned by the council, there will not be the spare capacity to absorb this influx, so severe disruption to bus services is expected to become a common problem.

This will be compounded, by traffic seeking alternative routes. This could be more disruptive to bus services than the direct traffic queues on the A23; as often on these alternative routes, a relatively small increase in traffic, will cause a disproportionately large increase in disruption to bus services. As the 'traffic model' only models October traffic, these particular traffic issues are unlikely to be identified by the traffic model.

It should be remembered that proportionally, **Brighton has the highest bus usage in the UK (excluding London)**. This increased bus usage has helped to underpin the economic regeneration of the city over the last two decades. Ironically, this high bus usage is important factor in the low October traffic counts, and a major reason why traffic increases so much, when there is a large influx of external shoppers/ visitors.

Acceptable reliability is the cornerstone of a successful bus service. While passengers are prepared to accept occasional disruption; if this becomes relatively normal, then it risks severely undermining our currently successful bus service.

In this city we have become accustomed to increasing bus usage, but this is unusual. With these proposals, we risks joining the majority of towns and cities in Britain, with falling bus usage- and risk creating a *multiple spiral of decline*.

Increased fares: Before mentioning spirals of decline, we should point out that while bus reliability is the biggest issue- increasing bus fares is important too.

As bus service become more and more unreliable, bus companies are forced to add extra buses to the timetable. Possibly costing £150,000 per annum, for each extra bus (of which there is likely to be many). Bus companies are not charities, so will pass most of these extra costs onto passengers (i.e. us), resulting in higher fares. This is most unwelcome, and will do nothing to encourage bus usage, one of the council's stated aims.

Going back to the multiple spiral of decline. Increasing congestion worsens reliability, which directly discourages bus usage. As outlined above, it also increases costs/fares. Both of these lead to fewer passengers or cut-backs to services (which further discourages bus usage).

Worse, fewer passengers means more congestion- so causing further unreliability, higher fares, and fewer passengers; and so on..... in a continuing downward spiral of declining bus usage.

As local bus users, we are more used to a positive spiral; but this could quickly reverse under present Valley Garden plans.

In fact, such a decline did happen one year, when severe traffic restrictions caused by roadworks reduced bus usage for the first time in perhaps 15 years (this ironically included narrowing Grand Parade to a single lane).

It is noticeable that in London bus use has been falling for the past three years, after fifteen years of growth. This is largely attributable to slower journey times as a result of increased congestion, often created by traffic schemes that failed to take sufficient account of buses. That decline must not be allowed to happen in Brighton & Hove, as the city is so reliant on its bus services.

Other factors related to restricting traffic flow:

Removing existing spare capacity could preclude hoped for improvements at the Clock tower junction. More significantly- roadworks, a breakdown, or accident - in the single lane section of Grand Parade, would be doubly damaging to bus services. Not only would buses quickly be affected by the traffic tailbacks, but with general traffic forced to use the bus lanes, along with the low capacity of the design, means the bus lanes will soon resemble a car-park, effectively bringing bus services to their knees.

In addition, there are a number of reasons to question the council's assumption that traffic will never increase, especially given the scheme could have a design life of 25 years. So it is important the scheme is right. Not only does the assumption of no increase in traffic go against past trends, but equally important- it does not take into consideration population increase. If it is assumed that the city's population will increase by about 10%, this will require *car usage* (per inhabitant) *to reduce by about 10%*, to remain traffic neutral. If this target is not reached, it will result in an increase in car usage, potentially putting junctions over their maximum capacity.

Equally important, these '*theoretical*' traffic models assume everything works at 100% efficiency, whereas most traffic engineers assume the '*practical*' maximum capacity is only 90% of theoretical capacity. Also traffic counts completed at a Brighton junction- indicate the traffic (rather than junction) efficiency could be in the low 80%! Both these issues, would cause considerable extra traffic problems for buses.

Solving the problem?: The council has suggested all these problems could be resolved with the latest upgrade to the SCOOT traffic signal system. Forgive us if we remain unconvinced on this. Previous supposed improvements to traffic signals, have in some cases made the situation worse for buses. Equally important, one of the major proposed changes to the new signalling system, is said to be redirecting traffic off major routes such as the A23 and Lewes Road (where there are bus lanes), on to other routes, where buses will get stuck in incredibly disruptive traffic queues.

While the correct use of the new system could create modest improvements, it does not change the laws of physics. Once a junction is at capacity, the only way to increase traffic flow in one direction, is to reduce traffic flow in another direction. **The new system would certainly not be able to offset the congestion problems caused by approximately halving capacity, on arguably the most important route into the city.**

Such congestion is likely to cause unprecedented disruption to the city's bus services.
We are not looking forward to this!

Item 11: During Construction: The council should be praised for the considerable effort it has put into reducing delays to buses during the construction period. However, given the likely massive level of disruption caused by making major changes to almost every section of road; delays to buses are still likely. With later detailing, showing the constructional solution is not quite as pristine as originally thought.

Equally important, while buses have got off lightly from such a comprehensive scheme, other traffic has not fared so well. This is still likely to add significant disruption to bus services- from the long traffic queues beyond the bus lanes, and particularly from motorists seeking alternative routes.

The alternative aims to minimise these.

Lastly: Stating the obvious: all existing bus shelters and real-time information displays must be retained (or new equivalents provided).

Current proposals- conclusion:

While the current proposals are good for cyclist and pedestrians, they are likely to prove highly damaging for bus services. As buses are the main alternative to the car, for many people; this can only be damaging to the city. Our proposed solution is: the Alternative.

How the Alternative addresses each issue: Starting with the big issue:

Item 10 –Congestion problems:

Hopefully in highlighting the considerable problems caused by just having a single lane in each direction, we have provided sufficient reasons to ensure the design retains two lanes in each direction. This (and much more) can be seen in our attached diagrams.

The Alternative retains two lanes, in a number of ways.

Heading north from Edward Street, the current design has four traffic lanes, this would be extended up to North Road, utilising the pavement width between the current road and the mature trees (another alternative is possible).

Beyond North Road, a new 4.2 metre wide *single* lane road is suggested, between the two lines of trees- between North Road and Richmond Parade. Unlike the original two northbound lane road proposed for this location, this will not require any tree felling, especially of the very important mature Elms. Just beyond Richmond Parade, this single lane would be joined by a bus lanes carrying University (etc.) services. Just after the northbound bus stop, the road would become two lanes again, this will allow buses to easily get out into the right-hand lane, to continue their journey up the Lewes Road. The left turn lane will of course being used to carry the main A23 traffic.

Heading south: The Alternative starts in St. Peter's Place. The existing two southbound lane road would be retained (in Richmond Place *and Grand Parade*), towards North Road. The Alternative then makes use of the present design's two southbound traffic lanes, towards the Edward Street junction. Obviously, to prevent severe congestion problems at the Grand Parade/Church Street junction, traffic would be banned from turning right into Church Street. This is covered in a minute, under 'item 2'.

The missing section: So far all the general traffic would be retained on the east side of the valley, so retaining full pedestrian access into the Gardens from the west.

Yes there is a missing section: the second traffic lane between North Road and St. Peter's Church. The only way we can find to provide this, on the west side of the valley. Before readers throw their hands up in horror, this has been fully thought through.

The vast majority of people from the south and west, will enter the Valley Gardens 'linear park'- from either the Old Steine, Pavilion Gardens, Church Street, or North Road. The main A23 traffic flow will remain entirely on the east side of the valley throughout these important locations, so will not affect access to the park, or create any barrier.

Second for most of the time, the planned single lane on the east side of the valley will have sufficient capacity to cope with the expected traffic flows. This means the suggested overflow traffic lane on the west side of the valley (north of North Road) is only likely to see traffic at peak-times, and may not even be needed at all, at quieter times of the year! This means that for the majority of the time, there will be less traffic on the west side of the valley, than under present plans (because of the better enforcement). Even when traffic flows, pedestrians would still easily access the main valley, using Pelican crossings at the main entry points. Northbound traffic flowing on the west side of the valley, is likely to be just cars, and could be restricted to perhaps one-third of total traffic flow.

The 'Half Alternative' option: If even this is unacceptable, then a 'half Alternative' option could be possible.

This involves first building the eastern side of the Alternative (using sub-option 3, at the North Road junction). Then after running this design for a period (which must include a summer peak

period), analysis is made. If it is then found the design copes well with a single northbound lane, then no overflow lane would need be built on the west side of the valley.

If problems occur, then a peak-time overflow lane would be built, north of North Road.

This would allay a major concern by two members of the Buswatch executive committee, who worry that if the current restrictive design is implemented, and it proves so damaging to tourism and shopping, that pressure is put on the council to convert the proposed bus lane(s), into second general traffic lane(s). That this would further seriously undermine local bus services.

By proving whether this second northbound general traffic lane is needed (or not), it means that if it is built, it will not be at the expense of the northbound bus lane.

There are further issues for both options, but these are not covered here.

Covering issues 1 to 9

The proposed package of measures near St. Peter's Church will solve a number of problems (included those listed as items 1, 3 and 4). It also creates a number of other advantages not listed here, including a near continuous westbound bus lane in St. Peter's Place, useful for southbound service 25- and Lewes services. These important bus service would benefit from the Alternative, in both directions. And there are some potential pedestrian/cycling enhancements.

This package starts by restoring the east-west crossover link, south of St. Peter's Church. The council is planning to retain something fairly similar, as an emergency access route.

This arrangement would instantly solve:-

- (1) the possible capacity problems at the St. Peter's Place/London Road junction (which risk delaying buses in several directions); and the potential problems at other nearby junctions.
- (2) it will prevent the significantly longer journey times for buses heading towards the University (and other services).
- (3) It will potentially solve problems with the taxi rank; and along with other measures, it would solve the problem at the St. Peter's bus stops (see Appendix A).

Equally important it would prevent the problem of unwanted traffic in the 'bus etc. lane', which has the potential to be quite disruptive to current bus services.

Instead of the current arrangement, the Alternative would resolve this problem by splitting the bus lane into sections, where general traffic would not be able to continue along more than two sections. But more importantly, traffic would not gain by using these routes, so substantially reducing the amount of unwanted 'general' traffic, on the west side of the valley (while retaining necessary delivery access); which must be good.

How access would be arranged: Starting from the south: general traffic would be able to access Church Street westbound, but only buses (etc.) would be able to head eastbound towards the Edward Street junction. North from Church Street, the prohibition is reversed. Northbound would be bus (etc.) only, with general access only allowed southbound. General traffic be able to enter Gloucester Place and Marlborough Place, via the new access route south of St. Peter's Church. As traffic would only be able to access this route by turning left (thanks to the right-turn prohibition), it would be doubling back on itself, so it would only be worthwhile traffic accessing the route, if it has a genuine access requirement. Southbound general traffic really should be almost no existent.

The Alternative has been designed in such a way, that the new crossover 'road' south of St. Peter's Church should not adversely affect north-south pedestrian and cycle flow. To this end, the new route would be 'mixed priority', so pedestrians and cyclists should feel they have priority, over motorised vehicles. Second, traffic should be incredibly light- perhaps a bus every 3 minutes (plus some taxis) in the eastbound direction, and the almost non-existent traffic in the westbound direction (as outlined above).

Going on to item 2: A number of ideas were considered to overcome the serious problem of traffic wanting to turn right into Church Street, leaving only one southbound ahead traffic lane open. To retain two southbound lanes towards the Edward street junction, the preferred solution is for traffic to turn right at the North Road junction, then proceed on the west side of the valley, down to Church Street, where it can turn right. While this will slightly increase traffic on the west side of the valley, this is actually beneficial for the new greatly enhanced pedestrian crossing, adjacent to the Pavilion Gardens- which is covered in a minute.

Item 5 (right-turns in Kingswood Street and Morley Street). These problems would be simply solved by banning right turns into these roads. The few vehicles genuinely requiring access, would simply turn right at Richmond Parade, where they will almost immediately find a mini roundabout. Here they can turn around, and gain entry to these roads in a southbound direction.

Item 6: While the problem of more than one bus/taxi buses exiting the bus lane, at exceptionally busy times could be solved by the manual overriding of traffic signals. However the alternative offers positive idea of a short southbound bus lane, which could be lengthened if Valley Gardens Stage 3 is built. These would use near standard width traffic lanes, which will help buses turn right out of the bus lane, and merge with the main traffic stream.

Item 7: Under the Alternative, two southbound traffic lanes would be retained through the North Road junction, thereby answering the potential traffic problems raised.

Item 8: will hopefully will not be reinstated, so does not require an answer.

Item 9: The 6.5 metre narrowness issue, would be addressed by widening the bus (etc.) only carriageway to 7 metres (preferably 7.3 metres). Improving safety. This could also help keep the second traffic lane open during the construction phase, where 6.5 metre width could prove too narrow to allow buses to pass the roadworks (causing significant extra delays during construction).

Item 11- Construction: While the council has done a good job in reducing disruption during the construction period, such is the comprehensive scope of the roadworks, there is still likely to be considerable disruption to bus service.

The full Alternative aims to minimise disruption by:- (1) only changing the kerb-line, when it is absolutely necessary. (2) Second, the final design retains many more traffic lanes, so there is more potential to divert traffic, during the construction process, without causing disruption. (3) Third, with many fewer kerb-lines being changed, it makes it more likely these important roadworks can be completed at quieter times of the year; when disruption to buses/other traffic can be minimised.

Costs: While building the 4.2 metre road between North Road and Richmond Parade will not be cheap, however massive saving will be made by not changing almost every kerb-line within the scheme. So, not only should it be quicker and much easier to build; but it may even cost less!

It would not just be bus users who would gain:

While optional; the alternative is not just about helping bus users, but pedestrian and cyclists should gain as well.

We would argue the great new direct Toucan crossing between the Pavilion Gardens and the main part of Valley Gardens is a huge improvement over the current design, which involves pedestrians making use of two awkwardly arranged Pelican/Toucan crossings.

As just outlined, under the alternative; southbound Church Street right-turn traffic will stay west of the new crossing, so reducing the amount of traffic pedestrians (etc.) would need to cross, between the Pavilion Grounds, and Valley Gardens.

This would further enhance the integrated feel of joining the Pavilion Grounds, to the Valley Gardens, as a continuous open space (much better than the current proposal).

Further north: there could be an optional (but desirable) cycle/pedestrian underpass, under the North Road crossover. This would prevent North Road creating a barrier between these two sections of the valley.

Still further north. A combination of less traffic in St. Peters Place (because some peak traffic is on the west side of the valley), and having separate left and ahead traffic signal phase (northbound towards the Richmond Place/ St. Peter's Place junction); means it should be possible to have a straight across crossing (rather than staggered crossing) for cyclists and pedestrians, across the mouth of St. Peter's Place. Understandably, this is something which cycling groups are keen on. Other cycling/pedestrian improvements are suggested (including possible new shared cycle path(s)).

While it is difficult to see running some peak-time traffic on the west side of the valley (north of North Road) as being a positive; however the Alternative seeks to more than offset this, by suggesting a number of positive pedestrian and cycling measures (some of which have just been covered). Overall, some people may think that the Alternative is better for pedestrians, and especially cyclists, than the current plans! Even if this is not the case, then the massive benefits to bus users, should outweigh any tiny disbenefits to other users.

Conclusion:

While we can appreciate the council wanting to create a 'linear park', and to greatly enhance cycling and pedestrian facilities; but we see the cost of the current scheme as being too high in terms of risking seriously undermining bus services, with the resulting negative effects on the city's economy.

All is not lost. The Alternative solves all the identified bus issues (even benefiting bus services), while retaining most of the positives from the current Valley Gardens proposals. It would be less damaging during the construction phase, and it may even be better for cyclists and pedestrians, as well.

Above all, it is hoped that the council wants to retain our currently successful bus service, as much as bus users do; along with its benefits to the city's economy.

David Dufour (Acting Chair)

Peter Elvidge (Secretary)

Agreed by the Executive committee.

Problems with the St. Peter's bus stops

Appendix A.

We are concerned about proposals for the St. Peter's Bus stops. Far from improving the area for bus passengers, the proposals risk causing bus users considerable problems.

A number of these problems would be made worse by the road being so narrow. At 6.5 metres- this is narrower than North Street- and nearly a metre narrower than the standard 7.3 metre road width.

These observations are based on the original plans, with updates where they are known.

Problems with the Northbound bus stops:

- (1) As the road is so narrow (with each lane being little wider than a bus- with wing mirrors), the lack of manoeuvring space means it would be difficult for buses to get close and parallel enough to the kerb. So buses are likely to stick out, *blocking the road in both directions*. Looking at how buses normally approach bus stops, this will be a common problem, causing buses (and other traffic) to queue in both directions.
- (2) This problem will be compounded by the planned new bus stops being much shorter than the current bus stop space (making it far more likely buses will approach the second bus stop at an acute angle, d stick out, and so causing extra disruption to traffic). This will be further compounded by many extra Lewes Road buses serving the same bus stops.
- (3) Also one bendy-bus could take up much of the allocated bus stop space. With St. Peter's Church being such a key interchange point for Lewes/University services, loading times can be lengthy, potentially further extending northbound bus/traffic queues.
- (4) Then there is Visibility issues: With the proposed road being only 6.5 metres wide (barely wide enough for a bus), it may be difficult for overtaking traffic to get out far enough into the road, to see past the first bus, before overtaking it. This would cause even more delays to northbound buses/traffic, a problem which can be seen at the North Street (westbound) bus stops.
- (5) Even if the road is not blocked by buses sticking out, then there could well be visibility issues for the bus at the first bus-stop, trying to re-overtake the bus located at the second bus stop.
- (6) Then there is the taxi rank: which is assumed to be opposite the northbound bus stops. While the intermediate design is a huge improvement over the original design, if there are more than six taxis waiting at the rank, then excess taxis are likely to block the road in one (or both) directions. Also if a London taxi has been used to model the turning circle into (and out from) the new taxi rank, then this would be totally inadequate for most Brighton taxis - requiring taxis to make multiple manoeuvres- adding to the delays to buses. Also how easy would it be for taxis to exit from the taxi rank?
- (7) We generally welcome the banning of northbound general traffic from York Place (assuming it is properly enforced), as this traffic would just add to the problems at the northbound bus stops, as well causing problems- at the London Road exit from the bus lane. However there are disadvantages: any queues of traffic waiting to turn right into Trafalgar Street will make it difficult for northbound vehicles to overtake stationary buses, and cause minor delays to southbound buses. Also if the Trafalgar Street entrance is blocked, problems would be far worse.
- (8) More importantly: all these issues would take place over a very short physical distance, and so these problems are likely to compound each other, potentially generating substantial traffic queues; reaching towards Trafalgar Street. Once this is reached, northbound general traffic will add to the traffic queues, resulting in the traffic queues quickly reaching opposite the southbound bus stop (which is only a short distance away)- causing the compound problems mentioned below.

Southbound Bus stop:

A number of the problems for the northbound bus stop, could also apply to the southbound bus stop (but to a lesser degree). Remembering that bendy-buses will also be using this bus stop.

Going back to compounding the problem: Once northbound traffic queues reach the southbound bus stop, then this will prevent southbound vehicles from overtaking each other, potentially causing ever lengthening southbound traffic queues. As the distance between the two bus stops is such a comparatively short distance, these southbound traffic queues would soon reach the northbound bus stop. Once the northbound bus stop is reached, this will also make it impossible for northbound vehicles to overtake each other, and **gridlock will occur, with indeterminately long delays to bus services**. Any combination of traffic queues, from either bus stop, would cause this gridlock (originally this was as little as five buses/vehicles from either direction).

Even if this did not occur, the design risks causing significant delays/unreliability problems to bus services.

The solution we do not want: These problems could be greatly reduced by removing most bus service, from the St. Peter's bus stops. But as well as being a major interchange, this is the nearest bus stop for many people to Brighton station (we believe in integrated transport). Furthermore, it would put added pressure on other nearby bus stops, which would be equally unwelcome.

How the Alternative will solve these problems:

- (1) By having either a bus stop-layby, or overtaking lane in each direction: This would allow buses to easily get into the right bus stop, and for other traffic to overtake. Also having wider traffic lanes (up to 7.3 metre road width), will help with visibility issues.
- (2) Northbound Lewes/University services would run east of St. Peter's Church, reducing pressure on these crucial bus stops, as well as speeding up journey times.
- (3) The new general traffic access arrangement would prevent unwanted general traffic from affecting buses within the area, and prevent narrow Trafalgar Street from being used as a major through route.
- (4) Optionally, the taxi rank could be moved back to north of St. Peter's Church, but in a more inset position- to allow the creation of an eastbound bus lane in St. Peter's Place, for southbound (25 etc.) bus services.

Other Changes: Not only would buses gain (enormously). While not essential, the Alternative also could include a number of other pedestrian/cycling enhancements.

These changes are strongly recommended.