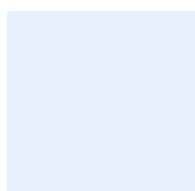


Reference number 102399



MOVEMENT STUDY



SHAWLANDS TOWN CENTRE ACTION PLAN

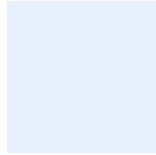
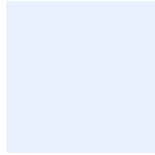
MOVEMENT STUDY

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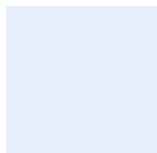
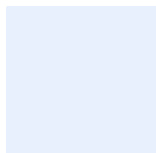
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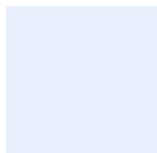
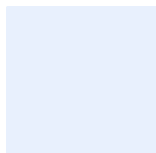
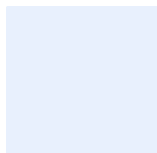
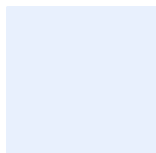


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1. SUMMARY

1.1 Purpose of the Study

- 1.1.1 In May 2012 Glasgow City Council approved an ambitious Action Plan for Shawlands Town Centre. The plan will be delivered over a period of 5 years and its aim is to renew the area's role as the heart of Glasgow's Southside community and to reposition the centre as a destination.
- 1.1.2 Like many Scottish high streets, Shawlands has suffered from changes in consumer demand, the growth of centres outside the city and the arrival of 24/7 internet shopping. To successfully deliver the plan therefore it is important to have an understanding how customers and traffic currently use the town centre and to consider how movement and spaces can be improved and adapted to ensure its businesses, range of facilities and attractions can be accessed more effectively.
- 1.1.3 As such, MVA were appointed by Glasgow City Council to undertake a 'Shawlands Town Centre Action Plan Movement Study' in May 2013.

1.2 Our Approach

- 1.2.1 Our approach to the study has been based around the following keys tasks:
- **Review of Existing Transport Services:** to understand the existing provision in the area and the impact it has upon the town centre;
 - **Data Collection and Analysis:** transport surveys have been undertaken to understand current traffic demand at key junctions, pedestrian movements, parking demand and usage as well as bus usage in the area;
 - **Site Visits:** by MVA personnel to develop a first hand understanding of the operation of the network for various user groups including cyclists, pedestrians, public transport users and general traffic; and
 - **Best Practice Knowledge:** our team has applied their knowledge and expertise of best practices techniques to review the current movement issues facing Shawlands town centre then to identify and assess at a high level potential solutions to resolve them.

1.3 Problems and Issues

- 1.3.1 From this analysis we identified a number of key problems and issues within the study area including:

General

- We believe there is poor awareness of the availability of parking at Shawlands Arcade (i.e. lack of signage) and a perception of poor personal safety (lighting, remoteness etc.). This is reflected in the fact that the Arcade car park is extensively underutilised and has plenty of excess capacity for parking which could be brought into more effective use.

- In addition, access to Shawlands Arcade and its car parking is impeded by the nature of the road layout. In particular, the north car park is inaccessible from the south.
- High traffic flows on A77 Pollokshaws Road / Kilmarnock Road cause pedestrian severance.
- Accidents that are occurring appear to be attributable to high traffic flows and conflicts between different user groups. There appear to be pedestrian safety issues as over half of recorded accidents involved pedestrians which would suggest that drivers are not driving according to the town centre environment but rather using it as an arterial route.
- Footways, raised crossings and tactile paving are in poor condition throughout the study area.
- Some pinch points on footways due to bus stops, wheelie bins, café tables and shop displays.
- It was observed that road markings are in poor condition in many locations, often worn, and this also applies to markings for traffic regulations.
- While there is no infrastructure provided for cyclists (other than parking) in the study area, there was a very apparent high number of cyclists observed in the study area which was confirmed by the Junction Turning Counts.
- Although cycle parking (Sheffield stands) are provided at a number of locations, cyclists tended to use informal locations (e.g. guardrails, etc.) closer to their destination and more in public view to secure their bikes.

Kilmarnock Road / Minard Road / Langside Avenue Junction

- Potential public realm area outside Langside Hall would require relocation of the existing taxi rank.
- The restrictions associated with the part-time bus lane on the northbound carriageway of Pollokshaws Road between Moss-side Road and Minard Road are largely ignored due to lack of enforcement of parking restrictions meaning that buses cannot use it.
- Similarly, regulations to restrict parking and loading on the nearside lane of the southbound carriageway during peak periods are typically ignored which is again due to lack of enforcement rendering this lane unusable.
- Footway, raised pedestrian crossings and tactile paving at junction in poor condition.
- No signage for off-street parking provision at Shawlands Arcade on entrance to Shawlands.
- Banned turns impede access to Shawlands, particularly from the M77 / Crossmyloof area, and encourages the use of the A77 as a through route only. This is exacerbated by ambiguous signage for Shawlands on the approach from the M77 / Crossmyloof area. In addition, access from Shawlands to Langside / Battlefield is also impeded by banned turns and requires ratrunning via residential streets.

Shawlands Cross

- Configuration of junction for pedestrians and vehicles is complicated

- The extensive provision of guardrail and its layout at Shawlands Cross does not match the pedestrian desire lines and leads to them being misused / ignored, particularly by school pupils.
- Pedestrian bottleneck at northbound bus stop outside The Granary.
- Right turning vehicles into Skirving Street can block northbound vehicles on Kilmarnock Road, particularly when the bus stop on the northbound carriageway is also occupied.
- There is parking adjacent to guardrails on Moss-side Road, opposite Frankfort Street and near Shawlands Academy. The signage says no waiting or loading at any time but there are no road markings as well as general lack of enforcement.

Kilmarnock Road around Shawlands Arcade

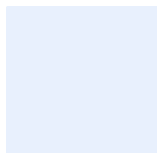
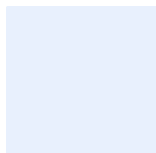
- Lack of loading facilities on Kilmarnock Road lead to use of the central reservation for loading / unloading which creates safety and operational issues.
- The central reservation on Kilmarnock Road encourages pedestrians to cross at informal locations, often between parked cars. Parked cars legitimately parked in designated bays often block dropped kerbs.
- Limited opportunities for pedestrian access to Shawlands Arcade. The existing ramped accesses cause pedestrians to use indirect routes and creates severance between Arcade shops and street level.
- Footway, raised pedestrian crossings and tactile paving at junctions in poor condition.
- On-street parking demand on Kilmarnock Road would seem to be less than capacity suggesting there is no problem with provision and that, given the level of off-street parking available at Shawlands Arcade, that a small amount of on-street parking could be used for alternative purposes (e.g. loading, pedestrian facilities, etc.) without impacting upon the effective supply.

Kilmarnock Road South of Shawlands Arcade

- Footway, raised pedestrian crossings and tactile paving at junctions in poor condition.
- No signage for off-street parking provision at Shawlands Arcade on entrance to Shawlands.

Pollokshaws Road behind Shawlands Arcade

- There are no formal opportunities for loading on Pollokshaws Road outside Ketchup or The Granary. Delivery vehicles for these establishments park-up in the bus stops.
- There are no major issues with the operation of bus services in the study area although it was identified that one southbound stop on Pollokshaws Road is underutilised and could potentially be removed.
- Tactile paving at signalised pedestrian crossing in poor condition.
- No signage for off-street parking provision at Shawlands Arcade on entrance to Shawlands.



1.4 Movement Strategy

- 1.4.1 Our analysis has shown that the road network operates near capacity at times but still in an efficient manner with some spare capacity throughout the network. However, traffic flows are high, particularly on the arterial A77 Pollokshaws Road / Kilmarnock Road corridor, which is not conducive to creating an attractive town centre environment.
- 1.4.2 Existing network restrictions (e.g. banned turns and one-way streets) are effective in facilitating network efficiency but also contribute to reducing the accessibility and permeability of Shawlands, particularly from the M77 / Crossmyloof area and, to a lesser extent, between Langside / Battlefield and Shawlands. These impediments mean people unfamiliar with the local area may have difficulty accessing the town centre whilst those that are familiar may choose to visit alternative locations due to the restrictions it imposes on access for them. As such, Shawlands may not be capitalising upon its local catchment area as a result.
- 1.4.3 Shawlands has a busy pedestrian environment with peaks in demand associated with schoolchildren and retail / leisure demand. Currently the volume of traffic and layout of the road network present an impediment to other users, particularly pedestrians. We believe that the network is currently too focussed upon catering for arterial through traffic rather than serving the needs of Shawlands town centre.
- 1.4.4 Our proposals detailed in Chapter 6 are aimed at reorientation of the transport network in the town centre to improve the attractiveness of the environment for pedestrians, cyclists and public transport users whilst maintaining the operational efficiency of the network for traffic.
- 1.4.5 Our strategy would make the Shawlands Arcade the heart of the town centre again by encouraging people to access it by a range of transport modes including walking, cycling, bus and by car.
- 1.4.6 In particular, our recommendations would improve the pedestrian environment and make the main entrance to the Arcade more accessible by creating a new central stepped access. Alongside this we propose the provision of widened footways, improved pedestrian crossings with built-outs to enhance their delineation along with enhanced raised granite crossings at junctions to guide pedestrians around the area. Crucially, these would lead pedestrians to the Arcade and its new central access point whilst also providing a high quality pedestrian environment in the surrounding locality.
- 1.4.7 The proposed road network amendments aim to make Shawlands a more attractive destination to visit by car by improving accessibility from the M77 / Crossmyloof area, making people more aware of how to access Shawlands through improved signage and capitalising upon the underutilised resource in the form of the off-street parking available at Shawlands Arcade.
- 1.4.8 These measures will also help to create a town centre environment in the vicinity of the Arcade by reducing the dominance of traffic and curbing the instinct of drivers to treat the network in Shawlands as part of a wider arterial route rather than a local town

centre. The formalisation of loading / unloading areas will eliminate the hazards created by these activities making the overall network safer and more efficient, in turn, contributing to facilitation of a town centre ambience.

- 1.4.9 Furthermore, amended and improved bus stops along with relocated cycle parking provision and Advanced Stop Lines (ASLs) for cyclists at key junctions will make access to the town centre easier by these modes as well.
- 1.4.10 Overall, we believe that our proposed measures would maintain the operational efficiency of the wider transport network in the study area whilst helping to guide people to the Shawlands Arcade area as the hub of the town centre. This approach is consistent with the principles of a high level 'Mixed Priority Route' and adheres to concepts defined in the Scottish Government's 'Designing Places' and 'Designing Streets' guidance. Ultimately this would serve the dual purpose of providing an effective and efficient transport network as well as stimulating economic activity and regeneration in line with the requirements of the Shawlands Town Centre Action Plan.
- 1.4.11 This is illustrated in the following figure which highlights the position of Shawlands Arcade and the surrounding town centre area as the focal point of the local transport network.



2. INTRODUCTION

2.1 Purpose of the Study

2.1.1 In May 2012 Glasgow City Council approved an ambitious Action Plan for Shawlands Town Centre. The plan will be delivered over a period of 5 years and its aim is to renew the area's role as the heart of Glasgow's Southside community and to reposition the centre as a destination.

2.1.2 Like many Scottish high streets, Shawlands has suffered from changes in consumer demand, the growth of centres outside the city and the arrival of 24/7 internet shopping. To successfully deliver the plan therefore it is important to have an understanding how customers and traffic currently use the town centre and to consider how movement and spaces can be improved and adapted to ensure its businesses, range of facilities and attractions can be accessed more effectively.

2.1.3 As such, MVA were appointed by Glasgow City Council to undertake a 'Shawlands Town Centre Action Plan Movement Study' in May 2013. Its purpose is to develop a high level, pre-outline design 'Mixed Priority Route Strategy' for Shawlands based upon best practice set out in the Scottish Government's 'Designing Streets', Department for Transport's 'Manual for Streets I' and the Insitutie of Highways and Transportation's 'Manual for Streets II' documents. In particular, key guidance for the study was the principles of the 'Six Qualities for Successful Places – Key Considerations for Street Design' as defined in Designing Streets and replicated in Figure 1.

distinctive	safe & pleasant	easy to move around	welcoming	adaptable	resource efficient
Street design should respond to local context to deliver places that are distinctive	Streets should be designed to be safe and attractive places	Streets should be easy to move around for all users and connect well to existing movement networks	Street layout and detail should encourage positive interaction for all members of the community	Street networks should be designed to accommodate future adaptation	Street design should consider orientation, the integration of sustainable drainage and use attractive, durable materials that can be easily maintained
Block structure <ul style="list-style-type: none"> The urban form should be distinctive with landmarks and vistas that provide good orientation and navigation of an area Context and character <ul style="list-style-type: none"> The requirements and impact of pedestrians, cycles and vehicles should be reconciled with local context to create streets with distinctive character Opportunities should be taken to respond to, and to derive value from, relevant elements of the historic environment in creating places of distinctive character 	Pedestrians and cyclists <ul style="list-style-type: none"> Street user hierarchy should consider pedestrians first and private motor vehicles last Street design should be inclusive, providing for all people regardless of age or ability Achieving appropriate traffic speed <ul style="list-style-type: none"> Design should be used to influence driver behaviour to reduce vehicle speed to levels that are appropriate for the local context and deliver safe streets for all Reducing clutter <ul style="list-style-type: none"> Signs and street markings should be kept to a minimum and considered early in the design process Street lighting should be as discreet as possible, but provide adequate illumination Street furniture should be located for maximum benefit and to reduce pedestrian obstruction 	Connections within a place <ul style="list-style-type: none"> Street design should provide good connectivity for all modes of movement and for all groups of street users respecting diversity and inclusion Public transport <ul style="list-style-type: none"> Public transport planning should be considered at an early stage in the design process Junction types and arrangements <ul style="list-style-type: none"> Junctions should be designed with the considerations of the needs of pedestrians first Junctions should be designed to suit context and urban form – standardised forms should not dictate the street pattern 	Walkable neighbourhoods <ul style="list-style-type: none"> Street layouts should be configured to allow walkable access to local amenities for all street users Streets for people <ul style="list-style-type: none"> Streets should allow for and encourage social interaction 	Connections to wider networks <ul style="list-style-type: none"> Street patterns should be fully integrated with surrounding networks to provide flexibility and accommodate change in built and social environments Integrating parking <ul style="list-style-type: none"> Parking should be accommodated by a variety of means to provide flexibility and lessen visual impact Service and emergency vehicles <ul style="list-style-type: none"> Street layouts should accommodate emergency and service vehicles without compromising a positive sense of place 	Orientation <ul style="list-style-type: none"> Orientation of buildings, streets and open space should maximise environmental benefits Drainage <ul style="list-style-type: none"> Streets should use appropriate SUDS techniques as relevant to the context in order to minimise environmental impacts Utilities <ul style="list-style-type: none"> The accommodation of services should not determine the layout of streets or footways Planting <ul style="list-style-type: none"> Street design should aim to integrate natural landscape features and foster positive biodiversity Materials <ul style="list-style-type: none"> Materials should be distinctive, easily maintained, provide durability and be of a standard and quality to appeal visually within the specific context

Figure 1. Six Qualities of Successful Places – Key Considerations for Street Design

2.1.4 The defined study area is shown in black outline in Figure 2.

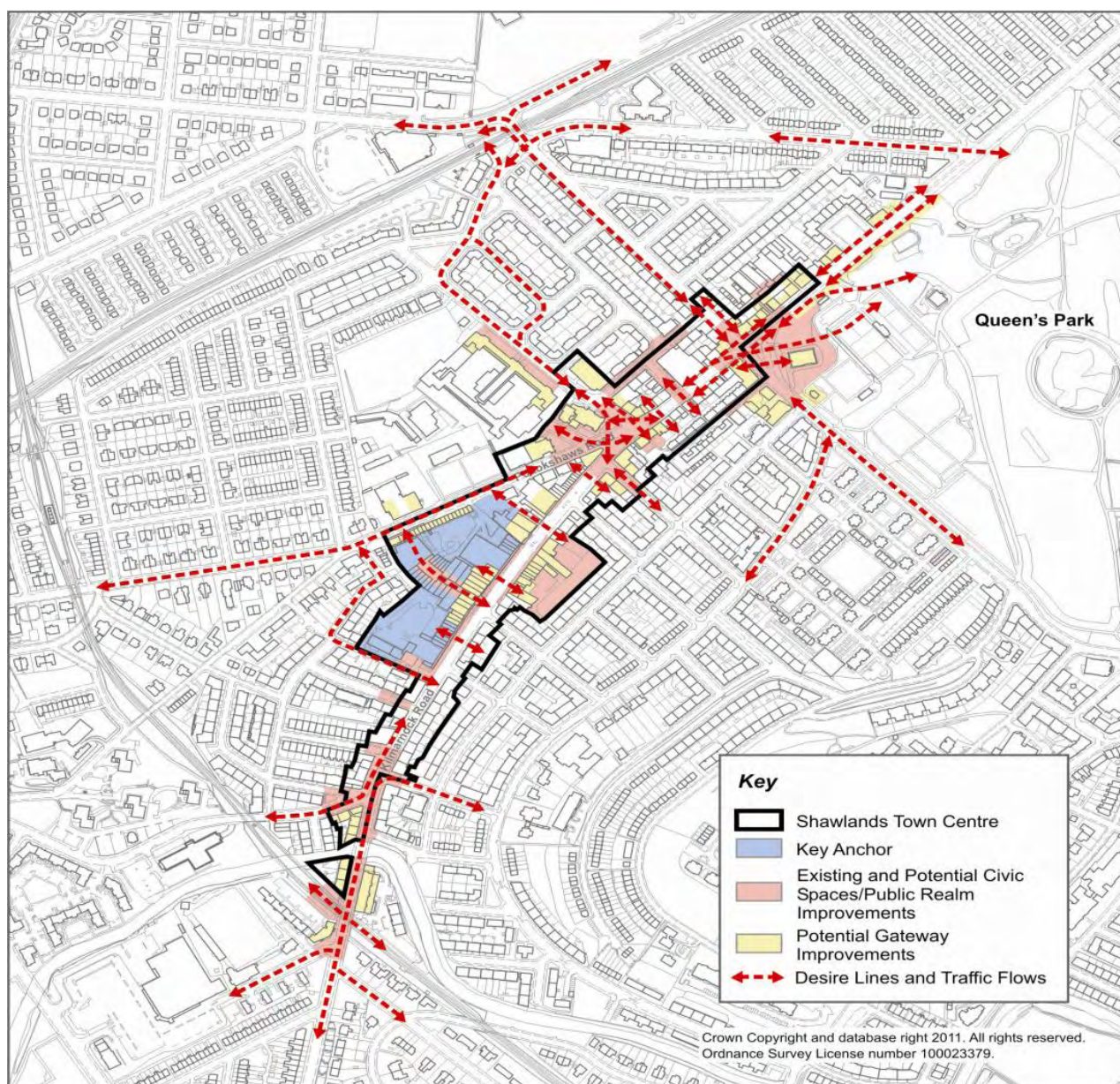
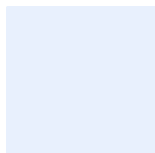
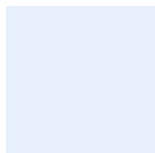


Figure 2. Study Area - Shawlands Town Centre

2.2 Our Approach

2.2.1 Our approach to the study has been based around the following keys tasks:

- **Review of Existing Transport Services:** to understand the existing provision in the area and the impact it has upon the town centre;
- **Data Collection and Analysis:** transport surveys have been undertaken to understand current traffic demand at key junctions, pedestrian movements, parking demand and usage as well as bus usage in the area;



- **Site Visits:** by MVA personnel to develop a first hand understanding of the operation of the network for various user groups including cyclists, pedestrians, public transport users and general traffic; and
- **Best Practice Knowledge:** our team has applied their knowledge and expertise of best practices techniques to review the current movement issues facing Shawlands town centre then to identify and assess at a high level potential solutions to resolve them.

2.2.2 The remainder of this document sets out the findings from these tasks as well as our associated conclusions and recommendations.

2.3 Existing Transport Services

2.3.1 Shawlands town centre is located approximately 4km south of Glasgow city centre with the suburban centre ideally situated around the A77 Kilmarnock Road – a key arterial route between the city and the southern suburbs including Strathbungo, Pollokshaws, Shawlands, Newlands, Giffnock and Newton Mearns.

2.3.2 As well as a key traffic route, the A77 is a major bus route between the city centre and the southern suburbs and is part of the network of *Streamline*¹ bus priority routes that operate in the city. The main bus operator is First Glasgow with their No. 38 flagship service operating via Shawlands on Kilmarnock Road. The 38 service and its derivatives operates at a 5 minute frequency throughout much of the day with frequency reducing to every 10 – 15 minutes in the evening and on Sundays. Figure 3 shows the bus routes operated by First Glasgow via Shawlands.

2.3.3 Other services operating via Shawlands include City Sprinter's 38 service which mirrors that provided by First and Stagecoach's 4 service which links Glasgow, Newton Mearns, Kilmarnock and Ayr via Shawlands.

¹ *streamline* is an enhanced bus service operating on key corridors in the Glasgow area delivered as a result of an innovative partnership investment and commitment by the public and private sectors.

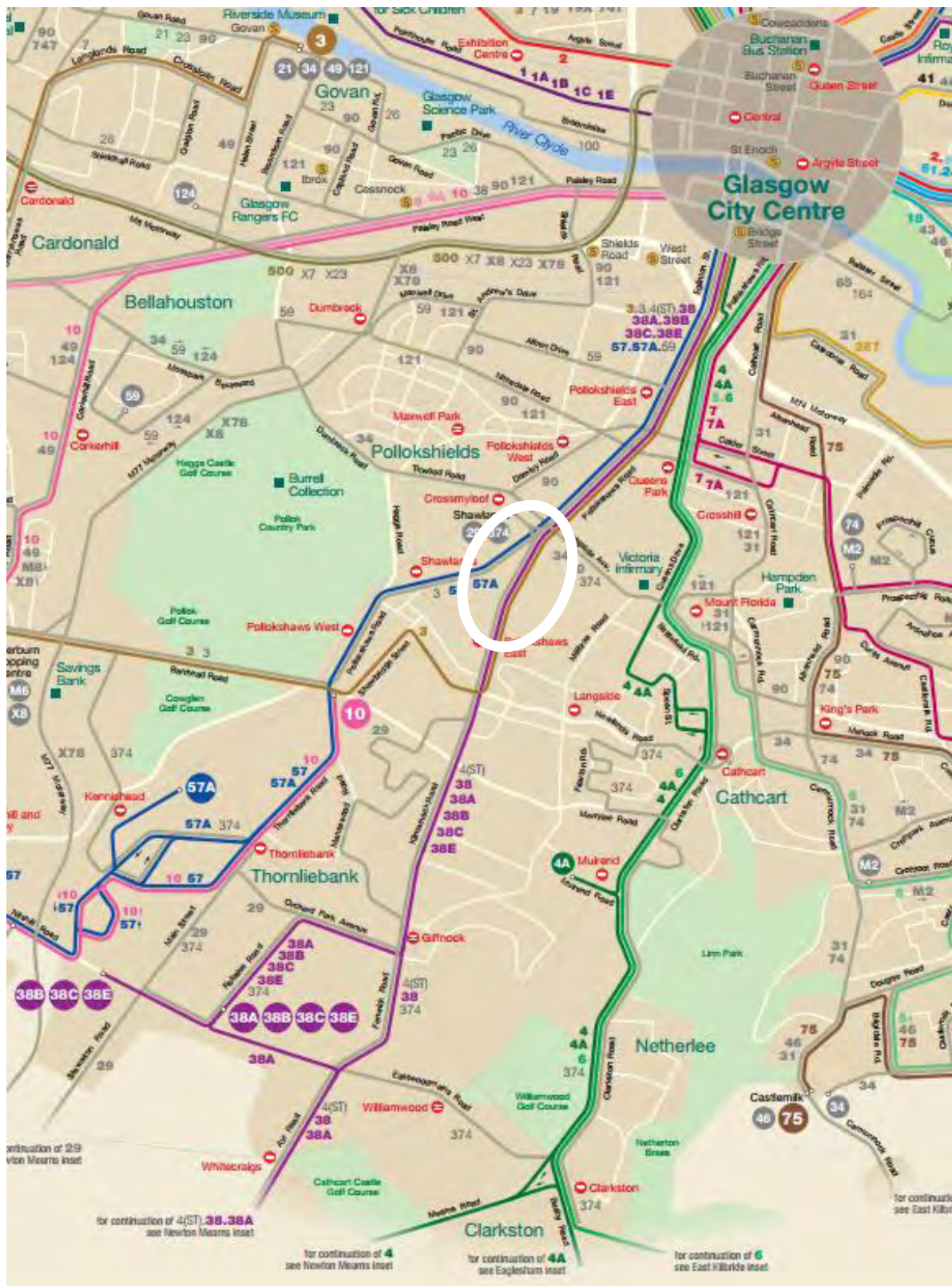


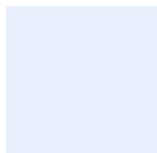
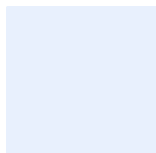
Figure 3. First Glasgow Bus Services via Shawlands

2.3.4 Shawlands town centre is also situated adjacent to Pollokshaws East railway station. It is part of the Cathcart Circle route linking locations around the southside of Glasgow with the city centre. There are two trains an hour between the city centre and Pollokshaws East throughout the day with additional services at peak times. Some services also provide links to Newton. Figure 4 shows the rail network serving Shawlands and within its vicinity.



Figure 4. Rail Network in vicinity of Shawlands

2.3.5 Overall, it can be seen that Shawlands is a key hub in the transport network of the southside of Glasgow. Whilst this gives Shawlands a number of advantages in terms of accessibility it also means that local residents may be encouraged to travel elsewhere to work, shop and undertake leisure activities thereby reducing the attractiveness of Shawlands as a destination.



- 2.3.6 In addition, it is possible that the transport links through Shawlands have come to dominate the area with result being severance in the town centre and between local neighbourhoods which are separated by the main arterial road routes and / or the railway line, which serves the wider conurbation and not the suburban town centre of Shawlands.

3. DATA ANALYSIS

3.1 Overview of Data Collection

3.1.1 To inform the study and our understanding of the problems in the area we undertook the following surveys:

- **Junction Turning Counts:** at five key junctions which included pedestrian's crossing each arm of the junction. Surveys were carried out on a typical Weekday between 07:00 to 10:00, 12:00 to 14:00 and 15:00 to 19:00, and on a Saturday between 10:00 to 15:00.
- **Pedestrian Crossing and Footway Surveys:** undertaken at six locations along Pollokshaws Road during the same time periods as above.
- **Bus Stop Boarding and Alighting Surveys:** at 6 key bus stops within the study area.
- **Parking Beat Surveys:** on Pollokshaws Road and Kilmarnock Road (on street only) within the study area and alongside arms for a distance of 50 metres maximum, as well as Shawlands Arcade Car Park. These recorded the duration, accumulation and turnover of parking and noted the number of service vehicles.

3.1.2 We were also provided with data covering road traffic accidents within the study area for a three year period (June 2010 – May 2013).

3.2 Junction Turning Surveys

3.2.1 Surveys were undertaken at five junctions, these were:

- A – Pollokshaws Road / Minard Road / Langside Avenue
- B – Pollokshaws Road / Kilmarnock Road / Moss-side Road / Skirving Street
- C – Kilmarnock Road / Mount Stuart Street
- D – Kilmarnock Road / Walton Street
- E – Kilmarnock Road / Millwood Street.

Junction A – Pollokshaws Road / Minard Road / Langside Avenue

3.2.2 The figure below shows the turning counts for all vehicles at the Weekday AM, PM and Inter Peaks, and the Weekend Peak at this junction.

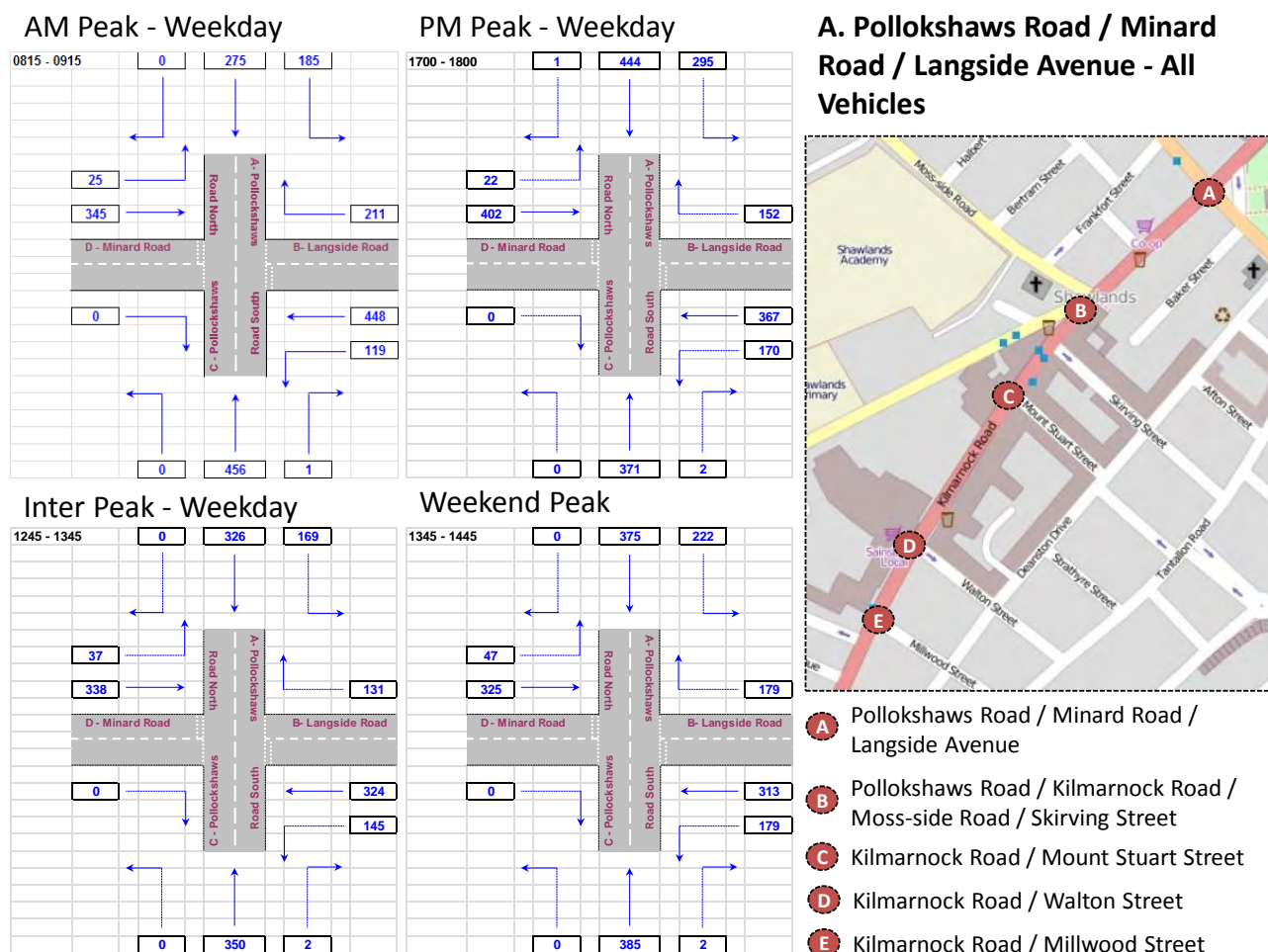


Figure 5. Turning Count – Pollokshaws Road / Minard Road / Langside Avenue

3.2.3 It can be seen at this junction that there are relatively high flows across all arms of the junction, with no arm experiencing significantly higher or lower flows than the others. As would be expected, in the AM peak the majority of the traffic travels northbound along Pollokshaws Road towards the City Centre. In the PM peak, there are a substantial number of left turns at the slip lane from the northern arm of Pollokshaws Road onto Langside Avenue. Turns during the inter- and weekend-peaks are largely balanced across the arms of the junction.

3.2.4 There are a number of banned turns at this junction: no left or right turn from the southern arm of Pollokshaws Road onto Minard Road and Langside Avenue respectively; no right turn from Minard Road onto Pollokshaws Road; and no right turn from the northern arm of Pollokshaws Road onto Minard Road. There are however a small number of vehicles performing illegal manoeuvres at the junction which have the potential to cause small periods of disruption, particularly vehicles ignoring the banned right turn from Pollokshaws Road onto Langside Avenue. This inappropriate behaviour also presents safety issues for other road users and pedestrians.

- 3.2.5 It is not apparent if these manoeuvres are undertaken by mistake or non-compliance with restrictions. The number would suggest non-compliance which would suggest an enforcement issue and the potential requirement to improve signage.
- 3.2.6 The banned turns at this junction are shown in Figure 6 along with the one-way streets and stopped up streets. Altogether these create accessibility difficulties for traffic approaching from Crossmyloof / M77 as right turns are banned at the Minard Road junction and signage on the approach is ambiguous both at the junction between Titwood Road and Minard Road and at the Titwood Road / Haggs Road junction. So this could lead to problems accessing Shawlands for those approaching from this direction that are unfamiliar with the area. This also impinges upon the accessibility and permeability of Shawlands for those approaching from the west that are familiar with the area.

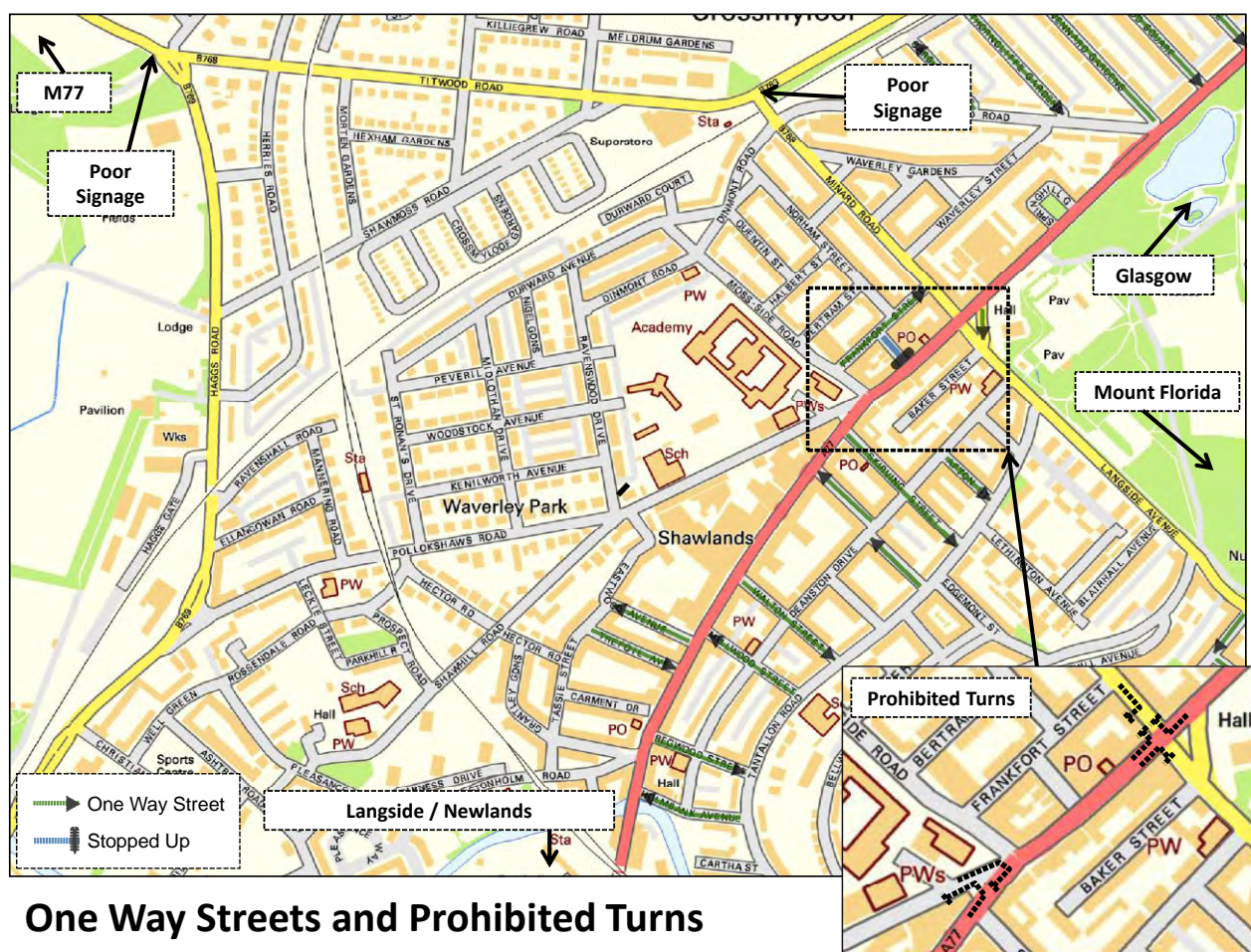


Figure 6. Banned Turns and One-way Streets

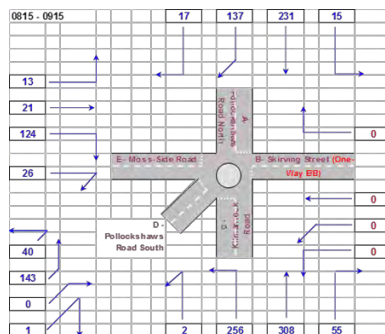
- 3.2.7 The following other issues also arise due to the banned turns and one-way streets:

- Journeys between the study area and the M77 / Crossmyloof are routed via Moss-side Road, and pass Shawlands Academy, rather than Minard Road and the junction to north of the study area.
- Vehicles wishing to travel east from Pollokshaws Road / Kilmarnock Road towards Mount Florida and / or The Victoria Infirmary cannot do so via Langside Avenue and typically use Skirving Street. This is a narrow, one-way residential street.
- Vehicular access to the parking at Shawlands Arcade is restricted because Eastwood Avenue, where the south car park entrance is, is one-way. This makes it difficult to access the south car park, which has been identified as the most desirable parking location, when approaching from the north or west.
- The Arcade north car park cannot be easily accessed from the south because left turns from Kilmarnock Road into Pollokshaws Road are banned at Shawlands Cross.

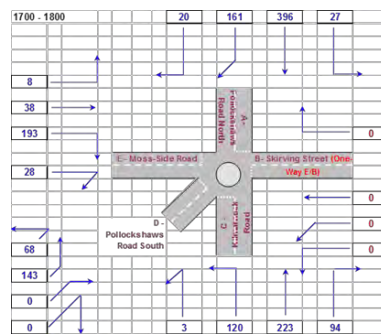
B – Pollokshaws Road / Kilmarnock Road / Moss-side Road / Skirving Street

3.2.8 The figure below shows the turning counts for all vehicles at the Weekday AM, PM and Inter Peaks, and the Weekend Peak at this junction.

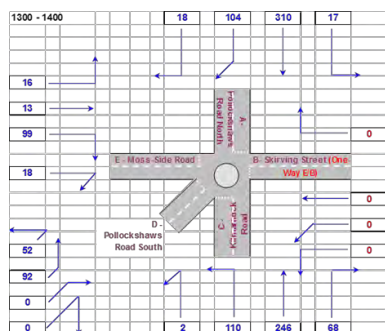
AM Peak - Weekday



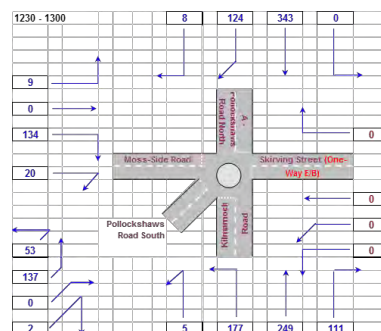
PM Peak - Weekday



Inter Peak - Weekday



Weekend Peak



B. Pollokshaws Road / Kilmarnock Road / Moss-side Road / Skirving Street - All Vehicles



- A** Pollokshaws Road / Minard Road / Langside Avenue
- B** Pollokshaws Road / Kilmarnock Road / Moss-side Road / Skirving Street
- C** Kilmarnock Road / Mount Stuart Street
- D** Kilmarnock Road / Walton Street
- E** Kilmarnock Road / Millwood Street

Figure 7. Turning Count – Pollokshaws Road / Kilmarnock Road / Moss-side Road / Skirving Street

- 3.2.9 In the AM Weekday peak the majority of traffic through Shawlands Cross travels north from Kilmarnock Road onto Pollokshaws Road heading for the city centre, or turns left from Kilmarnock Road onto Moss-side Road passing Shawlands Academy and is likely to be heading towards the M77. At the PM Weekday peak, as would be expected, there are high numbers of vehicles travelling southwards from Pollokshaws Road. Most of these vehicles continue southwards onto Kilmarnock Road, although a significant number also travel south-west onto the southern arm of Pollokshaws Road.
- 3.2.10 Most traffic from Moss-side Road at all times of the day/week turns right, southbound onto Kilmarnock Road. In comparison to the other arms of the junction, relatively small numbers of vehicles approach Shawlands Cross from the southern arm of Pollokshaws Road. Of those that do, the majority travel continue north on Pollokshaws Road, although a good number also turn left onto Moss-side Road.
- 3.2.11 During all of the survey periods, a steady number of vehicles turn right from Kilmarnock Road into Skirving Street and this has the potential to block the approach to the main junction at busy times. In particular, the weekday peak showed the highest number of right turners at this location.

3.2.12 Also during each survey period, a small number of vehicles were observed making the banned left turn from Kilmarnock Road back onto the southern arm of Pollokshaws Road. A small number of vehicles were also observed making the illegal right turn from the southern arm of Pollokshaws Road onto Kilmarnock Road.

C – Kilmarnock Road / Mount Stuart Street

3.2.13 The figure below shows the turning counts for all vehicles at the Weekday AM, PM and Inter Peaks, and the Weekend Peak at this junction.

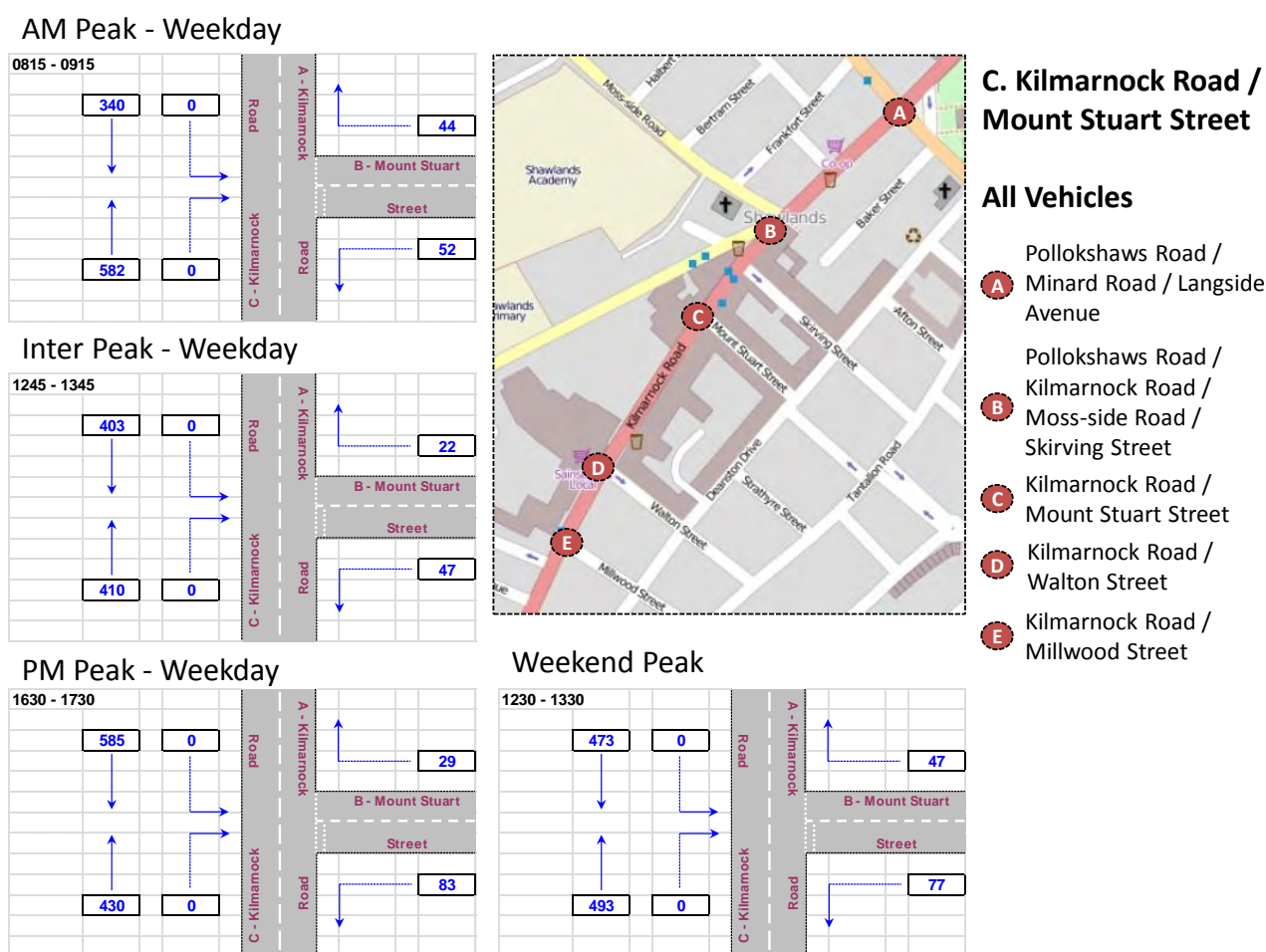


Figure 8. Turning Count – Kilmarnock Road / Mount Stuart Street

3.2.14 Mount Stuart Street is a one-way residential street, with vehicles able to turn both left and right onto Kilmarnock Road. Flows out of this junction were relatively low throughout the observed periods. In all the observed periods, a greater number of vehicles turn onto the southbound carriageway of Kilmarnock Road. Throughout all time periods, but particularly outwith the AM peak, it apparent that there is high left turn from Mount Stuart Street. This would suggest that there is element of rat-running and / or vehicles avoiding Shawlands Cross area (i.e. it is perceived as quicker to cut

through the residential area due to the one way system and junctions on Kilmarnock Road / Pollokshaws Road).

D – Kilmarnock Road / Walton Street

3.2.15 The figure below shows the turning counts for all vehicles at the Weekday AM, PM and Inter Peaks, and the Weekend Peak at this junction.

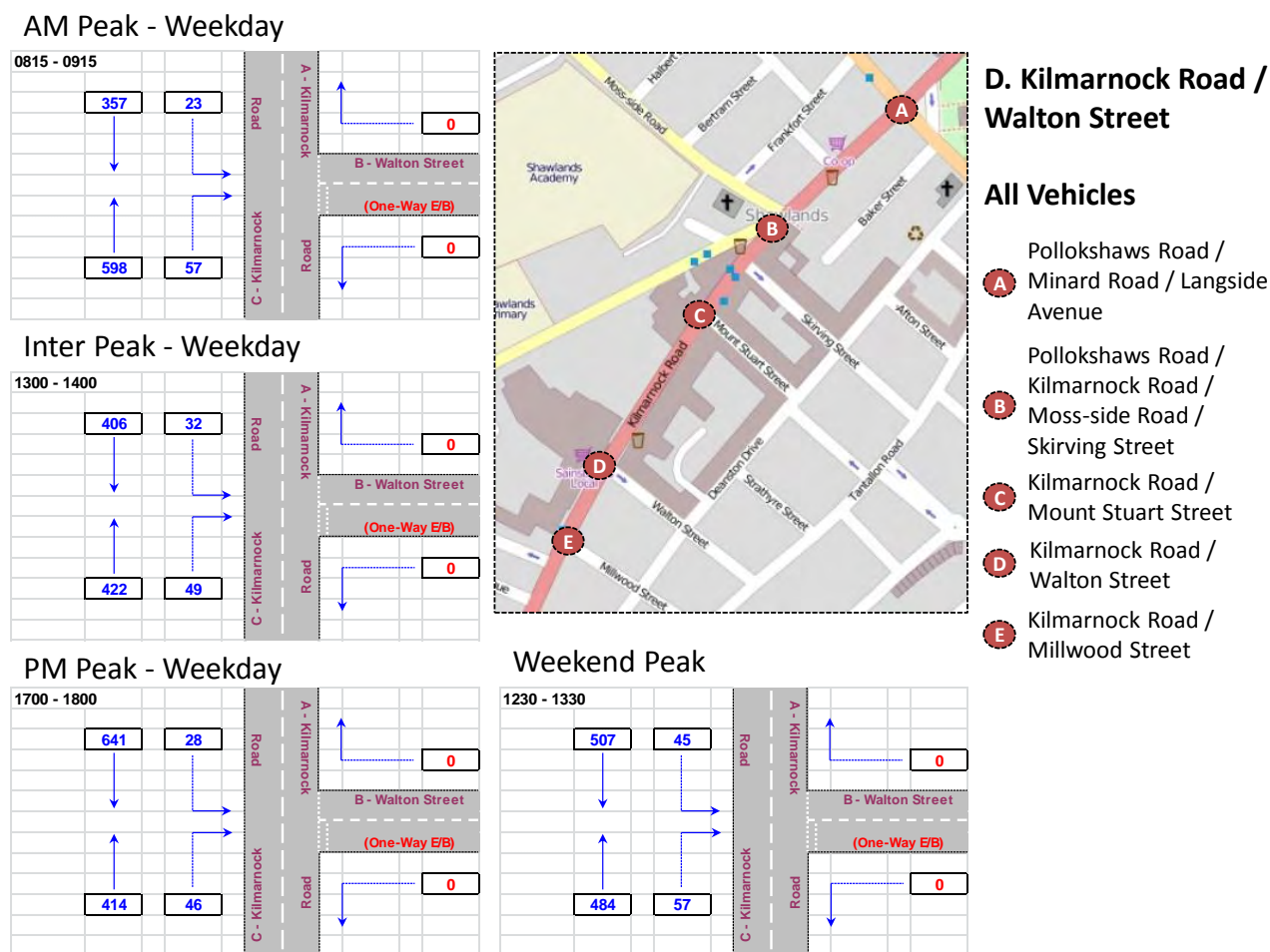


Figure 9. Turning Count – Kilmarnock Road / Walton Street

3.2.16 Walton Street is a one-way residential street with vehicles able to turn both left and right into it from Kilmarnock Road. The turning counts show relatively low numbers of vehicles turning into Walton Street – in all observed periods, only 10% or fewer vehicles turned in from Kilmarnock Road. During each observed period, a greater number of vehicles enter Walton Street from the south, most notably during the AM weekday peak period. This would suggest they are avoiding Shawlands Cross and the Pollokshaws Road / Minard Road / Langside Avenue junction due to the banned right turn which prohibits access to the east.

E – Kilmarnock Road / Millwood Street

3.2.17 The figure below shows the turning counts for all vehicles at the Weekday AM, PM and Inter Peaks, and the Weekend Peak at this junction.

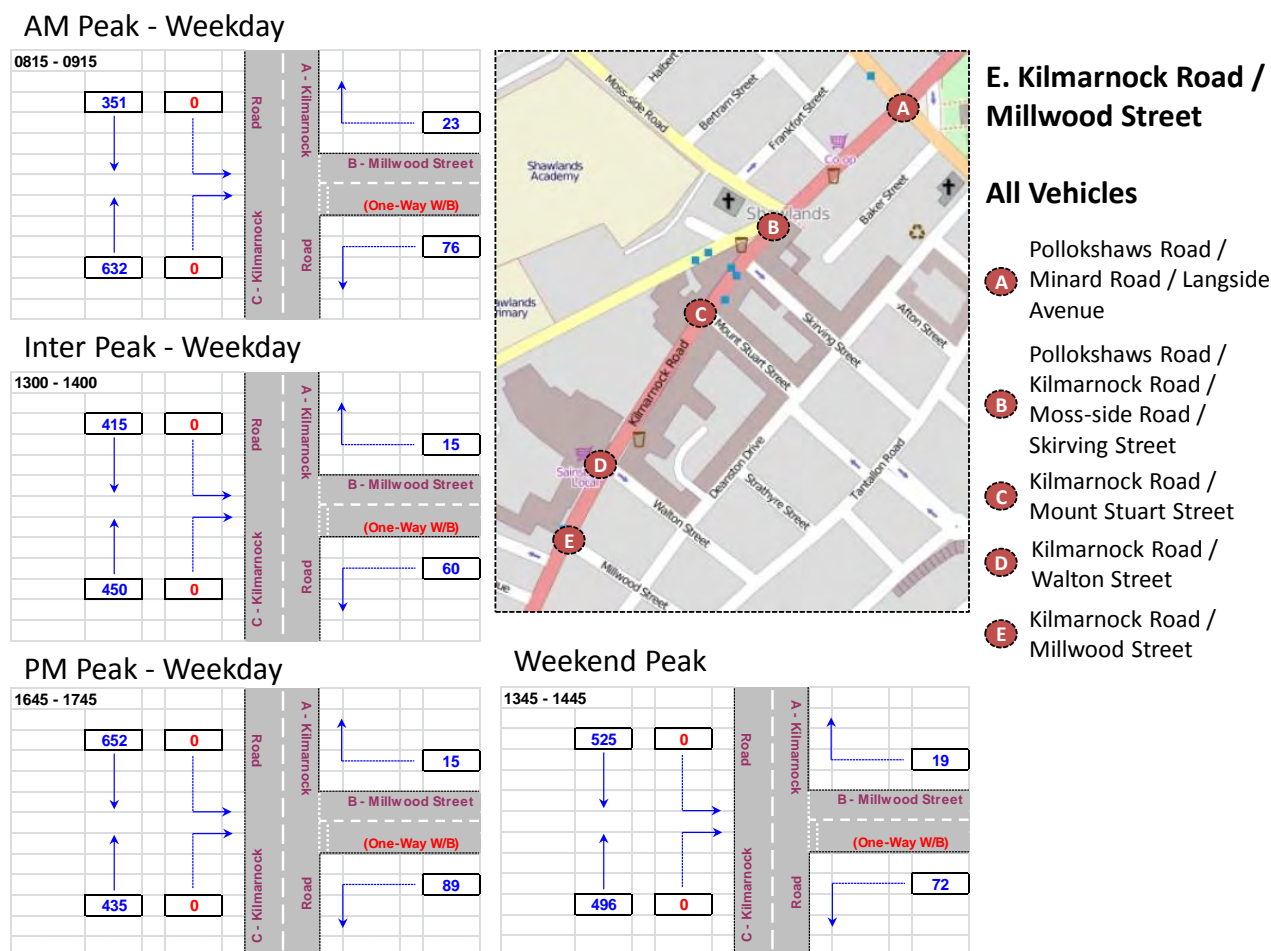


Figure 10. Turning Count – Kilmarnock Road / Millwood Street

3.2.18 Millwood Street is a one-way residential street, with traffic able to turn both left and right onto Kilmarnock Road. As with the previous residential streets discussed above, the number of vehicles turning at this junction is relatively low. A significantly higher number of vehicles turn from Millwood Street left onto the southbound Kilmarnock Road, compared to the number of right-turners onto the northbound carriageway. Similar splits between left and right turning vehicles are seen throughout the observed periods, however the highest number of turns are carried out in the PM weekday peak.

3.2.19 This would suggest that a number of vehicles are using this route as a rat-run in the PM peak rather than using the main A77 corridor which could be attributable to the network of one-way streets and banned turns which makes permeability throughout Shawlands difficult.

Pedestrian Severance

- 3.2.20 High levels of traffic are known to cause severance for pedestrians which can make it difficult to cross particularly busy roads. Taking the data from the Junction Turning Counts we have carried out analysis of traffic flows along the Pollokshaws Road / Kilmarnock Road corridor to understand the extent to which traffic volumes cause severance in Shawlands.
- 3.2.21 Traffic flows above 9,000 vehicles a day are deemed to represent a significant barrier to pedestrians whilst flows of between 2,000 to 9,000 vehicles a day are a slight barrier to pedestrians in accordance with criteria defined in the Scottish Transport Appraisal Guidance (STAG).
- 3.2.22 Figure 11 shows traffic volumes in Shawlands. It can be seen that traffic volumes on the Pollokshaws Road / Kilmarnock Road corridor pose a moderate to significant barrier to pedestrians which will most likely have caused severance as well as reducing the permeability of the area for walking. As such, pedestrian severance from traffic volumes is an issue which needs taken into consideration in Shawlands.

	Weekday AADT								
	Pollokshaws Road North			Pollokshaws Road South			Kilmarnock Road		
	AM	IP	PM	AM	IP	PM	AM	IP	PM
A - Pollokshaws Road / Minard Road / Langside Avenue	10,513	9,244	11,726	7,766	7,510	9,007			
B - Pollokshaws Road / Kilmarnock Road / Moss Side Road / Skirving Street	7,884	7,574	8,797				8,916	7,675	9,445
C - Kilmarnock Road / Mt Stuart Street							8,414	7,419	9,262
D - Kilmarnock Road / Walton Street							9,445	8,295	10,303
E - Kilmarnock Road / Millwood Street							8,970	7,894	9,919

Figure 11. Pedestrian Severance from Traffic Flows

3.3 Road Network Demand

- 3.3.1 We have considered the two-way vehicles flows in passenger car units (PCUs)² in relation to capacity during the weekday AM, inter-peak and PM peak hours and Saturday peak hour. We have calculated the Ratio of Flow to Capacity (RFC), traffic demand divided by the link capacity, for key sections of road in the study area. The results are presented below.

² The impact that a mode of transport has on traffic variables (such as headway, speed, density) compared to a single car.

Weekday AM Peak Hour (08:30 – 09:30)



Figure 12. Weekday AM Peak Hour Ratio of Flow to Capacity

- 3.3.2 In the weekday AM peak we can see that the road network within the study area generally operates well, with all key sections being under capacity. The greatest RFC is found on Kilmarnock Road, north, south and adjacent to Shawlands Arcade and at the Pollokshaws Road (north) and Langside Avenue approaches to the junction to the north of the study area (Junction A). The highest RFC of 84% is found on Langside Avenue.
- 3.3.3 In the case of the sections of Kilmarnock Road, this probably relates to the relatively low capacity, as there is parking on both sides of the carriageway and a single lane carrying traffic in each direction.
- 3.3.4 In the case of the approaches to Junction A, the high RFC is likely to be caused by high vehicle flows as the capacity in these locations is relatively high.

Weekday Inter-peak Hour (12:45 – 13:45)

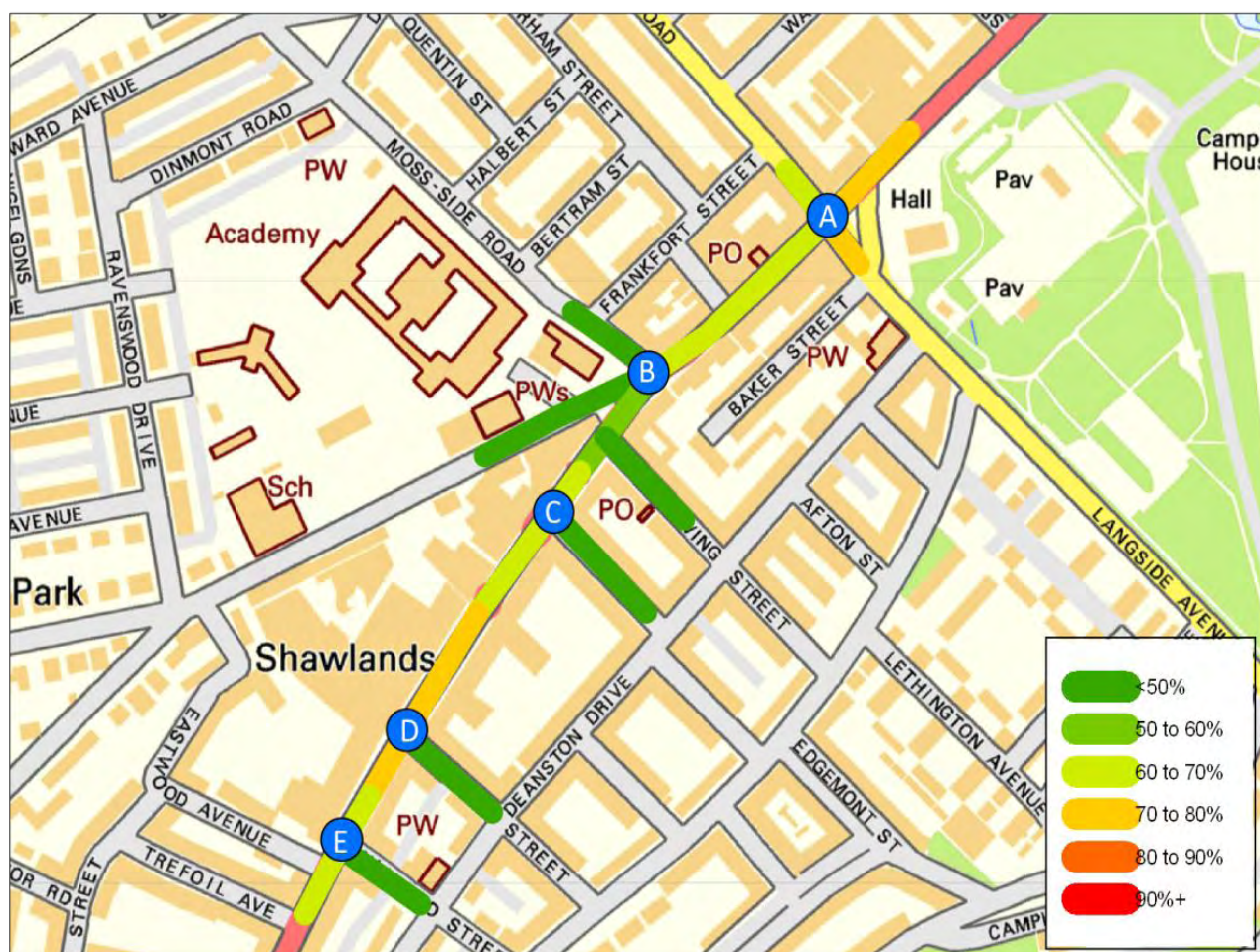


Figure 13. Weekday IP Peak Hour Ratio of Flow to Capacity

- 3.3.5 In the weekday inter peak period the greatest RFC is found in similar locations to the AM peak, although on Kilmarlock Road it is more focussed on the section adjacent to the Arcade and the RFC on Langside Avenue is lower.
- 3.3.6 The highest RFCs are found to the north and south of junction D, the junction of Kilmarlock Road and Walton Street (74% and 75% respectively).

Weekday PM Peak Hour (17:00 – 18:00)

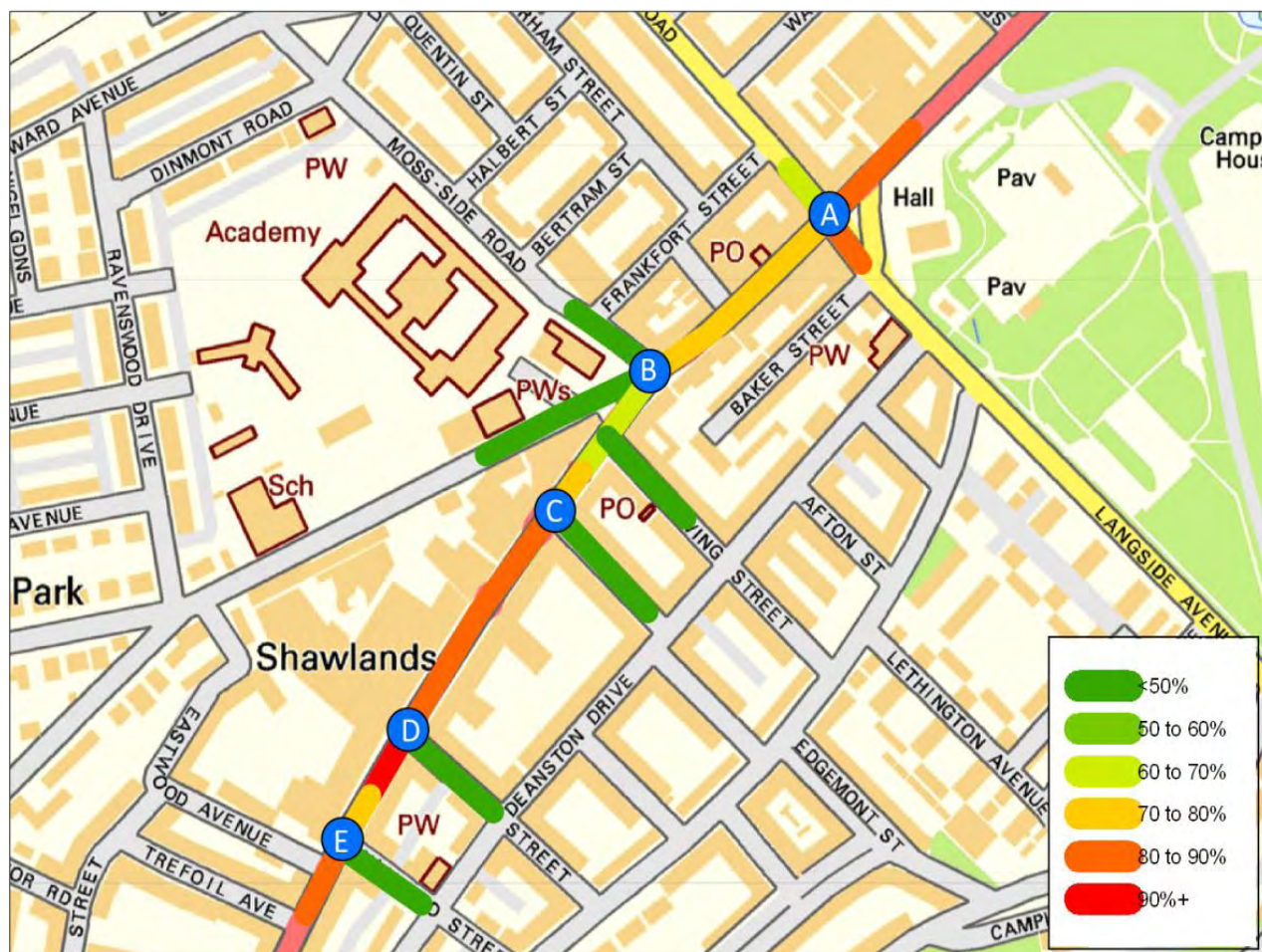


Figure 14. Weekday PM Peak Hour Ratio of Flow to Capacity

3.3.7 The weekday PM peak hour experiences the highest RFCs, with the area to the south of junction D, Kilmarnock Road and Walton Street, reaching 91%. The next highest RFCs are found on Kilmarnock Road between the junctions with Walton Street and Mount Stuart Street and on the Pollokshaws Road (north) and Langside Avenue approaches to junction A at the north of the study area. Here the RFCs are between 80% and 90%.

Saturday Peak Hour (13:15 – 14:15)

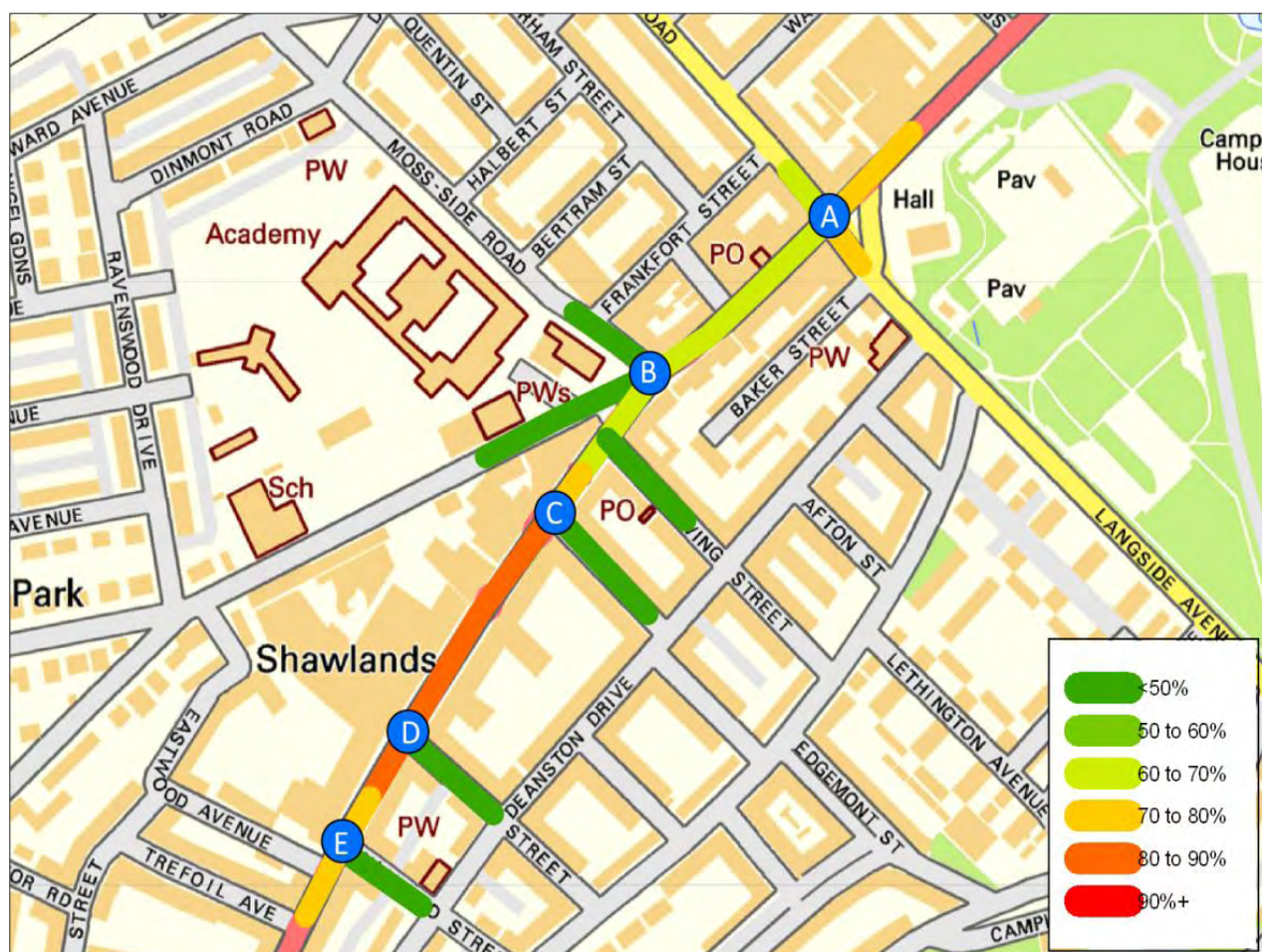


Figure 15. Saturday Peak Hour Ratio of Flow to Capacity

- 3.3.8 The highest RFCs during the Saturday peak hour are found in similar areas to where they are during the week; on Kilmarnock Road from south of Wilton Street north to Mount Stuart Street (80% to 90%).

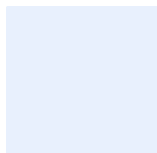
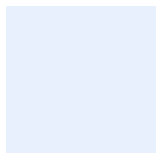
Summary

- 3.3.9 Overall the analysis has found that although there is a considerable volume of traffic in the study area, the road network and junctions operate well and can accommodate the flows during peak hours. Therefore there is no real demand for any measures to increase capacity or improve operation. Instead, the priority should be focussing on ensuring traffic movements do not impede or take priority over pedestrian demand.

3.4 Pedestrian Crossing Surveys

- 3.4.1 Pedestrian crossing surveys were undertaken at five locations:

- **Location 1** – Pollokshaws Road north of Abbot Street (informal crossing location)



- **Location 2** – Toucan crossing on Pollokshaws Road opposite Shawlands Primary
- **Location 3** – Pelican crossing on Kilmarnock Road at the north end of Shawlands Arcade
- **Location 4** – Informal crossing on Kilmarnock Road opposite Shawlands Arcade and between Walton Street and Millwood Street
- **Location 5** – Puffin crossing on Kilmarnock Road to the south of the study area between Carment Drive and Regwood Street

3.4.2 The data from these pedestrian crossing surveys has been supplemented by pedestrian flows across each arm of the junctions where junction turning surveys have been undertaken.

3.4.3 We have considered the flows for the weekday AM, inter-peak and PM peak hours as well as the peak hour on a Saturday. These are shown in the following Figures along with the peak hour period for each location / junction.

3.4.4 The pedestrian crossing survey data includes pedestrians who cross within 50 metres either side of the identified locations.

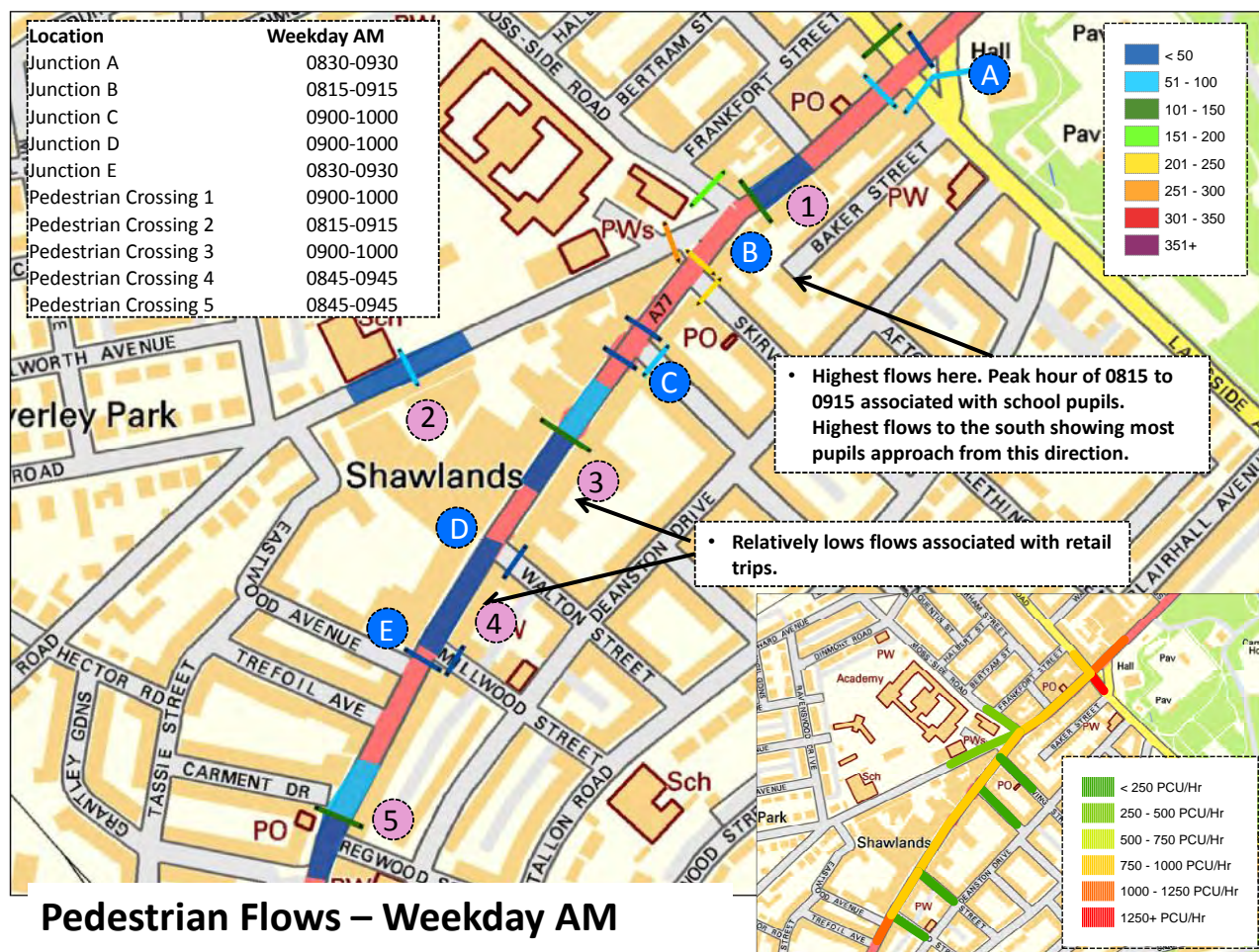
Weekday AM

3.4.5 In the weekday AM hour the highest pedestrian flows are around Shawlands Cross between 08:15 and 09:15, in particular the Pollokshaws Road arm. This, along with relatively high pedestrian flows on Kilmarnock Road and Skirving Street show most pupils approach from the south which may be indicative of pupils crossing from the southbound bus stops on Kilmarnock Road.

3.4.6 Flows adjacent to the Arcade are much lower and peak later around 09:00-10:00 which would be expected as workers and shoppers begin to arrive.

3.4.7 Flows to the very south of the study area are relatively high and peak between 08:45 and 09:45. This could due to the location of the Post Office and / or train station in this vicinity.

3.4.8 This is illustrated in the following Figure with the hourly peak demand in the AM for each individual crossing also highlighted. This also includes the traffic flows on the routes around Shawlands which illustrates the volume of traffic which pedestrians are required to negotiate.



Pedestrian Flows – Weekday AM

Figure 16. Pedestrian Flows Weekday AM

Weekday Inter-peak

- 3.4.9 In the weekday inter-peak the highest flows are concentrated around Shawlands Cross and associated with pupils from Shawlands Academy on their lunch break (12:30-13:30). Most arms have high hourly flows, greater than 350 pedestrians, including the crossing of Skirling Street, the exception being Moss-side Road.
- 3.4.10 The other area with high flows is the pelican crossing on Kilmarnock Road at the north end of Shawlands Arcade which peaks between 12:45 and 13:45 highlighting demand to access the shops and services in this location.
- 3.4.11 Pedestrian flows low at the northern junction in the study area crossing Minard Road and Pollokshaws (south) are greater in the inter-peak than the PM. The particularly high flows on the Minard Road crossing suggest schoolchildren are using it to access services on Minard Road.
- 3.4.12 There is also an upturn in demand at the Walton Street crossing highlighting increased demand generated by shoppers using the Arcade and neighbouring shops.

3.4.13 This is illustrated in the following Figure. This also includes the traffic flows on the routes around Shawlands which illustrates the volume of traffic which pedestrians are required to negotiate.

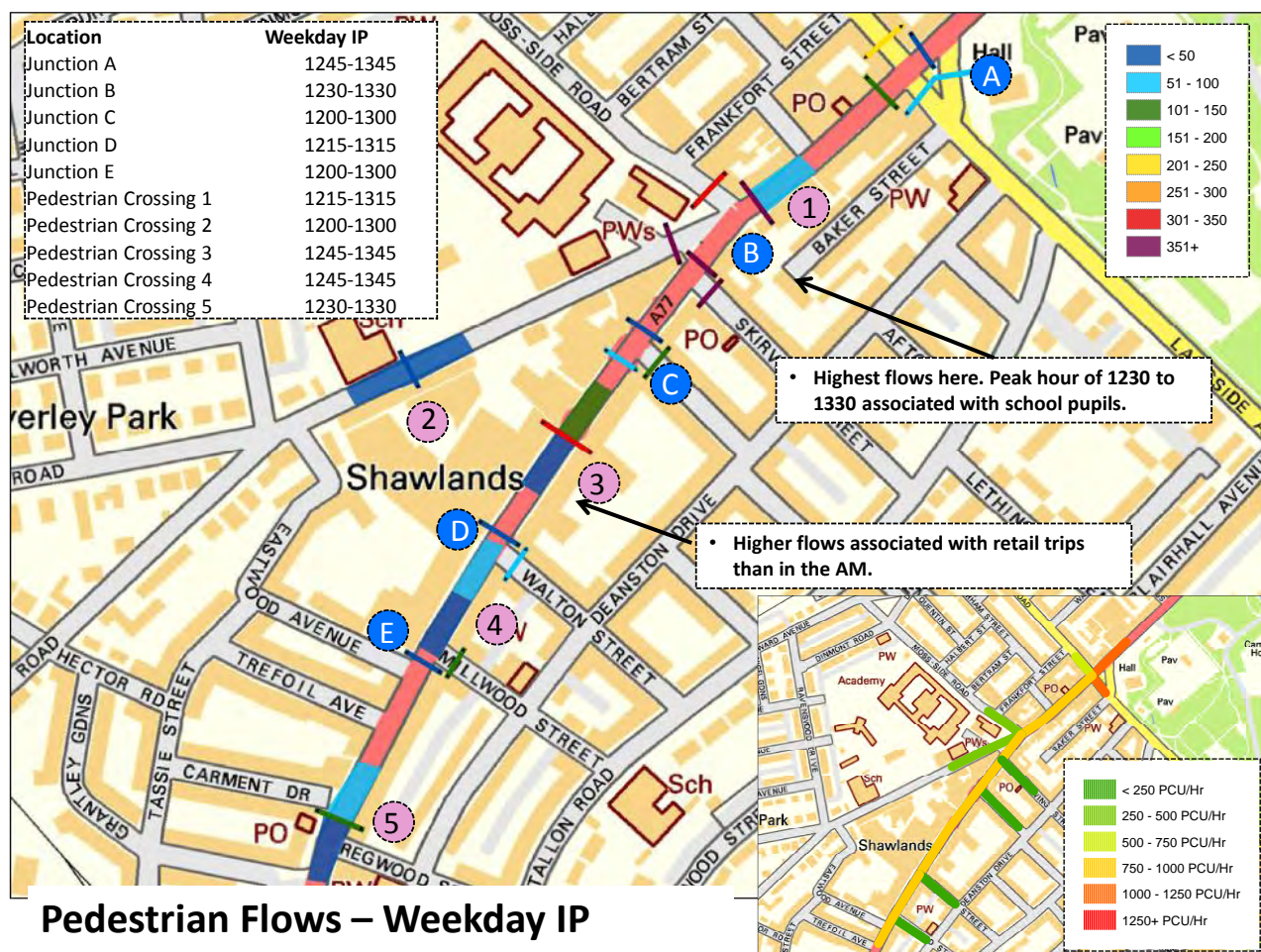


Figure 17. Pedestrian Flows Weekday IP

Weekday PM

- 3.4.14 In the weekday PM hour the highest flows are again around Shawlands Cross and associated with pupils from Shawlands Academy between 15:00 and 16:00. Flows tend to be highest to the south of the junction, across Skirving Street and Kilmarnock Road, showing most pupils head in this direction from the school.
- 3.4.15 Pedestrian flows at the junction to the north of the study area are similar in the PM to the inter-peak, greater than the AM, although slightly more pedestrians cross at Langside Avenue.
- 3.4.16 At the pedestrian crossing to the south of the study area there is a later peak hour (1615 to 1715) than elsewhere in the study area at this location, suggesting that flows are associated with commuter trips (i.e. using bus stops and train station in the area)

- 3.4.17 The pelican crossing on Kilmarnock Road at the north end of Shawlands Arcade has relatively high flows, as in the IP hour, and peaks between 15:15 and 16:15.
- 3.4.18 As with the inter-peak period, there is higher demand in the Walton Street area suggesting people using the Arcade and nearby shops as well as returning home from work.
- 3.4.19 This is illustrated in the following Figure. This also includes the traffic flows on the routes around Shawlands which illustrates the volume of traffic which pedestrians are required to negotiate.

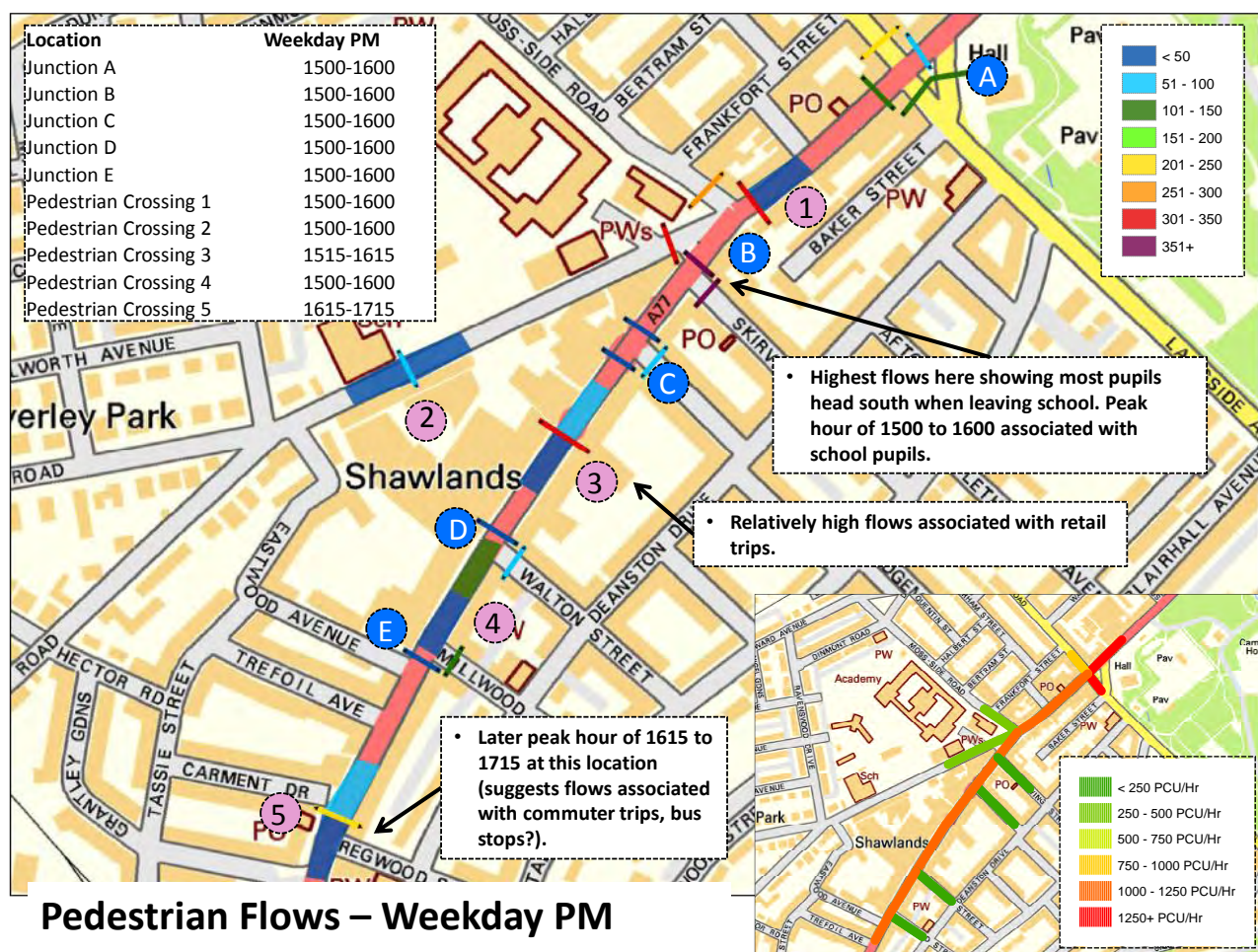


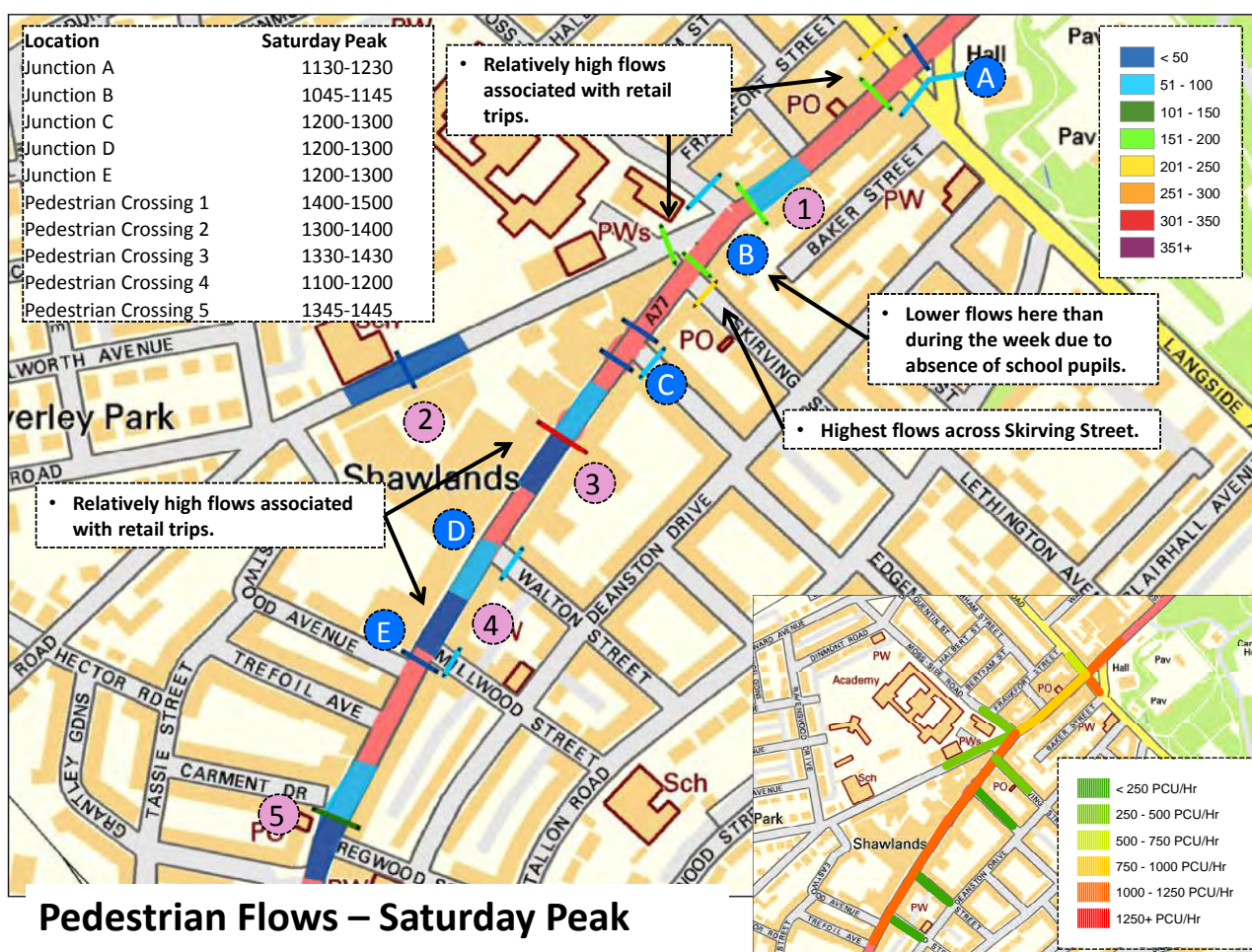
Figure 18. Pedestrian Flows Weekday PM

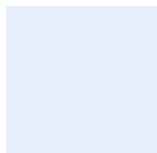
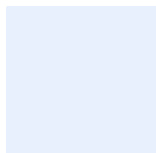
Saturday

- 3.4.20 The peak hours on a Saturday vary considerably at the various crossing locations in the study area. The highest pedestrian flows are found at the pelican crossing on Kilmarnock Road at the north end of Shawlands Arcade where over 300 pedestrian cross between 13:30 and 14:30.

- 3.4.21 As expected, the pedestrian flows at Shawlands Cross are much different to those experienced during the week due to the absence of school pupils. However, a considerable number of pedestrians cross at the west end of Skirving Street.
- 3.4.22 Generally the pedestrian flows at the junction to the north of the study area are lower than the AM, IP and PM peak hours during the week which can largely be attributed to the lack of schoolchildren at the weekend.
- 3.4.23 The pedestrian crossing to the very south of the area has a relatively late peak hour, 13:45 to 14:45, compared to the rest of the locations. Pedestrian Crossing 5 exhibits similar demand to the weekday and is most likely attributable to people accessing buses, the train station and local Post Office. However, demand at Pedestrian Crossing 3 is higher than during the week which is indicative of greater shopping demand at the weekend.

3.4.24 This is illustrated in the following Figure. This also includes the traffic flows on the routes around Shawlands which illustrates the volume of traffic which pedestrians are required to negotiate.





Key Themes

3.4.25 The key themes from the analysis are:

- On weekdays the highest flows tend to be associated with school pupils from Shawlands Academy, with peak hours matching the school start and finish times. The flows tend to be highest around junction B (Moss-side Road / Kilmarnock Road / Pollokshaws Road), in particular in the inter-peak and PM peak hours. As expected, most pupils approach from the south via Kilmarnock Road and depart in this direction.
- In the weekday AM peak the flows around Shawlands Arcade and Shawlands Cross are relatively low compared to the inter-peak and PM.
- In the inter-peak and PM periods the pedestrian flows on Kilmarnock Road near the Arcade are highest at Pedestrian Crossing 3 (the pelican crossing at the north end of Shawlands Arcade), suggesting it is well located to offer pedestrian access to the Arcade at these times, although there is element of informal crossing to the north of this formal crossing (i.e. pedestrians taking advantage of crossing opportunities from breaks in traffic).
- It was noticeable that demand in the vicinity of Walton Street increases during the day in line with retail demand which suggests this area is being used by people accessing the Arcade and nearby services.
- There are considerable pedestrian flows at Pedestrian Crossing 5 (the pelican crossing on Kilmarnock Road to the south of the study area between Carment Drive and Regwood Street) in all time periods during the week and on Saturday. This suggest it is well located to cater for pedestrian demand generated by the train station, bus stops as well as retail and local amenities like the nearby Post Office.
- There are high traffic flows throughout Shawlands which cause an impediment to pedestrian movement around the town centre.

3.5 Cycling in the Study Area

3.5.1 The Figure below shows the volume of cyclists at each of the key junctions in the study area during the weekday AM, inter-peak and PM time hour and the Saturday peak.

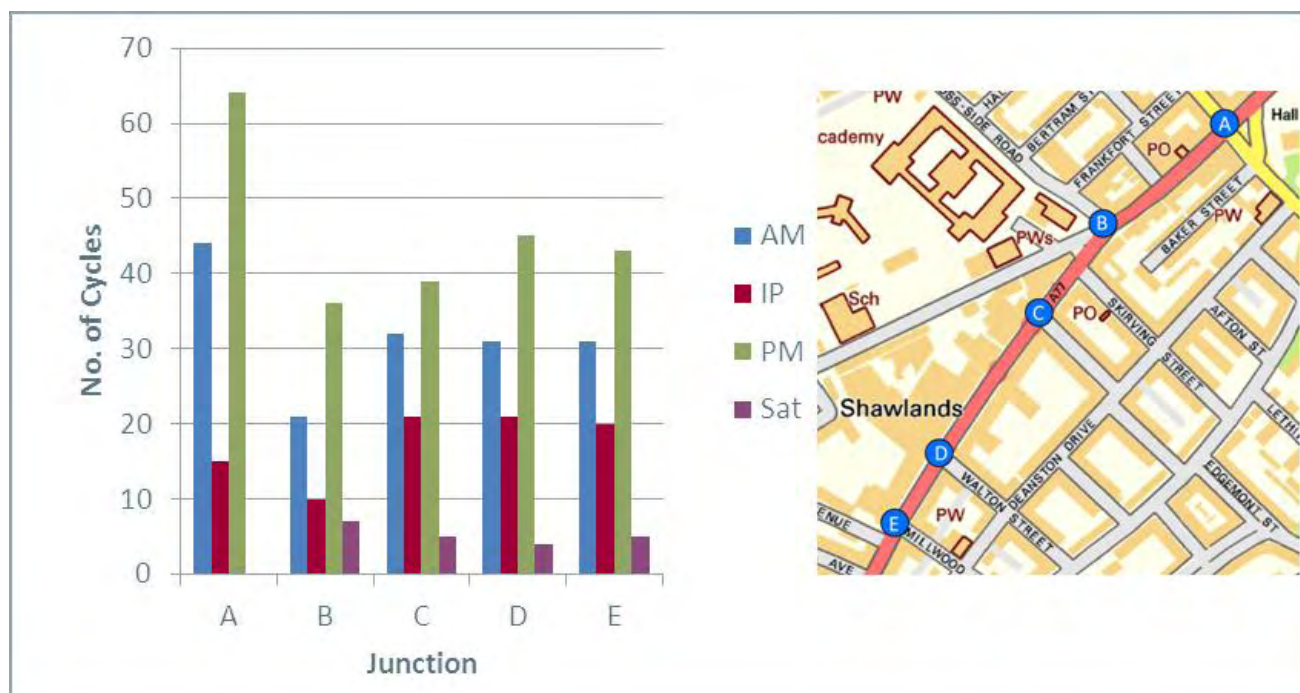


Figure 20. Peak Hour Cycling Volumes at Key Junctions in Study Area

3.5.2 It shows that, despite the presence of high traffic volumes, there are relatively high cycle flows throughout the study area during the week, in particular in the PM peak hour. The flows on a Saturday are much lower suggesting that most cyclists using the study area are undertaking commuting trips to and from work with much fewer using it as a leisure route.

3.5.3 It is notable that the cycle flows are lowest at junction B (Shawlands Cross) in each of the weekday peak hours, suggesting that it may be less attractive to cyclists.

3.6 Accidents

3.6.1 Glasgow City Council provided details of road traffic accidents which have occurred in Shawlands town centre over the past 3 years (June 2010 – May 2013) as shown in Figure 21 below. Green markers show the location of slight accidents whilst blue markers highlight where serious accidents have occurred. Pink 'P' symbols indicate that a pedestrian was involved in the accident and an overview of the circumstances is also provided.

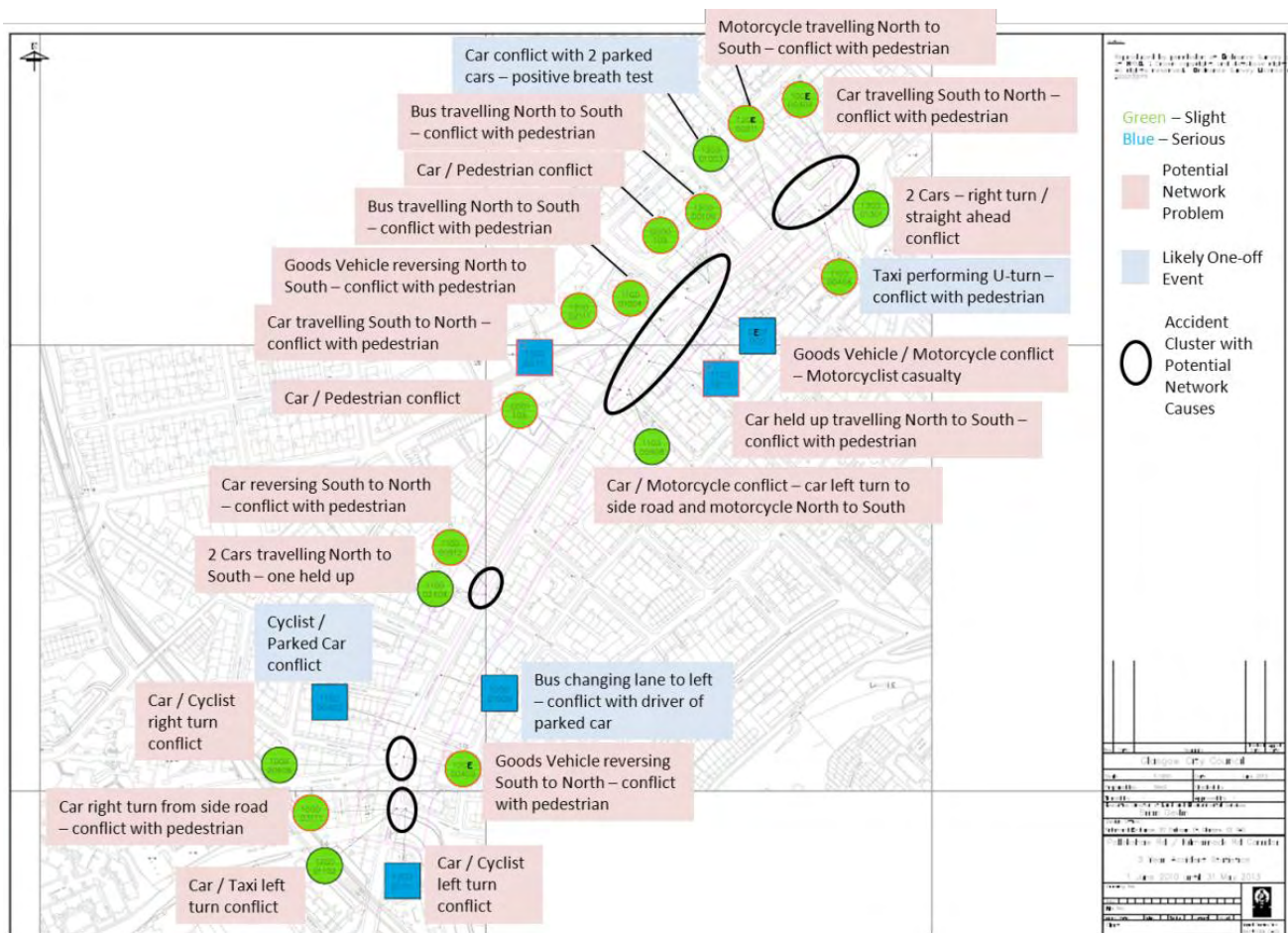


Figure 21. Road Traffic Accident Locations

- 3.6.2 It can be seen that accidents occur along the length of the Kilburn Road / Pollokshaws Road corridor which bisects the town centre. There are noticeable clusters of accidents at the northern and southern extents of the corridor with less occurring in the central area around Shawlands Arcade although a cluster is noticeable around the Kilburn Road / Millwood Street junction.
- 3.6.3 In particular, there is an accident cluster around the Kilburn Road / Pollokshaws Road / Moss Side Road / Skirling Street junction highlighting a potential issue in this vicinity. From first examination the analysis of the circumstances of the accidents there is no apparent consistent cause with the exception of the high traffic volumes experienced and numerous turning manoeuvres that occur at this location. However, from more detailed examination, it is apparent that the vast majority of these accidents involved pedestrian conflict with motorised vehicles which suggests there may be pedestrian safety issues in this area.
- 3.6.4 Overall, 13 out of the 23 accidents that occurred involved pedestrians highlighting potential pedestrian safety issues along the length of the corridor. However, of the 6 serious accidents in the corridor only 2 involved a pedestrian. Although both these incidents occurred in the same area where Kilburn Road has its junctions with

Mount Stuart Street and Skirving Street which could indicate a concentration of significant pedestrian safety issues at this location.

3.6.5 Of the 23 accidents we identified that 4 were likely to have been one-off events that weren't necessarily contributed to by the layout and operation of the network. The remainder of the accidents may be traceable to potential network problems which could lead to similar accidents occurring again in the future.

3.6.6 Without more detailed information we cannot conclude with certainty if there is one cause. However, our initial view is that it would seem that drivers are not driving with due care and / or in a manner appropriate for a suburban town centre like Shawlands with the elevated pedestrian numbers in this area.

3.7 Bus Stop Boarding and Alighting Surveys

3.7.1 Bus stop boarding and alighting surveys have been undertaken at six stops in the study area. The location of these stops is shown in the figure below.

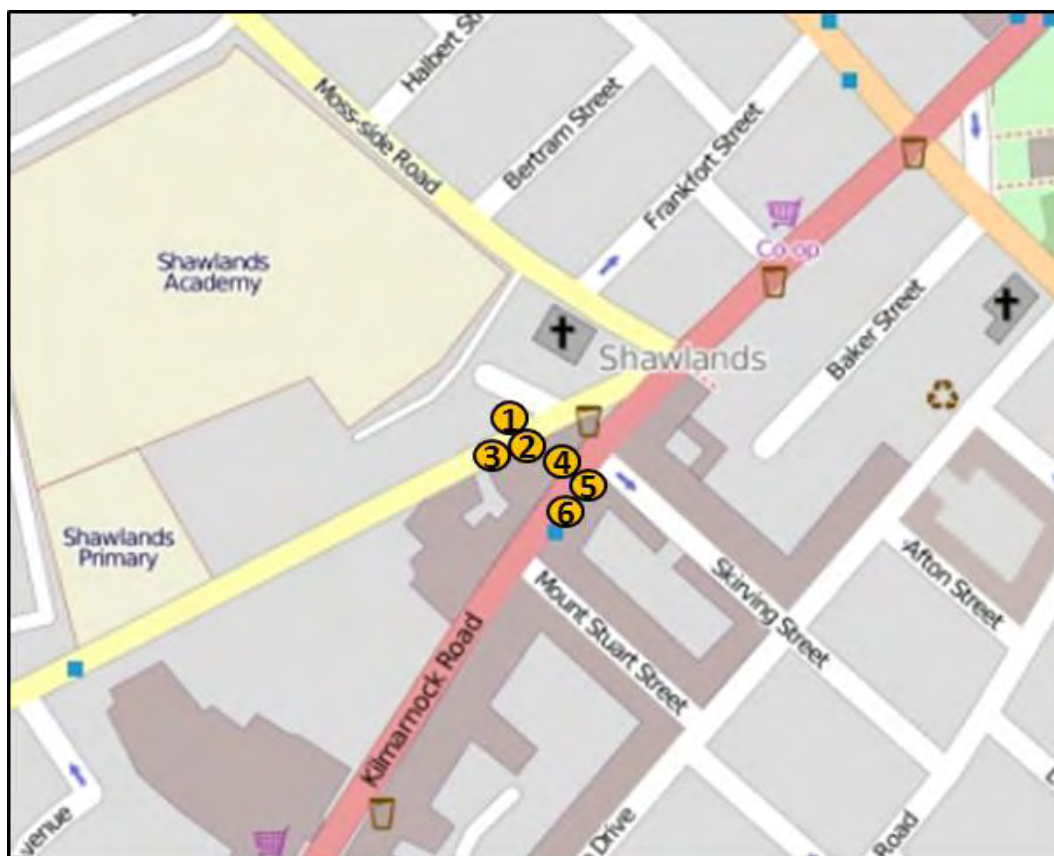


Figure 22. Bus Stop Locations

3.7.2 The figure below shows the total number of bus arrivals at each surveyed stop over a 12 hour weekday period between 07:00 and 19:00.

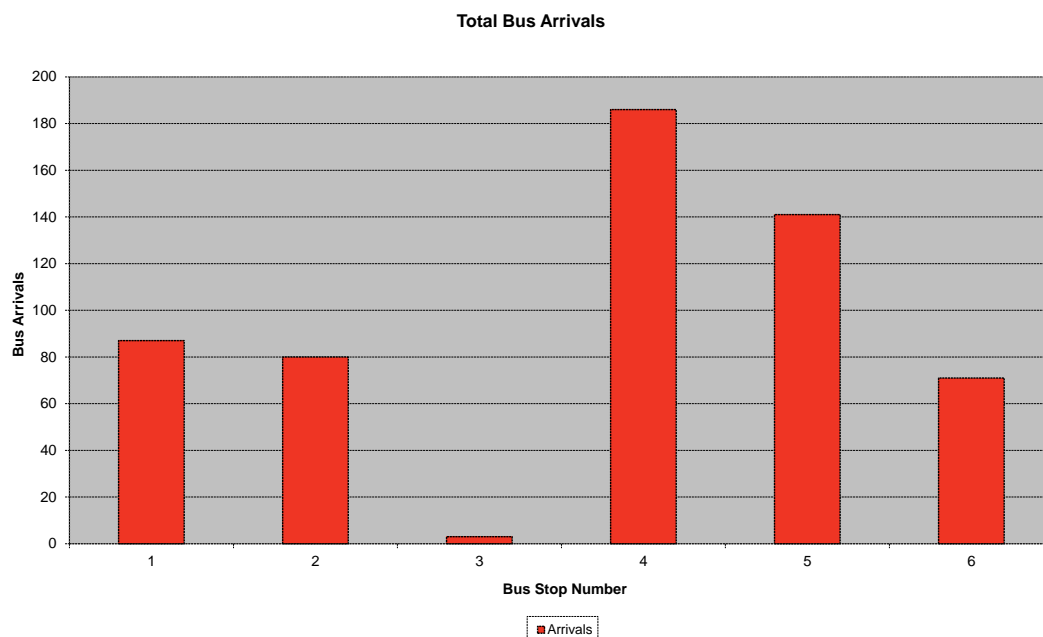


Figure 23. Bus Stop Arrivals

- 3.7.3 This graph shows that stops 4 and 5 received significantly higher numbers of buses than the other stops, accommodating 181 and 146 buses respectively throughout the day. This equates to an average of approximately 13 buses per hour or one every 4.5 – 5 minutes.
- 3.7.4 Although not to the same extent as above, stops 1, 2 and 6 also experience high levels of bus arrivals, with an average of over 6 buses per hour or 1 every 10 minutes. In comparison to the others, bus stop 3 however is exceptionally underused with only 3 bus arrivals observed during the survey period.
- 3.7.5 It is clear to see that significantly more buses use the stops on Kilmarnock Road (stops 4, 5 and 6) compared to Pollokshaws Road (stops 1, 2 and 3) due to the Streamline bus priority corridor which exists on the A77.
- 3.7.6 The figure below shows the boarding and alighting trends at the surveyed bus stops including total boarding and alighting over the weekday 12 hour period, as well as the average number of people boarding and alighting per bus.

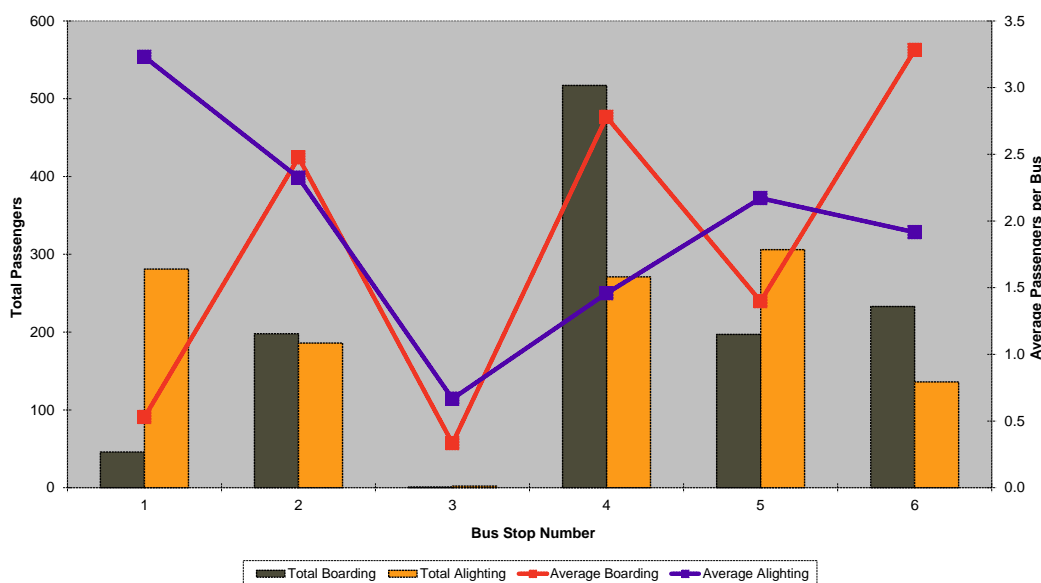


Figure 24. Bus Stop Boarding and Alighting

- 3.7.7 As would be expected, the greatest levels of bus stops boarding and alighting are at the stops with the highest number of bus arrivals – stops 4, 5 and 6. Stops 4 and 6 are mainly boarding stops, whilst stops 1 and 5 experience more alighting. This would be consistent with tidal flows of people from Shawlands to the City Centre.
- 3.7.8 Stop 2 has more balanced usage when compared to the others and, as expected given the low number of arrivals, stop 3 experiences very little boarding or alighting. The average number of people boarding and alighting at each stop tends to match the overall pattern of usage at each stop.
- 3.7.9 The figure below shows bus dwelling times at the surveyed stops including the maximum observed dwell time along with the average dwell time.

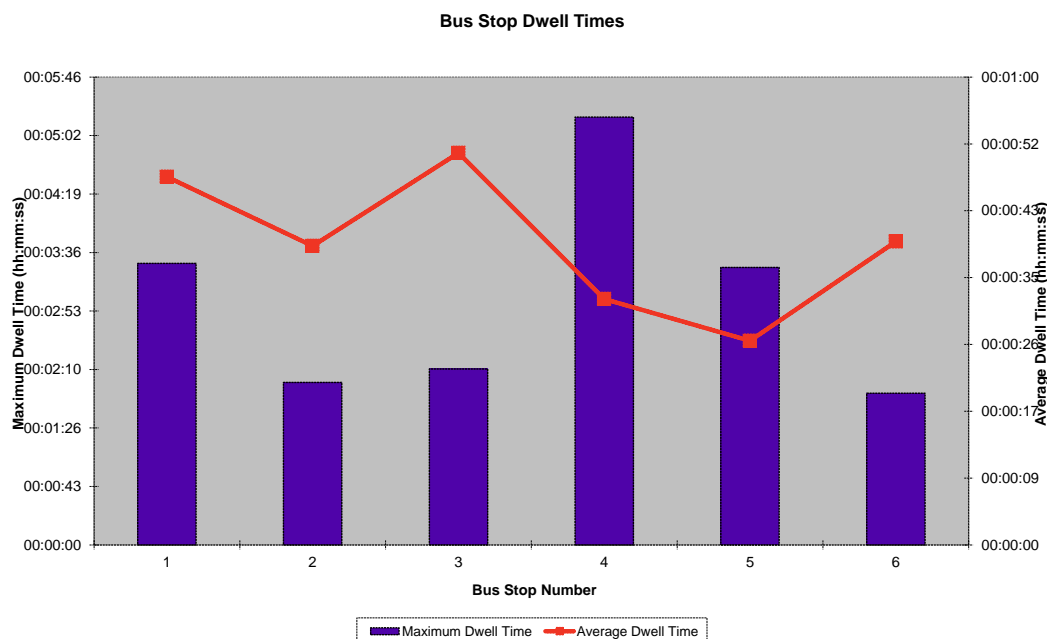


Figure 25. Bus Stop Dwell Times

- 3.7.10 The highest maximum dwell time was observed at bus stop 4, the northbound stop on Kilmarnock Road and also the stop where road network constraints are most restrictive. The maximum dwell times range from 5m 16s at stop 4, to 1m 52s at stop 6. Although bus stop 4 experienced the highest maximum dwell time, it experiences one of the lowest average dwell times, which is reflective of the high number of arrivals and passengers using the stop.
- 3.7.11 Although bus stop 3 has a relatively low maximum dwell time, it does however have the highest average dwell time (51 seconds) of the surveyed stops. This may be partially explained by the low number of services using the stop.
- 3.7.12 It should be noted that there is not always a direct relationship between maximum and average dwell times as the latter is affected by the number of instances where buses dwell at a stop for an extended period of time, whilst the former is a one off occurrence which may just be an isolated incident.
- 3.7.13 As such, we analysed the number of buses observed stationary at each stop for greater than 1 minute to gain an understanding of the frequency of extended dwell times at stops. The results are shown in the figure below.

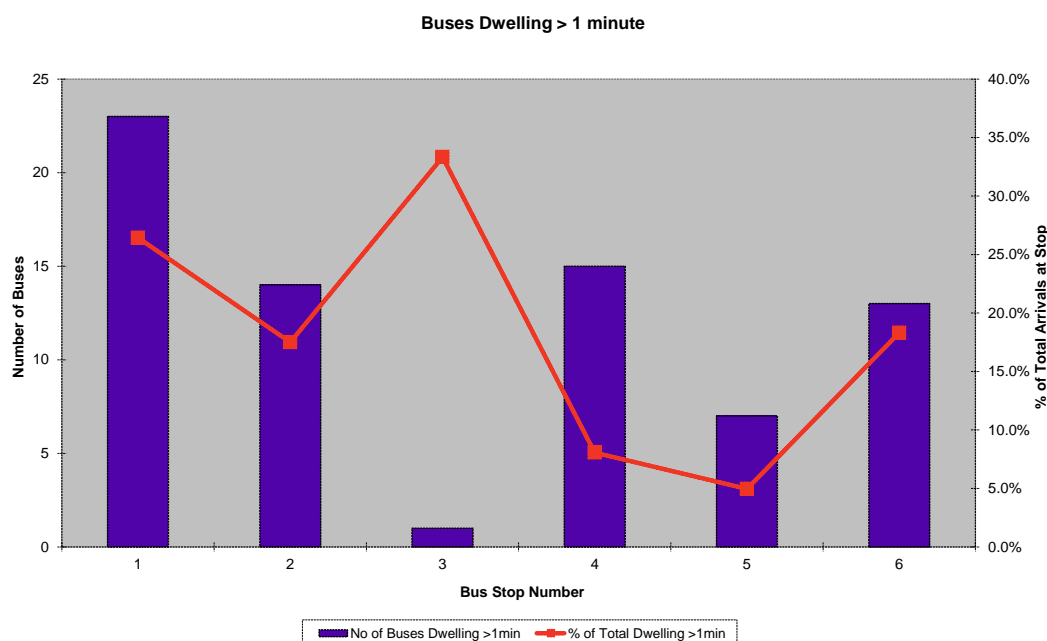


Figure 26. Buses Dwelling for more than 1 minute

- 3.7.14 It is clear to see that stop 1 experiences the highest number of buses stationary for more than 1 minute. These 23 buses equate to 26.4% of the total arrivals during the 12 hour period suggesting it is being used for layover or to maintain headways between services. However, the nature of the road network in this location means that this is unlikely to cause significant obstruction or delays to other traffic and is not deemed problematic.
- 3.7.15 As would be expected, the lowest dwelling percentages compared to total arrivals are seen at the busiest stops, 4 and 5; and the highest percentage at the quietest, stop 3 which means that delays and queues caused by stationary buses should be minimised.
- 3.7.16 Surveys were also undertaken on a Saturday between 10:00am and 3:00pm. The results of these surveys have been analysed, and key differences between the weekday surveys are detailed below.
- 3.7.17 Although fewer services operate on the Saturday, the number of buses observed during the four hour survey period was still significant. The distribution of these services follows exactly the same pattern observed during the weekday survey. Stops 4 and 5 are busiest (92 and 68 arrivals respectively), followed by stop 1 (52 arrivals), 2 (49 arrivals), 6 (37 arrivals) and 3 (3 arrivals).
- 3.7.18 In regards to boarding and alighting, the weekend pattern is broadly similar to the weekday pattern illustrated above. The notable exception however is at stop 5 where, during the weekday survey approximately one-third more people alighted than boarded. On the Saturday survey, the same number of people boarded and alighted at the stop. The weekday difference is likely due to more people using the stop when returning to Shawlands after work / shopping in the city centre rather than boarding to head to locations south of Shawlands. The weekend is likely to attract more people to

Shawlands from the surrounding areas, hence the similar figures for both boarding and alighting here.

- 3.7.19 As mentioned above, the average dwell time offers a more useful comparison than maximum dwell times which are the result of one-off incidents. The average dwell times on Saturday were relatively low and all were under 50 seconds
- 3.7.20 When considering the percentage of services which dwell for over 1 minute, there is some variation between the weekday and weekend surveys. Services at stops 4, 5 and 6 are more likely to dwell for over 1 minute on the weekend compared to a weekday. Most notably 8% of weekday arrivals dwell for more than 1 minute at stop 4, compared to 17% of the weekend arrivals which will represent a greater impediment to traffic flows given the layout of the network at this location. At stops 1 and 2, services were more likely to dwell for more than 1 minute on the weekday compared to the weekend, for example 13.5% of arrivals on the weekend compared to 26.4% of arrivals on a weekday.
- 3.7.21 Overall, it can be concluded that bus behaviour and operation in the area does not present any significant problems that need addressed. However, it is apparent that bus stop 3 on Pollokshaws Road is underutilised and appears to no longer provide a functional purpose. On this basis, there may be merit in considering alternative uses for this roadspace.

3.8 Parking Surveys

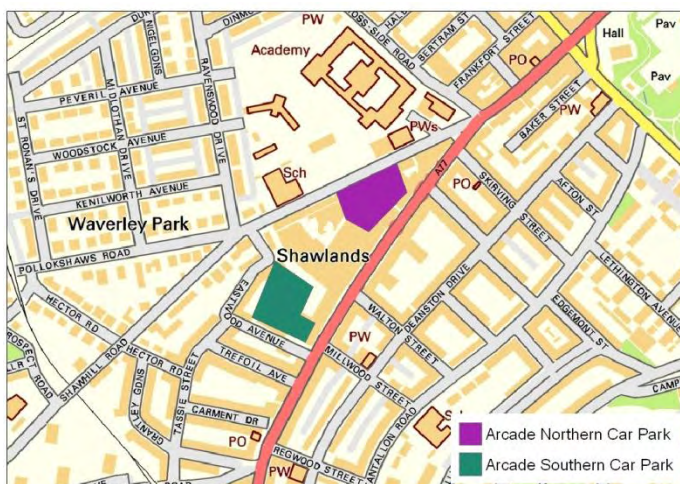
Introduction

- 3.8.1 We undertook parking surveys at all on-street locations within the study area as well as at the Shawlands Arcade Car Park which is made up of four distinct parking areas including:

- Northern Upper Level (55 spaces);
- Northern Lower Level (57 spaces, including one disabled);
- Southern Upper Level (19 spaces); and
- Southern Lower Level (68 spaces, including 12 disabled).

- 3.8.2 The location of these car parks are shown in the adjacent figure. The Northern Car Park is accessed from Pollokshaws Road whilst the Southern Car Park is accessed from Eastwood Avenue.

- 3.8.3 The surveys, which recorded occupancy, duration of stay and turnover, were undertaken on Thursday the 13th June 2013 between



07:00 and 19:00 and Saturday the 15th June between 10:00 and 16:00.

- 3.8.4 However, it should be noted that whilst these represent the sections of the car park that are open to public use we observed that there are currently two tiers which are currently closed to all access. One tier is located at the north car park and one at the south car park. It would appear that these have been closed off due to lack of demand but could be brought back into effective use should demand increase to the point that they are required.

Shawlands Arcade Overview

- 3.8.5 The Figures below shows the parking accumulation at the Arcade throughout a typical weekday and Saturday.

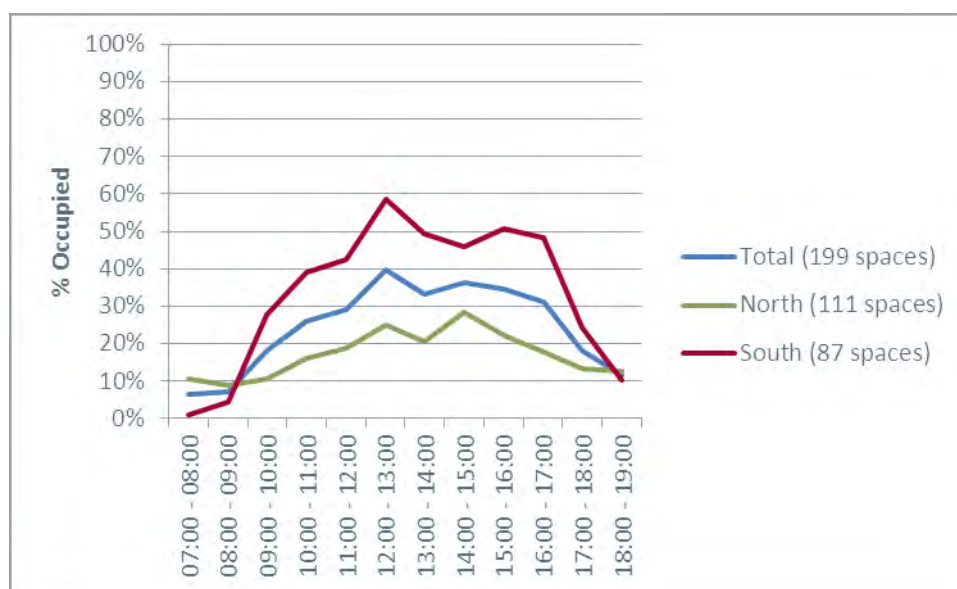


Figure 27. Weekday Parking Accumulation

- 3.8.6 Figure 27 shows that throughout weekdays there is plenty of spare capacity both within the north and south areas of the Arcade car park. The southern car park reaches 59% of occupancy (51 spaces occupied out of a total of 87 available) between 13:00 and 14:00 while the northern area reaches 29% occupancy (32 spaces occupied out of a total of 112 available) between 14:00 and 15:00. The overall peak across both car park is 40% occupancy (79 spaces occupied out of a total of 199 available) between 12:00 and 13:00.

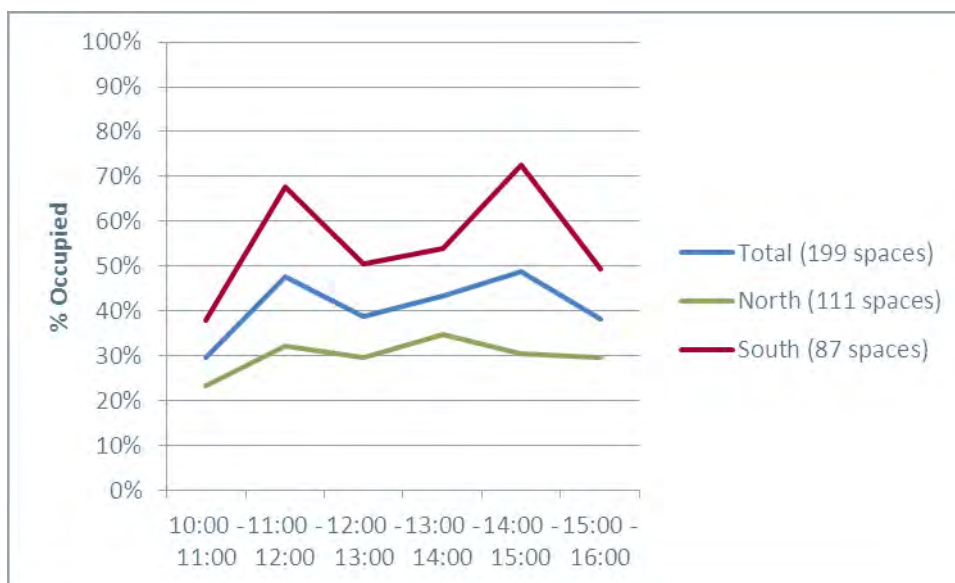


Figure 28. Saturday Parking Accumulation

- 3.8.7 Again, Figure 28 shows that throughout Saturdays there is plenty of spare capacity both within the north and south areas of the Arcade car park. The southern car park accommodates more vehicles than during the week, peaking at 72% occupancy (63 spaces occupied out of a total of 87 available) between 14:00 and 15:00. Demand at the northern car park is also greater than during the week, peaking at 35% occupancy (39 spaces occupied out of a total of 112 available) between 13:00 and 14:00. The overall peak across both car park is 49% occupancy (97 spaces occupied out of a total of 199 available) between 14:00 and 15:00.
- 3.8.8 The following Figures look in more detail at parking occupancy in each of the four car park areas at the Arcade for weekdays and Saturdays.

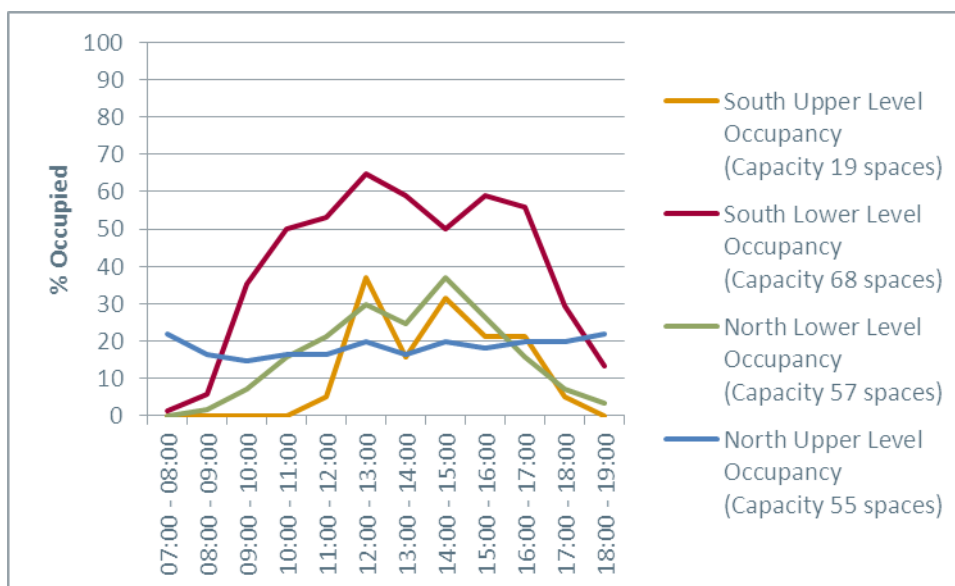


Figure 29. Weekday Parking Occupancy by Car Park

3.8.9

Figure 29 shows that the south lower car park is the most popular throughout the weekday, with relatively high use of the north upper level between around 12:00 and 15:00. The northern lower level car park occupancy remains stable throughout the day and the south upper level between 12:00 and 13:00 around the same time as the south lower level.

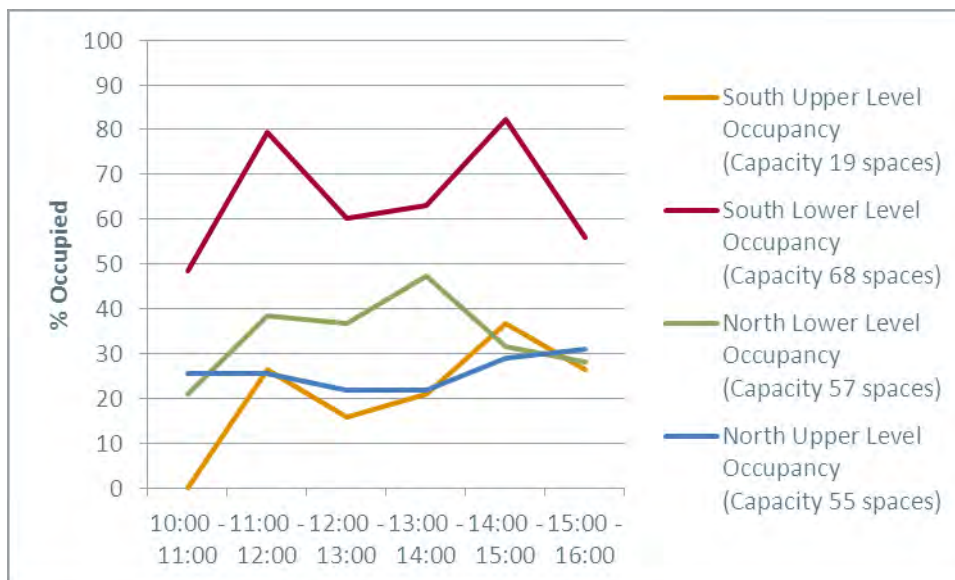
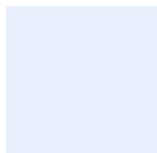
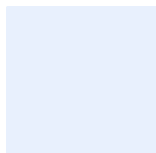


Figure 30. Saturday Parking Occupancy by Car Park

3.8.10

Again, Figure 30 shows that the south lower car park is the most popular throughout the weekday, with two distinct peaks between 11:00 and 12:00 and 14:00 and 15:00. The north lower car park is used by more vehicles than during the week, particularly during early afternoon, while the north upper car park has no pronounced peak during the



middle of the day as it does during the week. The south upper level car park continues to be used by very few vehicles on a Saturday.

Arcade South Lower Level

- 3.8.11 This part of the car park has the highest occupancy and turnover of spaces, both during the week and on Saturday. Each space typically used by 2 or more cars per 12 hr period. The highest capacity during the weekday is between 12:00 and 13:00 when 65% of spaces are occupied (44 spaces occupied out of a total of 68 available) and between 11:00 and 12:00 on Saturday when 82% of spaces are occupied (56 spaces occupied out of a total of 68 available).

Arcade South Higher Level

- 3.8.12 This car park is obviously less appealing to drivers than the south lower level and is typically only used after 11:00 on weekdays and Saturdays. It reaches 37% of occupancy (7 spaces occupied out of a total of 19 available) between 12:00 and 13:00 on a weekday when the lower level car park is closest to being used to capacity. On a Saturday the occupancy of this car park is more spread out throughout the day reaching a peak of 37% (7 spaces occupied out of a total of 19 available) between 14:00 and 15:00.

Arcade North Upper Level

- 3.8.13 This car park had a relatively high number of vehicles parked in it from when our surveys started (between 07:00 and 08:00 on a weekday and 10:00 to 11:00 on a Saturday) a considerable proportion of which stayed for the duration of our survey work. This suggests these vehicles are associated with residential parking which seemed to be confirmed from site visits and discussion with the car park personnel.
- 3.8.14 Turnover of spaces is relatively low but this relates to the car park being under-utilised rather than vehicles parking long-stay (i.e. over 4 hours). This car park is less well used than the lower level to the south reaching a maximum capacity of around 22% (12 spaces occupied out of a total of 55 available) before 08:00 and after 18:00 on a weekday and around 30% occupancy (12 spaces occupied out of a total of 55 available) after 15:00 on Saturday.

Arcade North Lower Level

- 3.8.15 This area of the car park reaches its highest occupancy of 37% (21 spaces occupied out of a total of 57 available) between 14:00 and 15:00 on a weekday and is better used on a Saturday reaching 47% occupancy (27 spaces occupied out of a total of 57 available) between 13:00 and 14:00. This is a greater percentage occupancy than the north upper level but significantly less than the south lower level. Not only is this area of the car park used more frequently on a Saturday than during the week, but the turnover of spaces is higher.

Off-Street Summary

- 3.8.16 In conclusion, it is apparent that there is extensive off-street parking provision available but that it is currently under-utilised. The south lower car park appears to be the most attractive which can be attributed to the fact that it is most accessible from the A77 Kilmarnock Road and is located adjacent to an entrance to Shawlands Arcade providing easy access to its facilities and those beyond. The south upper car park only comes into use when the south lower car park is at or nearing capacity.
- 3.8.17 The north upper and lower car parks are both extensively underutilised displaying very low levels of occupancy despite the presence of reserved resident parking which was seen to be in use. This can largely be attributed to the unattractiveness of the car park in terms of its condition, layout, design, levels of lighting and poorly defined pedestrian links to Shawlands Arcade. In addition, it is accessed from Pollokshaws Road which is problematic when approaching from south of Shawlands on the A77 Kilmarnock Road.
- 3.8.18 Furthermore, both the northern and southern car parks are poorly signed and located in manner which would make them difficult to find. As such, this means that people will need to be familiar their existence if they are to use them.
- 3.8.19 There is consequently an opportunity to bring the off-street parking available at Shawlands Arcade into more effective use.

On Street Parking

- 3.8.20 The following is the official parking provided on-street in the study area:
- Unclassified (unrestricted) – 397 spaces;
 - Parallel Bay (pay and display) – 180 spaces;
 - Nose-in Bay (pay and display) – 76 spaces;
 - Disabled – 3 spaces; and
 - Miscellaneous – 3 spaces.
- 3.8.21 The surveys found that overall, the parking restrictions in place result in a relatively high turnover of spaces on Kilmarnock Road near the Arcade and to the north, adjacent to the shops south of Shawlands Cross (the turnover is much greater near the Arcade). As expected, there is considerable long stay parking on many of the surrounding residential streets, however, there is also a significant number of vehicles parking short term in these areas suggesting they are also being used by shoppers as an alternative to the Arcade parking.
- 3.8.22 In order to look at the parking patterns in more detail we have split the study area up into a series of zones. These are:
- **The A77:** total of 137 spaces;
 - **Pollokshaws Road:** total of 114 spaces;
 - **East of Study Area** (comprising Baker Street, Holmbank Ave, Langside Ave, Mount Stewart Street, Regwood Street and Skirving Street): total of 98 spaces;

- **North West of Study Area** (comprising Abbot Street, Betram Street, Frankfort Street, Millwood Street, Minard Road, Moss-Side Road and Walton Street): total of 146 spaces; and
- **South West Of Study Area** (comprising Customholm Road, Eastwood Ave, Ettrick Place, Grantley Street, Shawhill Road, Tassie Street and Trefoil Ave): total of 165 spaces.

These areas are shown in the Figure below.

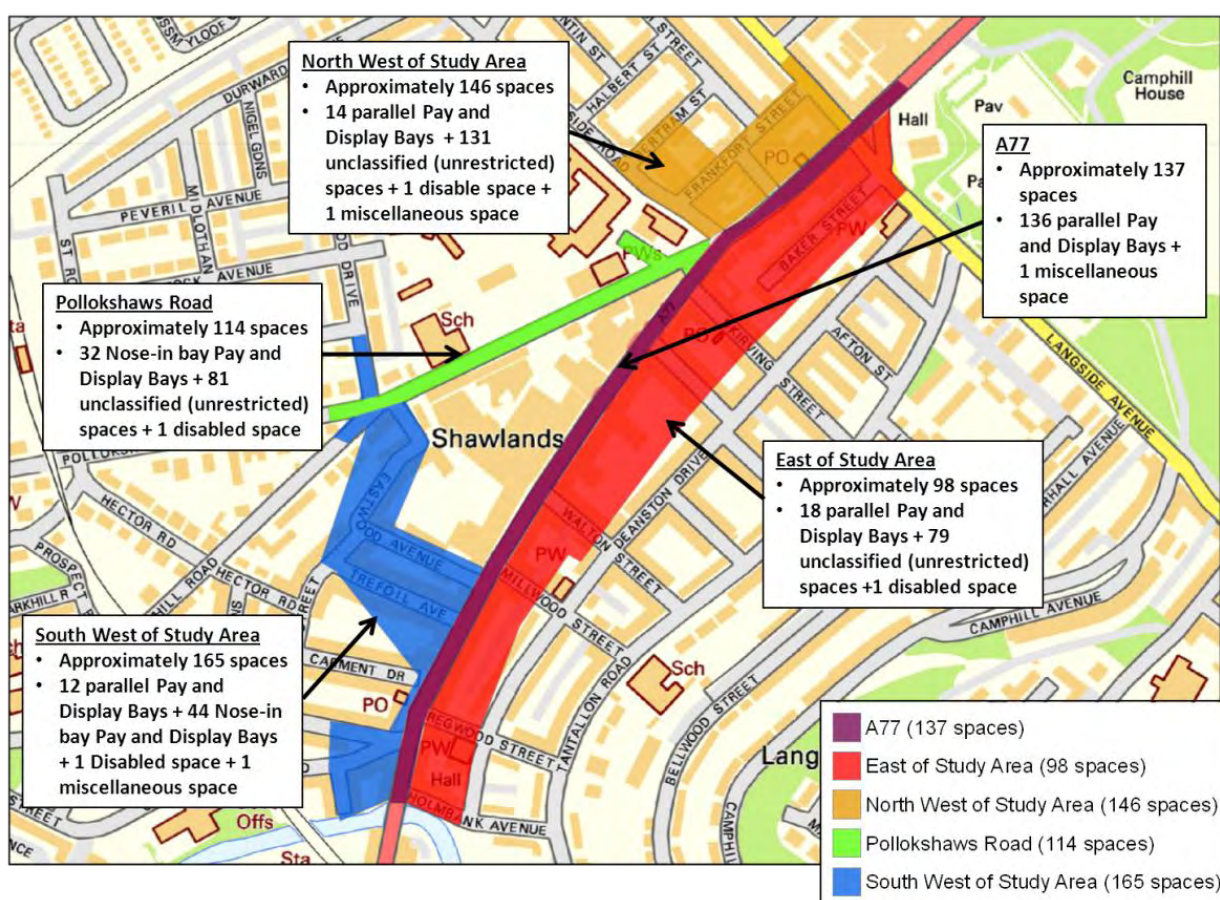


Figure 31. Study On-street Parking Zones

3.8.23 We considered the parking accumulation during the day for each zone during for weekdays and Saturdays and the results are shown in the Figures below.

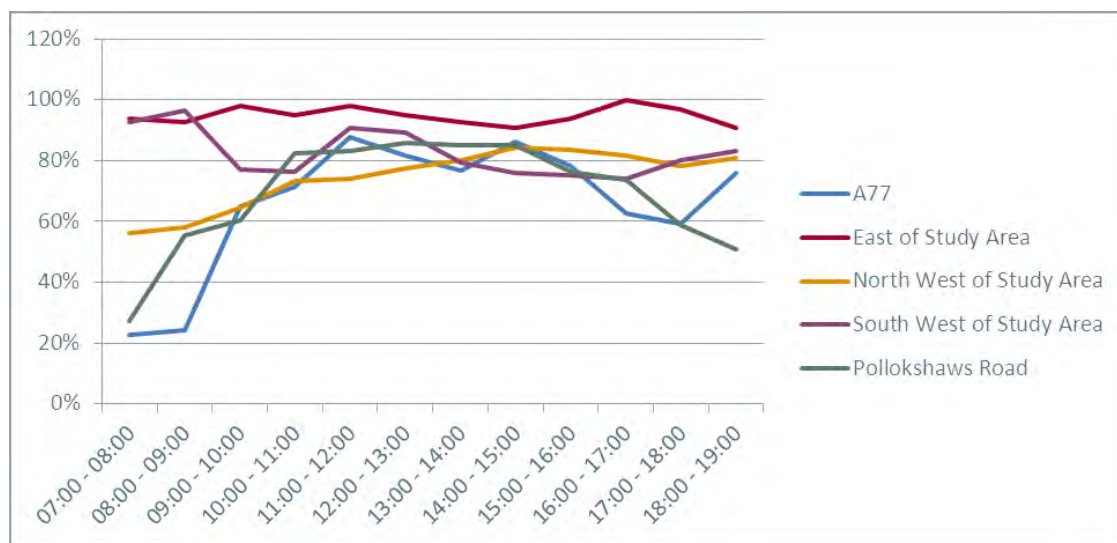


Figure 32. Weekday On-Street Parking Accumulation

3.8.24 This data is presented by area on the following Figure.

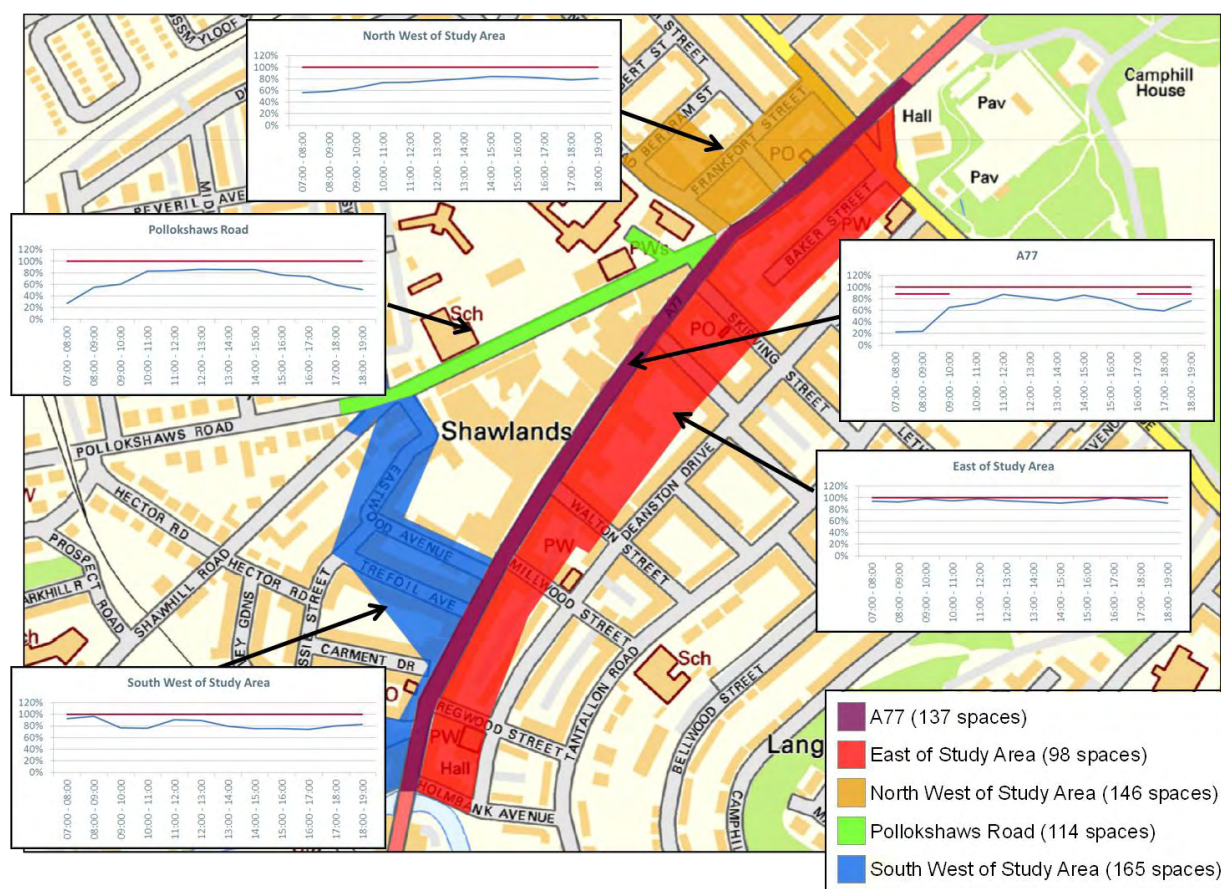


Figure 33. Weekday On-street Parking Accumulation by Area

3.8.25 Figure 32 shows that during the week the primarily residential streets to the east of the study area are occupied at, or close, capacity throughout the day. The streets in the north west of the study area, which are again primarily residential, fill up during the course of the day. The final area which contains mostly residential parking is the south west of the study area and the level of parking here actually reduces in the early morning before stabilising at around 80% of capacity for the rest of the day.

3.8.26 On Pollokshaws Road parking accumulates until around midday before falling away in the afternoon and on the A77 there is a clear pattern which shows growing volumes of parking in the morning with high levels between around 10:00 and 15:00, although never reaching capacity. The graph shows the reduced parking capacity on the A77 between 07:00 and 09:30 and 16:00 and 19:00 due to the part time bus lanes and parking restrictions north of Shawlands Cross coming into place at these times (note that parking restrictions are 07:00 to 09:30 and 16:00 to 18:30 in the southbound direction).

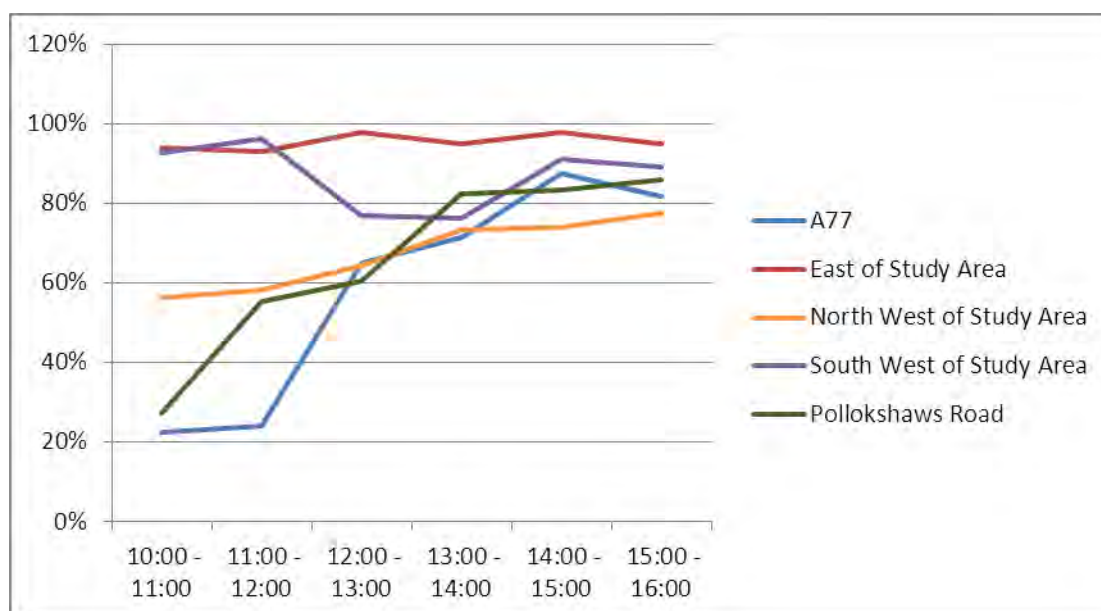


Figure 34. Weekend On-Street Parking Accumulation

3.8.27 Figure 34 shows that, again, the residential streets to the east of the study area are occupied at, or close, capacity throughout the day on a Saturday. The streets in the north west of the study area fill up during the course of the day as they do during the week. To the south west of the study area the level of parking falls during the middle of the day between around 12:00 and 14:00.

3.8.28 On Pollokshaws Road and the A77 parking accumulates steadily throughout the day in line with people visiting Shawlands for shopping and other leisure activities.

3.8.29 This data is shown by area on the following Figure.

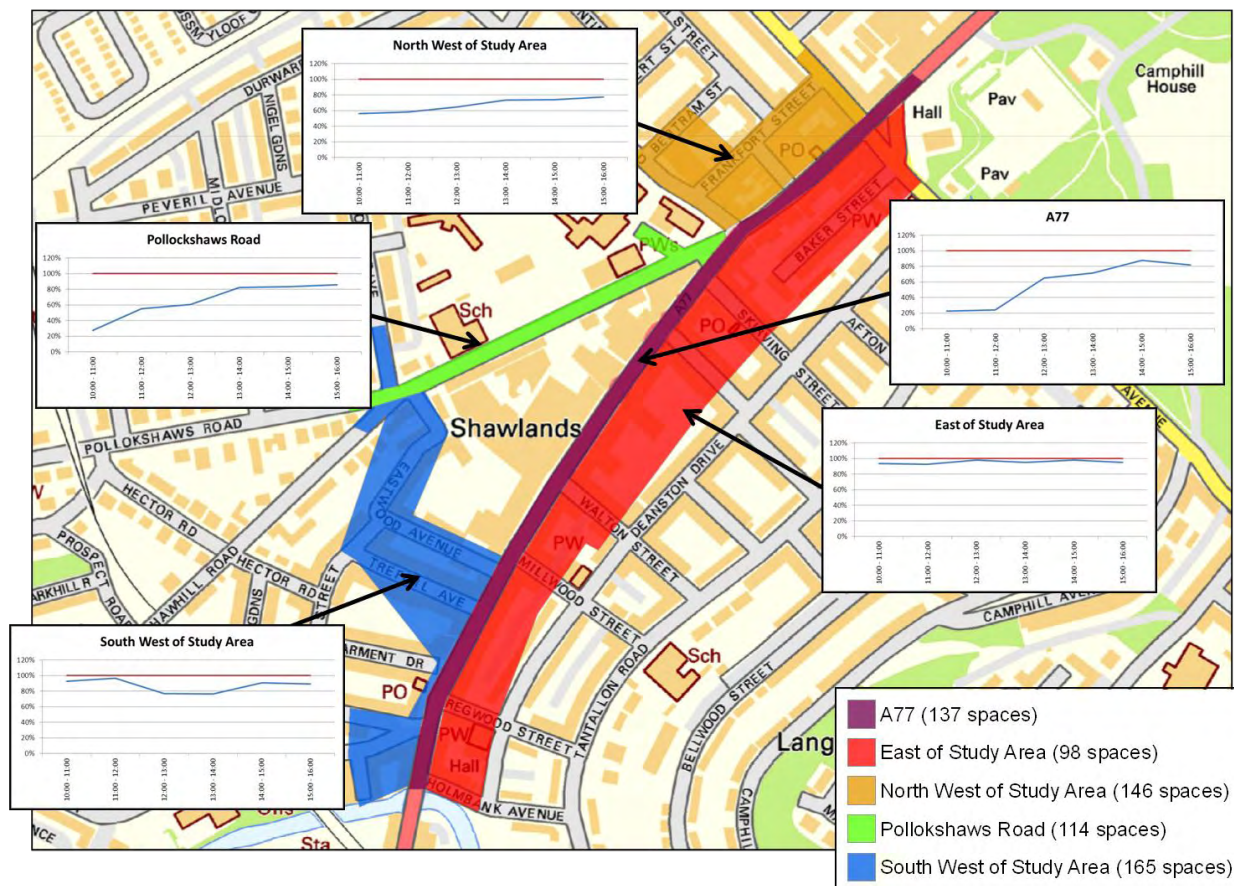


Figure 35. Saturday On-street Parking Accumulation by Area

On-Street Summary

- 3.8.30 Overall, the data would suggest that the on-street parking is functioning in the manner it is intended to do and catering for those needs fairly well with residential parking taking place in residential streets and short-stay parking on the key shopping streets of Pollokshaws Road and Kilmarnock Road, during the weekday and weekend.
- 3.8.31 Demand on Pollokshaws Road and Kilmarnock Road would seem to be less than capacity suggesting there is no problem with levels of provision and, indeed, with the level of off-street parking available at Shawlands Arcade that a small amount of on-street parking on these routes could be used for alternative purposes without impacting upon the effective supply.

3.9 Conclusions

- 3.9.1 From analysis of the data we have drawn the following conclusions regarding the problems and issues that it has presented:
- Balanced flows at the Minard Road / Pollokshaws Road / Langside Avenue junction require priority to be split between both east-west and north-south

traffic. However, the banned turns that have been implemented to enable this have created accessibility problems for traffic approaching Shawlands from the west which is exacerbated by poor signage on the approach from the Crossmyloof / M77 direction.

- Traffic flows can be accommodated at Shawlands Cross but the layout of the junction is unattractive for pedestrians which causes particular problems during the school lunch hour and immediately after school when high demand over a short period is experienced at these locations.
- Access to Shawlands Arcade and its car parking is impeded by the nature of the road layout and banned turns. In particular, the north car park is inaccessible from the south.
- Access from Shawlands to Langside / Battlefield is impeded by the banned turns at the Pollokshaws Road / Langside Avenue / Minard Road junction requiring eastbound traffic from Shawlands having to route via residential streets.
- High traffic flows on A77 Pollokshaws Road / Kilmarnock Road cause pedestrian severance.
- Accidents that are occurring appear to be attributable to high traffic flows and conflicts between different user groups. There appear to be pedestrian safety issues as over half of recorded accidents involved pedestrians which would suggest that drivers are not driving according to the town centre environment but rather using it as arterial route.
- There is high pedestrian demand along the corridor particularly at Shawlands Cross, largely attributable to school pupils, and also at the southern extent of the study area associated with main access points to Shawlands Arcade.
- Whilst the number of bus services and associated passenger demand is high this doesn't appear to cause any significant problems. Bus layover does appear to take place at some bus stop locations but does not seem to cause disruption to the operation of the network. One southbound bus stop on Pollokshaws Road is being underutilised and could be removed.
- On-street parking appears to be operating as intended with residential streets accommodating long-stay parking and Kilmarnock Road and Pollokshaws Road catering for short-stay parking. There appears to be additional capacity on Pollokshaws Road and Kilmarnock Road.
- Off-street parking is under-utilised with low overall demand at the Shawlands Arcade car parks which could be brought into more effective use.

4. SITE VISITS

4.1 Overview

- 4.1.1 We undertook site visits to help gain an understanding of how the study area currently operates during weekdays and on Saturday. In order to report our findings we have split the study area into different zones as shown in Figure 36. In the remainder of this section we discuss the characteristics of each zone in turn.

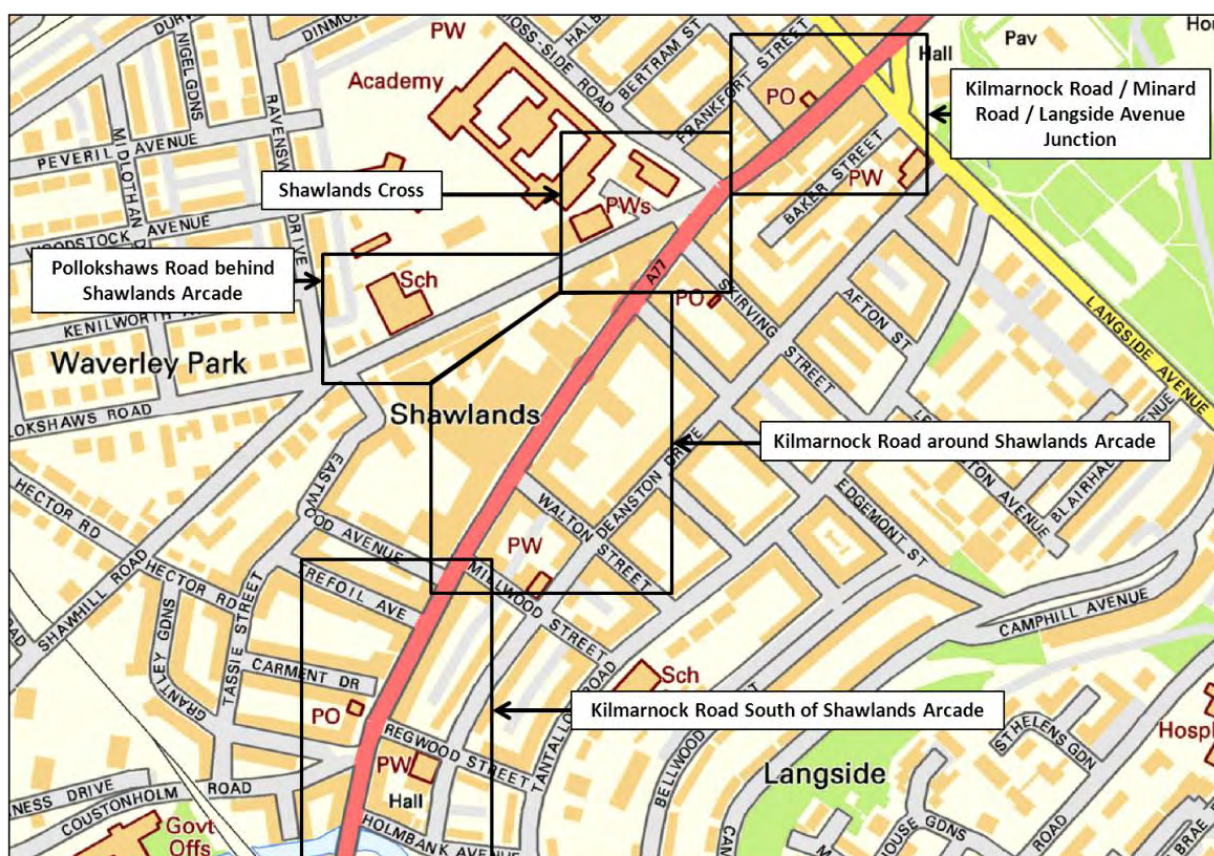


Figure 36. Site Visit Zones

- 4.1.2 There are a number of issues which apply throughout the study area. In general the footway condition is poor with many areas uneven, including paved crossing areas. Tactile paving is often worn or poorly located.
- 4.1.3 It was observed that road markings are also in poor condition, often worn, and this also applies to markings for traffic regulations.
- 4.1.4 Cycle parking (Sheffield stands) is provided at a number of locations, although it was observed that cyclists tended to use informal locations (guardrails etc.) closer to their destination. It may be worth reconsidering the existing locations of cycle parking.



4.1.5 There is no infrastructure provided for cyclists (other than parking) in the study area. Cycle advanced stop lines would be beneficial at the two main junctions in the study area. A considerable number of cyclists, over 60 two-way during the weekday PM peak hour at the Junction of Kilmarnock Road, Langside Avenue and Minard Road, were observed and this was confirmed by the Junction Turning Counts.

4.1.6 In general the junctions operate well in terms of traffic flow and we identified minimal opportunities for improvements.

4.2 Kilmarnock Road / Minard Road / Langside Avenue Junction

4.2.1 The key problems in this vicinity are shown in the following Figure and referenced in the discussion below.



Figure 37. Kilmarnock Road / Minard Road / Langside Avenue Issues

4.2.2 Given the relatively high traffic volumes, this junction generally operates well for traffic and pedestrians with little conflict; although there are short periods of congestion within the peaks, queues typically clear within one cycle. However, there are a number of banned turns which impact on the accessibility to Shawlands for vehicular traffic.

4.2.3 The signals have a stage where all pedestrian movements are called meaning that some pedestrians make diagonal crossings. Generally there is sufficient time to do so, although the elderly and those with mobility impairments can struggle to make it across before the vehicle movements are called. The waiting time between pedestrian stages is considered adequate (typically around one minute). Pedestrians wishing to cross south over Langside Avenue on the south-east side of the junction were



observed to often cross whilst the 'red-man' was still displayed. This is due to both the right and left turns into Langside Avenue being banned, and therefore no traffic uses this arm of the junction during the north-south phase.

4.2.4 Guardrail is used on all arms to direct pedestrians to a safe crossing location and there are paved raised crossing strips on the two minor arms. However both of these crossing strips are in poor condition and there are some locations where tactile paving and the footway is in very poor condition which presents a trip hazard, particularly for those with a mobility impairment. **See location 5 and 7.**

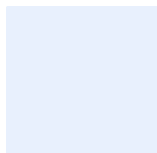
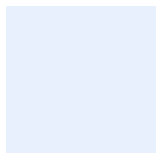
4.2.5 There is potential to relocate the taxi rank outside The Shed, shown adjacent, to create a public realm area. Traffic using the dedicated left turn lane from Pollokshaws Road (north arm), which would be lost, could be accommodated in the existing nearside lane which is currently rarely used because of parked / loading vehicles on the nearside lane through the junction. The current taxi rank is signed for 6 vehicles although it was observed that up to 10 taxis waited here at various points in the day. A relocated rank could be incorporated into the public realm space and / or situated on Langside Avenue. There is a bench located on the existing refuge island and this was observed to be used throughout the day suggesting there could be some demand should it become a public realm space (although, it was a sunny day). **See location A.**



4.2.6 There is significant guardrail provided outside The Shed, presumably to guide pedestrians when they leave this venue in the early hours. This is more than would be required at all other times, although it does not appear to cause any inconvenience to pedestrians it could be reconsidered, particularly in connection with any measures to create a public realm space.

4.2.7 Kilmarnock Road northbound between Moss-side Road to beyond Minard Road is a temporary bus lane operating between 07:00-09:30 and 16:00-19:00. During these times parking and loading are prohibited. However, it was observed that at least one vehicle was parked or loading at all times during these periods meaning that the nearside lane was not used by buses and shows a lack of





enforcement of the bus lane. **See location 2.**

4.2.8 In the southbound direction parking and loading are prohibited during the same times, although it is not designated as a bus lane. Again, it was observed that at least one vehicle was parked or loading at all times during these periods meaning that the nearside lane was not used by any vehicles. **See location 3** and adjacent picture.

4.2.9 Pay and Display parking on Kilmarnock Road in this area allow for up to a 2 hour stay (£1.00) and no return within one hour. There is an unrestricted parking area between Shawlands Kirk and Destiny Church which was also observed to be well used throughout the day. There was also no signage for the parking provision available at Shawlands Arcade.

Other mapped issues:

- To the south of the junction on the southbound side of Kilmarnock Road there are display boards / stands / stalls outside shops and the crossing point to the pedestrian crossing refuge island which narrows the footway, although this did not present a significant barrier to pedestrian movement. **See location 1.**
- On the south side of Minard Road west of the junction loading using a bus stop was observed which would suggest insufficient formal loading provision. **See location 4.**
- On the west side of Kilmarnock Road north of the junction loading was observed in the peak periods which is not ideal as this could disrupt traffic flows at peak periods. **See location 6.**

Key Issues

- Potential public realm area.
- Parking / loading restrictions in AM and PM peaks ignored on both sides of the carriageway – northbound bus lane benefits are made redundant.
- Footway / raised crossing / tactile paving in poor condition.
- Parking availability at Shawlands Arcade not well signed.
- Banned turns impede access to Shawlands and encourages use of A77 as a through route only.

4.3 Shawlands Cross

4.3.1 The key problems in this vicinity are shown in the following Figure and referenced in the discussion below.



Figure 38. Shawlands Cross Issues

4.3.2 Again, given the relatively high traffic volumes, this junction generally operates well for traffic and pedestrians with vehicle queues typically clearing within one or two cycles. Each arm has its own pedestrian stage and these contribute to some 'blocking' during peak periods. Road markings at the junction are worn, in particular the 'no waiting' yellow box hatching.



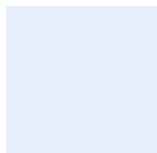
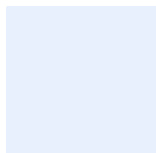
4.3.3 Pedestrian wait times for the 'green man' stage were observed to be relatively short and pedestrians are guided to safe crossing locations by extensive use of guardrails. These mean that crossing routes do not match pedestrian desire lines and this leads to a number of users crossing on the wrong side of the guardrail at unsafe locations. This was particularly the case for school pupils from the nearby Shawlands Academy.

- 4.3.4 It is evident that the pedestrian crossing locations at this junction have been relocated at some point. Previously they were closer to the stop lines and more consistent with the pedestrian desire lines.
- 4.3.5 Observations at Shawlands Cross during the PM school peak mainly relate to unsafe and inappropriate behaviour by schoolchildren including:
- many pupils crossing at the wrong side of guardrail;
 - pupils crossing out with the 'green man' pedestrian stage;
 - pupils climbing over the guardrail;
 - pupils walking in front of traffic; and
 - pupils squeezing through a gap in the guardrail. **See location 12.**
- 4.3.6 There are a high number of right turns from Kilmarnock Road into Skirving Street in the AM peak. This is in close proximity to a bus stop (northbound carriageway) and while it only causes limited blocking of traffic, there may be opportunities to provide a formal right-turn lane, although this could be limited by narrowing of the carriageway to the north of the junction. **See location 19.**
- 4.3.7 The bus stop on the northbound approach of Kilmarnock Road creates a pedestrian bottleneck due to the narrow footway width. This is particularly the case in the PM school peak when a high number of pupils congregate here to wait for buses. There is limited opportunity to relocate this bus stop as the existing location was identified as the only one which avoids blocking shop frontage. **See location 16.**



Other mapped issues:

- Parking on "Keep Clear" markings at corner of Moss-side Road and Franfort Street outside Tusk. It is assumed this is designed to allow access to Tusk but parking at this location may also restrict visibility for school pupils crossing here. **See Location 8.**
- Bollards outside the shops on Moss-side Road could create a hazard to pedestrians, especially those with partial visual impairment. It is apparent they have been installed to prevent / discourage parking outside the shop but these bollards are no longer required since the pedestrian guardrail is now installed. **See Location 9.**
- Wheelie bins outside the Linen pub create a pedestrian bottleneck as there is also pedestrian guardrail at this location. **See Location 10.**
- A utility box adjacent to the junction on the east side of Kilmarnock Road significantly narrows the footway. **See Location 11.**



- There is a gap in the pedestrian guardrail which is used by pedestrians, particularly school pupils. **See Location 12.**
- There is parking adjacent to guardrails on Moss-side Road opposite Frankfort Street. The signage says no waiting or loading at any time but there are no associated road markings. **See Location 13.**
- A pedestrian bottleneck is caused by the guardrail, narrow footway and church perimeter wall outside Shawlands Kirk. This could act as a deterrent to pedestrians using this route, particularly school pupils. **See Location 14.**
- There are no formal opportunities for loading on Pollokshaws Road outside Ketchup. Delivery vehicles for here and The Granary park-up in the bus stops. **See Location 15.**
- At the west end of Skirving Street tactile paving is only provided at one side of the road and is in poor condition. **See Location 17.**
- Parking restrictions unclear at the west end of Skirving Street. **See Location 18.**

Key Issues

- Configuration of junction for pedestrians and vehicles is complicated
- Pedestrian desire lines broken by guardrail and crossings sometimes abused (especially by school pupils)
- Pedestrian bottleneck at bus stop
- Opportunity to improve right-turn into Skirving Street

4.4 Kilmarnock Road around Shawlands Arcade

- 4.4.1 The key problems in this vicinity are shown in the following Figure and referenced in the discussion below.



Figure 39. Kilmarnock Road in vicinity of Shawlands Arcade Issues

4.4.2

The central reservation on Kilmarnock Road provides opportunities for pedestrians to cross but it is unclear whether this is formal or informal provision (see adjacent picture) and there are some concerns about safety as only some sections are kerbed. There is no formal provision for loading in this section of the study area and this could contribute to the central reservation frequently being used for loading which presents network operation and safety issues. There may be opportunities to make better use of this road space. **See Location 21.**



4.4.3 Premises within Shawlands Arcade are serviced from the rear. However all other premises appear to be serviced from Kilmarnock Road which can lead to operational and safety issues due to service vehicles parking in the central reservation as shown adjacent.

4.4.4 Pay and Display parking on Kilmarnock Road in this area allows for up to a 3 hour stay (£1.50). These bays are well used, however there always appeared to be a small amount of availability. With underused parking spaces in the Arcade car park, on street parking may not be the most effective use of the road space. Consideration could also be given to providing loading bays where appropriate to remove the parking on the central reservation.

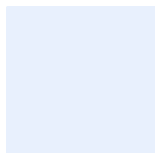
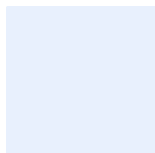


4.4.5 There is a two-stage puffin crossing towards the north end of Shawlands Arcade. This is well used by pedestrians, and the wait time appears to be suitable with few pedestrians trying to cross while the 'red-man' was still showing.

4.4.6 As mentioned, the kerbed sections of the central reservation are often used as pedestrian crossings. These do have dropped kerbs available on either side of the carriageway, however they are all blocked by cars parked in designated parking bays at these crossing points. This is obviously poor in terms of accessibility, however it also gives rise to a potentially dangerous situation as pedestrians are crossing the carriageway between parked cars. In one location a new 'City Car Club' bay has been installed which blocks the dropped kerb and access to the kerbed pedestrian refuge. **See Location 22** and adjacent picture.

4.4.7 There are only three access points to Shawlands Arcade – at the north and south ends, and a ramp in the centre although this is offset to the south. The staggered signalised crossing mentioned above provides access to the northern end of the Arcade. There are no formal crossings however leading to the southern or central access point, and this creates pedestrian desire lines at these locations. For the central access, the informal pedestrian refuge discussed in the previous paragraph is situated in relative proximity to the end of the ramp, however there are no formal crossing facilities to access the southern entrance which is





supported by the findings of the pedestrian survey at Walton Street area.

- 4.4.8 As with many parts of the study area, footway and road surfaces are generally in poor condition. The only cycling provision in this section of the study area is a small number of Sheffield stands located at the western end of the eastern side streets (Mount Stuart Street, Walton Street and Millwood Street). None of these stands appear well used, and several are almost hidden from view by phone boxes and wheelie bins which presents a risk of bike theft. Consideration should be given to moving cycle parking to more prominent locations that will make them more secure and encourage increased use.

Other mapped issues:

- Illegal parking regularly observed on double yellow lines on Kilmarnock Road with junction of Mount Stuart Street. This is possibly due to the location of bank cash machines on both corners of the junction but also highlights the lack of enforcement in the area. **See Location 20.**
- Poor footway, road and tactile paving condition. **See Location 23 and 24.**

Key Issues

- Poor footway, road and tactile paving condition.
- Lack of loading facilities leading to use of central reservation.
- Pedestrians using kerbed refuge to cross road, yet therefore crossing between parked cars.
- Dropped kerbs blocked by parking bays.
- Difficult access for pedestrians to Arcade main entrance.

4.5 Kilmarnock Road South of Shawlands Arcade

- 4.5.1 The key problems in this vicinity are shown in the following Figure and referenced in the discussion below.

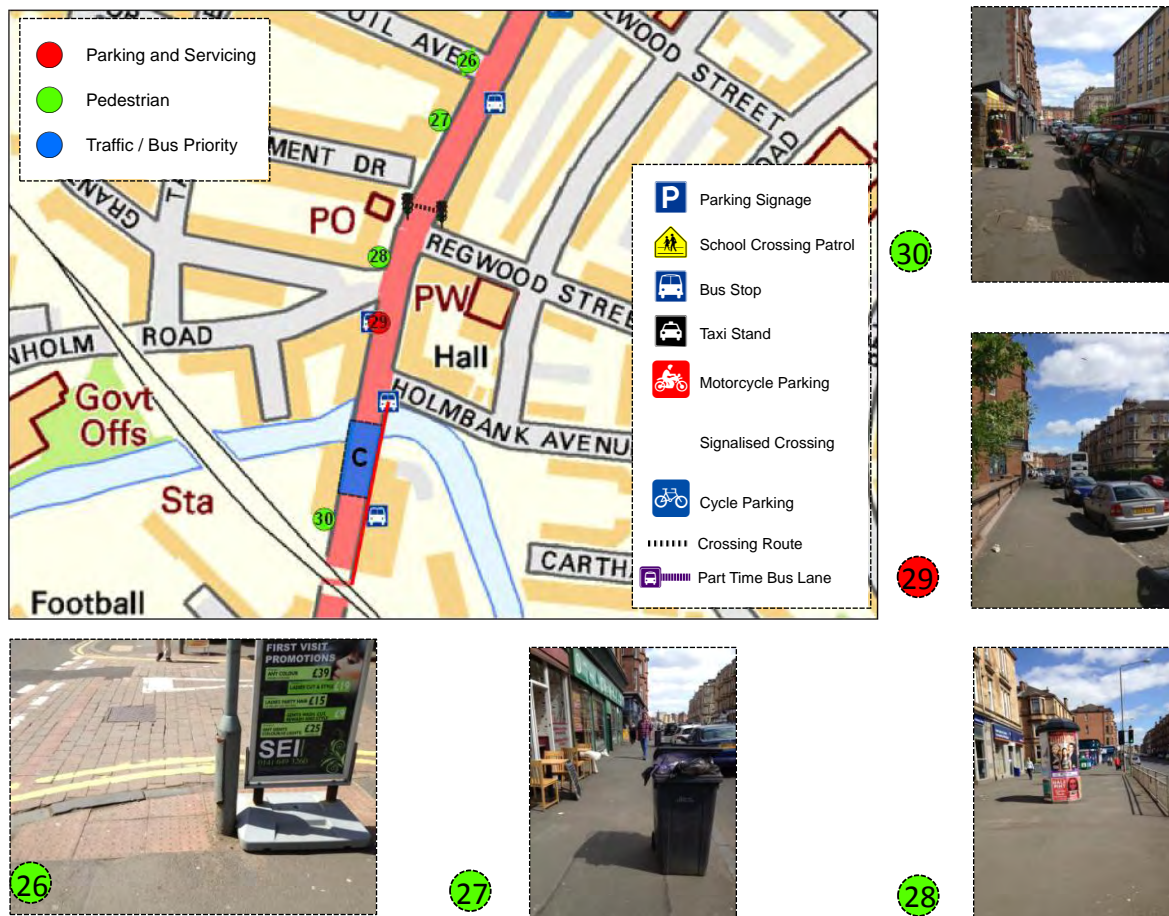


Figure 40. Kilmarnock Road South of Shawlands Arcade Issues

- 4.5.2 Pay and Display parking in most of this area of Kilmarnock Road allows for up to a 3 hour stay (£1.50). To the south of Holmbank Avenue, the parking restriction road markings are in very poor condition, and are non-existent in some cases, particularly on the bridge at the White Cart Water. In many areas the footway, road and tactile paving are in poor condition with uneven surfaces. In general, the footways are a good width. There are however some instances where the footway effective width is reduced by wheelie bins and shops products being displayed on street. **See Location 27 and 30.**
- 4.5.3 The signalised pedestrian crossing between Regwood Street and Carment Drive, shown adjacent, is used by high numbers of people.



However, a significant wait time was observed which led to many pedestrians crossing when there were gaps in the traffic during red man phase.

4.5.4 There appears to be a clear desire line across Kilmarnock Road in the area between Holmbank Avenue and the railway bridge. It is likely that this is due to people accessing the bus stops, Pollokshaws East rail station and the shops on either side of Kilmarnock Road. It is unlikely that a signalised crossing would be required at this location, given the proximity of other crossings both to the north and south, however a pedestrian refuge could be considered although the pedestrian surveys suggest that flow at this point is consistent throughout the day both during the weekday and weekend.

4.5.5 The northbound and southbound bus stops are both well used. The southbound stop has recently been relocated and now has a build out and raised kerb to provide better access to services. The build out now frees up more space for parking, and also helps the bus services pull back out into the traffic. This however does result in the traffic being stopped behind waiting buses, however the delays were observed to be minimal. At the northbound bus stop, a small number of parked cars and delivery vehicles were observed parking in the bus layby, preventing buses from fully pulling into the kerb. **See Location 29.** There are no provisions for loading in the area and, in addition to using the northbound bus stop, delivery vehicles were also observed in the parking bays outside the Tesco Express.



4.5.6 As with most side streets off Kilmarnock Road, the majority are one-way and have high numbers of parked cars on either side, some partly on the footway. These streets to the south of Shawlands Arcade appear to be wide enough to cope with the unrestricted parking whilst still allowing vehicles through, however they can become narrow for pedestrians as shown in the adjacent picture. No issues were observed with the operation of the one-way system in these streets, although as with many roads in the study area, the surface condition is poor.

Other mapped issues:

- Only noticeable sign advertising the free parking at Shawlands Arcade is situated on the southern end of the Arcade itself. Therefore perhaps more people are parking on street as they are unaware of the spaces available there. **See Location 24/25.**

Key Issues

- Footway, crossing and road surface in poor condition.

- Parking availability at Shawlands Arcade not well signed.

4.6 Pollokshaws Road behind Shawlands Arcade

- 4.6.1 The key problems in this vicinity are shown in the following Figure and referenced in the discussion below.



Figure 41. Pollokshaws Road behind Shawlands Arcade Issues

- 4.6.2 Parking in this area is mainly unrestricted and on-street parking was observed to be at, or close to, capacity throughout the day.
- 4.6.3 Few pedestrian movements were observed during the day, although there were more movements during the AM and PM peaks, particularly by school pupils. The area outside Shawlands Primary is designated a 'school zone' with mandatory 20mph speed limit



when flashing amber lights are in operation. When the primary school finished at 3pm, pupils and parents left the area in a very orderly fashion. Most parents appeared to walk their children to and from the school. Those needing to cross Pollokshaws Road either made use of the pelican crossing or the School Crossing Patrol, depending on which school gate they had exited. It appears that very few parents drive to the school to collect their children, although one vehicle was observed waiting to collect a pupil on the 'zig-zag' keep clear lines – this however appeared to be an isolated incident.

- 4.6.4 There is a toucan crossing immediately opposite the school and "school keep clear" road markings and signage which operates between 08:00 and 18:00 as shown adjacent.



- 4.6.5 The on-street area outside the entrance to Shawlands Bowling Club is kept clear of parking by police cones and it is unclear whether this is a formal arrangement undertaken by the police or informal one undertaken by the Bowling Club.

- 4.6.6 Pollokshaws Road is used as a main bus route with frequent services and bus stops located close to Shawlands Cross

- 4.6.7 There is a vehicular access to the Shawlands Arcade car park opposite Shawlands Bowling Club.

Key Issues

- Tactile paving at pedestrian crossing in poor condition
- No signage for Arcade car park

4.7 Saturday

- 4.7.1 A site visit was also conducted between 11am and 3pm on a Saturday. Traffic flows were observed to be similar to the off-peak mid-week flows and the key junctions at Shawlands Cross and Minard Road both performed well with little to no queuing. Several vehicles exiting on-street parking bays on Kilmarnock Road were seen to be undertaking u-turns. There was notably more illegal parking on the Saturday, with several taxis waiting for fares, or private hires waiting to collect passengers on double yellow lines. Other vehicles were also observed to double-park momentarily to drop passengers off to access the shops as there were fewer available pay and display bays.

- 4.7.2 There appeared to be a higher number of pedestrians in the area, but a lower number of cyclists on the Saturday. Pedestrian behaviour at Shawlands Cross was better with the majority following the guardrail round to the relevant crossing points. Pedestrian behaviour at the Minard Road junction was very similar to mid-week, with the majority of people waiting for the pedestrian phase (with the exception of Langside Avenue) and a relatively high number of diagonal movements.

4.8 Summary

- 4.8.1 The key issues set out in the previous sections are summarised in the Figure below.

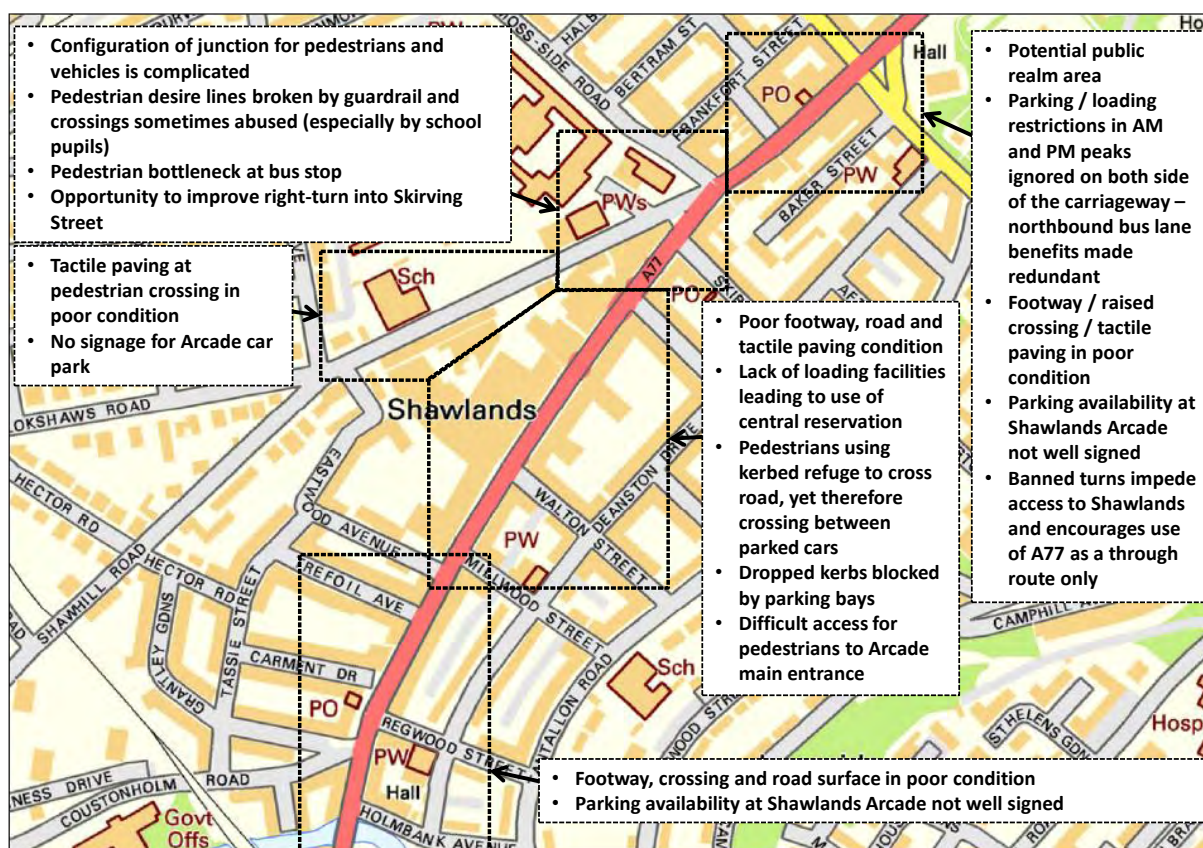


Figure 42. Summary of Key Issues from Site Visits

5. PROBLEMS AND ISSUES

5.1 Summary

5.1.1 With reference to Chapters 3 and 4, a number of key problems and issues have been identified within the study area. These are:

General

- We believe there is poor awareness of the availability of parking at Shawlands Arcade (i.e. lack of signage) and a perception of poor personal safety (lighting, remoteness etc.). This is reflected in the fact that the Arcade car park is extensively underutilised and has plenty of excess capacity for parking which could be brought into more effective use.
- In addition, access to Shawlands Arcade and its car parking is impeded by the nature of the road layout. In particular, the north car park is inaccessible from the south.
- High traffic flows on A77 Pollokshaws Road / Kilmarnock Road cause pedestrian severance.
- Accidents that are occurring appear to be attributable to high traffic flows and conflicts between different user groups. There appear to be pedestrian safety issues as over half of recorded accidents involved pedestrians which would suggest that drivers are not driving according to the town centre environment but rather using it as an arterial route.
- Footways, raised crossings and tactile paving are in poor condition throughout the study area.
- Some pinch points on footways due to bus stops, wheelie bins, café tables and shop displays.
- It was observed that road markings are in poor condition in many locations, often worn, and this also applies to markings for traffic regulations.
- While there is no infrastructure provided for cyclists (other than parking) in the study area, there was a very apparent high number of cyclists observed in the study area which was confirmed by the Junction Turning Counts.
- Although cycle parking (Sheffield stands) are provided at a number of locations, cyclists tended to use informal locations (e.g. guardrails, etc.) closer to their destination and more in public view to secure their bikes.

Kilmarnock Road / Minard Road / Langside Avenue Junction

- Potential public realm area outside Langside Hall would require relocation of the existing taxi rank.
- The restrictions associated with the part-time bus lane on the northbound carriageway of Pollokshaws Road between Moss-side Road and Minard Road are largely ignored due to lack of enforcement of parking restrictions meaning that buses cannot use it.
- Similarly, regulations to restrict parking and loading on the nearside lane of the southbound carriageway during peak periods are typically ignored which is again due to lack of enforcement rendering this lane unusable.

- Footway, raised pedestrian crossings and tactile paving at junction in poor condition.
- No signage for off-street parking provision at Shawlands Arcade on entrance to Shawlands.
- Banned turns impede access to Shawlands, particularly from the M77 / Crossmyloof area, and encourages the use of the A77 as a through route only. This is exacerbated by ambiguous signage for Shawlands on the approach from the M77 / Crossmyloof area. In addition, access from Shawlands to Langside / Battlefield is also impeded by banned turns and requires ratrunning via residential streets.

Shawlands Cross

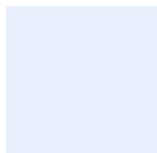
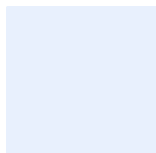
- Configuration of junction for pedestrians and vehicles is complicated
- The extensive provision of guardrail and its layout at Shawlands Cross does not match the pedestrian desire lines and leads to them being misused / ignored, particularly by school pupils.
- Pedestrian bottleneck at northbound bus stop outside The Granary.
- Right turning vehicles into Skirving Street can block northbound vehicles on Kilmarnock Road, particularly when the bus stop on the northbound carriageway is also occupied.
- There is parking adjacent to guardrails on Moss-side Road, opposite Frankfort Street and near Shawlands Academy. The signage says no waiting or loading at any time but there are no road markings as well as general lack of enforcement.

Kilmarnock Road around Shawlands Arcade

- Lack of loading facilities on Kilmarnock Road lead to use of the central reservation for loading / unloading which creates safety and operational issues.
- The central reservation on Kilmarnock Road encourages pedestrians to cross at informal locations, often between parked cars. Parked cars legitimately parked in designated bays often block dropped kerbs.
- Limited opportunities for pedestrian access to Shawlands Arcade. The existing ramped accesses cause pedestrians to use indirect routes and creates severance between Arcade shops and street level.
- Footway, raised pedestrian crossings and tactile paving at junctions in poor condition.
- On-street parking demand on Kilmarnock Road would seem to be less than capacity suggesting there is no problem with provision and that, given the level of off-street parking available at Shawlands Arcade, that a small amount of on-street parking could be used for alternative purposes (e.g. loading, pedestrian facilities, etc.) without impacting upon the effective supply.

Kilmarnock Road South of Shawlands Arcade

- Footway, raised pedestrian crossings and tactile paving at junctions in poor condition.

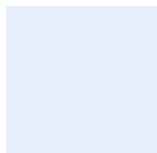
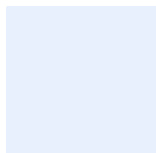


- No signage for off-street parking provision at Shawlands Arcade on entrance to Shawlands.

Pollokshaws Road behind Shawlands Arcade

- There are no formal opportunities for loading on Pollokshaws Road outside Ketchup or The Granary. Delivery vehicles for these establishments park-up in the bus stops.
- There are no major issues with the operation of bus services in the study area although it was identified that one southbound stop on Pollokshaws Road is underutilised and could potentially be removed.
- Tactile paving at signalised pedestrian crossing in poor condition.
- No signage for off-street parking provision at Shawlands Arcade on entrance to Shawlands.

5.1.2 These problems and issues form the basis upon which we have developed potential solutions and options as set out in the following chapter.



6. POTENTIAL SOLUTIONS

6.1 Existing Proposals

- 6.1.1 From discussions with Glasgow City Council officers we identified that there are a number of existing proposals for Shawlands and the A77 Pollokshaws Road / Kilmarnock Road corridor which are at varying stages of development.
- 6.1.2 In particular, proposals for public realm improvements are at an early stage of development with an initial outline plan for enhancement works shown in Figure 43 below.

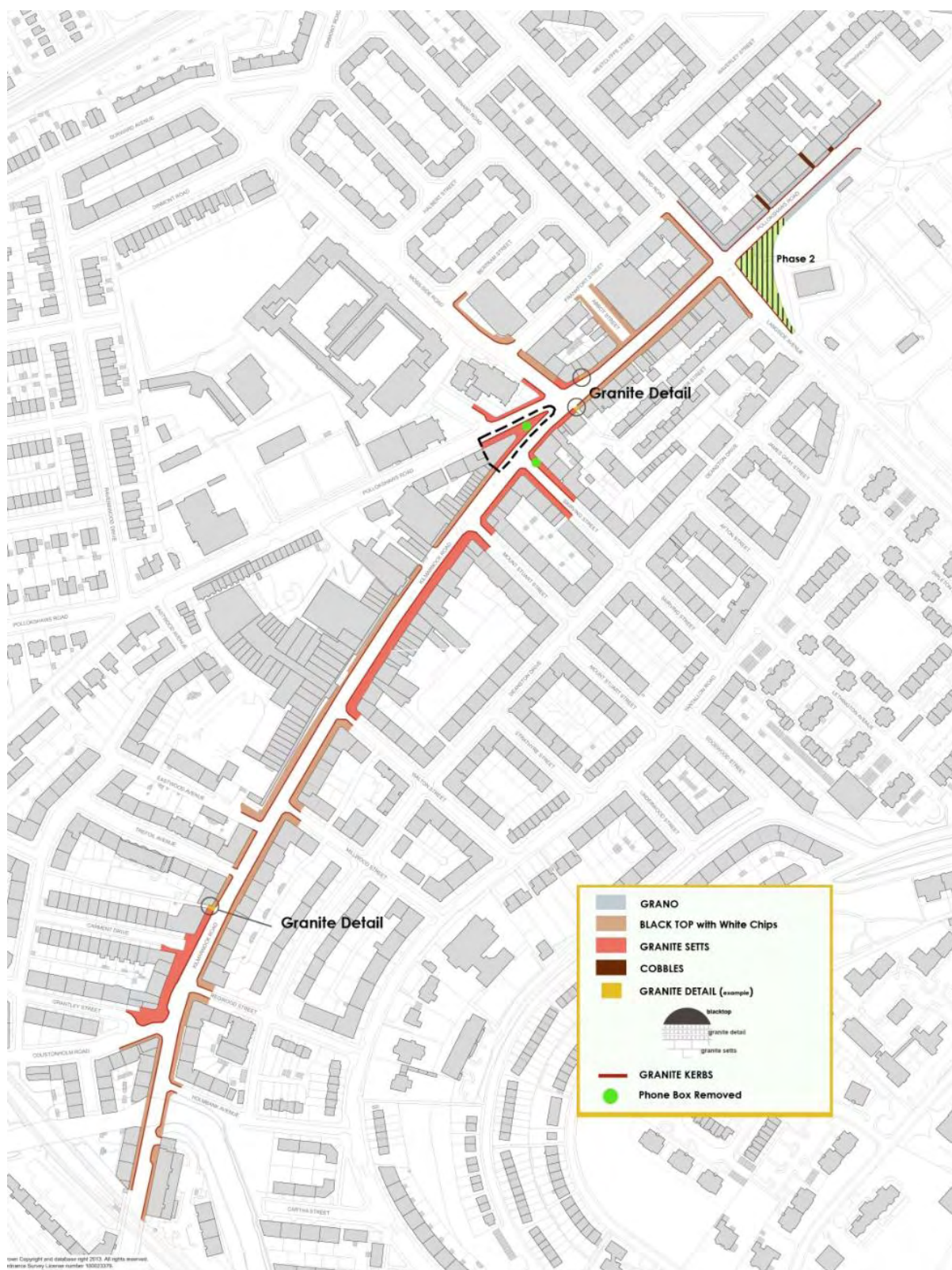


Figure 43. Public Realm Improvement Proposals

6.1.3 As such, we taken these proposals into account when considering potential solutions to the identified problems in Shawlands wherever possible. Our proposals should consequently be considered as variations upon or additional to those set out in the above Council plan.

6.1.4 Furthermore, Glasgow City Council are currently working on proposals to improve bus priority on the A77 Pollokshaws Road / Kilmarnock Road Streamline corridor. We have met with the Council's team responsible for the design and development of these measures who have highlighted that no definitive proposals for the study area were currently in existence. They also highlighted that a consultant will soon be appointed to undertake micro-simulation modelling of the corridor and that there would potentially be an opportunity for measures emerging from this study to be tested as part of this work.

6.2 Our Proposals

6.2.1 The following Figures and discussion sets out a range of proposals that we have identified which may potentially alleviate the problems and issues identified in the study area and these are discussed in the remainder of this section. All the proposals maps are also attached as Appendix A.

6.2.2 It should be noted that none of these options or proposals have been subjected to detailed design or testing given the nature of this study as a pre-outline design, high level 'Mixed Priority Route Strategy'. Therefore, we recommend that further work is undertaken to examine the feasibility and operational impacts of these options prior to development of detailed proposals.

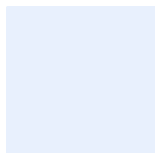
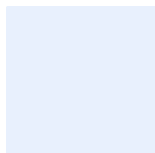
Shawlands Arcade

6.2.3 We have found that there is spare capacity in all of the parking areas in the Arcade throughout the week and Saturday. We believe if we can encourage use of the Arcade car park we can:

- A) increase the number of shoppers attracted to the Arcade and wider study area;
- B) provide greater availability of short term on-street parking on Kilmarnock Road, thus an increase in turnover of spaces and footfall at adjacent retail premises (from passing trade); and
- C) reduce pressure for parking by shoppers in surrounding residential streets.

6.2.4 We suggest providing Variable Message Signs (VMS) which would display the number of parking spaces available at Shawlands Arcade North and South car parks and which would be sited at "Gateway" entrances to the north and south of Shawlands. In addition, static signs highlighting the availability of off-street parking at Shawlands Arcade should be provided at other key locations. This would promote the accessibility of the area and widen the catchment for trips to Shawlands.

6.2.5 In conjunction, we suggest that further signage for Shawlands and the Arcade should be provided in the wider area including at Crossmyloof and the junction between Dumbreck Road / Haggs Road and Titwood Road at Pollok Park.



- 6.2.6 It is suggested that the Arcade parking is designated as follows:
- North car park upper – long stay (8 hour max) for residents, employees and shoppers overspill
 - North car park lower – medium stay (3 hour max) for shoppers
 - South car park lower – medium stay (3 hour max) for shoppers and disabled parking
 - South car park upper – long stay (8 hour max) for employees and shoppers overspill
- 6.2.7 To complement this, the attractiveness of the Arcade car parks, particularly those to the north, should be improved to make them more welcoming and increase the perception of personal safety. It is hoped that if we can encourage more people to use the car parks this will actually contribute to a feeling of greater safety and less isolation and, in turn, encourage further use.
- 6.2.8 Additional benefits would be to encourage more trips through the Arcade in the hope that it has the ‘knock-on’ effect of making it more appealing to retailers.
- 6.2.9 Furthermore, consideration could also be given to undertaking promotion of off-street parking during key shopping periods such as November and December when incentives such as ‘free from three’ and such other initiatives identified in the *Portas Review of the High Street* could be used to encourage more economic activity in the area.
- 6.2.10 The overall vision would be to try to re-establish the Arcade as the retail hub of Shawlands by creating greater footfall of visitors and shoppers.
- Kilmarnock Road / Minard Road / Langside Avenue Junction**
- 6.2.11 Our proposals to address the problems in this location are summarised in the following Figure and discussed in detail below.

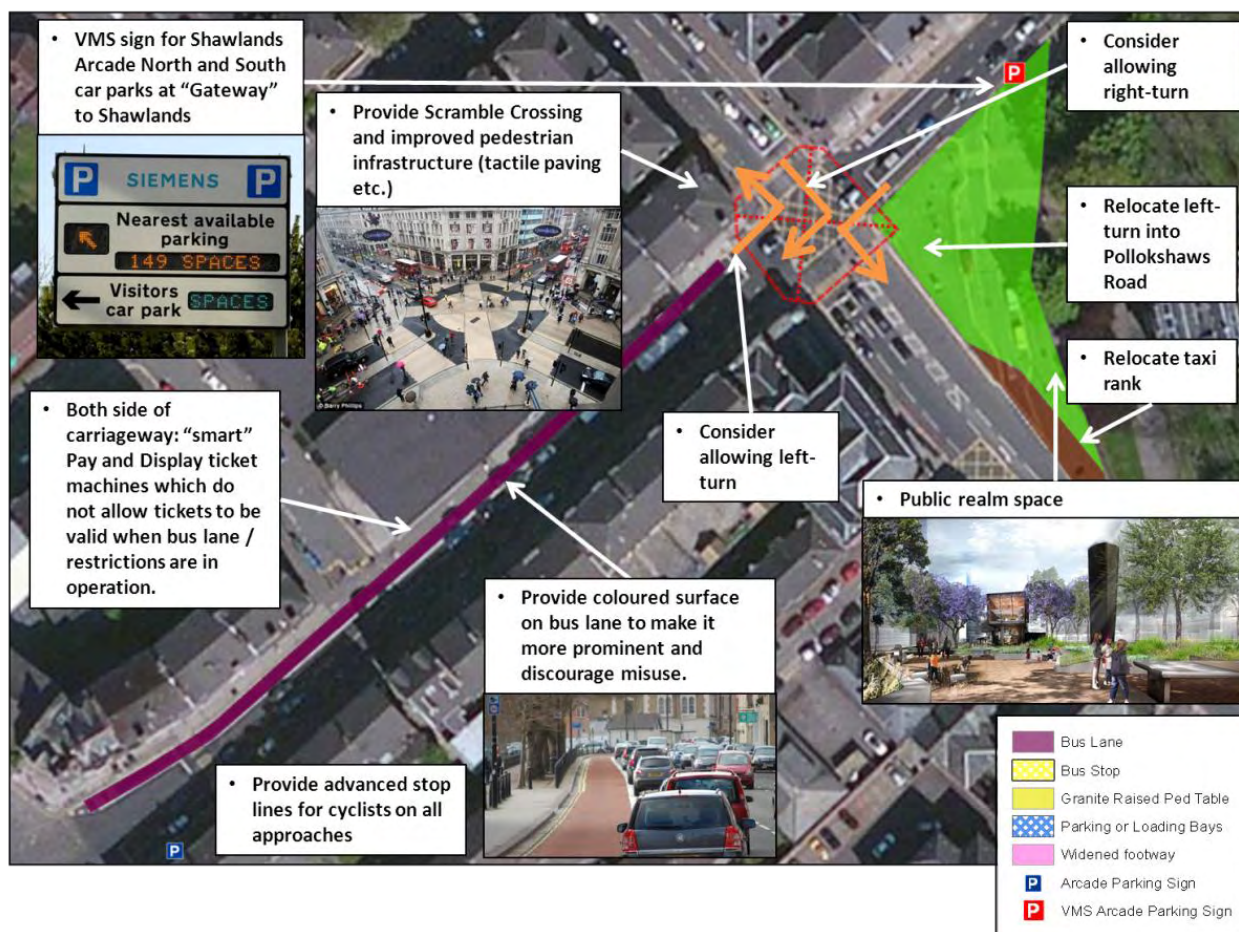


Figure 44. Kilmarnock Road / Minard Road / Langside Avenue Junction Potential Solutions

- 6.2.12 We suggest considering allowing right-turn movements from Minard Road to Pollokshaws Road which are currently banned. By doing so, journeys from the M77 / Crossmyloof area to the south and the Arcade could be signed and diverted away from Moss-side Road and Shawlands Academy where they are currently required to travel. We believe this would increase the permeability and accessibility of Shawlands making it a more attractive destination. This would also require changes to the Shawlands Cross junction which are detailed later.
- 6.2.13 Although our analysis has found that the Minard Road approach to this junction does not have a Ratio of Flow to Capacity (RFC) of greater than 75% during any of the peak hours, we suggest consideration be given to whether an additional right-turn lane could be provided on the approach to the junction to ensure operational efficiency is not compromised.
- 6.2.14 The option to allow north-eastbound traffic on Kilmarnock Road to turn left into Minard Road could also be explored.
- 6.2.15 Our site visits identified that the footway, tactile paving and raised crossings at this junction are in poor condition. We also noted that a number of people made diagonal

crossing movements during pedestrian green stages. We suggest providing a scramble crossing at the junction which will formally accommodate diagonal crossing movements and would incorporate new, improved, pedestrian infrastructure (footways, tactile paving and raised crossings). This would be in line with the similar scheme recently implemented at Oxford Circus in London.

- 6.2.16 Both these measures would require a review of the traffic signal settings to firstly include a right turn movement from Minard Road and secondly to provide an all arm pedestrian green man phase which allows sufficient time for diagonal crossings to take place.
- 6.2.17 In conjunction with the reworking of the junction we suggest providing advanced stop lines for cyclists on all approaches.
- 6.2.18 The council have identified an opportunity to create a public realm space to the east of the junction adjacent to Langside Hall. We suggest that the taxi rank could be relocated and the existing left turn lane from Pollokshaws Road to Langside Avenue removed to create a suitable area. The left turn movement could be accommodated in the existing near-side lane on Pollokshaws Road at this junction. This is currently under-utilised by vehicles because the nearside lane through the junction on the A77 is typically occupied by parked or loading vehicles which should enable the left turn movement to be accommodated without disruption to straight ahead flows.
- 6.2.19 Options to relocate the rank to another location have been explored but we have not identified anywhere which we believe would not result in operational difficulties or safety concerns,
- 6.2.20 Our site visit found that the part time bus lane on the northbound carriageway of the A77 is typically redundant due to vehicles illegally parking / loading. We suggest instating a coloured surface on the bus lane between Moss-side Street and Minard Road to make it more prominent and discourage misuse. In conjunction “smart” pay and display ticket machines, which do not allow tickets to be valid when the bus lane is in operation, could be installed. These could also be installed on the southbound carriageway to help keep the nearside lane clear during peak periods. In addition, regular reinforcement of these regulations should be undertaken by traffic wardens at peak periods.
- 6.2.21 As mentioned above, we also recommend installation of a VMS to display the number of parking spaces available at Shawlands Arcade on the Pollokshaws Road approach to this junction.

Shawlands Cross

- 6.2.22 Our proposals to address the problems in this location are summarised in the following Figure and discussed in detail below.

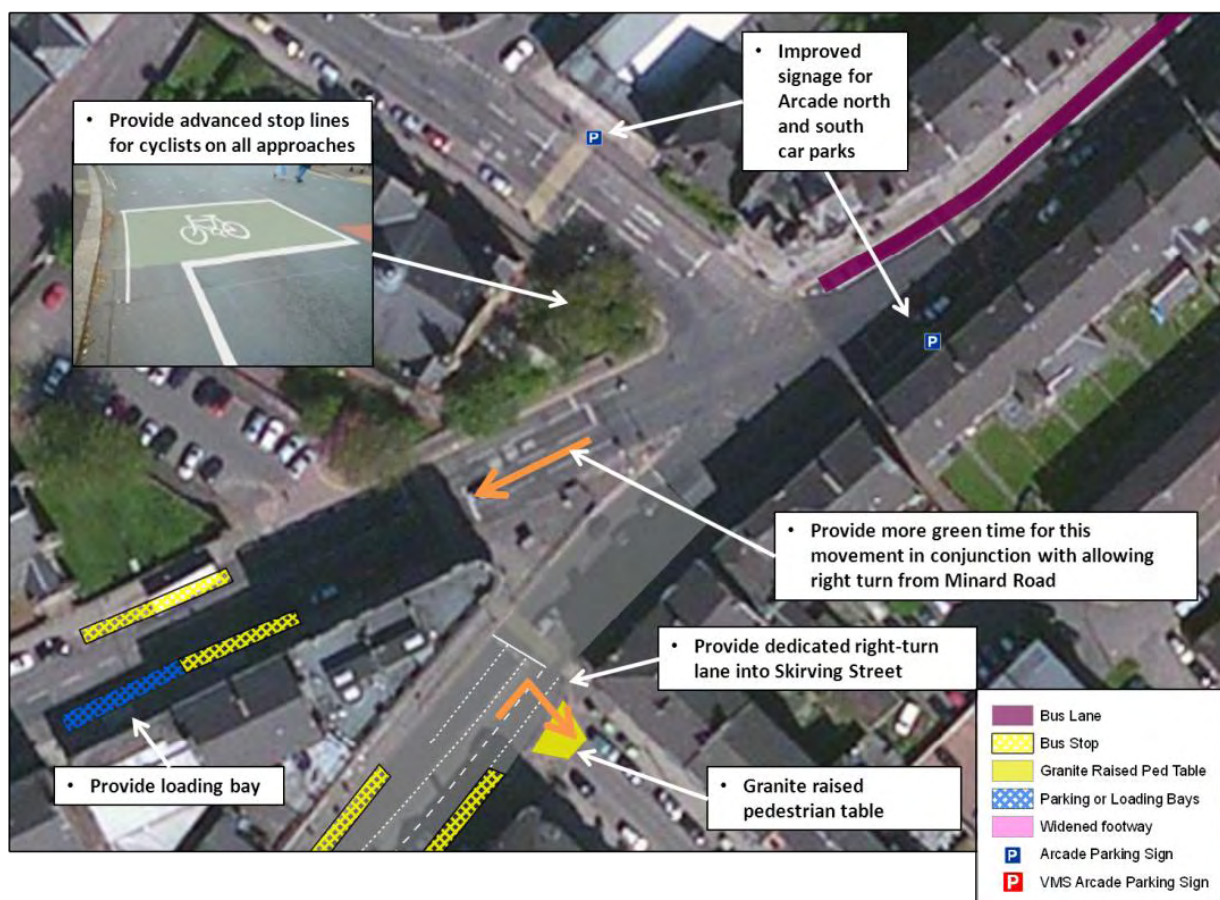
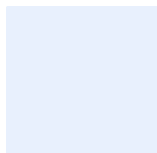
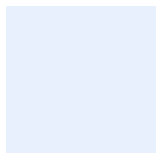


Figure 45. Shawlands Cross Potential Solutions

- 6.2.23 Our site visit identified that there is extensive guardrail in place at this junction and this contributes to extended walking distances for pedestrians. One option to improve the situation would be to ‘pull-in’ the junction and provide pedestrian crossings at the road intersections rather than the offset crossings which currently exist. In this situation less guardrail could be provided and only at targeted locations reducing walking distances and catering for pedestrian desire lines. We note, that historically this type of situation existed but also that it may adversely affect the capacity and operational efficiency of the network. As such, we would recommend more detailed analysis including traffic modelling of this proposal if you wish to progress it further.
- 6.2.24 Alternatively, we previously identified an opportunity to remove the ban on right-turning traffic from Minard Road into the A77 at the junction to the north of this location. If this was implemented it would likely lead to greater vehicle flows from the A77 to Pollokshaws Road. Therefore, there may be a need to provide an increased window of green time for westbound traffic to pass through the pedestrian crossing on Pollokshaws Road to prevent blocking back along the A77 as currently it is called to red for traffic when they are released through the junction.
- 6.2.25 Our site visit identified that there are a relatively high numbers of right-turning vehicles from Kilmarnock Road into Skirving Street, a contributing factor being the turn ban from



Kilmarnock Road to Langside Avenue at the junction to the north. At some times these vehicles and / or buses using the adjacent bus stop on the northbound carriageway, can block northbound traffic on Kilmarnock Road. Provision of a dedicated right-turn lane could improve the situation and we believe there is sufficient carriageway space here to accommodate one. Northbound traffic on Kilmarnock Road could then flow freely without being inhibited by right-turning vehicles or buses stopped at the bus stop.

- 6.2.26 We also suggest provision of advanced stop lanes for cyclists on each of the approach arms to this junction. This would formalise a practice which is currently taking place at some of the approaches anyway. Our analysis noted that cyclist flows at this junction are lower than the other junctions in the study area in each of the weekday peak hours. The introduction of advanced stop lines would make it more cycle-friendly and may encourage more cyclists to feel comfortable negotiating it.
- 6.2.27 We recommend to providing a raised granite pedestrian table at the west end of Skirving Street to accommodate pedestrian crossing movements safely. The current tactile paving and surface are in poor condition and this would help to distinguish this area as a key pedestrian crossing as well as guiding people to the shops and services further south down Kilmarnock Road.
- 6.2.28 The traffic regulation road markings on the south side of Moss-side Road, opposite Frankfort Street and near Shawlands Academy, are worn and should be reinstated, to match the signage in place, as they are no longer visible.
- 6.2.29 Our site visits identified there was a pedestrian bottleneck at the northbound bus stop on Kilmarnock Road outside The Granary. Unfortunately, we have not been able to identify an opportunity to improve the footway width, due to constraints imposed by the carriageway, or to relocate the bus stop without blocking nearby shop frontages.

Kilmarnock Road around Shawlands Arcade

- 6.2.30 Our proposals to address the problems in this location are summarised in the following Figure and discussed in detail below.

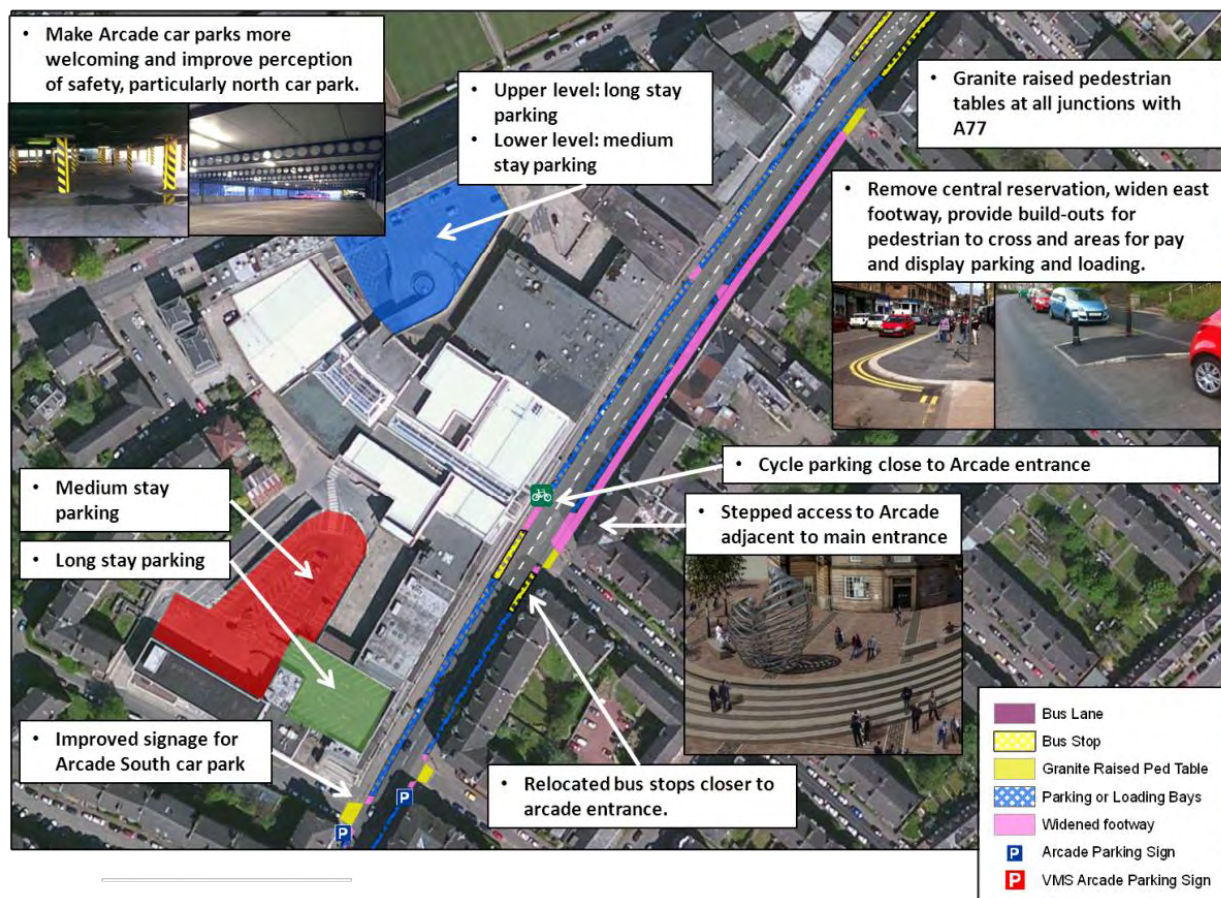


Figure 46. Kilburn Road around Shawlands Arcade Potential Solutions

- 6.2.31 Our site visits found that the existing central reservation is used by loading / unloading vehicles and by pedestrians to cross in informal, often unsafe, locations. We suggest removing it, widening the east footway and providing build-outs for pedestrian to cross safely with areas for pay and display parking and loading between these build outs.
- 6.2.32 The build-outs provide short, safe locations for pedestrians to cross free from parked cars and loading vehicles and reduce the likelihood of them waiting in the middle of the carriageway. They also provide a clear line of sight for pedestrians and motorists. We recommend that consideration should also be given to banning u-turning traffic on this stretch of Kilburn Road outside the Shawlands Arcade where there are high pedestrian crossing flows.
- 6.2.33 Although this arrangement would result in the loss of some on-street parking spaces from Kilburn Road we do not believe this would prove problematic and will create benefits by reducing the sense of severance as well as improving safety. Our analysis found that the parking on Kilburn Road never reached capacity at any time during the week or on Saturday. In addition, any increase or offset parking could be accommodated through increased promotion of the off-street parking at the Arcade, particularly taking into account the improvements we have outlined for these car parks.

- 6.2.34 A benefit of the new layout would be the inclusion of formal loading bays for premises on the east side of Kilmarnock Road, south of Shawlands Cross, which are not currently provided for.
- 6.2.35 It should be noted that the removal of the central reservation will not affect the capacity of the A77 as the operational road width will stay the same.
- 6.2.36 We have identified that access to the Arcade is not ideal with a degree of severance caused by the current ramped access. We suggest construction of stairs providing access from the Arcade to the street level at the main entrance to the Arcade near Millwood Street. The stairs should be attractively designed to create a public realm space and signify the entrance to the Arcade.
- 6.2.37 It is also suggested that the opportunity be taken to relocate the existing bus stops on both sides of Kilmarnock Road closer to the Arcade main entrance. This relocation would improve connectivity to the Arcade for bus users while minimising walking distances. By relocating the stops as proposed, minimum bus stop spacing standards would still adhered to as the closest stops to the north and south are within 400 metres.
- 6.2.38 The relocated stops should include high quality shelters, Kassel (raised) kerbs and tactile paving while Real Time Information (RTI) displays could also be displayed.
- 6.2.39 We suggest provision of improved signage of the Arcade south medium and long stay car parks on Kilmarnock Road at the junction with Eastwood Avenue, which is close to their entrance.
- 6.2.40 In addition, cycle parking should be provided close to the Arcade entrance on Kilmarnock Road. Our site visits observed that some cycles are already being parked here informally rather than at existing cycle parking locations and we believe formal provision would encourage more cyclists to visit the Arcade and surrounding shops. This location has the added benefit of being visible with a high number of passing pedestrians contributing to a feeling of greater security.
- 6.2.41 We recommend that raised granite pedestrian tables should be provided on all minor roads where they meet Kilmarnock Road to allow pedestrians to cross safely and provide continuous pedestrian networks to guide people to the key retail areas. Specifically this would be on Eastwood Avenue, Millwood Street, Walton Street and Mount Stuart Street. In most cases this would be replacing existing infrastructure (i.e. footways, tactile paving and raised crossings) which are in poor condition.

Kilmarnock Road South of Shawlands Arcade

- 6.2.42 Our proposals to address the problems in this location are summarised in the following Figure and discussed in detail below.



Figure 47. Kilmarnock Road South of Shawlands Arcade Potential Solutions

- 6.2.43 In this section of the study area we recommend retention of the existing pelican crossing as our analysis found this was well used through the week and Saturday.
- 6.2.44 We suggest provision of a VMS for the south car parks at the Arcade at the 'gateway' to Shawlands on the bridge over the White Cart Water.
- 6.2.45 Finally, we identified a number of problems relating to footway, crossings and road surfaces being in poor condition and suggest these should be reviewed and repaired as necessary.

Pollokshaws Road behind Shawlands Arcade

- 6.2.46 Our proposals to address the problems in this location are summarised in the following Figure and discussed in detail below.

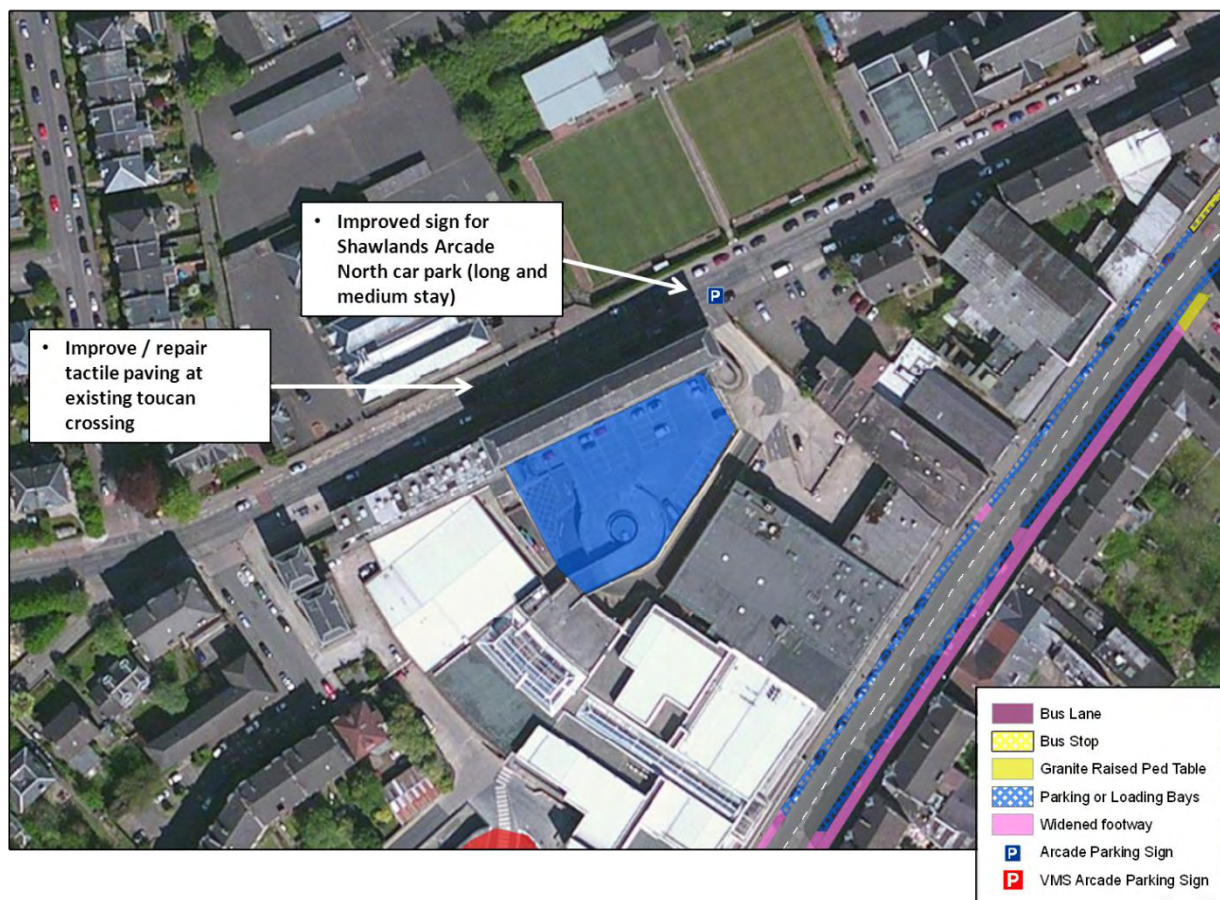


Figure 48. Pollokshaws Road behind Shawlands Arcade Potential Solutions

- 6.2.47 In this part of the study area we suggest provision of a new sign for the Arcade north medium and long stay parking near to the entrance off Pollokshaws Road.
- 6.2.48 We recommend removing the underutilised southbound bus stop on Pollokshaws Road outside and replacing this with a loading bay to enable safe servicing for The Granary, Ketchup and other adjacent services.
- 6.2.49 We also identified that the tactile paving at the existing pelican crossing opposite Shawlands Primary is in poor condition and in need of maintenance.

7. MOVEMENT STRATEGY

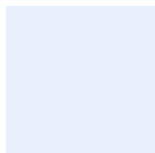
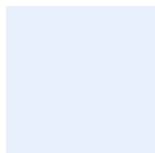
7.1 Overview

- 7.1.1 Our analysis has shown that the road network operates near capacity at times but still in an efficient manner with some spare capacity throughout the network. However, traffic flows are high, particularly on the arterial A77 Pollokshaws Road / Kilmarnock Road corridor, which is not conducive to creating an attractive town centre environment.
- 7.1.2 Existing network restrictions (e.g. banned turns and one-way streets) are effective in facilitating network efficiency but also contribute to reducing the accessibility and permeability of Shawlands, particularly from the M77 / Crossmyloof area and, to a lesser extent, between Langside / Battlefield and Shawlands. These impediments mean people unfamiliar with the local area may have difficulty accessing the town centre whilst those that are familiar may choose to visit alternative locations due to the restrictions it imposes on access for them. As such, Shawlands may not be capitalising upon its local catchment area as a result.
- 7.1.3 Shawlands has a busy pedestrian environment with peaks in demand associated with schoolchildren and retail / leisure demand. Currently the volume of traffic and layout of the road network present an impediment to other users, particularly pedestrians. We believe that the network is currently too focussed upon catering for arterial through traffic rather than serving the needs of Shawlands town centre.
- 7.1.4 Our proposals detailed in Chapter 6 are aimed at reorientation of the transport network in the town centre to improve the attractiveness of the environment for pedestrians, cyclists and public transport users whilst maintaining the operational efficiency of the network for traffic.
- 7.1.5 Our strategy would make the Shawlands Arcade the heart of the town centre again by encouraging people to access it by a range of transport modes including walking, cycling, bus and by car.
- 7.1.6 In particular, our recommendations would improve the pedestrian environment and make the main entrance to the Arcade more accessible by creating a new central stepped access. Alongside this we propose the provision of widened footways, improved pedestrian crossings with built-outs to enhance their delineation along with enhanced raised granite crossings at junctions to guide pedestrians around the area. Crucially, these would lead pedestrians to the Arcade and its new central access point whilst also providing a high quality pedestrian environment in the surrounding locality.
- 7.1.7 The proposed road network amendments aim to make Shawlands a more attractive destination to visit by car by improving accessibility from the M77 / Crossmyloof area, making people more aware of how to access Shawlands through improved signage and capitalising upon the underutilised resource in the form of the off-street parking available at Shawlands Arcade.

- 7.1.8 These measures will also help to create a town centre environment in the vicinity of the Arcade by reducing the dominance of traffic and curbing the instinct of drivers to treat the network in Shawlands as part of a wider arterial route rather than a local town centre. The formalisation of loading / unloading areas will eliminate the hazards created by these activities making the overall network safer and more efficient, in turn, contributing to facilitation of a town centre ambience.
- 7.1.9 Furthermore, amended and improved bus stops along with relocated cycle parking provision and Advanced Stop Lines (ASLs) for cyclists at key junctions will make access to the town centre easier by these modes as well.
- 7.1.10 Overall, we believe that our proposed measures would maintain the operational efficiency of the wider transport network in the study area whilst helping to guide people to the Shawlands Arcade area as the hub of the town centre. This approach is consistent with the principles of a high level 'Mixed Priority Route' and adheres to concepts defined in the Scottish Government's 'Designing Places' and 'Designing Streets' guidance. Ultimately this would serve the dual purpose of providing an effective and efficient transport network as well as stimulating economic activity and regeneration in line with the requirements of the Shawlands Town Centre Action Plan.
- 7.1.11 This is illustrated in the following figure which highlights the position of Shawlands Arcade and the surrounding town centre area as the focal point of the local transport network.



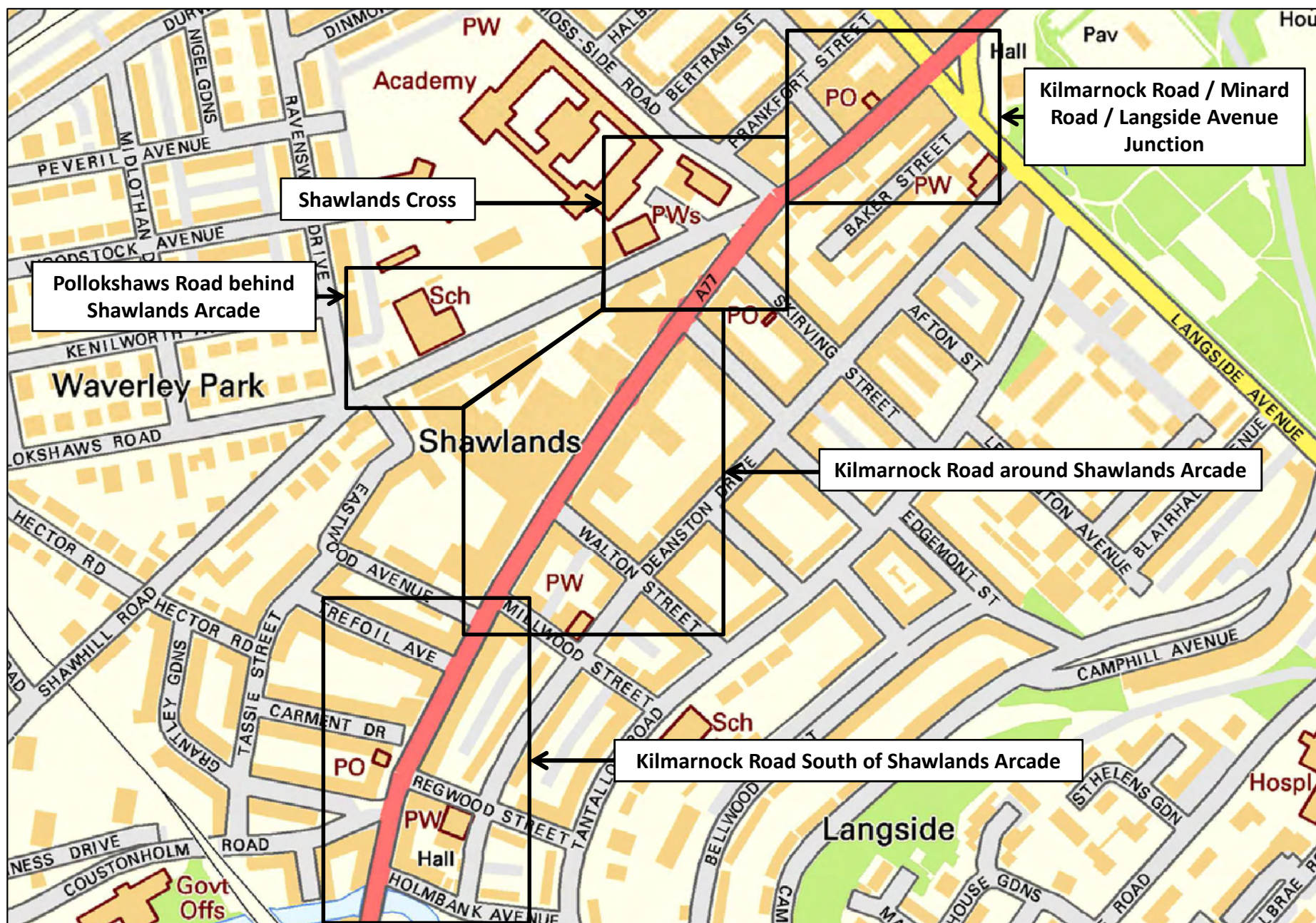
Figure 49. Shawlands Town Centre Hub

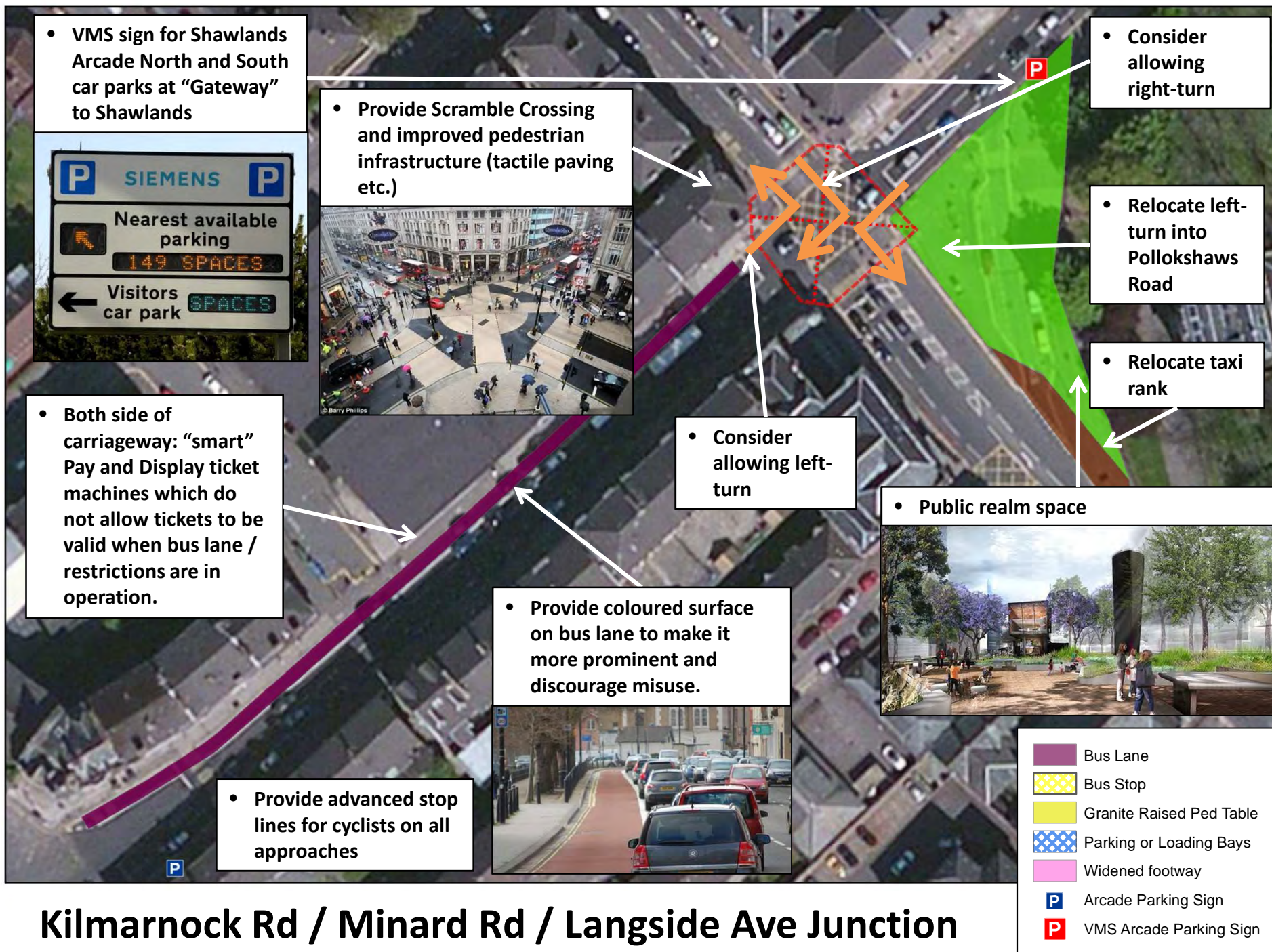


7.2 Next Steps

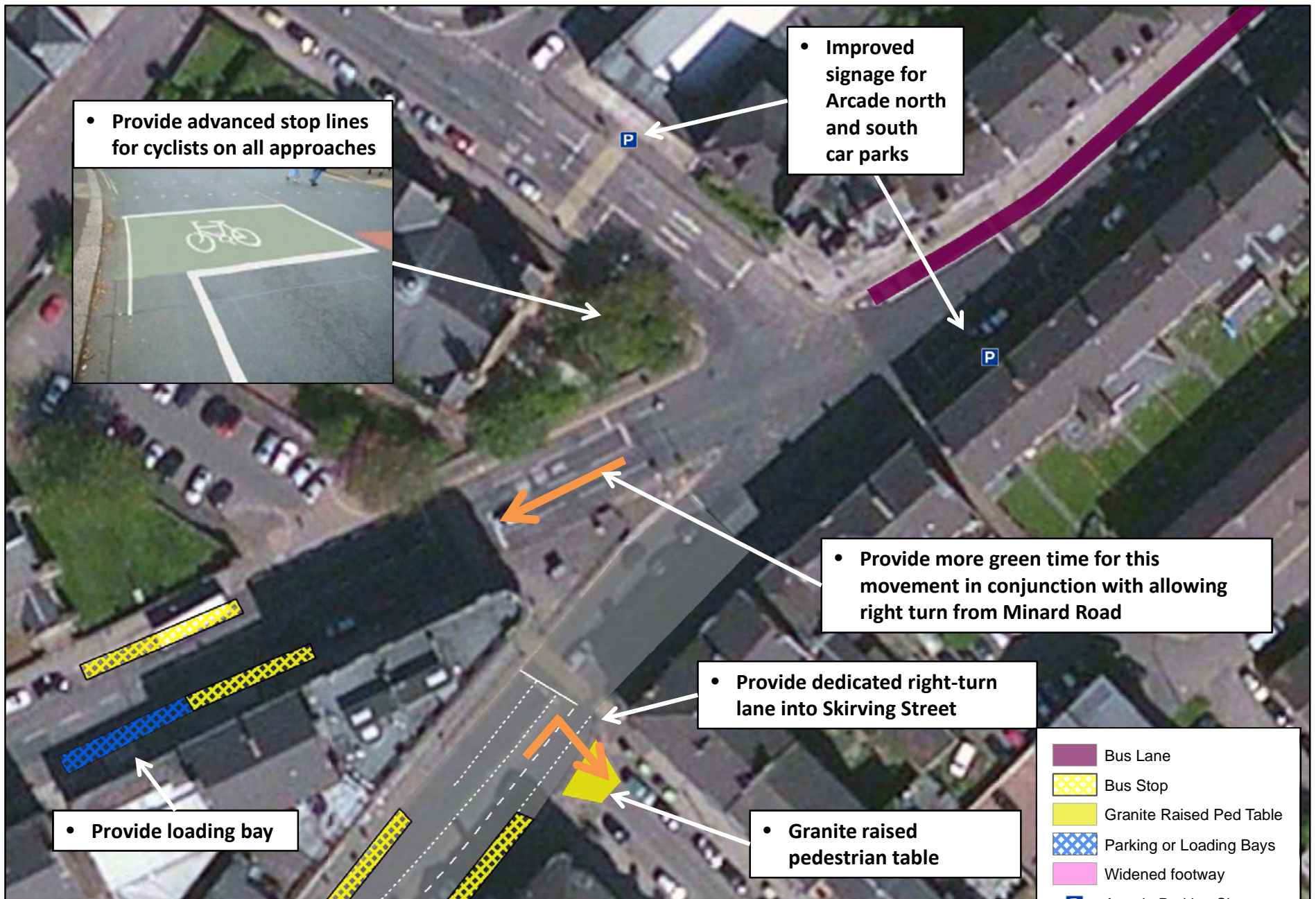
- 7.2.1 Due to the high level and strategic nature of this study, the proposals we have set out have not been designed in detail or subjected to assessment of their feasibility, affordability or network impacts. We recommend that work is now undertaken to take forward these options in more detail as part of the development of a comprehensive and coherent plan for Shawlands town centre.
- 7.2.2 Firstly, we believe that it would be beneficial to submit the high level proposals to more extensive public and stakeholder consultation which was the beyond the scope of this study. This would help to understand the level of 'buy-in' for the proposals brought forward and enable their refinement prior to more detailed appraisal and design being undertaken.
- 7.2.3 We understand that work will shortly commence upon micro-simulation traffic modelling of the A77 corridor as part of the Quality Bus Corridor work being undertaken. If possible, we recommend that our proposed road network interventions are tested as part of these works to ascertain their detailed impact on the network. As part of any further work to develop our proposals, we would be happy to work with the appointed contractor undertaking the modelling work to assist this process if you wish.
- 7.2.4 Alternatively, if the testing of options using this model is not possible, we would suggest that a localised transport model for Shawlands is developed to enable these tests to take place. We have all the necessary skills and expertise to undertake this work should you wish to pursue this further.
- 7.2.5 Finally, we would suggest that this work should be carried out alongside more detailed analysis of the other, non-traffic related solutions that we proposed. This would enable all options to be assessed for feasibility and detailed designs for all viable solutions to be developed ready for implementation.

Appendix A – Proposals Maps

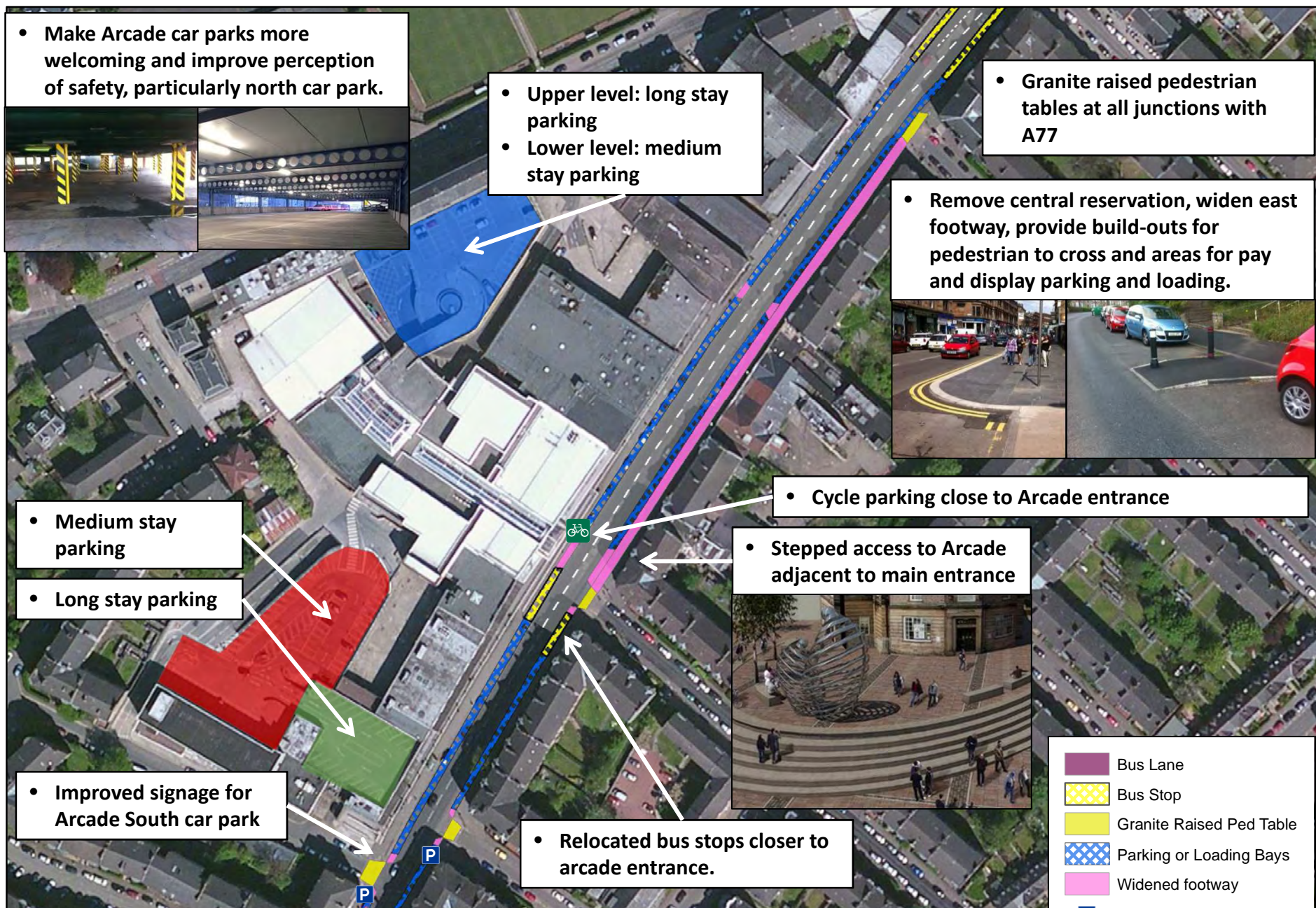




Kilburn Rd / Minard Rd / Langside Ave Junction



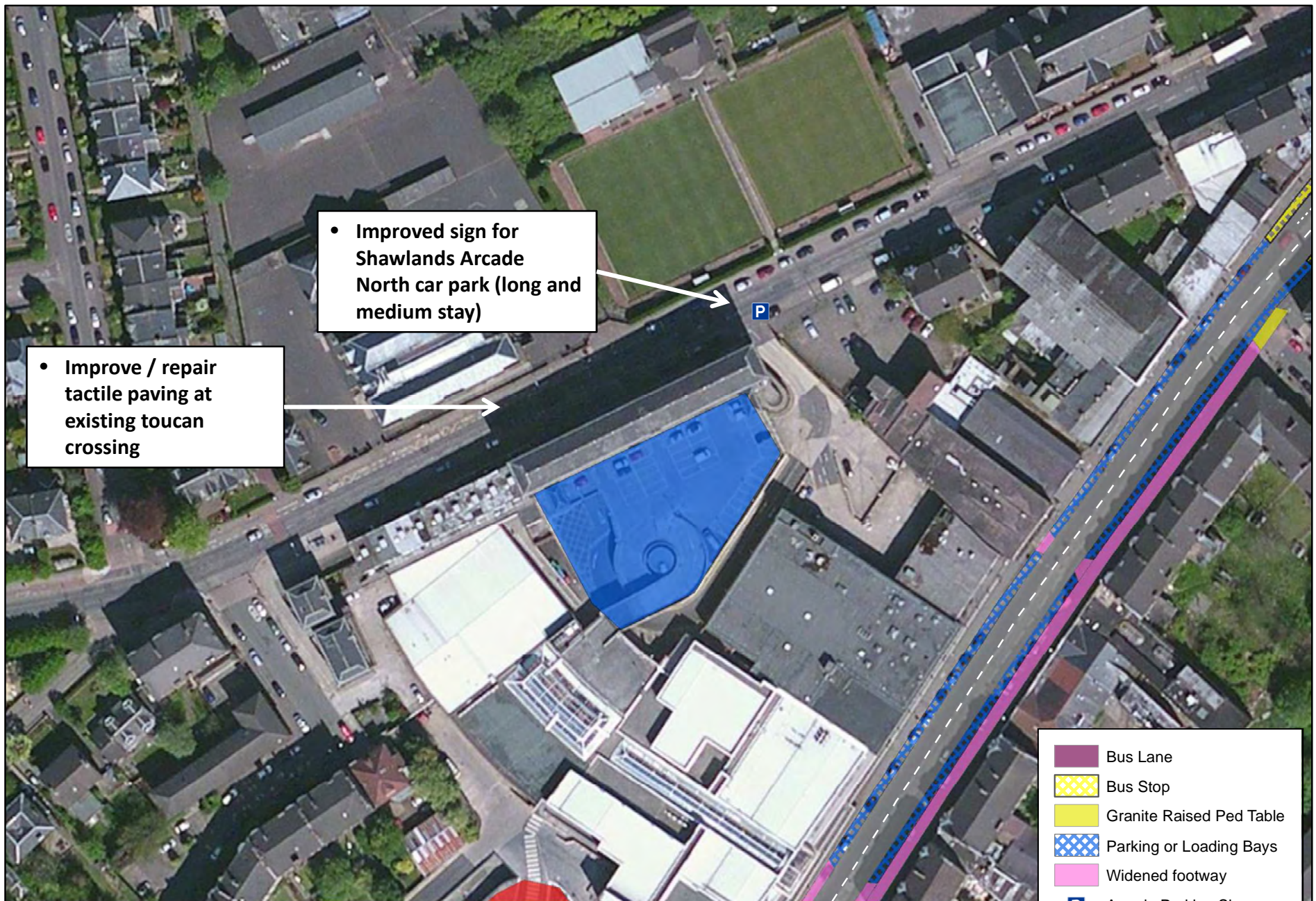
Shawlands Cross



Kilmarnock Road around Shawlands Arcade



Kilmarnock Road South of Shawlands Arcade



Pollockshaws Road behind Shawlands Arcade

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