

## Appendix 4A

### A467 Speed Limit Review

Link	Location	Tier	Length (km)	Current Speed Limit (mph)	Mean Speed (mph)	Traffic Flow (A.A.D.T)	Collision Rate per year	Collision Rate per 100 million vehicle km's	Remediation Measures Required?
1	County Boundary to Risca R/B	Upper	0.88	70 (National)	54.35	34427	1.0	9.04	No
2	Risca R/B to Full Moon R/B	Upper	3.775	70 (National)	62.2	28611	1.333	3.38	No
3	Full Moon R/B to Cwmcarn R/B	Upper	2.0	50	46.25	24288	1.0	5.64	No
4	Cwmcarn R/B to Abercarn R/B	Upper	2.82	50	44.6	22844	0.333	1.42	No
5	Abercarn R/B to Trecelyn R/B	Upper	0.83	40	36.55	26487	0.333	4.15	No
6	Trecelyn R/B to Panside Junction	Upper	0.33	30	30.85	24636	1.0	33.7	No
<b>7</b>	<b>Panside Junction to south of Aiwa Signals</b>	<b>Upper</b>	<b>0.2</b>	<b>40</b>	<b>43.7</b>	<b>21256</b>	<b>0.333</b>	<b>21.48</b>	<b>Yes</b>
8	South of Aiwa Signals to Crumlin Signals	Upper	1.34	60 (National)	44.15	21379	1.0	9.56	No
9	Crumlin Signals to County Boundary	Upper	1.56	60 (National)	49.25	16579	0	0	No

#### Highlighted zones

	Speed limit length below 600m
	Mean Speed above Speed Limit Intervention Level
	Mean Speed considerably lower than Speed Limit
	Collision Rate above accepted threshold

#### Functional Tiers

- **Upper Tier** - those roads with a primarily through function where mobility is important
- **Lower Tier** - single carriageway roads passing through local communities with 20 or more frontage developments and a minimum length of 600m, or those roads with a local or access function where quality of life benefits are important.

## A467 – Remediation Measures

### 1. Link 7 – Panside Junction to south of Aiwa Signals

- Functional Tier: Upper road
- Length of link: 0.2km
- Current Speed Limit: 40mph
- Mean Speed: 43.7mph
- A.A.D.T: 21,256 vehicles
- Collision Rate per 100 million vehicle kilometres: 21.48

#### Link Description

This consists of a very short 40mph speed limit section with a wide carriageway that curves gradually in a north-south direction. The link contains a continuous footpath next to the northbound lane. The link does not include any adjacent development or junctions, however a major junction leading towards Panside is located just south of the link, where the speed limit is 30mph and the nearby area includes several adjacent houses and parked vehicles. To the north is a national speed limit section that leads towards Crumlin traffic lights. The 40mph section is used to slow down southbound traffic that's travelling around the slight bend towards Panside junction, where cross road vehicle movements and congestion can occur.



Figure A1: Northbound approach to the 40mph section

#### Areas of Concern

- Mean speed of 43.7mph that is almost 10% higher than the road's speed limit.
- An extremely short speed limit section of 200m, which is below the recommended minimum speed limit length of 600m according to the 'Setting Local Speed Limits in Wales' guidance.
- The characteristics of the link are similar to that of the national speed limit section to the north of link 7.

#### Proposed Actions (Link 7):

- 1) **Remove the short speed limit section by increasing the limit from 40mph to 60mph (National), AND**
- 2) **Include countdown markers and/or road markings on the bend to remind motorists travelling in a southbound direction to slow down whilst approaching Panside junction. Increase the size of the 30mph gateway signs and cut back any overgrowth to facilitate better visibility at Panside junction and of the road traffic signs.**

### A468 Speed Limit Review

Link	Location	Tier	Length (km)	Current Speed Limit (mph)	Mean Speed (mph)	Traffic Flow A.A.D.T	Collision Rate per year	Collision Rate per 100 million vehicle km's	Remediation Measures Required?
<i>'Penrhos Roundabout to Pwllpant Roundabout reviewed as part of the A469 Speed Limit Review'</i>									
1	Pwllpant R/B to Crossways R/B	Upper	0.69	40	41.6	24444	0.667	10.83	No
2	Crossways R/B to Bedwas Bridge R/B	Upper	0.74	40	40.35	19842	0	0	No
3	Bedwas Bridge R/B to Trethomas	Upper	1.2	40	31.7	17743	1	12.87	No
4	Trethomas	Lower	1.275	30	23.7	14142	4	60.78	No
5	Trethomas to Machen	Upper	1.55	40	39.05	9677	0.667	12.18	No
6	Machen	Lower	1.75	30	31.6	8677	0.667	12.03	No
7	Machen to County Boundary	Upper	0.77	40	41.35	9878	0.333	12.01	No

#### Highlighted zones

	Speed limit length below 600m
	Mean Speed above Speed Limit Intervention Level
	Mean Speed considerably lower than Speed Limit
	Collision Rate above accepted threshold

#### Functional Tiers

- **Upper Tier** - those roads with a primarily through function where mobility is important
- **Lower Tier** - single carriageway roads passing through local communities with 20 or more frontage developments and a minimum length of 600m, or those roads with a local or access function where quality of life benefits are important.

### A469 Speed Limit Review

Link	Location	Tier	Length (km)	Current Speed Limit (mph)	Mean Speed (mph)	Traffic Flow (A.A.D.T)	Collision Rate per year	Collision Rate per 100 million vehicle km's	Remediation Measures Required?
1	A465 to Pontlottyn	Upper	3.125	60 (National)	52.4	7599	0.667	7.691	No
<i>'Pontlottyn Village – 30mph'</i>									
2	Pontlottyn to Troedrhifwuch	Upper	1.292	60 (National)	46	7896	0.333	8.952	No
3	Troedrhifwuch to Tirphil	Upper	1.7	40	41.75	7980	0.333	6.732	No
<b>4</b>	<b>Tirphil</b>	<b>Upper</b>	<b>0.608</b>	<b>30</b>	<b>36</b>	<b>1510</b>	<b>0</b>	<b>0</b>	<b>Yes</b>
5	Tirphil to Brithdir	Upper	1.434	40	39.25	2066	0	0	No
6	Brithdir Cementary	Upper	2.14	60 (National)	<b>38.85</b>	2543	0	0	No
<b>7</b>	<b>Deri Junction</b>	<b>Upper</b>	<b>0.14</b>	<b>40</b>	<b>25.2</b>	<b>2526</b>	<b>0.333</b>	<b>258.24</b>	<b>Yes</b>
8	Station Rd, Bargoed	Upper	1.0	30	30.5	7132	0.667	25.61	No
9	Station Rd R/B to Bargoed R/B	Upper	<b>0.349</b>	40	37.35	7281	0	0	No
10	Bargoed R/B to Britannia R/B	Upper	0.585	50	43.05	12075	0	0	No
<b>11</b>	<b>Britannia R/B to Lewis Boys School</b>	<b>Upper</b>	<b>1.0</b>	<b>50</b>	<b>52.4</b>	<b>9432</b>	<b>0</b>	<b>0</b>	<b>Yes</b>
12	Tir-y-berth	Upper	2.0	30	28.7	13560	1	10.102	No
13	Tir-y-berth to Tesco's R/B	Upper	1.686	40	42.2	17485	2	18.587	No
14	Tesco R/B to Ystrad Mynach R/B	Upper	0.7	60 (National)	44.1	19457	1	20.116	No
15	Ystrad Mynach R/B to Twyn Sion Ifan R/B	Upper	0.665	40	37.85	30223	1.333	18.176	No
16	Twyn Sion Ifan R/B to Wingfield R/B	Upper	2.685	70 (National)	61	28595	1.667	5.947	No
17	Wingfield R/B to Coed-y-Brain R/B	Upper	1.534	70 (National)	51	27633	1.667	10.772	No
18	Coed-y-Brain R/B to Pwllypant R/B	Upper	0.55	40	39.9	37815	1	13.173	No

Link	Location	Tier	Length (km)	Current Speed Limit (mph)	Mean Speed (mph)	Traffic Flow (A.A.D.T)	Collision Rate per year	Collision Rate per 100 million vehicle km's	Remediation Measures Required?
19	Pwllpant R/B to Trecenydd R/B	Upper	1.7	60 (National)	39.5	30971	2	10.407	No
20	Trecenydd R/B to Penrhos R/B	Upper	1.378	60 (National)	43.05	30787	1.667	10.763	No
21	Penrhos R/B to Watford	Upper	1.6	40	41.2	8304	2.667	54.988	No
<b>22</b>	<b>Watford to Boundary</b>	<b>Upper</b>	<b>2.0</b>	<b>60 (National)</b>	<b>41.8</b>	<b>12482</b>	<b>2.333</b>	<b>25.608</b>	<b>Yes</b>

#### Further Review of Link 22 (explained further under A469 – Remediation Measures)

Link	Length (km)	Current Speed Limit (mph)	Collision Rate per year	Collision Rate per 100 million vehicle km's	Remediation Measures Required?
22A (North)	1.15	60 (National)	0.667	12.724	No
22B (South)	0.85	60 (National)	1.667	43.038	Yes

#### Highlighted zones

	Speed limit length below 600m
	Mean Speed above Speed Limit Intervention Level
	Mean Speed considerably lower than Speed Limit
	Collision Rate above accepted threshold

#### Functional Tiers

- **Upper Tier** - those roads with a primarily through function where mobility is important
- **Lower Tier** - single carriageway roads passing through local communities with 20 or more frontage developments and a minimum length of 600m, or those roads with a local or access function where quality of life benefits are important.

## A469 – Remediation Measures

### 1. Link 4 – Tirphil

- Functional Tier: Upper road
- Length of link: 0.608km
- Current Speed Limit: 30mph
- Mean Speed: 36mph
- A.A.D.T: 1510 vehicles
- Collision Rate per 100 million vehicle kilometres: 0

#### Link Description

The link consists of a straight section of carriageway with good sight lines through a very short residential area that contains less than 20 houses. There are no junctions throughout the village, whilst the width of the carriageway is slightly narrow. The link contains two rows of terraced housing on different sides of the carriageway, which are not adjacent to each other. A few parked cars are located outside these terraced houses, whilst on the opposite side of the road double yellow lines restrict any parking. Footpaths are located outside the terraced housing, however they are limited and footpaths are not present on any section of the route on both sides of the road. The link is between two 40mph speed limits in a rural environment.



Figure C1: A469 route through Tirphil village

#### Areas of Concern

- Mean Speed is 6mph above the current speed limit.
- The link does not meet the village definition of 20 or more houses and a length of 600m, as defined in the 'Traffic Advisory Leaflet' (Department of Transport). Should the speed limit be higher than the standard village limit of 30mph?
- Whilst this is a classified A road the traffic flow is below 2000 vpd and therefore does not prohibit remedial measures based on capacity.

#### Proposed Action (Link 4):

- 1) **Consider engineering measures at either end of the residential area in order to reduce the speed of vehicles approaching the residential section, AND**
- 2) **Vehicle Activated Sign (VAS) to be located along the 30mph road.**

## 2. Link 7 – Deri Junction

- Functional Tier: Upper road
- Length of link: 0.14km
- Current Speed Limit: 40mph
- Mean Speed: 25.2mph
- A.A.D.T: 2526 vehicles
- Collision Rate per 100 million vehicle kilometres: 258.24

### Link Description

This is a very short section of 140m that includes a junction and property access on a hairpin bend. The carriageway has very good width and includes a footpath next to the southbound lane. A national speed limit is located to the north of the link, whilst there is a small residential area with a 30mph limit to the south. 40mph speed limit signs for oncoming southbound traffic are located extremely close to the bend, and there is arguably not enough warning of the bend ahead. The 40mph section is used to control approach speeds to the bend.



Figure C2: Hairpin bend next to Deri Junction access

### Areas of Concern

- Extremely high Collision Rate of 258.24.
- Collision Rate to be considered as an anomaly. This is due to the short link length, and the fact there has only been one accident in a three-year period.
- Length of the 40mph speed limit below the recommended minimum length of 600m. In exceptional circumstances a length of 300m is accepted.
- According to the guidance 'speed limits should not be used to attempt to solve reduced forward visibility at a bend'.
- 30mph speed limit signs on entrance to link 8 are located quite a distance away from the village itself, approximately 170m.
- The section between the village (link 8) and speed limit signs (between link 7 and 8) remains rural without any adjacent development, and the 30mph signs could be located closer to the village



Figure C3: 30mph gateway signs on entrance to residential area

**Proposed Actions (Link 7):**

- 1) Increase the speed limit on the bend from 40mph to a national speed limit, and include a 'bend ahead with a recommended maximum speed of 40mph' sign, as well as road markings that would warn southbound traffic to slow down.** The change in speed limit will result in the removal of an under length speed limit.

**AND**

- 2) Increase the speed limit along Groes-Faen Terrace (rural road towards Deri) from 40mph to national in order to tie in with the change in limit at the bend.** No collisions have been recorded along this stretch of road within a three-year period.

**AND**

- 3) Re-locate the 30mph gateway signs closer to the village.** Current gateway signs located approximately 200m away from the village edge.

NB - Following a site visit/discussions with Gwent Police's Traffic Management Advisor it is considered that a 40mph speed limit should be maintained in order to help reduce traffic speeds on the approach to the bend at Puzzle House junction. In view of this, it is recommended that:

- The length of the current 30mph speed limit on Factory Road is reduced and the existing 40mph speed limit is extended on the eastern approach to Puzzle House junction.
- The current section of 40mph speed limit is increased to National from the junction as far as the existing 30mph signs to the south of Groesfaen Terrace.

**3. Link 11 – Britannia Roundabout to Lewis Boys' School**

- Functional Tier: Upper road
- Length of link: 1.0 km
- Current Speed Limit: 50mph
- Mean Speed: 52.4mph
- A.A.D.T: 9432 vehicles
- Collision Rate per 100 million vehicle kilometres: 0



### Link Description

The link contains a standard width single carriageway section with very good sight lines in a rural environment. The road includes a short bridge section over a small valley, whilst there is no adjacent development or footpaths. There are no junctions along the length of the route. To the north past Britannia roundabout, there is a similar 50mph section otherwise known as link 10. This link has similar characteristics to link 11 and is located in a rural environment, however it is half the length (0.585km) of link 11 and its mean speed (43.05mph) is below the road's speed limit. To the south is Tir-y-berth that contains a 30mph speed limit.

### Areas of Concern

- Mean Speed of link 11 (52.4mph) above the current Speed Limit (50mph)
- Nature and characteristics of the road is similar to other roads in the borough that have a national speed limit rather than a 50mph limit.



Figure C4: Southbound view along link 11



Figure C5: Southbound view along link 10

### Proposed Action (Link 11):

- 1) Increase the speed limit of link 11 from 50mph to national (60mph).
- AND

- 2) **Increase the speed limit of link 10 from 50mph to national (60mph) in order to keep consistency along the route.** Compared to link 11, link 10 is shorter section of just 0.585km with a lower mean speed of just 43.05mph. However the carriageway's characteristics is similar to link 11 and it is felt that a longer national speed limit section would be preferred over the lack of continuity one would have if the speed limit consistently change at every roundabout along the A469.

#### **4. Link 19 – Pwllpant Roundabout to Trecenydd Roundabout**

The link's mean speed (39.5mph) is considerably lower than the current speed limit of 60mph. However the link has one of the highest traffic A.A.D.T in the borough of 30,971 vehicles and often faces congestion during peak hours. Although the average mean speed is 37.2 mph during evening and early morning hours the mean speed is often recorded over 50mph, therefore:

**No action required.**

#### **5. Link 22 – Watford to County Boundary**

- Functional Tier: Upper road
- Length of link: 2.0 km
- Current Speed Limit: 60mph
- Mean Speed: 41.8mph
- A.A.D.T: 12,482 vehicles
- Collision Rate per 100 million vehicles – 25.608

#### **Link Description**

The link can be split into two different sections, the southern and northern sections. The southern section next to the county boundary includes a carriageway that winds and undulates, and contains restricted visibility for motorists. The northern section is straighter, bends less and has a wider carriageway. The data was collected in the northern straighter section near to the Mountain Rd junction. The whole of the link is located in a very rural environment.



Figure C7: Northbound route near the county boundary

#### **Area of Concern**

Although the national speed limit is suitable for the majority of the link, it feels too high for the winding, undulating section next to the boundary, where vehicles are likely to be travelling below 40mph. To provide an accurate assessment of the link it

has been split into two different zones, 22A represents the northern section, and 22B representing the southern section. No speed data has been collected in 22B, however it is possible to provide collision rates for both sections by using the A.A.D.T figure collected from the original data.

Link	Length (km)	Current Speed Limit (mph)	Collision Rate per year	Collision Rate per 100 million vehicle km's
22A (North)	1.15	60 (National)	0.667	<b>12.724</b>
22B (South)	0.85	60 (National)	1.667	<b>43.038</b>

The collision rate in the winding section is high and above the threshold of 35 collisions per 100 million vehicle kilometres. A reduction in the speed limit from national to 40mph could assist in reducing the collision rate figure and provide a safer environment for motorists. It would also fit in with the 40mph limit on the other side of the boundary in Cardiff.

**Proposed Action (Link 22):**

**Reduce the southern part of the link that contains a winding, undulating carriageway from the current national speed limit to 40mph.** The proposed site for the new speed limit change from national to 40mph can be seen in Figure C9, where the **orange route represents a 40mph limit** and the **blue route represents a national speed limit**.

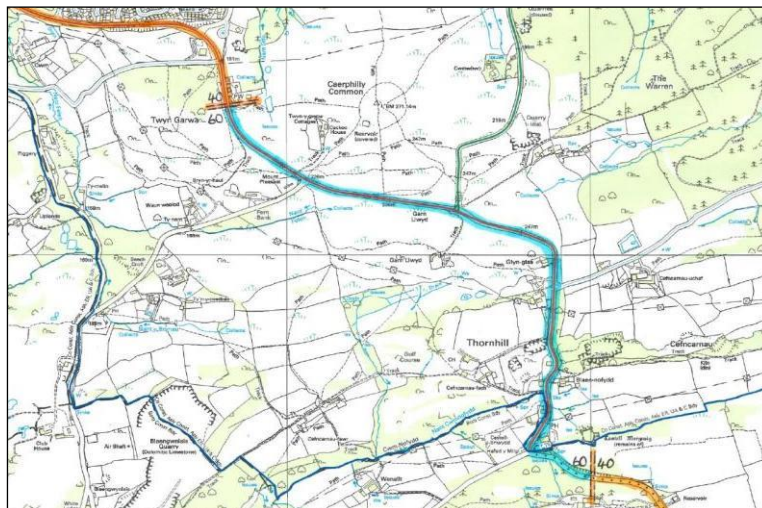


Figure F8: Current view of Caerphilly Mountain speed limits



Figure F9: The proposed speed limit changes along Caerphilly Mountain



### A472 Speed Limit Review

Link	Location	Tier	Length (km)	Current Speed Limit (mph)	Mean Speed (mph)	Traffic Flow A.A.D.T	Collision Rate per year	Collision Rate per 100 million vehicle km's	Remediation Measures Required?
1	County Boundary to Hafodyrynys	Upper	1.2	60 (National)	44.1	20767	0	0	No
2	Hafodyrynys	Lower	0.6	30	30.45	17277	0	0	No
3	Hafodyrynys to Crumlin	Upper	0.56	60 (National)	37.35	15397	0.667	21.183	No
4	Crumlin	Lower	0.59	30	29.65	20568	0.333	7.526	No
5	Newbridge to Pentwynmawr Roundabout	Upper	2.5	70 (National)	56.8	22933	1	4.779	No
6	Pentwynmawr R/B to Gelligroes R/B	Upper	1.75	70 (National)	59.65	18054	0.333	2.891	No
7	Gelligroes R/B to Crown R/B	Upper	1.0	70 (National)	52.75	22289	2	24.584	No
8	Bryn Meadows R/B to Maesycwmmmer	Upper	0.52	60 (National)	35.5	26112	1	20.177	No
9	Maesycwmmmer to Ystrad Mynach R/B	Upper	1.82	30	29.5	21445	0.667	4.680	No
10	Ystrad Mynach R/B to Tredomen R/B	Upper	1.25	30	29.4	21063	3	31.218	No
11	Tredomen R/B to Nelson East R/B	Upper	2.35	60 (National)	44.3	15535	1.667	12.508	No
12	Nelson East R/B to Nelson West R/B	Upper	0.52	60 (National)	45.95	12088	0.667	29.057	No
13	Nelson West R/B to Llwynycelyn Terrace	Upper	0.77	40	34.4	18995	0.667	12.488	No
14	Llwynycelyn Terrace to County Boundary	Upper	0.55	60 (National)	42.65	21767	0.667	13.985	No

#### **Highlighted zones**

	Speed limit length below 600m
	Mean Speed above Speed Limit threshold
	Mean Speed considerably lower than Speed Limit
	Collision Rate above accepted threshold

## **A472 – Remediation Measures**

### **1. Link 3 – Hafodyrynys to Crumlin**

The link's mean speed of 37.35mph is considerably lower than the road's current speed limit of 60mph. However the data was collected near the speed limit gateways to the west of Hafodyrynys. Motorists will either be beginning to slow down whilst approaching a 30mph limit, or increasing their speed on entering a national speed limit section. The link's characteristic, which includes a three-lane carriageway, rural location and lack of adjacent development, is similar to many other national speed limit sections.

**No action required.**

### **2. Link 8 – Bryn Meadows Roundabout to Maesycwmmer**

The link's mean speed (35.5mph) is way below the road's current speed limit (National – 60mph). Due to the major difference between the mean speed and limit a reduction of the road's speed limit was considered. There has been a comparatively low collision rate that does not support reducing the current limit for the road.

However the link's A.A.D.T is 26,112 vehicles, higher than any other section along the A472. The link is short, and the road is often congested resulting in a slower vehicle mean speed. During evening hours, motorists take advantage of the quieter conditions and reach speeds of 45mph.

**No action required.**



### A4048 Speed Limit Review

Link	Location	Tier	Length (km)	Current Speed Limit (mph)	Mean Speed (mph)	Traffic Flow (A.A.D.T)	Collision Rate per year	Collision Rate per 100 million vehicle km's	Remediation Measures Required?
1	Pentwynmawr R/B to Penmaen Road R/B	Upper	1.03	50	49.65	15546	0.333	5.7	No
2	Penmaen Road R/B to Woodfieldside R/B	Upper	0.51	50	40.25	17598	0.333	10.18	No
3	Woodfieldside R/B to Chartist Bridge	Upper	0.95	50	48.8	12017	0	0	No
4	Chartist Bridge	Upper	0.3	40	35.6	16443	0	0	No
5	Chartist Bridge to Argoed	Upper	1.7	40	39.2	7690	0.333	6.99	No
<b>6</b>	<b>Argoed</b>	<b>Lower</b>	<b>1.2</b>	<b>30</b>	<b>40.2</b>	<b>4521</b>	<b>0.333</b>	<b>16.83</b>	<b>Yes</b>
<b>7</b>	<b>Argoed to Hollybush</b>	<b>Upper</b>	<b>2.74</b>	<b>50</b>	<b>47.85</b>	<b>5666</b>	<b>0.667</b>	<b>11.76</b>	<b>Yes</b>
<b>8</b>	<b>Hollybush</b>	<b>Lower</b>	<b>0.62</b>	<b>30</b>	<b>32</b>	<b>5427</b>	<b>0</b>	<b>0</b>	<b>Yes</b>
9	Hollybush to County Boundary	Upper	1.17	60 (National)	44.2	5274	0.667	29.6	No

#### Highlighted zones

	Speed limit length below 600m
	Mean Speed above Speed Limit Intervention Level
	Mean Speed considerably lower than Speed Limit
	Collision Rate above accepted threshold

#### Functional Tiers

- **Upper Tier** - those roads with a primarily through function where mobility is important
- **Lower Tier** - single carriageway roads passing through local communities with 20 or more frontage developments and a minimum length of 600m, or those roads with a local or access function where quality of life benefits are important.



## A4048 – Remediation Measures

### 1. Link 6 – Argoed

- Functional Tier: Lower road
- Length of link: 1.2 km
- Current Speed Limit: 30mph
- Mean Speed: 40.2mph
- A.A.D.T: 4521
- Collision Rate per 100 million vehicle kilometres: 16.83

#### Link Description

The link contains a fairly straight carriageway with good sight lines through Argoed village. The village is long and narrow. Several rows of terraced housing are located next to the northbound adjacent to the carriageway, additional housing/development is set back from the main road on both sides of the main road. Several parking bays are located outside along the route. The carriageway is of standard width for the majority of the route, although there are also some horizontal/central hatch markings within the carriageway that aims to visibility reduce carriageway width to manage the speed of traffic. A small section of route near to the southern edge of Argoed village bends and undulates slightly. There are a few junctions along this link, whilst the data was collected near to Penylan Rd junction, where the carriageway is relatively wide.



Figure E1: Carriageway section to the south of Argoed village

#### Areas of Concern

- Mean speed of 40.2mph is much higher than the road's current speed limit of 30mph.
- According to the 'Speed Management Strategy' set by CCBC, mean speed of above 37mph warrants consideration of engineering measures and enforcement to control vehicle speeds through the village.
- The carriageway has a very straight alignment, whilst at certain locations the carriageway is quite wide; therefore it is difficult to restrict the speeds of vehicles to 30mph.
- The road needs to remain a 30mph speed limit due to the residential nature of the surrounding area and the pedestrian crossing demand in this part of the village.
- Rows of terraced housing to the north of the village are separated by straight carriageway alignments, where the characteristics of the road are similar to a 40mph speed limit road.

### **Proposed Action (Link 6):**

**A combination of engineering works and low cost works could be used to reduce the speed of passing vehicles.** These might include built out gateways to narrow the width of the road or coloured road markings, as well as vehicle activated signs (VAS) on both sides of the carriageway to compliment the existing VAS. Although traffic mobility through the village is important, additional horizontal or vertical traffic calming measures would assist in reducing the mean speed and dependant on the HGV flow might be considered if the site constraints make these options feasible.

### **2. Link 7 – Argoed to Hollybush**

- Functional Tier: Upper road
- Length of link: 2.74 km
- Current Speed Limit: 50mph
- Mean Speed: 47.85mph
- A.A.D.T: 5666 vehicles
- Collision Rate per 100 million vehicle kilometres: 11.76

### **Link Description**

The link consists of a rural single carriageway road that includes a few bends. The carriageway is of standard width, an intermittent footpath is located on both sides of the road. There is no adjacent development next to the road, however there are some junctions and at one point houses are within sight of the carriageway. One of the road's side junctions provides access to Markham village, whilst the majority of the junctions provide access to country lanes. Safety barriers are located next to the southbound lane for large sections of the route.



Figure E2: Single carriageway road between Argoed and Hollybush

### **Areas of Concern**

- The characteristics of the road in terms of its width, rural location, and lack of frontage development determine that the speed limit should be the national limit of 60mph rather than a 50mph limit.
- There is a need to keep speed limit consistency throughout the borough. This particular link is similar to other national speed limit sections such as the section from Hollybush to the county boundary or from Crumlin to the county boundary.

**Proposed Action (Link 7):**

In order to keep consistency throughout the borough given the characteristic and function of the road, increase the link's speed limit from the current 50mph limit to national (60mph).

**3. Link 8 & 9 – Location of 30mph/National speed limit signs next to Hollybush**

Link 8 – Hollybush

- Functional Tier: Lower road
- Length of link: 0.62 km
- Current Speed Limit: 30mph
- Mean Speed: 32mph
- A.A.D.T: 5427 vehicles
- Collision Rate per 100 million vehicle kilometres: 0

Link 9 – Hollybush to County Boundary

- Functional Tier: Upper road
- Length of link: 1.17 km
- Current Speed Limit: National (60mph)
- Mean Speed: 44.2mph
- A.A.D.T: 5274 vehicles
- Collision Rate per 100 million vehicle kilometres: 29.6



Figure E3: Poor forward visibility of national speed limit signs

Site Description

The change in speed limit occurs to the north of Hollybush village on a bend where the carriageway is slightly narrow and the forward visibility of the gateway signs is poor. One of the gateway signs is located next to a large hedge, and at times can be covered by overgrowth.

The village itself has a 30mph speed limit where the carriageway is of standard width, has good sight lines and footpaths are located on both sides of the road. The village consists of terraced housing, the majority of which is next to the northbound lane of the carriageway. There are few parked vehicles and two bus stops are sited

on the carriageway. To the north of the speed limit gateway is a national speed limit section that leads onto the county boundary.

Areas of Concern

- Poor forward visibility of the speed limit signs from both directions.

**Proposed Actions (Link 8/9):**

- 1) Re-locate speed limit gateway closer to Hollybush village at a position of better visibility.** Potentially could re-locate the signs next to the stone wall just north of the access on to Railway Terrace.
- 2) Include countdown markers for southbound traffic, therefore reminding motorists that there will be a change in limit and decreasing the risk of high vehicles speeds approaching the village.**

**OR**

- 3) Include a 40mph buffer zone of approximately between the northern end of the village and the proposed national speed limit gateways located just north of an access to private property.** There have been no collisions along the 30mph section of the bend that would limit prohibit or cause concern in about an increase in the speed limit.



### A4049 Speed Limit Review

Link	Location	Tier	Length (km)	Current Speed Limit (mph)	Mean Speed (mph)	Traffic Flow A.A.D.T	Collision Rate per year	Collision Rate per 100 million vehicle km's	Remediation Measures Required?
1	Crown R/B to Bryn R/B	Upper	0.45	30	31.4	16380	0.333	12.39	No
2	Bryn R/B to Fleur-de-lis	Upper	1.37	40	41.3	9266	0.333	7.19	No
<b>3</b>	<b>Fleur-de-lis to Fairview Signals</b>	<b>Upper</b>	<b>1.085</b>	<b>30</b>	<b>33.65</b>	<b>7994</b>	<b>1.0</b>	<b>31.59</b>	<b>Yes</b>
4	Fairview Signals to Britannia	Upper	1.16	40	36.9	10909	2.0	43.3	No
<b>5</b>	<b>Britannia to Aberbargoed R/B</b>	<b>Upper</b>	<b>0.79</b>	<b>30</b>	<b>34.6</b>	<b>11387</b>	<b>1.0</b>	<b>30.46</b>	<b>Yes</b>
<i>Aberbargoed Village – 30mph</i>									
<b>6</b>	<b>Aberbargoed to New Tredegar</b>	<b>Upper</b>	<b>2.5</b>	<b>50</b>	<b>46.05</b>	<b>6039</b>	<b>0.667</b>	<b>12.1</b>	<b>Yes</b>
<b>7</b>	<b>New Tredegar to Tirphil</b>	<b>Mixed</b>	<b>1.7</b>	<b>30</b>	<b>32.05</b>	<b>5867</b>	<b>1.0</b>	<b>27.47</b>	<b>Yes</b>

#### Highlighted zones

	Speed limit length below 600m
	Mean Speed above Speed Limit Intervention Level
	Mean Speed considerably lower than Speed Limit
	Collision Rate above accepted threshold

#### Functional Tiers

- **Upper Tier** - those roads with a primarily through function where mobility is important
- **Lower Tier** - single carriageway roads passing through local communities with 20 or more frontage developments and a minimum length of 600m, or those roads with a local or access function where quality of life benefits are important.

## A4049 – Remediation Measures

### 1. Link 3 – Fleur de Lis to Fairview Signals

- Functional Tier: Upper road
- Length of link: 1.085 km
- Current Speed Limit: 30mph
- Mean Speed: 33.65mph
- A.A.D.T: 7994 vehicles
- Collision Rate per 100 million vehicle kilometres: 31.59

#### Link Description

The link can be split into two different sections according to the carriageway's characteristics. The southern section from the start of Fleur-de-Lys to Oak Terrace By-pass traffic lights has a very wide carriageway with pedestrian crossing points at a number of locations. There are footpaths on either side of the road, as well as nearby primary and secondary schools including Ysgol Cwm Rhymni. This route generally has minimal frontage development. The northern section from the traffic lights up to Fairview signals is more residential with several driveways leading onto the carriageway. Here the carriageway and footpath is narrower. The data was taken from the widest point of the carriageway next to the bus stops near the Bryn Road traffic lights.



Figure F1: Northbound view along southern section of link 3.

#### Areas of Concern:

- Mean Speed (33.65mph) above the current speed limit (30mph).
- Very wide carriageway and relatively straight alignment along the northern section of the link. Difficult to restrict vehicles speeds to around 30mph.
- Unsuitable to increase the road's speed limit due to nearby schools and residential nature of the surrounding area.

#### Proposed Action (Link 3):

- 1) **Include either hatch markings or a vehicle activated sign (VAS) along the northern section of the link, AND**
- 2) **Improve the visibility of the 30mph gateway signs (yellow backing board or larger signage) and cut back vegetation overgrowth restricting forward visibility.**

## **2. Link 5 – Britannia to Aberbargoed Roundabout**

- Functional Tier: Upper road
- Length of link: 0.79 km
- Current Speed Limit: 30mph
- Mean Speed: 34.6mph
- A.A.D.T: 11,387 vehicles
- Collision Rate per 100 million vehicle kilometres: 30.46

### Link Description

The carriageway is similar to that of link 4, where the road is fairly straight with good sight lines and is relatively wide. To the west of the carriageway is the residential area of Britannia, however the majority of the nearby houses and buildings are set back off the A4049. Along the route there are bus stops, lay bays and footpaths on either side of the road. There is a former school entrance off Pengam Road, however the school no longer exists. There are several side junctions along the route and the carriageway widens near Aberbargoed roundabout to accommodate a right turn holding lane to the nearby industrial park. To the north is Aberbargoed, and to the south the speed limit is 40mph.

### Areas of Concern

- Mean Speed (34.6mph) is over 15% higher than the road's speed limit (30mph).
- The characteristics of the road are similar to a 40mph speed limit section, whilst there's hardly any change in the nature of the road between link 4 and link 5, although there are more junctions and development.

### **Proposed Action (Link 5):**

**Consider the feasibility of increasing the limit from 30mph to 40mph or speed management measures to reduce vehicle speeds to within an acceptable range of a 30mph limit.**

N.B - Before increasing the speed limit it is worth looking at the visibility of Britannia Terrace for those attempting to access on to the A4049. The side junction of Britannia Terrace is located on the A4049 bend approaching Britannia.



Figure F2: Northbound view next to Britannia village

N.B. Following a site assessment it is considered that a higher (40mph) speed limit would not be appropriate for this link due to the restricted/limited visibility that exists for drivers when exiting Britannia Terrace onto the A4049 route. In view of this, it is



recommended that the existing 30mph speed limit be retained and the link be treated with speed management measures.

### **3. Link 6 – Aberbargoed to New Tredegar**

- Functional Tier: Upper road
- Length of link: 2.5 km
- Current Speed Limit: 50mph
- Mean Speed: 46.05mph
- A.A.D.T: 6039 vehicles
- Collision Rate per 100 million vehicle kilometres: 12.1

#### **Link Description**

Single carriageway road of standard width, there are a number of right turn holding lanes. The route is in a rural environment with a steep fall to one side of the carriageway that is protected by speed barriers for most of the route. Footpath is provided on one side of the road. There is no adjacent development and few side junctions, the link has street lighting.



Figure F3: Southbound view between New Tredegar and Aberbargoed

#### **Areas of Concern**

- The characteristics of the road are similar to other national speed limit roads throughout the borough.
- Whilst the link description is similar to the description of 60mph road under defined Setting Local Speed Limits guidance. 'High quality road with few bends, junctions or accesses'.

#### **Proposed Action (Link 6):**

**Increase the speed limit from 50mph to national (60mph).**

#### **4. Link 7 – New Tredegar to Tirphil**

- Functional Tier: Mixed road
- Length of link: 1.7 km
- Current Speed Limit: 30mph
- Mean Speed: 32.05mph
- A.A.D.T: 5867 vehicles
- Collision Rate per 100 million vehicle kilometres: 27.47

#### **Link Description**

The link's characteristics change along the route. The southern section of the link has a very wide carriageway with a number of right turn holding lanes in the village. There is hardly any adjacent development; however there are a few side junctions and a footpath next to the northbound lane that includes a set of pedestrian dropped kerbs. A middle section of the link becomes more residential. In this area there are more side junctions, footpaths on both sides of the road and the occasional bus stop. In the northern section of the link there is more facilities including a few shops, pubs, garage and terraced housing.

The data was collected 300m to the south of Tirphil roundabout, the location of which can be seen in Figure F5.

#### **Areas of Concern**

- Mean speed (32.05mph) marginally above the current speed limit (30mph)
- Some parts of the link have carriageway characteristics that are more suitable for a 40mph speed limit rather than the current 30mph speed limit



Figure F4: Northbound view in the southern section of the link

#### **Proposed Action (Link 8):**

**Include a 40mph buffer zone between the two current speed limits, otherwise known as link 6 (50mph) and link 7 (30mph).** The 40mph section would start after the current 50mph gateways and come to and end just before the side junction to White Rose Care Home.