

Appendix 4B

B4251 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	Crumlin	Upper	0.33	30	28.7	10318	0.666	53.64	No
2	Kendon Road	Upper	0.675	60 (National)	42.5	11281	0	0	No
3	Ty-Brachty Terrace	Lower	0.905	30	30.0	10,199	0.333	9.89	No
4	Parkway	Upper	0.687	40	42.4	8775	0	0	No
5	Yard Coal Rise (North)	Upper	1.51	40	41.85	9400	0.333	6.43	No
6	Yard Coal Rise (South)	Upper	1.045	40	41.3	12036	0.333	7.26	No
<i>'Blackwood Town Centre'</i>									
7	Blackwood Road, Pontllanfraith	Lower	0.835	30	31.1	14411	1.0	22.77	No
8	Pontllanfraith	Lower	0.605	30	30.5	9579	0.333	15.76	No
9	Newport Road, Pontllanfraith	Upper	0.575	40	37.2	4526	0.333	35.09	No
10	Newport Road, Gelligroes	Upper	0.3	40	38.95	11027	0.667	55.21	No
11	Gelligroes to Ynysddu	Upper	1.534	60 (National)	40.5	7190	1.0	24.84	No
12	Ynysddu & Cwmfelinfach	Mixed	1.876	30	30.5	9511	1.667	25.59	No
13	Cwmfelinfach to Brynawel	Upper	0.965	60 (National)	42.5	7181	0.333	13.18	No
14	Brynawel & Wattsville	Lower	1.865	30	26.55	11258	1.0	13.05	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.

B4252 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	Pengam	Lower	0.645	30	27.45	4776	0.667	59.29	No
<i>'Fleur de lis village centre'</i>									
2	Fleur de lis	Lower	0.825	30	29.0	3873	0.333	28.58	No
3	Victoria Road, Fleur de lis	Upper	0.578	30	34.25	3110	0	0	No
4	Victoria Road to Maescwmmmer	Lower	0.57	30	18.75	2927	0.333	54.74	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.

B4252 Remediation Measures

1. Link 3 – Victoria Road, Fleur de lis

The link's mean speed of 34.25mph is above the road's speed limit (30mph) and intervention level.

The link is relatively short, a length of just 0.578km, and the length of a proposed 40mph limit outside the settlement boundary would be even shorter. As well as a short proposed speed limit, the carriageway is relatively narrow and at certain locations can be difficult for two vehicles to pass and a some accesses to residential properties located along the route would not meet the recommended visibility criteria for a 40mph limit.

Road safety measures such as a narrowed carriageway, built out sections or VAS were deemed unsuitable due to the site's already narrow carriageway and rural location, as can be seen in the photo below.

Consequently, it is not considered appropriate to increase the speed limit from 30mph to 40mph.

No action required.



Southbound view along Victoria Road

B4254 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>'Llancaiach Fawr – 30mph'</i>									
1	Gelligaer Road (West)	Upper	0.485	40	43.95	7146	0	0	Yes
2	Gelligaer Road (East)	Upper	0.98	60 (National)	36.8	7252	0.666	25.7	No
3	Gelligaer Village	Lower	1.0	30	32.55	11729	0	0	Yes
4	Gelligaer to Penpedairheol	Upper	0.806	30	38.05	10898	1.0	31.19	No
5	Penpedairheol	Lower	0.39	30	26.45	11053	0.667	42.37	No
6	Penpedairheol to Glan y Nant	Upper	0.48	40	38.3	11817	0	0	No
<i>'Glan y Nant, A469 & A4049'</i>									
7	Upper Trelyn	Upper	1.0	30	39.4	5008	0.667	36.47	Yes
8	Highfields Way	Upper	1.092	30	29.75	9509	0.333	8.79	No
9	Southern Cross Valley Link	Upper	0.579	30	35.9	11714	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.

B4254 – Remediation Measures

1. Link 1 – Gelligaer Road (West)

- Functional Tier: Upper
- Length of link: 0.485km
- Current Speed Limit: 40mph
- Mean Speed: 43.95mph
- A.A.D.T: 7146 vehicles
- Collision Rate per 100 million vehicle kilometres: 0

Link Description

The link is located in a rural environment with no adjacent developments or footways along the length of the route. To the west of the link is a 30mph road that passes by Llancaiach Fawr and continues on to the CCBC boundary, whilst to the east of the link is a national speed limit section. Overall the carriageway is relatively wide and its characteristics are similar to a national speed limit road rather than a 40mph road. The carriageway is relatively straight for the majority of the route, however it does contain one sharp bend where the carriageway begins to rise in elevation. Just before this bend is a side junction access to 'Coed Top Hill Reed Facility' which has poor visibility when leaving the site onto the main highway. There are no other side junctions other than the access to Coed Top Hill Reed facility.



Eastbound view along Gelligaer Road

Areas of Concern

- Mean Speed of 43.95mph is higher than the road's current speed limit.
- Due to the nature and characteristics of the carriageway it is difficult to restrict vehicle speeds to 40mph.
- The road's rural location, wide carriageway and high carriageway standard are more adequate for a national speed limit rather than a 40mph section. There seems to be no change in the carriageway's characteristics and quality between the road's 40mph and national speed limit sections.
- Length of the speed limit section is sub standard and below the recommended minimum length of 600m, stated in the WG Circular 24/2009.
- Sub-standard visibility at the driveway access to the reed farm.

Proposed Action (Link 1):

- 1) **Increase the speed limit from 40mph to a national speed limit (60mph)**
AND

- 2) Provide better visibility for those leaving the reed farm facility by cutting back vegetation to either side of the entrance.
AND
- 3) Cut back the overgrowth that often covers the two gateway signs located at either end of the 40mph section. Continue to monitor the area for overgrowth.

2. Link 2 & 3 – Location of 60/30mph gateway signs

Link 2 – Gelligaer Road (East)

- Functional Tier: Upper
- Length of link: 0.98 km
- Current Speed Limit: 60mph
- Mean Speed: 36.8mph
- A.A.D.T: 7252 vehicles
- Collision Rate per 100 million vehicle kilometres: 25.7

Link 3 – Gelligaer Village

- Functional Tier: Lower
- Length of link: 1.0 km
- Current Speed Limit: 30mph
- Mean Speed: 32.55mph
- A.A.D.T: 11,729 vehicles
- Collision Rate per 100 million vehicle kilometres: 0

Site Description

The gateway signs are located on an eastbound approach towards Gelligaer village. To the west of gateway is a national speed limit section located in a very rural environment, whilst to the east of the signs is a 30mph section that carries on through Gelligaer village. However the change in limit is located approximately 450m away from the village end, between the village end and the gateway signs is the occasional side junction leading to residential areas. There is no frontage development along this particular section, whilst the road is of a standard width and there is a footpath next to the westbound lane for part of this section.

Areas of Concern

- The 30mph section starts a considerable distance away from the Gelligaer village (approx 450m), and could benefit from being located closer to the frontage development.
- The carriageway's characteristics between the end of Gelligaer and the speed limit gateway, is more adequate for a higher speed limit. Although there are a couple of side junction accesses, the road is relatively wide with no frontage development, few lay-bays and good visibility for those egressing onto the main road from any side junctions.
- Between the western edge of Gelligaer and the change in limit it is considered difficult to restrict vehicle speeds to just 30mph.

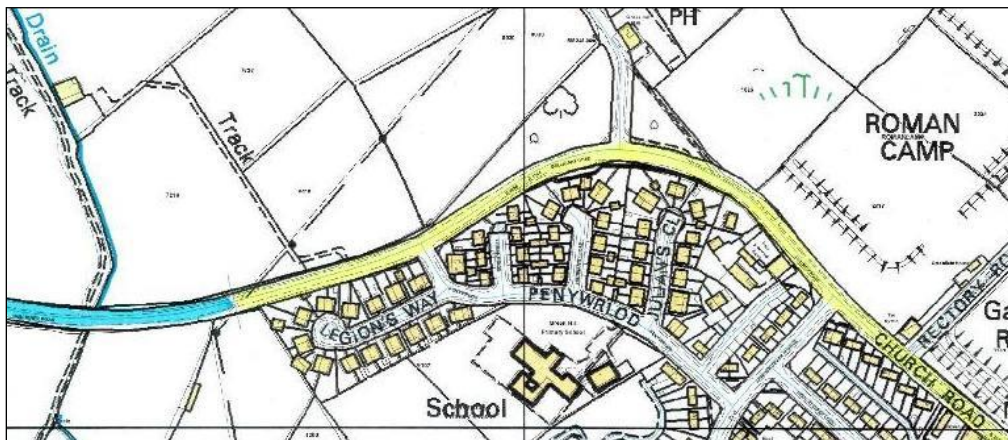


Eastbound view on approach towards Gelligaer village

Proposed Action (Link 2/3):

Include a new 40mph speed limit section between the national speed limit section on Gelligaer Road (link 2) and the 30mph section through Gelligaer village (link 3). The 40mph section will stretch from near the Gelligaer village sign to just past the current location for the gateway signs, as can be seen in the drawings below. The **blue route represents a national speed limit**, the **yellow route represents a 30mph speed limit** and the **green route represents a 40mph speed limit**.

Re-locating the 30mph gateway closer to the village could also assist in reducing the speeds of passing vehicles through Gelligaer village.



Current layout of Gelligaer Speed Limits



Proposed layout of Gelligaer Speed Limits

3. Link 4 – Gelligaer to Penpedairheol

The mean speed (38.05mph) along the link is considerably higher than the road's current speed limit of 30mph. Consideration to increase the speed limit to 40mph from near Gwaun Fro junction to the top of the hill was taken into account. However this speed limit section would be particularly short.

Proposed Action:-

Speed management measures will need to be considered to address the high traffic speeds along the route.



Westbound view between Penpedairheol and Gelligaer

4. Link 7 – Oak Terrace By-pass

- Functional Tier: Upper
- Length of link: 1.0km
- Current Speed Limit: 30mph
- Mean Speed: 39.4mph
- A.A.D.T: 5008 vehicles
- Collision Rate per 100 million vehicle kilometres: 36.47

Link Description

The link starts at the A4049 signals and has a gradual incline in an eastern direction. The majority of the route is of standard width, relatively straight with hardly any adjacent developments. There is no road narrowing or speed reducing features. At the top of the incline is a sharp bend that continues on towards a roundabout. There are hardly any side junction accesses other the occasional driveway and an access leading to a residential area near the A4049 signals. A pedestrian and vehicle rear entrance to Ysgol Gymraeg Cwm Rhymni is located next to Oak Terrace By-pass. The vehicle access is usually closed, however the pedestrian gates are usually open and are used by students walking to school.

Areas of Concern

- Mean Speed (39.4mph) significantly higher than the road's current speed limit (30mph).
- Nature and characteristics of the carriageway are more adequate for a higher speed limit.
- Difficult to restrict speed to 30mph due to the straight carriageway and lack of speed reducing features.



Uphill route along Oak Terrace By-pass

Proposed Action (Link 7)

Increase the speed limit from 30mph to 40mph. The limit should begin just passed the roundabout at the top and carry on as far as either:

- i) 50m to the east of the school entrance; OR
- ii) The A4049 signals at the bottom of the link.

N.B. Following site investigations/discussions with Gwent Police's Traffic Management Advisor it is considered that a higher (40mph) speed limit would not be appropriate for this link due to concerns about pedestrian safety as the adjacent school has a rear access that joins the road which is used as part of a walking route by pupils to the school. In view of this, it is recommended that the existing 30mph speed limit be retained and the link be treated with speed management measures.

B4255 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	Dynevor Terrace	Lower	0.35	30	29.2	7522	0	0	No
2	Nelson R/B to County Boundary (Shingrig Rd)	Lower	0.97	30	25.9	7661	1.333	49.16	No

B4256 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>'Residential area, Hill Street, Rhymney'</i>									
1	Rhymney to County Boundary	Upper	1.18	60 (National)	39.45	2186	0	0	No

B4257 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	A469 Heads of the Valleys Roundabout to Llechryd	Upper	0.375	60 (National)	37	3847	0	0	No
2	Llechryd to Rhymney	Upper	0.712	30	36.65	2989	0	0	Yes
<i>'Rhymney estates and town centre'</i>									

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

B4257 – Remediation Measures

1. Link 1 – A469 Heads of the Valleys Roundabout to Llechryd

The link's mean speed of 37mph is considerably lower than the current speed limit of a national speed limit. However the link is a short section of just 375 metres and is part of a much longer national speed limit section. Dropping the speed limit to 40mph would create a sub-standard speed limit length of below 600m.

No action required.

2. Link 2 – Llechryd to Rhymney

- Functional Tier: Upper
- Length of link: 0.712km
- Current Speed Limit: 30mph
- Mean Speed: 36.65mph
- A.A.D.T: 2989 vehicles
- Collision Rate per 100 million vehicle kilometres: 0

Link Description

The link is located in a relatively rural location with hardly any adjacent development and connects Llechryd village to Rhymney town. The carriageway is of good width and bends and undulates on occasions. There are very few junction access points other than the entrance to the Rhymney House Hotel. A footway is located next to the southbound lane and the whole of the link contains street lighting.



Southbound view along carriageway that connects Llechryd to Rhymney

Areas of Concern

- Mean Speed (36.65mph) is over 20% higher than the current speed limit.
- The rural location, wide carriageway and lack of speed reducing features, makes it difficult to restrict vehicle speeds to 30mph.
- The carriageway characteristics and location is more adequate for a higher speed limit.

Proposed Action (Link 2)

Increase the speed limit from 30mph to 40mph. The 40mph limit to begin at the junction in Llechryd and to finish near the Rhymney village sign.

B4263 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	Commercial Street to Bryngelli Terrace	Lower	1.5	30	30.25	6417	3.0	85.39?	No
2	Bryngelli Terrace to Abermill Care Centre	Lower	0.965	30	30.7	9931	1.667	47.65	No
3	Abermill Care Centre to Commercial Motors Garage	Lower	0.715	30	36.1	10602	0	0	Yes
4	Commercial Motors Garage to Penyrheol	Upper	0.7	40	39.9	11509	0	0	No
5	St Cenydd Road North	Lower	0.538	30	26.65	16650	0.667	20.39	No
6	Penyrheol to Energlyn Railway Bridge	Lower	1.51	30	32.55	6534	2.333	64.79	No
<i>'Mill Road to Caerphilly Town Centre'</i>									

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.

B4263 – Remediation Measures

1. Link 3 – Abermill Care Centre to Thomas Street Garage

- Functional Tier: Lower
- Length of link: 0.715km
- Current Speed Limit: 30mph
- Mean Speed: 36.1mph
- A.A.D.T: 10,602 vehicles
- Collision Rate per 100 million vehicle kilometres: 0

Link Description

A single fairly straight carriageway road that's based in a residential location where there is a mixture of bungalows and terraced houses. The northern side of the link includes double yellow lines on both sides of the carriageway, and even when these lines come to an end there are hardly any parked vehicles, as most residents park towards the rear of their bungalows. It is here towards the north of the link where the speed and volume data was collected. However towards the south of the link the double yellow lines are generally located on one side of the road and the many terraced houses have no rear lanes. Consequently there are many more vehicles parked on the road. There are footways on both sides of the road and overall the link has good sight lines.



Eastbound view through Abertridwr

Areas of Concern

- Mean speed of 36.1mph is more than 20% higher than the road's current speed limit of 30mph.
- Lack of parked cars, double yellow lines and good width towards the north of the link makes it difficult to restrict vehicle speeds to 30mph.
- Carriageway is not considered wide enough to be able to use road hatch markings to reduce the overall vehicle speeds.
- Due to the residential nature of the area, speed limit needs to remain at 30mph, rather than being increased to 40mph.

Proposed Action (Link 3)

Consider a vehicle activated sign, positioned to the north of the link in order to assist in reducing the overall vehicles speeds.

B4511 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	Bedwelty Rd, Aberbargoed	Lower	0.822	30	30.6	3369	0.333	32.98	No
2	Aberbargoed to Markham	Upper	0.641	40	42.95	2552	0	0	No
3	Markham	Lower	1.2	30	36.5	2241	0.333	33.96	Yes
4	Penylan Road	Lower	0.68	30	26.8	2251	0	0	No

B4591 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	A467 Abercarn R/B to Abercarn	Upper	0.58	40	36.45	4124	0.333	38.18	No
2	Abercarn to Cwmcarn	Lower	0.955	30	28.85	4099	0	0	No
3	Cwmcarn to Twyncarn Road	Lower	1.19	30	26.1	3576	1.0	64.38	No
4	Pontywaun	Lower	0.62	30	31.0	3904	0.333	37.73	No
5	High St, Crosskeys	Lower	0.675	30	26.15	4245	0	0	No
6	Risca & Cromwell Roads	Lower	1.49	30	29.4	7858	1.0	23.40	No
7	St Mary Street, Risca	Lower	1.015	30	27.8	8381	1.0	32.21	No
<i>'Risca village to the county boundary'</i>									

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

B4511 – Remediation Measures

1. Link 3 – Markham

- Functional Tier: Lower
- Length of link: 1.2km
- Current Speed Limit: 30mph
- Mean Speed: 36.5mph
- A.A.D.T: 2241 vehicles
- Collision Rate per 100 million vehicle kilometres: 33.96

Link Description

The link passes by Markham village and can be split into two sections either side of the mini roundabout. To the west along Pantycefn Road are several bungalows, Markham primary school and a few side junction accesses. Traffic speeds are well controlled along this section with a several speed humps and builds outs that narrow the width of the road. However to the east of the mini roundabout along Abernant Road the carriageway is of good width, there are no speed reducing features and the residential properties are only located on one side of the road. The residential properties end some 400m before the end of the speed link. From here onwards the environment is very rural, as can be seen in the picture below, and it was along this section that the data was gathered.



Rural road connecting the residential areas along Abernant Road and Penylan Road

Areas of Concern

- Mean speed of 36.5mph taken along a rural section between the residential properties on Abernant Road and Penylan Road (link 4).
- Difficult to restrict vehicle speeds to the east of the mini roundabout to 30mph, due to the rural environment, lack of parked vehicles and speed reducing features, as well as the carriageway's good width.
- Rural section between the residential properties of Abernant Road (link 3) and Penylan Road (link 4) is considered too short a length to increase the speed limit to 40mph.

Proposed Action (Link 3)

Consider implementing minor engineering measures to reduce the speeds of vehicles approaching the residential areas. Road markings could also be included as well as a vehicle activated sign (VAS) located along the residential section of Abernant Road.

B4600 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	Bedwas R/B to Caerphilly Town Centre	Lower	1.365	30	31.05	13809	2.667	38.76	No
2	Nantgarw Road	Lower	1.32	30	24.65	17824	2.667	31.05	No
3	Nantgarw Road Crossroads to Penrhos Roundabout	Upper	1.01	40	39.3	17725	0.333	5.10	No

B4623 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	Pontygwindy Roundabout to Caerphilly Town Centre	Lower	1.645	30	26.25	18823	1.333	11.80	No
<i>'Caerphilly Town Centre'</i>									
2	Mountain Road (from railway bridge to 60mph zone)	Lower	0.643	30	26.8	8217	3.667	190.13	To be further reviewed as part of collision analysis.
3	Mountain Road	Upper	0.933	60 (National)	37.2	6965	0	0	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

B4623 – Remediation Measures

1. Link 2 – Mountain Road (from Railway Bridge to 60mph zone)

The speed along this 30mph stretch is well controlled with a mean speed of just 26.8mph. However several collisions have occurred along this carriageway, often located next to the several junctions that are located along the residential section of Mountain Road. There haven't been as many recorded collisions within the last year, however **the link will be reviewed further as part of a collision analysis.**

2. Link 3 – Mountain Road

The mean speed for a national speed limit road is relatively low at 37.2mph. However the characteristics of the road are similar to any other national speed limit road i.e. it is located in a relatively rural location, there are no footpaths on either side of the road, limited development, and no accesses to residential properties or junctions to side roads. There have been no collisions along the road, and there is no strong reason to change the current speed limit.

No action required.