

APPENDIX 10

COBALT Output Files

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*      CCC      OOO      BBBB      AAA      L      TTTTT
*      C C      O O      B B      A A      L      T
*      C      O O      B B      A A      L      T
*      C      O O      BBBB      AAAAA      ---- L      T
*      C      O O      B B      A A      L      T
*      C C      O O      B B      A A      L      T
*      CCC      OOO      BBBB      A A      LLLLL      T
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*                                     Version 2013.02
*
*      Transport Appraisal and Strategic Modelling (TASM) Division,
*      Department for Transport,
*      Great Minster House,
*      33 Horseferry Road,
*      London,
*      SW1P 4DR
*      Email tasm@dft.gsi.gov.uk
*
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Written by Roger Himlin

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[Section 1] Summary Statistics

[Section 1.1] Economic Summary

Total Without-Scheme Accident Costs = 81,730.6
Total With-Scheme Accident Costs = 79,411.2

Total Accident Benefits Saved by Scheme = 2,319.3

Costs and benefits discounted to 2010 in multiples of a thousand pounds.

[Section 1.2] Accident Summary

Total Without-Scheme Accidents = 1,528.3
Total With-Scheme Accidents = 1,483.4

Total Accidents Saved by Scheme = 44.9

[Section 1.3] Casualty Summary

Total Without-Scheme Casualties (Fatal) = 11.2
(Serious) = 186.5
(Slight) = 1,830.4

Total With-Scheme Casualties (Fatal) = 10.8
(Serious) = 181.9
(Slight) = 1,773.4

Total Casualties Saved by Scheme (Fatal) = 0.4
(Serious) = 4.6
(Slight) = 57.0

[Section 2] Accident Statistics

[Section 2.1] Link Accident Statistics

Link Name	Without-Scheme			Total* Cost*	With-Scheme			Total* Cost*	Benefits			Total* Benefit*
	2017	2032	Total*		2017	2032	Total*		2017	2032	Total*	
Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Costs and benefits discounted to 2010 in multiples of a thousand pounds.

[Section 2.2] Junction Accident Statistics

Junction Name	Without-Scheme			Total* Cost*	With-Scheme			Total* Cost*	Benefits			Total* Benefit*
	2017	2032	Total*		2017	2032	Total*		2017	2032	Total*	

8441_8442	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8443_8444	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8445_8446	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8447_8448	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8449_8450	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8449_9720	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8451_8452	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8453_8454	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8455_8456	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8457_8458	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8463_8464	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8465_8466	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8467_8468	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8470_8471	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8491_8492	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8491_8495	0.0	0.0	1.5	76.5	0.0	0.0	1.5	79.0	0.0	0.0	0.0	-2.4
8493_8494	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8495_8496	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8497_8498	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8503_8504	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8505_8506	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9701_9703	0.0	0.0	1.5	76.9	0.0	0.0	1.3	67.9	0.0	0.0	0.0	9.0
9707_9724	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9720_9721	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9720_9721_DS	0.0	0.0	0.0	0.0	0.0	0.0	1.3	68.9	0.0	0.0	-1.3	-68.9
9722_9723	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9724_9725	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	28.7	26.6	1,528.3	81,730.6	28.3	25.8	1,483.4	79,411.1	0.3	0.8	44.9	2,319.5

Costs and benefits discounted to 2010 in multiples of a thousand pounds.

[Section 3] Accident Rates

[Section 3.1] Link Accident Rates

Link Name	*----- Accident Rate -----*	
	2017	2032
	*	*

Accident rates are in accidents per million vehicle kilometres.

[Section 3.2] Junction Accident Rates

Junction Name	*----- Coefficient 'a' -----*	
	2017	2032
	*	*

[Section 3.3] Combined Link and Junction Accident Rates

Link Name	*----- Accident Rate -----*	
	2017	2032
401_617	0.633653	0.477905
402_617	0.385934	0.275336
411_8503	0.385934	0.275336
411_1360	0.385934	0.275336
412_623	0.385934	0.275336
412_624	0.385934	0.275336
417_600	0.385934	0.275336
417_418	0.385934	0.275336
418_451	0.385934	0.275336
420_599	0.633653	0.477905
421_1370	0.633653	0.477905
421_422	0.633653	0.477905
422_549	0.633653	0.477905
423_599	0.633653	0.477905
423_1370	0.633653	0.477905
424_529	0.633653	0.477905
424_827	0.633653	0.477905
425_598	0.385934	0.275336
425_687	0.385934	0.275336
426_531	0.453255	0.344566
426_806	0.453255	0.344566
427_516	0.633653	0.477905
427_8426	0.633653	0.477905
428_538	0.633653	0.477905
428_429	0.633653	0.477905
429_539	0.633653	0.477905
429_804	0.000000	0.000000
439_1502	0.453255	0.344566
451_603	0.385934	0.275336
451_452	0.000000	0.000000
453_1003	0.000000	0.000000
453_454	0.000000	0.000000
453_1321	0.000000	0.000000
456_623	0.633653	0.477905
456_565	0.633653	0.477905
458_1151	0.000000	0.000000
458_1149	0.385934	0.275336
504_813	0.000000	0.000000
504_813_DS	0.000000	0.000000
504_8418	0.000000	0.000000
505_512	0.000000	0.000000
506_507	0.000000	0.000000
505_507	0.000000	0.000000
507_868	0.000000	0.000000
508_8431	0.000000	0.000000
508_8429	0.000000	0.000000
509_9601	0.000000	0.000000
509_1504	0.453255	0.344566
509_681	0.453255	0.344566
511_1503	0.000000	0.000000
511_1521	0.000000	0.000000
511_1521_DS	0.000000	0.000000
512_813	0.453255	0.344566
512_513	0.385934	0.275336
512_1521	0.000000	0.000000
512_1521_DS	0.000000	0.000000
512_8443	0.000000	0.000000
504_513	0.000000	0.000000
513_8419	0.000000	0.000000

514_515	0.633653	0.477905
514_813	0.453255	0.344566
514_775	0.633653	0.477905
515_8455	0.000000	0.000000
515_8420	0.633653	0.477905
516_816	0.000000	0.000000
516_8420	0.633653	0.477905
516_8453	0.000000	0.000000
506_517	0.000000	0.000000
517_8416	0.000000	0.000000
518_522	0.000000	0.000000
518_838	0.000000	0.000000
518_519	0.000000	0.000000
519_774	0.000000	0.000000
519_520	0.385934	0.275336
520_816	0.000000	0.000000
521_538	0.633653	0.477905
520_521	0.385934	0.275336
521_8457	0.633653	0.477905
522_809	0.000000	0.000000
522_523	0.000000	0.000000
523_541	0.000000	0.000000
524_1350	0.000000	0.000000
525_895	0.000000	0.000000
524_525	0.000000	0.000000
526_878	0.000000	0.000000
525_526	0.000000	0.000000
526_8436	0.000000	0.000000
527_545	0.385934	0.275336
527_682	0.385934	0.275336
527_829	0.385934	0.275336
528_828	0.000000	0.000000
527_528	0.000000	0.000000
529_9501	0.000000	0.000000
529_551	0.633653	0.477905
529_9705	0.000000	0.000000
439_530	0.453255	0.344566
530_830	0.385934	0.275336
530_531	0.453255	0.344566
531_772	0.000000	0.000000
532_8443	0.000000	0.000000
532_8447	0.000000	0.000000
532_8449	0.000000	0.000000
532_773	0.000000	0.000000
533_534	0.000000	0.000000
533_775	0.633653	0.477905
533_561	0.633653	0.477905
534_864	0.000000	0.000000
534_535	0.000000	0.000000
534_8455	0.000000	0.000000
535_536	0.000000	0.000000
535_8453	0.000000	0.000000
536_537	0.000000	0.000000
536_538	0.000000	0.000000
537_539	0.633653	0.477905
537_569	0.633653	0.477905
537_837	0.000000	0.000000
538_8438	0.000000	0.000000
539_572	0.385934	0.275336
540_541	0.000000	0.000000
540_840	0.000000	0.000000
541_804	0.000000	0.000000
541_841	0.000000	0.000000
545_845	0.000000	0.000000
545_546	0.000000	0.000000
546_846	0.000000	0.000000
546_547	0.385934	0.275336
546_851	0.000000	0.000000
547_687	0.385934	0.275336
547_548	0.000000	0.000000
548_549	0.000000	0.000000
548_8451	0.000000	0.000000
549_550	0.633653	0.477905
550_850	0.000000	0.000000
550_551	0.633653	0.477905
551_851	0.000000	0.000000
552_553	0.385934	0.275336
552_852	0.000000	0.000000
552_603	0.385934	0.275336
553_805	0.633653	0.477905
553_554	0.633653	0.477905
554_854	0.000000	0.000000
554_555	0.633653	0.477905
555_655	0.633653	0.477905
556_806	0.633653	0.477905
556_856	0.000000	0.000000
556_655	0.633653	0.477905
557_9720	0.000000	0.000000
557_655	0.385934	0.275336
557_559	0.385934	0.275336
559_9707	0.000000	0.000000
559_859	0.385934	0.275336
560_859	0.000000	0.000000
560_860	0.000000	0.000000
560_563	0.000000	0.000000
561_862	0.633653	0.477905
562_862	0.633653	0.477905
562_896	0.000000	0.000000
562_896_DS	0.390618	0.294607
562_563	0.633653	0.477905
562_811	0.000000	0.000000
563_564	0.633653	0.477905
564_565	0.633653	0.477905
564_566	0.385934	0.275336
564_865	0.000000	0.000000
565_865	0.000000	0.000000
566_625	0.000000	0.000000
566_567	0.385934	0.275336
567_568	0.385934	0.275336
567_867	0.000000	0.000000
568_9722	0.633653	0.477905
568_571	0.385934	0.275336
568_569	0.633653	0.477905
569_1323	0.000000	0.000000

572_574	0.385934	0.275336
572_840	0.000000	0.000000
573_840	0.000000	0.000000
598_8497	0.000000	0.000000
598_8495	0.385934	0.275336
599_8491	0.385934	0.275336
599_601	0.633653	0.477905
599_600	0.385934	0.275336
600_781	0.000000	0.000000
603_604	0.385934	0.275336
614_1373	0.633653	0.477905
614_1381	0.633653	0.477905
614_1382	0.000000	0.000000
615_1372	0.633653	0.477905
615_815	0.633653	0.477905
615_1390	0.633653	0.477905
615_1374	0.633653	0.477905
616_2526	0.385934	0.275336
616_1149	0.633653	0.477905
616_617	0.633653	0.477905
617_8411	0.385934	0.275336
618_9704	0.385934	0.275336
618_620	0.000000	0.000000
618_2521	0.385934	0.275336
619_8503	0.385934	0.275336
619_8467	0.385934	0.275336
619_9704	0.385934	0.275336
620_621	0.385934	0.275336
620_1322	0.000000	0.000000
621_8467	0.385934	0.275336
621_821	0.000000	0.000000
621_1005	0.000000	0.000000
622_1360	0.385934	0.275336
622_660	0.000000	0.000000
622_823	0.385934	0.275336
623_823	0.633653	0.477905
624_638	0.000000	0.000000
624_1003	0.385934	0.275336
625_626	0.385934	0.275336
625_1003	0.385934	0.275336
626_627	0.000000	0.000000
626_9722	0.633653	0.477905
626_680	0.633653	0.477905
654_682	0.453255	0.344566
655_9724	0.000000	0.000000
657_660	0.633653	0.477905
660_8470	0.633653	0.477905
681_688	0.453255	0.344566
681_827	0.633653	0.477905
682_688	0.453255	0.344566
682_878	0.000000	0.000000
687_8493	0.000000	0.000000
688_8429	0.000000	0.000000
772_8445	0.000000	0.000000
772_872	0.000000	0.000000
772_874	0.000000	0.000000
772_874_DS	0.000000	0.000000
773_873	0.000000	0.000000
774_814	0.000000	0.000000
775_775	0.000000	0.000000
826_787	0.385934	0.275336
804_8440	0.000000	0.000000
805_1381	0.633653	0.477905
805_1380	0.000000	0.000000
806_807	0.000000	0.000000
521_809	0.000000	0.000000
809_8440	0.000000	0.000000
514_814	0.000000	0.000000
814_8423	0.000000	0.000000
815_7014	0.171486	0.123320
815_1150	0.000000	0.000000
816_8424	0.000000	0.000000
823_860	0.000000	0.000000
823_8470	0.633653	0.477905
528_827	0.000000	0.000000
838_847	0.000000	0.000000
517_847	0.000000	0.000000
847_8428	0.000000	0.000000
851_8451	0.000000	0.000000
854_8463	0.000000	0.000000
854_9707	0.000000	0.000000
555_855	0.385934	0.275336
859_1005	0.385934	0.275336
860_8505	0.000000	0.000000
861_864	0.000000	0.000000
862_863	0.000000	0.000000
561_864	0.000000	0.000000
865_8505	0.000000	0.000000
868_895	0.000000	0.000000
508_868	0.000000	0.000000
894_8434	0.000000	0.000000
878_894	0.000000	0.000000
895_8434	0.000000	0.000000
895_8433	0.000000	0.000000
898_8497	0.385934	0.275336
1005_1322	0.000000	0.000000
1149_1371	0.633653	0.477905
1150_1152	0.000000	0.000000
1150_1151	0.000000	0.000000
1151_8514	0.000000	0.000000
507_1350	0.000000	0.000000
1360_8521	0.000000	0.000000
1370_8522	0.000000	0.000000
1370_8493	0.000000	0.000000
1371_1390	0.633653	0.477905
1373_1374	0.633653	0.477905
1374_1375	0.000000	0.000000
1375_1376	0.000000	0.000000
1375_1377	0.000000	0.000000
1375_1383	0.000000	0.000000
1376_1391	0.000000	0.000000
1380_1383	0.000000	0.000000
1383_8463	0.000000	0.000000
1376_1390	0.000000	0.000000

Junction Input Section

Junction Name	Junction Geometry	Highest Carriageway	Highest Standard	Speed Limit (mph)	Error/Warning Summary (!=Error, #=Warning)
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Junction Flow Subsection

Junction Name	Arm 1 (Major)	Arm 2 (Minor)	Arm 3 (Major)	Arm 4 (Minor)	Arm 5 (Major)	Arm 6 (Minor)
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Without-Scheme Year Flows

Junction Name	Year	Arm 1 (Major)	Arm 2 (Minor)	Arm 3 (Major)	Arm 4 (Minor)	Arm 5 (Major)	Arm 6 (Minor)
---------------	------	---------------	---------------	---------------	---------------	---------------	---------------

With-Scheme Year Flows

Junction Name	Year	Arm 1 (Major)	Arm 2 (Minor)	Arm 3 (Major)	Arm 4 (Minor)	Arm 5 (Major)
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Junction Local Accident Rate Subsection

Junction Name	Observed Accidents	First Observed Accident Year	Local Severity Ratio	Split Year
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Link and Junction Combined Input Section

Link Name	Road Type	Length (km)	Speed Limit (mph)	Error/Warning Summary (!=Error, #=Warning)
401_617	8	0.36	40	
402_617	9	0.34	40	
411_8503	9	0.08	30	
411_1360	9	0.19	30	
412_623	9	0.15	30	
412_624	9	0.10	30	
417_600	9	0.05	30	
417_418	9	0.30	30	
418_451	9	0.17	30	
420_599	8	0.38	30	
421_1370	8	0.04	30	
421_422	8	0.27	30	
422_549	8	0.05	30	
423_599	8	0.04	30	
423_1370	8	0.44	30	
424_529	8	0.08	30	
424_827	8	0.07	30	
425_598	9	0.20	30	
425_687	9	0.22	30	
426_531	12	0.04	30	
426_806	12	0.04	30	
427_516	8	0.03	30	
427_8426	8	0.09	30	
428_538	8	0.02	30	
428_429	8	0.08	30	
429_539	8	0.02	30	
429_804	9	0.22	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
439_1502	12	0.09	30	
451_603	9	0.12	30	
451_452	9	0.10	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
453_1003	9	0.08	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
453_454	9	0.10	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
453_1321	9	0.38	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
456_623	8	0.19	30	
456_565	8	0.04	30	
458_1151	9	0.15	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
458_1149	9	0.12	30	
504_813	9	0.02	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
504_813_DS	9	0.05	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
504_8418	9	0.05	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
505_512	9	0.51	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
506_507	9	0.10	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
505_507	9	0.12	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
507_868	9	0.06	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
508_8431	9	0.05	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
508_8429	9	0.05	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
509_9601	9	0.20	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
509_1504	12	0.04	30	
509_681	12	0.10	30	
511_1503	12	0.20	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
511_1521	12	0.04	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
511_1521_DS	10	0.04	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
512_813	12	0.16	30	
512_513	9	0.10	30	
512_1521	12	0.02	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
512_1521_DS	10	0.02	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
512_8443	9	0.06	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
504_513	9	0.06	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
513_8419	9	0.05	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
514_515	8	0.14	30	
514_813	12	0.10	30	
514_775	8	0.10	30	
515_8455	9	0.08	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
515_8420	8	0.02	30	
516_816	9	0.03	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
516_8420	8	0.11	30	
516_8453	9	0.02	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
506_517	9	0.11	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
517_8416	9	0.05	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
518_522	9	0.17	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
518_838	9	0.03	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
518_519	9	0.03	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
519_774	9	0.24	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
519_520	9	0.04	30	
520_816	9	0.14	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
521_538	8	0.18	30	
520_521	9	0.07	30	
521_8457	8	0.04	30	
522_809	9	0.06	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
522_523	9	0.18	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
523_541	9	0.18	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
524_1350	9	0.08	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
525_895	9	0.10	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
524_525	9	0.06	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
526_878	9	0.04	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.

525_526	9	0.06	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
526_8436	9	0.10	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
527_545	9	0.40	30	
527_682	9	0.05	30	
527_829	9	0.10	30	
528_828	9	0.09	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
527_528	9	0.17	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
529_9501	9	0.15	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
529_551	8	0.12	30	
529_9705	9	0.08	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
439_530	12	0.12	30	
530_830	9	0.15	30	
530_531	12	0.07	30	
531_772	9	0.13	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
532_8443	9	0.10	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
532_8447	9	0.04	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
532_8449	9	0.16	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
532_773	9	0.24	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
533_534	9	0.14	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
533_775	8	0.07	30	
533_561	8	0.10	30	
534_864	9	0.10	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
534_535	9	0.18	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
534_8455	9	0.08	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
535_536	9	0.24	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
535_8453	9	0.18	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
536_537	9	0.16	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
536_538	9	0.18	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
537_539	8	0.22	30	
537_569	8	0.40	30	
537_837	9	0.05	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
538_8438	9	0.07	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
539_572	9	0.14	30	
540_541	9	0.05	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
540_840	9	0.23	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
541_804	9	0.06	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
541_841	9	0.18	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
545_845	9	0.50	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
545_546	9	0.31	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
546_846	9	0.50	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
546_547	9	0.20	30	
546_851	9	0.35	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
547_687	9	0.37	30	
547_548	9	0.26	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
548_549	9	0.18	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
548_8451	9	0.15	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
549_550	8	0.10	30	
550_850	9	0.35	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
550_551	8	0.22	30	
551_851	9	0.19	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
552_553	9	0.60	30	
552_852	9	0.25	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
552_603	9	0.33	30	
553_805	8	0.15	30	
553_554	8	0.13	30	
554_854	9	0.15	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
554_555	8	0.15	30	
555_655	8	0.11	30	
556_806	8	0.20	30	
556_856	9	0.15	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
556_855	8	0.22	30	
557_9720	9	0.12	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
557_655	9	0.18	30	
557_559	9	0.11	30	
559_9707	9	0.16	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
559_859	9	0.22	30	
560_859	9	0.23	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
560_860	9	0.41	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
560_563	9	0.43	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
561_862	8	0.06	30	
562_862	8	0.06	30	
562_896	9	0.20	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
562_896_DS	4	0.20	30	
562_563	8	0.15	30	
562_811	9	0.10	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
563_564	8	0.09	30	
564_565	8	0.14	30	
564_566	9	0.22	30	
564_865	9	0.40	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
565_865	9	0.34	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
566_625	9	0.36	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
566_567	9	0.26	30	
567_568	9	0.26	30	
567_867	9	0.20	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
568_9722	8	0.26	30	
568_571	9	0.25	30	
568_569	8	0.08	30	
569_1323	9	0.47	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
572_574	9	0.17	30	
572_840	9	0.06	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
573_840	9	0.18	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
598_8497	9	0.18	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
598_8495	9	0.18	30	
599_8491	9	0.10	30	
599_601	8	0.40	30	
599_600	9	0.19	30	
600_781	9	0.24	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
603_604	9	0.24	30	
614_1373	8	0.05	30	
614_1381	8	0.18	30	
614_1382	9	0.10	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
615_1372	8	0.14	30	
615_815	8	0.17	30	
615_1390	8	0.01	40	
615_1374	8	0.41	30	
616_2526	9	0.46	30	
616_1149	8	0.05	40	
616_617	8	0.38	40	
617_8411	9	0.12	40	
618_9704	9	0.27	30	
618_620	9	0.28	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
618_2521	9	0.00	30	
619_8503	9	0.08	30	
619_8467	9	0.12	30	

619_9704	9	0.03	30	
620_621	9	0.43	30	
620_1322	9	0.32	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
621_8467	9	0.12	40	
621_821	9	0.14	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
621_1005	9	0.30	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
622_1360	9	0.19	30	
622_660	9	0.35	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
622_823	9	0.37	30	
623_823	8	0.04	30	
624_638	9	0.35	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
624_1003	9	0.08	30	
625_626	9	0.34	30	
625_1003	9	0.04	30	
626_627	9	0.29	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
626_9722	8	0.26	30	
626_680	8	0.37	30	
654_682	12	0.50	30	
655_9724	9	0.08	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
657_660	8	0.87	40	
660_8470	8	0.18	30	
681_688	12	0.07	30	
681_827	8	0.08	30	
682_688	12	0.22	30	
682_878	9	0.07	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
687_8493	9	0.08	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
688_8429	9	0.04	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
772_8445	9	0.04	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
772_872	9	0.10	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
772_874	9	0.15	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
772_874_DS	9	0.15	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
773_873	9	0.13	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
774_814	9	0.06	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
773_775	9	0.09	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
626_787	9	0.10	30	
804_8440	9	0.12	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
805_1381	8	0.16	30	
805_1380	9	0.02	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
806_807	9	0.13	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
521_809	9	0.05	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
809_8440	9	0.14	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
514_814	9	0.14	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
814_8423	9	0.14	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
815_7014	8	0.58	60	
815_1150	9	0.22	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
816_8424	9	0.06	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
821_860	9	0.04	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
823_8470	8	0.16	30	
528_827	9	0.17	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
838_847	9	0.10	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
517_847	9	0.15	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
847_8428	9	0.05	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
851_8451	9	0.15	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
854_8463	9	0.14	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
854_9707	9	0.41	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
555_855	9	0.15	30	
859_1005	9	0.05	30	
860_8505	9	0.10	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
861_864	9	0.10	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
862_863	9	0.10	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
561_864	9	0.05	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
865_8505	9	0.23	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
868_895	9	0.08	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
508_868	9	0.06	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
894_8434	9	0.04	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
878_894	9	0.08	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
895_8434	9	0.04	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
895_8433	9	0.05	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
898_8497	9	0.18	30	
1005_1322	9	0.20	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
1149_1371	8	0.22	40	
1150_1152	9	0.21	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
1150_1151	9	0.29	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
1151_8514	9	0.02	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
507_1350	9	0.08	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
1360_8521	9	0.02	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
1370_8522	9	0.02	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
1370_8493	9	0.22	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
1371_1390	8	0.24	40	
1373_1374	8	0.07	30	
1374_1375	9	0.02	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
1375_1376	9	0.15	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
1375_1377	9	0.15	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
1375_1383	9	0.28	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
1376_1391	9	0.10	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
1380_1383	9	0.17	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
1383_8463	9	0.14	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
1376_1390	9	0.17	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
511_1501	12	0.15	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
1501_1503	12	0.05	30	
1502_1504	12	0.02	30	
509_1502	12	0.02	30	
530_1503	12	0.15	30	
1502_1503	12	0.06	30	
1501_1504	12	0.02	30	
1504_1505	9	0.05	30	
1501_1505	9	0.10	30	
1505_1506	9	0.03	30	
1521_1522	9	0.20	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
2521_2522	9	0.00	30	
2522_2523	9	0.00	30	
618_2523	9	0.02	30	
2523_2524	9	0.00	30	
2524_2525	9	0.00	30	
2525_2526	9	0.00	30	
2523_2526	9	0.01	30	
2526_2527	9	0.02	30	
616_2527	9	0.45	30	
681_8212	9	0.05	30	
8411_8412	9	0.10	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
8411_8465	9	0.24	30	
8411_8413	9	0.10	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.
8414_8465	9	0.16	30	
8414_8415	9	0.10	20	\$Speed limit is low. Care should be taken using the results of the calculation for this link.

516_816	939	1,189	1,564	0	0	0	1,045	1,359	0	0	0
516_8420	5,066	4,752	6,189	0	0	0	3,936	5,351	0	0	0
516_8453	1,449	1,716	2,099	0	0	0	1,859	1,931	0	0	0
506_517	2,123	2,229	3,221	0	0	0	3,254	3,682	0	0	0
517_8416	1,284	1,178	1,586	0	0	0	1,217	1,624	0	0	0
518_522	558	513	785	0	0	0	643	1,037	0	0	0
518_838	3,652	3,646	5,122	0	0	0	4,713	5,630	0	0	0
518_519	47	156	89	0	0	0	67	147	0	0	0
519_774	3,501	3,587	3,731	0	0	0	3,041	3,385	0	0	0
519_520	2,887	3,045	4,308	0	0	0	3,711	4,339	0	0	0
520_816	315	250	309	0	0	0	235	557	0	0	0
521_538	6,404	7,127	8,525	0	0	0	6,777	8,271	0	0	0
520_521	6,904	6,802	8,673	0	0	0	7,464	8,959	0	0	0
521_8457	4,818	4,420	6,095	0	0	0	3,845	5,370	0	0	0
522_809	505	439	524	0	0	0	594	785	0	0	0
522_523	54	77	265	0	0	0	52	260	0	0	0
523_541	54	77	265	0	0	0	52	260	0	0	0
524_1350	3,124	2,536	3,381	0	0	0	2,978	3,310	0	0	0
525_895	150	238	195	0	0	0	184	298	0	0	0
524_525	686	252	866	0	0	0	688	790	0	0	0
526_878	548	850	966	0	0	0	869	916	0	0	0
525_526	2,701	2,372	2,557	0	0	0	2,403	2,824	0	0	0
526_8436	1,613	1,653	2,356	0	0	0	1,675	2,190	0	0	0
527_545	4,831	4,476	6,664	0	0	0	4,908	6,567	0	0	0
527_682	5,921	5,411	7,233	0	0	0	5,157	7,595	0	0	0
527_829	198	208	243	0	0	0	209	245	0	0	0
528_828	568	546	658	0	0	0	547	660	0	0	0
527_528	1,545	1,253	826	0	0	0	1,997	1,218	0	0	0
529_9501	5,478	5,486	6,672	0	0	0	5,501	6,689	0	0	0
529_551	7,767	10,160	11,264	0	0	0	9,652	11,468	0	0	0
529_9705	454	458	523	0	0	0	460	525	0	0	0
439_530	11,615	10,916	11,872	0	0	0	13,279	12,900	0	0	0
530_830	346	402	525	0	0	0	697	709	0	0	0
530_531	13,198	11,017	13,335	0	0	0	11,289	13,826	0	0	0
531_772	1,118	1,289	2,642	0	0	0	1,670	2,820	0	0	0
532_8443	1,415	4,100	5,560	0	0	0	3,206	3,467	0	0	0
532_8447	674	1,869	3,941	0	0	0	3,195	3,252	0	0	0
532_8449	6,497	5,747	7,467	0	0	0	4,357	5,389	0	0	0
532_773	2,361	2,121	2,108	0	0	0	429	329	0	0	0
533_534	1,608	1,476	2,903	0	0	0	2,071	3,580	0	0	0
533_775	9,991	9,383	9,494	0	0	0	5,058	5,427	0	0	0
533_561	7,100	8,588	10,459	0	0	0	4,986	5,468	0	0	0
534_864	925	819	981	0	0	0	1,016	944	0	0	0
534_535	829	914	2,550	0	0	0	1,066	3,490	0	0	0
534_8455	1,602	1,189	1,624	0	0	0	1,490	2,549	0	0	0
535_536	2,202	2,542	4,566	0	0	0	2,842	4,999	0	0	0
535_8453	107	191	253	0	0	0	222	463	0	0	0
536_537	2,200	2,538	4,514	0	0	0	2,468	4,179	0	0	0
536_538	2	4	52	0	0	0	374	819	0	0	0
537_539	4,520	4,016	5,276	0	0	0	4,782	6,173	0	0	0
537_569	6,198	6,589	8,905	0	0	0	7,403	10,041	0	0	0
537_837	1,180	1,165	1,404	0	0	0	1,166	1,406	0	0	0
538_8438	1,493	1,772	2,082	0	0	0	1,780	1,935	0	0	0
539_572	2,929	3,079	4,669	0	0	0	2,760	4,126	0	0	0
540_541	239	261	505	0	0	0	265	553	0	0	0
540_840	164	186	421	0	0	0	160	405	0	0	0
541_804	1,691	1,553	1,822	0	0	0	1,608	1,582	0	0	0
541_841	1,573	1,554	1,848	0	0	0	1,556	1,849	0	0	0
545_845	638	636	756	0	0	0	651	769	0	0	0
545_546	4,600	4,231	6,445	0	0	0	4,729	6,351	0	0	0
546_846	300	325	449	0	0	0	326	450	0	0	0
546_547	3,948	3,825	6,030	0	0	0	4,467	6,243	0	0	0
546_851	699	423	633	0	0	0	393	631	0	0	0
547_687	3,794	3,791	7,099	0	0	0	4,510	7,546	0	0	0
547_548	246	65	988	0	0	0	347	1,002	0	0	0
548_549	1,915	1,666	858	0	0	0	1,765	846	0	0	0
548_8451	1,565	1,333	1,728	0	0	0	1,406	1,791	0	0	0
549_550	7,426	7,653	10,209	0	0	0	8,360	9,580	0	0	0
550_850	3,789	3,571	4,209	0	0	0	3,578	4,217	0	0	0
550_551	7,312	8,143	10,280	0	0	0	8,070	9,539	0	0	0
551_851	864	1,114	1,002	0	0	0	1,136	1,136	0	0	0
552_553	6,204	6,142	9,904	0	0	0	7,222	10,934	0	0	0
552_852	1,651	1,652	2,183	0	0	0	1,806	2,225	0	0	0
552_603	5,873	5,392	7,564	0	0	0	5,756	8,273	0	0	0
553_805	9,638	9,146	13,310	0	0	0	10,114	13,013	0	0	0
553_554	11,050	11,489	12,427	0	0	0	11,806	12,650	0	0	0
554_854	629	520	118	0	0	0	475	228	0	0	0
554_555	11,249	11,902	12,781	0	0	0	12,119	12,861	0	0	0
555_655	11,629	12,193	13,186	0	0	0	12,258	13,103	0	0	0
556_806	9,609	9,083	9,975	0	0	0	9,805	10,516	0	0	0
556_856	732	677	827	0	0	0	101	130	0	0	0
556_655	11,232	9,650	11,484	0	0	0	9,613	13,279	0	0	0
557_9720	3,043	5,108	7,375	0	0	0	8,965	11,070	0	0	0
557_655	5,721	5,772	7,094	0	0	0	7,218	7,347	0	0	0
557_559	5,148	3,678	5,055	0	0	0	3,261	5,015	0	0	0
559_9707	2,212	1,932	3,263	0	0	0	1,865	3,875	0	0	0
559_859	9,635	7,166	8,752	0	0	0	4,767	6,784	0	0	0
560_859	3,158	4,019	6,917	0	0	0	3,621	6,232	0	0	0
560_860	30	0	0	0	0	0	1	40	0	0	0
560_563	6,259	4,395	5,639	0	0	0	952	2,084	0	0	0
561_862	7,606	9,242	11,207	0	0	0	5,830	6,192	0	0	0
562_862	11,210	10,565	12,167	0	0	0	7,451	9,734	0	0	0
562_896	5,058	4,886	5,805	0	0	0	0	0	0	0	0
562_896_DS	0	0	0	0	0	0	4,102	4,585	0	0	0
562_563	8,769	10,235	12,281	0	0	0	10,310	12,094	0	0	0
562_811	1,166	1,107	1,283	0	0	0	1,111	1,289	0	0	0
563_564	11,061	11,172	13,161	0	0	0	10,310	12,094	0	0	0
564_565	7,816	8,680	10,747	0	0	0	8,230	9,721	0	0	0
564_566	3,951	3,184	3,537	0	0	0	3,749	4,894	0	0	0
564_865	675	636	1,064	0	0	0	704	993	0	0	0
565_865	520	569	970	0	0	0	612	874	0	0	0
566_625	444	422	509	0	0	0	444	640	0	0	0
566_567	3,973	3,323	3,708	0	0	0	3,999	5,359	0	0	0
567_568	3,620	3,002	3,701	0	0	0	3,975	5,362	0	0	0
567_867	1,901	1,875	2,202	0	0	0	1,881	2,207	0	0	0
568_9722	5,920	5,853	7,201	0	0	0	5,567	6,729	0	0	0
568_571	2,164	2,262	2,636	0	0	0	2,727	3,784	0	0	0
568_569	5,814	4,907	5,956	0	0	0	5,611	7,124	0	0	0
569_1323	0	0	0	0	0	0	0	1	0	0	0
572_574	2,978	3,130	4,946	0	0	0	2,784	4,386	0	0	0
572_840	239	261	505	0	0	0	265	553	0	0	0
573_840	0	0	0	0	0	0	0	0	0	0	0
598_8497	67	71	90	0	0	0	72	90	0	0	0
598_8495	1,903	1,905	4,582	0	0	0	2,529	4,973	0	0	0

599_8491	4,329	3,401	6,675	0	0	0	3,737	6,759	0	0	0
599_601	3,172	3,412	4,477	0	0	0	3,984	5,089	0	0	0
599_600	4,205	3,247	5,948	0	0	0	4,589	6,704	0	0	0
600_781	1,110	1,152	1,304	0	0	0	1,158	1,173	0	0	0
603_604	3,649	4,734	5,086	0	0	0	3,896	5,462	0	0	0
614_1373	9,564	9,020	12,741	0	0	0	9,921	12,357	0	0	0
614_1381	8,905	9,324	10,301	0	0	0	9,580	10,008	0	0	0
614_1382	557	661	816	0	0	0	662	818	0	0	0
615_1372	8,683	7,899	11,819	0	0	0	8,105	11,152	0	0	0
615_815	7,825	9,065	12,017	0	0	0	9,382	11,502	0	0	0
615_1390	9,689	9,684	12,419	0	0	0	10,292	12,409	0	0	0
615_1374	8,539	9,056	10,737	0	0	0	9,368	10,758	0	0	0
616_2526	3,731	3,673	3,325	0	0	0	3,578	3,083	0	0	0
616_1149	9,373	9,867	14,388	0	0	0	10,267	14,343	0	0	0
616_617	5,508	5,609	9,540	0	0	0	6,421	10,216	0	0	0
617_8411	1,768	2,109	3,834	0	0	0	2,635	4,575	0	0	0
618_9704	2,698	2,472	756	0	0	0	2,159	733	0	0	0
618_620	1,092	1,210	3,664	0	0	0	1,753	3,761	0	0	0
618_2521	3,047	3,276	3,850	0	0	0	3,125	3,626	0	0	0
619_8503	3,978	3,566	4,729	0	0	0	3,973	4,929	0	0	0
619_8467	2,719	2,925	1,867	0	0	0	2,633	2,237	0	0	0
619_9704	5,428	5,398	6,987	0	0	0	5,734	7,010	0	0	0
620_621	63	111	551	0	0	0	189	548	0	0	0
620_1322	639	626	2,231	0	0	0	1,011	2,324	0	0	0
621_8467	3,787	3,373	3,354	0	0	0	3,459	3,646	0	0	0
621_821	1,033	1,127	1,172	0	0	0	1,374	1,972	0	0	0
621_1005	3,302	3,247	3,176	0	0	0	3,090	3,239	0	0	0
622_1360	3,599	4,011	6,595	0	0	0	4,398	6,216	0	0	0
622_660	648	668	1,227	0	0	0	617	1,150	0	0	0
622_823	3,877	3,256	4,044	0	0	0	3,753	4,129	0	0	0
623_823	8,034	9,057	10,071	0	0	0	8,832	9,921	0	0	0
624_638	1,421	1,290	1,746	0	0	0	1,272	1,629	0	0	0
624_1003	5,492	4,985	5,549	0	0	0	5,196	5,692	0	0	0
625_626	2,648	2,412	2,562	0	0	0	2,745	3,246	0	0	0
625_1003	1,622	1,783	1,974	0	0	0	1,772	2,563	0	0	0
626_627	655	639	1,602	0	0	0	667	1,808	0	0	0
626_9722	3,689	3,527	4,270	0	0	0	3,793	4,764	0	0	0
626_680	5,525	5,463	5,637	0	0	0	5,456	5,525	0	0	0
654_682	24,499	25,205	32,216	0	0	0	25,190	32,315	0	0	0
655_9724	4,450	4,038	3,654	0	0	0	3,870	3,603	0	0	0
657_660	4,847	5,175	7,281	0	0	0	4,709	6,801	0	0	0
660_8470	4,784	5,070	5,921	0	0	0	4,476	5,751	0	0	0
681_688	20,054	19,435	22,829	0	0	0	18,139	20,677	0	0	0
681_827	10,004	13,251	15,170	0	0	0	12,456	15,143	0	0	0
682_688	22,242	23,035	29,211	0	0	0	22,280	28,954	0	0	0
682_878	3,397	3,259	3,264	0	0	0	3,330	3,829	0	0	0
687_8493	1,910	1,908	2,586	0	0	0	2,012	2,635	0	0	0
688_8429	772	767	1,277	0	0	0	816	1,177	0	0	0
772_8445	603	1,251	3,152	0	0	0	1,105	1,420	0	0	0
772_872	82	1,654	5,188	0	0	0	1,675	5,278	0	0	0
772_874	554	0	0	0	0	0	0	0	0	0	0
772_874_DS	0	0	0	0	0	0	1,210	2,537	0	0	0
773_873	2,361	2,121	2,108	0	0	0	429	329	0	0	0
774_814	4,812	4,805	5,314	0	0	0	4,298	5,001	0	0	0
773_775	3,556	3,240	3,149	0	0	0	4,734	4,361	0	0	0
626_787	0	0	0	0	0	0	0	0	0	0	0
804_8440	759	727	674	0	0	0	613	498	0	0	0
805_1381	9,273	8,790	12,547	0	0	0	9,681	12,161	0	0	0
805_1380	463	463	1,148	0	0	0	635	1,283	0	0	0
806_807	584	564	669	0	0	0	564	669	0	0	0
521_809	970	847	768	0	0	0	949	821	0	0	0
809_8440	17	19	273	0	0	0	19	423	0	0	0
514_814	4,021	4,231	4,677	0	0	0	3,475	4,263	0	0	0
814_8423	1,029	945	1,162	0	0	0	1,011	1,220	0	0	0
815_7014	0	8,866	12,031	0	0	0	9,111	12,298	0	0	0
815_1150	318	244	915	0	0	0	316	697	0	0	0
816_8424	1,165	1,308	1,709	0	0	0	1,185	1,714	0	0	0
821_860	1,033	1,127	1,172	0	0	0	1,374	1,972	0	0	0
823_8470	4,793	5,463	5,983	0	0	0	5,106	5,979	0	0	0
528_827	1,776	1,464	1,094	0	0	0	2,208	1,485	0	0	0
838_847	3,652	3,646	5,122	0	0	0	4,713	5,630	0	0	0
517_847	3,407	3,407	4,807	0	0	0	4,471	5,306	0	0	0
847_8428	728	743	937	0	0	0	747	949	0	0	0
851_8451	922	1,121	1,225	0	0	0	1,058	1,170	0	0	0
854_8463	1,148	858	1,947	0	0	0	939	2,238	0	0	0
854_9707	1,389	965	2,647	0	0	0	1,284	3,091	0	0	0
555_855	446	352	463	0	0	0	677	828	0	0	0
859_1005	5,583	4,866	6,444	0	0	0	5,047	7,253	0	0	0
860_8505	1,064	1,127	1,172	0	0	0	1,375	2,012	0	0	0
861_864	832	819	973	0	0	0	820	972	0	0	0
862_863	2,193	2,137	2,521	0	0	0	2,158	2,546	0	0	0
561_864	964	866	1,019	0	0	0	1,059	974	0	0	0
865_8505	1,195	1,205	2,034	0	0	0	1,316	1,867	0	0	0
868_895	1,803	1,692	2,486	0	0	0	2,359	2,786	0	0	0
508_868	2,254	2,430	2,600	0	0	0	2,874	3,157	0	0	0
894_8434	191	151	501	0	0	0	208	264	0	0	0
878_894	2,317	2,381	2,899	0	0	0	3,083	3,700	0	0	0
895_8434	1,573	1,550	1,780	0	0	0	1,894	2,131	0	0	0
895_8433	113	137	181	0	0	0	142	192	0	0	0
898_8497	63	67	78	0	0	0	68	79	0	0	0
1005_1322	592	659	1,343	0	0	0	527	1,354	0	0	0
1149_1371	8,849	9,147	12,564	0	0	0	9,531	11,791	0	0	0
1150_1152	1	2	188	0	0	0	2	193	0	0	0
1150_1151	317	242	740	0	0	0	314	519	0	0	0
1151_8514	1,845	2,061	2,994	0	0	0	2,080	3,017	0	0	0
507_1350	3,124	2,536	3,381	0	0	0	2,978	3,310	0	0	0
1360_8521	1,948	1,937	2,385	0	0	0	1,938	2,387	0	0	0
1370_8522	1,148	1,077	1,354	0	0	0	1,082	1,356	0	0	0
1370_8493	526	795	939	0	0	0	686	894	0	0	0
1371_1390	8,849	9,147	12,564	0	0	0	9,531	11,791	0	0	0
1373_1374	9,564	9,020	12,741	0	0	0	9,921	12,357	0	0	0
1374_1375	805	843	1,460	0	0	0	1,005	1,821	0	0	0
1375_1376	152	156	197	0	0	0	157	198	0	0	0
1375_1377	393	394	444	0	0	0	395	446	0	0	0
1375_1383	885	848	1,841	0	0	0	879	1,986	0	0	0
1376_1391	409	400	459	0	0	0	401	461	0	0	0
1380_1383	510	463	1,148	0	0	0	635	1,283	0	0	0
1383_8463	1,395	1,312	2,990	0	0	0	1,514	3,270	0	0	0
1376_1390	540	511	781	0	0	0	508	534	0	0	0
511_1501	17,501	15,526	19,315	0	0	0	12,318	15,659	0	0	0
1501_1503	18,973	18,698	22,422	0	0	0	19,849	24,534	0	0	0
1502_1504	2,781	529	729	0	0	0	218	187	0	0	0
509_1502	27,845	29,286	32,967	0	0	0	27,070	30,868	0	0	0
530_1503	13,182	11,111	13,369	0	0	0	11,353	13,791	0	0	0

1502_1503	19,011	18,899	21,824	0	0	0	14,008	18,155	0	0	0
1501_1504	36,474	34,224	41,736	0	0	0	32,167	40,192	0	0	0
1504_1505	0	0	0	0	0	0	0	0	0	0	0
1501_1505	0	0	0	0	0	0	0	0	0	0	0
1505_1506	0	0	0	0	0	0	0	0	0	0	0
1521_1522	3,763	3,444	4,082	0	0	0	3,448	4,086	0	0	0
2521_2522	3,047	3,276	3,850	0	0	0	3,125	3,626	0	0	0
2522_2523	3,047	3,276	3,850	0	0	0	3,125	3,626	0	0	0
618_2523	3,731	3,673	3,325	0	0	0	3,578	3,083	0	0	0
2523_2524	3,047	3,276	3,850	0	0	0	3,125	3,626	0	0	0
2524_2525	3,047	3,276	3,850	0	0	0	3,125	3,626	0	0	0
2525_2526	3,047	3,276	3,850	0	0	0	3,125	3,626	0	0	0
2523_2526	3,731	3,673	3,325	0	0	0	3,578	3,083	0	0	0
2526_2527	3,047	3,276	3,850	0	0	0	3,125	3,626	0	0	0
616_2527	3,047	3,276	3,850	0	0	0	3,125	3,626	0	0	0
681_2212	4,655	2,870	3,286	0	0	0	2,939	3,453	0	0	0
8411_8412	428	396	530	0	0	0	396	531	0	0	0
8411_8465	1,501	1,812	3,494	0	0	0	2,338	4,235	0	0	0
8411_8413	299	345	447	0	0	0	345	447	0	0	0
8414_8465	3,192	3,210	5,439	0	0	0	3,498	5,675	0	0	0
8414_8415	1,848	1,806	2,079	0	0	0	1,833	2,095	0	0	0
8414_9704	1,861	1,796	3,453	0	0	0	2,358	4,286	0	0	0
8416_8417	846	831	1,064	0	0	0	837	1,080	0	0	0
774_8416	1,311	1,219	1,583	0	0	0	1,257	1,616	0	0	0
8420_8421	591	566	634	0	0	0	568	639	0	0	0
8422_8423	632	629	766	0	0	0	630	768	0	0	0
8423_8424	913	834	1,038	0	0	0	900	1,095	0	0	0
8424_8425	643	660	825	0	0	0	661	825	0	0	0
8426_8457	9,485	10,299	13,103	0	0	0	9,635	12,034	0	0	0
8426_8427	402	413	551	0	0	0	414	552	0	0	0
8429_8430	664	634	788	0	0	0	636	791	0	0	0
8431_8432	170	184	215	0	0	0	185	218	0	0	0
894_8431	1,004	1,068	1,674	0	0	0	1,455	1,915	0	0	0
8434_8435	148	161	179	0	0	0	165	188	0	0	0
8436_9703	1,080	1,120	1,489	0	0	0	1,134	1,480	0	0	0
8436_8437	877	895	1,164	0	0	0	896	1,167	0	0	0
8438_8439	1,030	1,059	1,281	0	0	0	1,061	1,284	0	0	0
8438_8440	564	824	925	0	0	0	832	768	0	0	0
8441_8445	585	1,703	3,629	0	0	0	3,038	2,854	0	0	0
8441_8447	601	1,331	3,323	0	0	0	1,115	1,641	0	0	0
8441_8442	543	540	701	0	0	0	540	702	0	0	0
8443_8444	809	785	1,050	0	0	0	785	1,051	0	0	0
8445_8446	131	136	156	0	0	0	136	156	0	0	0
8447_8448	149	158	179	0	0	0	158	180	0	0	0
8449_8450	164	186	208	0	0	0	186	209	0	0	0
8449_9720	6,562	5,798	7,540	0	0	0	4,390	5,496	0	0	0
8451_8452	2,486	2,453	2,939	0	0	0	2,460	2,946	0	0	0
8453_8454	205	209	278	0	0	0	210	279	0	0	0
8455_8456	524	485	485	0	0	0	485	485	0	0	0
8457_8458	593	633	951	0	0	0	634	952	0	0	0
8463_8464	1,461	1,403	1,681	0	0	0	1,405	1,682	0	0	0
8465_8466	210	231	273	0	0	0	231	274	0	0	0
8467_8468	68	68	85	0	0	0	68	85	0	0	0
8470_8471	1,317	1,300	1,529	0	0	0	1,300	1,531	0	0	0
8491_8492	1,885	1,411	1,711	0	0	0	1,428	1,710	0	0	0
8491_8495	2,462	2,004	4,981	0	0	0	2,324	5,066	0	0	0
8493_8494	2,401	2,694	3,294	0	0	0	2,682	3,297	0	0	0
8495_8496	1,082	1,108	1,341	0	0	0	1,109	1,342	0	0	0
8497_8498	0	0	0	0	0	0	0	0	0	0	0
8503_8504	53	56	64	0	0	0	56	64	0	0	0
8505_8506	2,227	2,330	2,799	0	0	0	2,332	2,801	0	0	0
9701_9703	680	896	1,266	0	0	0	918	1,082	0	0	0
9707_9724	2,094	1,871	3,882	0	0	0	1,998	3,979	0	0	0
9720_9721	493	0	0	0	0	0	0	0	0	0	0
9720_9721_DS	0	0	0	0	0	0	2,012	3,505	0	0	0
9722_9723	2,285	2,162	2,524	0	0	0	2,164	2,499	0	0	0
9724_9725	5,582	5,321	6,287	0	0	0	5,327	6,292	0	0	0

Combined Local Accident Rate Subsection
Link Observed First Observed Local Severity Split
Name Accidents Accident Year Ratio Year

[Section 5] Input Data - Parameter File

COBAL Parameter File
Version 2,014.30

Cost Base Year
2010

Appraisal Period
60

Discount Rate
Years from Discount
Current Year Rate (%)
30 3.50
75 3.00
125 2.50

Cost per Casualty
Severity Cost
Fatal 1,640,134
Serious 184,305
Slight 14,208

Cost per Accident
Severity Insurance Administration Damage to Property
Urban Rural Motorway
Fatal 301 7,842 13,301 16,919
Serious 187 4,203 6,064 14,437
Slight 114 2,479 4,019 7,304
Damage 54 2,479 2,651 2,547
Police Cost
Urban Rural Motorway
Fatal 17,012 17,469 17,673
Serious 1,878 2,345 2,477
Slight 486 666 556
Damage 486 20 17

Compound Annual Rates of Growth of Accident Values
Range of Years Rate of Growth (%p.a.)
2010-2011 0.80

2011-2012	0.00
2012-2013	1.09
2013-2014	2.05
2014-2015	1.67
2015-2016	1.95
2016-2017	1.99
2017-2018	1.90
2018-2019	1.91
2019-2020	1.90
2020-2021	1.88
2021-2022	1.87
2022-2023	1.89
2023-2024	1.90
2024-2025	1.92
2025-2026	1.94
2026-2027	1.95
2027-2028	1.97
2028-2029	1.99
2029-2030	2.01
2030-2031	2.02
2031-2032	2.04
2032-2033	2.05
2033-2034	2.06
2034-2035	2.07
2035-2036	2.08
2036-2037	2.09
2037-2041	2.10
2041-2046	2.12
2046-2051	2.15
2051-2056	2.19
2056-2061	2.21
2061-2062	2.22
2062-2066	2.21
2066-2071	2.20
2071-2087	2.17
2087-2092	2.18
2092-2110	2.17

Number of Damage Only Accidents per PIA			
	Urban	Rural	Motorway
Damage	17.7	7.8	7.6

Link Only Accident Proportions

Base Year
2009

Road Type	Speed Limit (mph)	Accident Proportions		
		Fatal	Serious	Slight
1	50	0.019	0.104	0.877
1	60	0.019	0.104	0.877
1	70	0.019	0.104	0.877
1	80	0.019	0.104	0.877
2	50	0.019	0.104	0.877
2	60	0.019	0.104	0.877
2	70	0.019	0.104	0.877
2	80	0.019	0.104	0.877
3	50	0.019	0.104	0.877
3	60	0.019	0.104	0.877
3	70	0.019	0.104	0.877
3	80	0.019	0.104	0.877
4	30	0.014	0.145	0.841
4	40	0.014	0.145	0.841
4	50	0.046	0.206	0.748
4	60	0.046	0.206	0.748
4	70	0.046	0.206	0.748
4	80	0.046	0.206	0.748
5	30	0.014	0.145	0.841
5	40	0.014	0.145	0.841
5	50	0.046	0.206	0.748
5	60	0.046	0.206	0.748
5	70	0.046	0.206	0.748
5	80	0.046	0.206	0.748
6	30	0.014	0.145	0.841
6	40	0.014	0.145	0.841
6	50	0.046	0.206	0.748
6	60	0.046	0.206	0.748
6	70	0.046	0.206	0.748
6	80	0.046	0.206	0.748
7	30	0.014	0.145	0.841
7	40	0.014	0.145	0.841
7	50	0.046	0.206	0.748
7	60	0.046	0.206	0.748
7	70	0.046	0.206	0.748
7	80	0.046	0.206	0.748
8	30	0.014	0.145	0.841
8	40	0.014	0.145	0.841
8	50	0.046	0.206	0.748
8	60	0.046	0.206	0.748
8	70	0.046	0.206	0.748
8	80	0.046	0.206	0.748
9	30	0.010	0.145	0.846
9	40	0.010	0.145	0.846
9	50	0.026	0.193	0.780
9	60	0.026	0.193	0.780
9	70	0.026	0.193	0.780
9	80	0.026	0.193	0.780
10	30	0.017	0.135	0.849
10	40	0.017	0.135	0.849
10	50	0.028	0.135	0.837
10	60	0.028	0.135	0.837
10	70	0.028	0.135	0.837
10	80	0.028	0.135	0.837
11	30	0.017	0.135	0.849
11	40	0.017	0.135	0.849
11	50	0.028	0.135	0.837
11	60	0.028	0.135	0.837
11	70	0.028	0.135	0.837
11	80	0.028	0.135	0.837
12	30	0.017	0.135	0.849
12	40	0.017	0.135	0.849
12	50	0.028	0.135	0.837
12	60	0.028	0.135	0.837
12	70	0.028	0.135	0.837
12	80	0.028	0.135	0.837
13	30	0.017	0.135	0.849

13	40	0.017	0.135	0.849
13	50	0.028	0.135	0.837
13	60	0.028	0.135	0.837
13	70	0.028	0.135	0.837
13	80	0.028	0.135	0.837
14	30	0.017	0.135	0.849
14	40	0.017	0.135	0.849
14	50	0.028	0.135	0.837
14	60	0.028	0.135	0.837
14	70	0.028	0.135	0.837
14	80	0.028	0.135	0.837
15	30	0.017	0.135	0.849
15	40	0.017	0.135	0.849
15	50	0.028	0.135	0.837
15	60	0.028	0.135	0.837
15	70	0.028	0.135	0.837
15	80	0.028	0.135	0.837

Link and Junction Combined Accident Proportions

Base Year
2009

Road Type	Speed Limit (mph)	Accident Proportions		
		Fatal	Serious	Slight
1	50	0.018	0.101	0.882
1	60	0.018	0.101	0.882
1	70	0.018	0.101	0.882
1	80	0.018	0.101	0.882
2	50	0.018	0.101	0.882
2	60	0.018	0.101	0.882
2	70	0.018	0.101	0.882
2	80	0.018	0.101	0.882
3	50	0.018	0.101	0.882
3	60	0.018	0.101	0.882
3	70	0.018	0.101	0.882
3	80	0.018	0.101	0.882
4	30	0.008	0.122	0.869
4	40	0.008	0.122	0.869
4	50	0.034	0.187	0.779
4	60	0.034	0.187	0.779
4	70	0.034	0.187	0.779
4	80	0.034	0.187	0.779
5	30	0.008	0.122	0.869
5	40	0.008	0.122	0.869
5	50	0.034	0.187	0.779
5	60	0.034	0.187	0.779
5	70	0.034	0.187	0.779
5	80	0.034	0.187	0.779
6	30	0.008	0.122	0.869
6	40	0.008	0.122	0.869
6	50	0.034	0.187	0.779
6	60	0.034	0.187	0.779
6	70	0.034	0.187	0.779
6	80	0.034	0.187	0.779
7	30	0.008	0.122	0.869
7	40	0.008	0.122	0.869
7	50	0.034	0.187	0.779
7	60	0.034	0.187	0.779
7	70	0.034	0.187	0.779
7	80	0.034	0.187	0.779
8	30	0.008	0.122	0.869
8	40	0.008	0.122	0.869
8	50	0.034	0.187	0.779
8	60	0.034	0.187	0.779
8	70	0.034	0.187	0.779
8	80	0.034	0.187	0.779
9	30	0.007	0.126	0.867
9	40	0.007	0.126	0.867
9	50	0.024	0.187	0.789
9	60	0.024	0.187	0.789
9	70	0.024	0.187	0.789
9	80	0.024	0.187	0.789
10	30	0.009	0.104	0.887
10	40	0.009	0.104	0.887
10	50	0.023	0.127	0.850
10	60	0.023	0.127	0.850
10	70	0.023	0.127	0.850
10	80	0.023	0.127	0.850
11	30	0.009	0.104	0.887
11	40	0.009	0.104	0.887
11	50	0.023	0.127	0.850
11	60	0.023	0.127	0.850
11	70	0.023	0.127	0.850
11	80	0.023	0.127	0.850
12	30	0.009	0.104	0.887
12	40	0.009	0.104	0.887
12	50	0.023	0.127	0.850
12	60	0.023	0.127	0.850
12	70	0.023	0.127	0.850
12	80	0.023	0.127	0.850
13	30	0.009	0.104	0.887
13	40	0.009	0.104	0.887
13	50	0.023	0.127	0.850
13	60	0.023	0.127	0.850
13	70	0.023	0.127	0.850
13	80	0.023	0.127	0.850
14	30	0.009	0.104	0.887
14	40	0.009	0.104	0.887
14	50	0.023	0.127	0.850
14	60	0.023	0.127	0.850
14	70	0.023	0.127	0.850
14	80	0.023	0.127	0.850
15	30	0.009	0.104	0.887
15	40	0.009	0.104	0.887
15	50	0.023	0.127	0.850
15	60	0.023	0.127	0.850
15	70	0.023	0.127	0.850
15	80	0.023	0.127	0.850

Junction Only Accident Proportions

Base Year
2000

Road Type	Speed Limit (mph)	Accident Proportions		
		Fatal	Serious	Slight
1	50	0.024	0.188	0.787

1	60	0.024	0.188	0.787
1	70	0.024	0.188	0.787
1	80	0.024	0.188	0.787
2	30	0.007	0.124	0.869
2	40	0.007	0.124	0.869
3	50	0.024	0.188	0.787
3	60	0.024	0.188	0.787
3	70	0.024	0.188	0.787
3	80	0.024	0.188	0.787
4	30	0.007	0.124	0.869
4	40	0.007	0.124	0.869
5	50	0.027	0.206	0.766
5	60	0.027	0.206	0.766
5	70	0.027	0.206	0.766
5	80	0.027	0.206	0.766
6	30	0.006	0.116	0.878
6	40	0.006	0.116	0.878
7	50	0.027	0.206	0.766
7	60	0.027	0.206	0.766
7	70	0.027	0.206	0.766
7	80	0.027	0.206	0.766
8	30	0.006	0.116	0.878
8	40	0.006	0.116	0.878
9	50	0.027	0.206	0.766
9	60	0.027	0.206	0.766
9	70	0.027	0.206	0.766
9	80	0.027	0.206	0.766
10	30	0.006	0.116	0.878
10	40	0.006	0.116	0.878
11	50	0.027	0.206	0.766
11	60	0.027	0.206	0.766
11	70	0.027	0.206	0.766
11	80	0.027	0.206	0.766
12	30	0.006	0.116	0.878
12	40	0.006	0.116	0.878
13	50	0.024	0.188	0.787
13	60	0.024	0.188	0.787
13	70	0.024	0.188	0.787
13	80	0.024	0.188	0.787
14	30	0.007	0.124	0.869
14	40	0.007	0.124	0.869
15	50	0.024	0.188	0.787
15	60	0.024	0.188	0.787
15	70	0.024	0.188	0.787
15	80	0.024	0.188	0.787
16	30	0.007	0.124	0.869
16	40	0.007	0.124	0.869
17	50	0.027	0.206	0.766
17	60	0.027	0.206	0.766
17	70	0.027	0.206	0.766
17	80	0.027	0.206	0.766
18	30	0.006	0.116	0.878
18	40	0.006	0.116	0.878
19	50	0.027	0.206	0.766
19	60	0.027	0.206	0.766
19	70	0.027	0.206	0.766
19	80	0.027	0.206	0.766
20	30	0.006	0.116	0.878
20	40	0.006	0.116	0.878
21	50	0.027	0.206	0.766
21	60	0.027	0.206	0.766
21	70	0.027	0.206	0.766
21	80	0.027	0.206	0.766
22	30	0.006	0.116	0.878
22	40	0.006	0.116	0.878
23	50	0.027	0.206	0.766
23	60	0.027	0.206	0.766
23	70	0.027	0.206	0.766
23	80	0.027	0.206	0.766
24	30	0.006	0.116	0.878
24	40	0.006	0.116	0.878
25	50	0.024	0.188	0.787
25	60	0.024	0.188	0.787
25	70	0.024	0.188	0.787
25	80	0.024	0.188	0.787
26	30	0.007	0.124	0.869
26	40	0.007	0.124	0.869
27	50	0.024	0.188	0.787
27	60	0.024	0.188	0.787
27	70	0.024	0.188	0.787
27	80	0.024	0.188	0.787
28	30	0.007	0.124	0.869
28	40	0.007	0.124	0.869
29	50	0.027	0.206	0.766
29	60	0.027	0.206	0.766
29	70	0.027	0.206	0.766
29	80	0.027	0.206	0.766
30	30	0.006	0.116	0.878
30	40	0.006	0.116	0.878
31	50	0.027	0.206	0.766
31	60	0.027	0.206	0.766
31	70	0.027	0.206	0.766
31	80	0.027	0.206	0.766
32	30	0.006	0.116	0.878
32	40	0.006	0.116	0.878
33	50	0.027	0.206	0.766
33	60	0.027	0.206	0.766
33	70	0.027	0.206	0.766
33	80	0.027	0.206	0.766
34	30	0.006	0.116	0.878
34	40	0.006	0.116	0.878
35	50	0.027	0.206	0.766
35	60	0.027	0.206	0.766
35	70	0.027	0.206	0.766
35	80	0.027	0.206	0.766
36	30	0.006	0.116	0.878
36	40	0.006	0.116	0.878
37	50	0.009	0.117	0.874
37	60	0.009	0.117	0.874
37	70	0.009	0.117	0.874
37	80	0.009	0.117	0.874
38	30	0.006	0.107	0.887
38	40	0.006	0.107	0.887
39	50	0.009	0.117	0.874

39	60	0.009	0.117	0.874
39	70	0.009	0.117	0.874
39	80	0.009	0.117	0.874
40	30	0.006	0.107	0.887
40	40	0.006	0.107	0.887
41	50	0.009	0.115	0.876
41	60	0.009	0.115	0.876
41	70	0.009	0.115	0.876
41	80	0.009	0.115	0.876
42	30	0.006	0.107	0.887
42	40	0.006	0.107	0.887
43	50	0.009	0.115	0.876
43	60	0.009	0.115	0.876
43	70	0.009	0.115	0.876
43	80	0.009	0.115	0.876
44	30	0.006	0.107	0.887
44	40	0.006	0.107	0.887
45	50	0.009	0.115	0.876
45	60	0.009	0.115	0.876
45	70	0.009	0.115	0.876
45	80	0.009	0.115	0.876
46	30	0.006	0.107	0.887
46	40	0.006	0.107	0.887
47	50	0.009	0.115	0.876
47	60	0.009	0.115	0.876
47	70	0.009	0.115	0.876
47	80	0.009	0.115	0.876
48	30	0.006	0.107	0.887
48	40	0.006	0.107	0.887
49	50	0.006	0.091	0.903
49	60	0.006	0.091	0.903
49	70	0.006	0.091	0.903
49	80	0.006	0.091	0.903
50	30	0.003	0.075	0.923
50	40	0.003	0.075	0.923
51	50	0.006	0.091	0.903
51	60	0.006	0.091	0.903
51	70	0.006	0.091	0.903
51	80	0.006	0.091	0.903
52	30	0.003	0.075	0.923
52	40	0.003	0.075	0.923
53	50	0.006	0.091	0.903
53	60	0.006	0.091	0.903
53	70	0.006	0.091	0.903
53	80	0.006	0.091	0.903
54	30	0.003	0.075	0.923
54	40	0.003	0.075	0.923
55	50	0.006	0.091	0.903
55	60	0.006	0.091	0.903
55	70	0.006	0.091	0.903
55	80	0.006	0.091	0.903
56	30	0.003	0.075	0.923
56	40	0.003	0.075	0.923
57	50	0.006	0.091	0.903
57	60	0.006	0.091	0.903
57	70	0.006	0.091	0.903
57	80	0.006	0.091	0.903
58	30	0.003	0.075	0.923
58	40	0.003	0.075	0.923
59	50	0.006	0.091	0.903
59	60	0.006	0.091	0.903
59	70	0.006	0.091	0.903
59	80	0.006	0.091	0.903
60	30	0.003	0.075	0.923
60	40	0.003	0.075	0.923
61	50	0.006	0.091	0.903
61	60	0.006	0.091	0.903
61	70	0.006	0.091	0.903
61	80	0.006	0.091	0.903
62	30	0.003	0.075	0.923
62	40	0.003	0.075	0.923
63	50	0.006	0.091	0.903
63	60	0.006	0.091	0.903
63	70	0.006	0.091	0.903
63	80	0.006	0.091	0.903
64	30	0.003	0.075	0.923
64	40	0.003	0.075	0.923
65	50	0.006	0.091	0.903
65	60	0.006	0.091	0.903
65	70	0.006	0.091	0.903
65	80	0.006	0.091	0.903
66	30	0.003	0.075	0.923
66	40	0.003	0.075	0.923
67	50	0.006	0.091	0.903
67	60	0.006	0.091	0.903
67	70	0.006	0.091	0.903
67	80	0.006	0.091	0.903
68	30	0.003	0.075	0.923
68	40	0.003	0.075	0.923
69	50	0.006	0.091	0.903
69	60	0.006	0.091	0.903
69	70	0.006	0.091	0.903
69	80	0.006	0.091	0.903
70	30	0.003	0.075	0.923
70	40	0.003	0.075	0.923
71	50	0.006	0.091	0.903
71	60	0.006	0.091	0.903
71	70	0.006	0.091	0.903
71	80	0.006	0.091	0.903
72	30	0.003	0.075	0.923
72	40	0.003	0.075	0.923
73	50	0.006	0.091	0.903
73	60	0.006	0.091	0.903
73	70	0.006	0.091	0.903
73	80	0.006	0.091	0.903
74	30	0.003	0.087	0.910
74	40	0.003	0.087	0.910
75	50	0.006	0.091	0.903
75	60	0.006	0.091	0.903
75	70	0.006	0.091	0.903
75	80	0.006	0.091	0.903
76	30	0.003	0.087	0.910
76	40	0.003	0.087	0.910
77	50	0.006	0.091	0.903

77	60	0.006	0.091	0.903
77	70	0.006	0.091	0.903
77	80	0.006	0.091	0.903
78	30	0.003	0.087	0.910
78	40	0.003	0.087	0.910
79	50	0.006	0.091	0.903
79	60	0.006	0.091	0.903
79	70	0.006	0.091	0.903
79	80	0.006	0.091	0.903
80	30	0.003	0.087	0.910
80	40	0.003	0.087	0.910
81	50	0.006	0.091	0.903
81	60	0.006	0.091	0.903
81	70	0.006	0.091	0.903
81	80	0.006	0.091	0.903
82	30	0.003	0.087	0.910
82	40	0.003	0.087	0.910
83	50	0.006	0.091	0.903
83	60	0.006	0.091	0.903
83	70	0.006	0.091	0.903
83	80	0.006	0.091	0.903
84	30	0.003	0.087	0.910
84	40	0.003	0.087	0.910
85	50	0.004	0.062	0.934
85	60	0.004	0.062	0.934
85	70	0.004	0.062	0.934
85	80	0.004	0.062	0.934
86	30	0.003	0.064	0.933
86	40	0.003	0.064	0.933
87	50	0.004	0.062	0.934
87	60	0.004	0.062	0.934
87	70	0.004	0.062	0.934
87	80	0.004	0.062	0.934
88	30	0.003	0.064	0.933
88	40	0.003	0.064	0.933
89	50	0.004	0.062	0.934
89	60	0.004	0.062	0.934
89	70	0.004	0.062	0.934
89	80	0.004	0.062	0.934
90	30	0.003	0.064	0.933
90	40	0.003	0.064	0.933
91	50	0.004	0.062	0.934
91	60	0.004	0.062	0.934
91	70	0.004	0.062	0.934
91	80	0.004	0.062	0.934
92	30	0.003	0.064	0.933
92	40	0.003	0.064	0.933
93	50	0.004	0.062	0.934
93	60	0.004	0.062	0.934
93	70	0.004	0.062	0.934
93	80	0.004	0.062	0.934
94	30	0.003	0.064	0.933
94	40	0.003	0.064	0.933
95	50	0.004	0.062	0.934
95	60	0.004	0.062	0.934
95	70	0.004	0.062	0.934
95	80	0.004	0.062	0.934
96	30	0.003	0.064	0.933
96	40	0.003	0.064	0.933

Link Only Accident Rates and Change Factors
Base Year

Road Type	Speed Limit (mph)	Accident Rate	Beta Factor
1	50	0.063	0.956
1	60	0.063	0.956
1	70	0.063	0.956
2	50	0.063	0.956
2	60	0.063	0.956
2	70	0.063	0.956
3	50	0.075	0.956
3	60	0.075	0.956
3	70	0.075	0.956
4	30	0.175	0.964
4	40	0.175	0.964
4	50	0.143	0.958
4	60	0.143	0.958
4	70	0.143	0.958
4	80	0.143	0.958
5	30	0.175	0.964
5	40	0.175	0.964
5	50	0.143	0.958
5	60	0.143	0.958
5	70	0.143	0.958
5	80	0.143	0.958
6	30	0.206	0.964
6	40	0.206	0.964
6	50	0.082	0.958
6	60	0.082	0.958
6	70	0.082	0.958
6	80	0.082	0.958
7	30	0.206	0.964
7	40	0.206	0.964
7	50	0.082	0.958
7	60	0.082	0.958
7	70	0.082	0.958
7	80	0.082	0.958
8	30	0.206	0.964
8	40	0.206	0.964
8	50	0.143	0.958
8	60	0.143	0.958
8	70	0.143	0.958
8	80	0.143	0.958
9	30	0.195	0.957
9	40	0.195	0.957
9	50	0.163	0.935
9	60	0.163	0.935
9	70	0.163	0.935
9	80	0.163	0.935
10	30	0.148	0.965
10	40	0.148	0.965
10	50	0.077	0.960
10	60	0.077	0.960

10	70	0.077	0.960
10	80	0.077	0.960
11	30	0.154	0.965
11	40	0.154	0.965
11	50	0.059	0.960
11	60	0.059	0.960
11	70	0.059	0.960
11	80	0.059	0.960
12	30	0.154	0.965
12	40	0.154	0.965
12	50	0.077	0.960
12	60	0.077	0.960
12	70	0.077	0.960
12	80	0.077	0.960
13	30	0.184	0.949
13	40	0.184	0.949
13	50	0.101	0.956
13	60	0.101	0.956
13	70	0.101	0.956
13	80	0.101	0.956
14	30	0.184	0.949
14	40	0.184	0.949
14	50	0.101	0.956
14	60	0.101	0.956
14	70	0.101	0.956
14	80	0.101	0.956
15	30	0.184	0.949
15	40	0.184	0.949
15	50	0.101	0.956
15	60	0.101	0.956
15	70	0.101	0.956
15	80	0.101	0.956

Link and Junction Combined Accident Rates and Change Factors
Base Year

2009 Road Type	Speed Limit (mph)	Accident Rate	Beta Factor
1	50	0.080	0.956
1	60	0.080	0.956
1	70	0.080	0.956
2	50	0.067	0.956
2	60	0.067	0.956
2	70	0.067	0.956
3	50	0.079	0.956
3	60	0.079	0.956
3	70	0.079	0.956
4	30	0.532	0.959
4	40	0.532	0.959
4	50	0.244	0.955
4	60	0.244	0.955
4	70	0.244	0.955
4	80	0.244	0.955
5	30	0.532	0.959
5	40	0.532	0.959
5	50	0.244	0.955
5	60	0.244	0.955
5	70	0.244	0.955
5	80	0.244	0.955
6	30	0.863	0.959
6	40	0.863	0.959
6	50	0.163	0.955
6	60	0.163	0.955
6	70	0.163	0.955
6	80	0.163	0.955
7	30	0.863	0.959
7	40	0.863	0.959
7	50	0.163	0.955
7	60	0.163	0.955
7	70	0.163	0.955
7	80	0.163	0.955
8	30	0.863	0.959
8	40	0.863	0.959
8	50	0.244	0.955
8	60	0.244	0.955
8	70	0.244	0.955
8	80	0.244	0.955
9	30	0.559	0.951
9	40	0.559	0.951
9	50	0.233	0.933
9	60	0.233	0.933
9	70	0.233	0.933
9	80	0.233	0.933
10	30	0.553	0.967
10	40	0.553	0.967
10	50	0.107	0.956
10	60	0.107	0.956
10	70	0.107	0.956
10	80	0.107	0.956
11	30	0.599	0.967
11	40	0.599	0.967
11	50	0.072	0.956
11	60	0.072	0.956
11	70	0.072	0.956
11	80	0.072	0.956
12	30	0.599	0.967
12	40	0.599	0.967
12	50	0.107	0.956
12	60	0.107	0.956
12	70	0.107	0.956
12	80	0.107	0.956
13	30	0.620	0.951
13	40	0.620	0.951
13	50	0.123	0.946
13	60	0.123	0.946
13	70	0.123	0.946
13	80	0.123	0.946
14	30	0.620	0.951
14	40	0.620	0.951
14	50	0.123	0.946
14	60	0.123	0.946
14	70	0.123	0.946
14	80	0.123	0.946
15	30	0.620	0.951

15	40	0.620	0.951
15	50	0.123	0.946
15	60	0.123	0.946
15	70	0.123	0.946
15	80	0.123	0.946

Link Only and Link and Junction Combined Accident Beta Factor Changes over Time

Range of Years	Change to Beta Factor
2004-2019	1.000
2020-2029	0.500
2030-2039	0.250
2040-2153	0.000

Link Only Casualty Rates

Base Year

2009

Road Type	Speed Limit (mph)	Casualties per P.I.A.		
		Fatal	Serious	Slight
1	50	0.021	0.129	1.464
1	60	0.021	0.129	1.464
1	70	0.021	0.129	1.464
2	50	0.021	0.129	1.464
2	60	0.021	0.129	1.464
2	70	0.021	0.129	1.464
3	50	0.021	0.129	1.464
3	60	0.021	0.129	1.464
3	70	0.021	0.129	1.464
4	30	0.015	0.162	1.154
4	40	0.015	0.162	1.154
4	50	0.052	0.274	1.251
4	60	0.052	0.274	1.251
4	70	0.052	0.274	1.251
4	80	0.052	0.274	1.251
5	30	0.015	0.162	1.154
5	40	0.015	0.162	1.154
5	50	0.052	0.274	1.251
5	60	0.052	0.274	1.251
5	70	0.052	0.274	1.251
5	80	0.052	0.274	1.251
6	30	0.015	0.162	1.154
6	40	0.015	0.162	1.154
6	50	0.052	0.274	1.251
6	60	0.052	0.274	1.251
6	70	0.052	0.274	1.251
6	80	0.052	0.274	1.251
7	30	0.015	0.162	1.154
7	40	0.015	0.162	1.154
7	50	0.052	0.274	1.251
7	60	0.052	0.274	1.251
7	70	0.052	0.274	1.251
7	80	0.052	0.274	1.251
8	30	0.015	0.162	1.154
8	40	0.015	0.162	1.154
8	50	0.052	0.274	1.251
8	60	0.052	0.274	1.251
8	70	0.052	0.274	1.251
8	80	0.052	0.274	1.251
9	30	0.010	0.156	1.071
9	40	0.010	0.156	1.071
9	50	0.028	0.230	1.178
9	60	0.028	0.230	1.178
9	70	0.028	0.230	1.178
9	80	0.028	0.230	1.178
10	30	0.018	0.148	1.183
10	40	0.018	0.148	1.183
10	50	0.031	0.161	1.328
10	60	0.031	0.161	1.328
10	70	0.031	0.161	1.328
10	80	0.031	0.161	1.328
11	30	0.018	0.148	1.183
11	40	0.018	0.148	1.183
11	50	0.031	0.161	1.328
11	60	0.031	0.161	1.328
11	70	0.031	0.161	1.328
11	80	0.031	0.161	1.328
12	30	0.018	0.148	1.183
12	40	0.018	0.148	1.183
12	50	0.031	0.161	1.328
12	60	0.031	0.161	1.328
12	70	0.031	0.161	1.328
12	80	0.031	0.161	1.328
13	30	0.018	0.148	1.183
13	40	0.018	0.148	1.183
13	50	0.031	0.161	1.328
13	60	0.031	0.161	1.328
13	70	0.031	0.161	1.328
13	80	0.031	0.161	1.328
14	30	0.018	0.148	1.183
14	40	0.018	0.148	1.183
14	50	0.031	0.161	1.328
14	60	0.031	0.161	1.328
14	70	0.031	0.161	1.328
14	80	0.031	0.161	1.328
15	30	0.018	0.148	1.183
15	40	0.018	0.148	1.183
15	50	0.031	0.161	1.328
15	60	0.031	0.161	1.328
15	70	0.031	0.161	1.328
15	80	0.031	0.161	1.328

Link and Junction Combined Casualty Rates

Base Year

2009

Road Type	Speed Limit (mph)	Casualties per P.I.A.		
		Fatal	Serious	Slight
1	50	0.020	0.123	1.455
1	60	0.020	0.123	1.455
1	70	0.020	0.123	1.455
2	50	0.020	0.123	1.455
2	60	0.020	0.123	1.455
2	70	0.020	0.123	1.455
3	50	0.020	0.123	1.455
3	60	0.020	0.123	1.455
3	70	0.020	0.123	1.455

4	30	0.009	0.132	1.176
4	40	0.009	0.132	1.176
4	50	0.038	0.238	1.300
4	60	0.038	0.238	1.300
4	70	0.038	0.238	1.300
4	80	0.038	0.238	1.300
5	30	0.009	0.132	1.176
5	40	0.009	0.132	1.176
5	50	0.038	0.238	1.300
5	60	0.038	0.238	1.300
5	70	0.038	0.238	1.300
5	80	0.038	0.238	1.300
6	30	0.009	0.132	1.176
6	40	0.009	0.132	1.176
6	50	0.038	0.238	1.300
6	60	0.038	0.238	1.300
6	70	0.038	0.238	1.300
6	80	0.038	0.238	1.300
7	30	0.009	0.132	1.176
7	40	0.009	0.132	1.176
7	50	0.038	0.238	1.300
7	60	0.038	0.238	1.300
7	70	0.038	0.238	1.300
7	80	0.038	0.238	1.300
8	30	0.009	0.132	1.176
8	40	0.009	0.132	1.176
8	50	0.038	0.238	1.300
8	60	0.038	0.238	1.300
8	70	0.038	0.238	1.300
8	80	0.038	0.238	1.300
9	30	0.007	0.134	1.132
9	40	0.007	0.134	1.132
9	50	0.026	0.222	1.218
9	60	0.026	0.222	1.218
9	70	0.026	0.222	1.218
9	80	0.026	0.222	1.218
10	30	0.009	0.112	1.238
10	40	0.009	0.112	1.238
10	50	0.025	0.151	1.297
10	60	0.025	0.151	1.297
10	70	0.025	0.151	1.297
10	80	0.025	0.151	1.297
11	30	0.009	0.112	1.238
11	40	0.009	0.112	1.238
11	50	0.025	0.151	1.297
11	60	0.025	0.151	1.297
11	70	0.025	0.151	1.297
11	80	0.025	0.151	1.297
12	30	0.009	0.112	1.238
12	40	0.009	0.112	1.238
12	50	0.025	0.151	1.297
12	60	0.025	0.151	1.297
12	70	0.025	0.151	1.297
12	80	0.025	0.151	1.297
13	30	0.009	0.112	1.238
13	40	0.009	0.112	1.238
13	50	0.025	0.151	1.297
13	60	0.025	0.151	1.297
13	70	0.025	0.151	1.297
13	80	0.025	0.151	1.297
14	30	0.009	0.112	1.238
14	40	0.009	0.112	1.238
14	50	0.025	0.151	1.297
14	60	0.025	0.151	1.297
14	70	0.025	0.151	1.297
14	80	0.025	0.151	1.297
15	30	0.009	0.112	1.238
15	40	0.009	0.112	1.238
15	50	0.025	0.151	1.297
15	60	0.025	0.151	1.297
15	70	0.025	0.151	1.297
15	80	0.025	0.151	1.297

Link Only Casualty Change Factors

Base Year

2009

Road Type	Speed Limit (mph)	Beta Factor		
		Fatal	Serious	Slight
1	50	0.978	0.979	1.002
1	60	0.978	0.979	1.002
1	70	0.978	0.979	1.002
2	50	0.978	0.979	1.002
2	60	0.978	0.979	1.002
2	70	0.978	0.979	1.002
3	50	0.978	0.979	1.002
3	60	0.978	0.979	1.002
3	70	0.978	0.979	1.002
4	30	0.971	0.995	1.001
4	40	0.971	0.995	1.001
4	50	0.979	0.983	1.002
4	60	0.979	0.983	1.002
4	70	0.979	0.983	1.002
4	80	0.979	0.983	1.002
5	30	0.971	0.995	1.001
5	40	0.971	0.995	1.001
5	50	0.979	0.983	1.002
5	60	0.979	0.983	1.002
5	70	0.979	0.983	1.002
5	80	0.979	0.983	1.002
6	30	0.971	0.995	1.001
6	40	0.971	0.995	1.001
6	50	0.979	0.983	1.002
6	60	0.979	0.983	1.002
6	70	0.979	0.983	1.002
6	80	0.979	0.983	1.002
7	30	0.971	0.995	1.001
7	40	0.971	0.995	1.001
7	50	0.979	0.983	1.002
7	60	0.979	0.983	1.002
7	70	0.979	0.983	1.002
7	80	0.979	0.983	1.002
8	30	0.971	0.995	1.001
8	40	0.971	0.995	1.001
8	50	0.979	0.983	1.002

8	60	0.979	0.983	1.002
8	70	0.979	0.983	1.002
8	80	0.979	0.983	1.002
9	30	0.985	0.997	1.001
9	40	0.985	0.997	1.001
9	50	0.987	0.989	0.998
9	60	0.987	0.989	0.998
9	70	0.987	0.989	0.998
9	80	0.987	0.989	0.998
10	30	0.998	0.990	1.002
10	40	0.998	0.990	1.002
10	50	0.984	0.985	0.998
10	60	0.984	0.985	0.998
10	70	0.984	0.985	0.998
10	80	0.984	0.985	0.998
11	30	0.998	0.990	1.002
11	40	0.998	0.990	1.002
11	50	0.984	0.985	0.998
11	60	0.984	0.985	0.998
11	70	0.984	0.985	0.998
11	80	0.984	0.985	0.998
12	30	0.998	0.990	1.002
12	40	0.998	0.990	1.002
12	50	0.984	0.985	0.998
12	60	0.984	0.985	0.998
12	70	0.984	0.985	0.998
12	80	0.984	0.985	0.998
13	30	0.998	0.990	1.002
13	40	0.998	0.990	1.002
13	50	0.984	0.985	0.998
13	60	0.984	0.985	0.998
13	70	0.984	0.985	0.998
13	80	0.984	0.985	0.998
14	30	0.998	0.990	1.002
14	40	0.998	0.990	1.002
14	50	0.984	0.985	0.998
14	60	0.984	0.985	0.998
14	70	0.984	0.985	0.998
14	80	0.984	0.985	0.998
15	30	0.998	0.990	1.002
15	40	0.998	0.990	1.002
15	50	0.984	0.985	0.998
15	60	0.984	0.985	0.998
15	70	0.984	0.985	0.998
15	80	0.984	0.985	0.998

Link and Junction Combined Casualty Change Factors

Base Year

2009

Road Type	Speed Limit (mph)	Beta Factor		
		Fatal	Serious	Slight
1	50	0.978	0.979	1.002
1	60	0.978	0.979	1.002
1	70	0.978	0.979	1.002
2	50	0.978	0.979	1.002
2	60	0.978	0.979	1.002
2	70	0.978	0.979	1.002
3	50	0.978	0.979	1.002
3	60	0.978	0.979	1.002
3	70	0.978	0.979	1.002
4	30	0.971	0.995	1.001
4	40	0.971	0.995	1.001
4	50	0.979	0.983	1.002
4	60	0.979	0.983	1.002
4	70	0.979	0.983	1.002
4	80	0.979	0.983	1.002
5	30	0.971	0.995	1.001
5	40	0.971	0.995	1.001
5	50	0.979	0.983	1.002
5	60	0.979	0.983	1.002
5	70	0.979	0.983	1.002
5	80	0.979	0.983	1.002
6	30	0.971	0.995	1.001
6	40	0.971	0.995	1.001
6	50	0.979	0.983	1.002
6	60	0.979	0.983	1.002
6	70	0.979	0.983	1.002
6	80	0.979	0.983	1.002
7	30	0.971	0.995	1.001
7	40	0.971	0.995	1.001
7	50	0.979	0.983	1.002
7	60	0.979	0.983	1.002
7	70	0.979	0.983	1.002
7	80	0.979	0.983	1.002
8	30	0.971	0.995	1.001
8	40	0.971	0.995	1.001
8	50	0.979	0.983	1.002
8	60	0.979	0.983	1.002
8	70	0.979	0.983	1.002
8	80	0.979	0.983	1.002
9	30	0.985	0.997	1.001
9	40	0.985	0.997	1.001
9	50	0.987	0.989	0.998
9	60	0.987	0.989	0.998
9	70	0.987	0.989	0.998
9	80	0.987	0.989	0.998
10	30	0.998	0.990	1.002
10	40	0.998	0.990	1.002
10	50	0.984	0.985	0.998
10	60	0.984	0.985	0.998
10	70	0.984	0.985	0.998
10	80	0.984	0.985	0.998
11	30	0.998	0.990	1.002
11	40	0.998	0.990	1.002
11	50	0.984	0.985	0.998
11	60	0.984	0.985	0.998
11	70	0.984	0.985	0.998
11	80	0.984	0.985	0.998
12	30	0.998	0.990	1.002
12	40	0.998	0.990	1.002
12	50	0.984	0.985	0.998
12	60	0.984	0.985	0.998
12	70	0.984	0.985	0.998
12	80	0.984	0.985	0.998

13	30	0.998	0.990	1.002
13	40	0.998	0.990	1.002
13	50	0.984	0.985	0.998
13	60	0.984	0.985	0.998
13	70	0.984	0.985	0.998
13	80	0.984	0.985	0.998
14	30	0.998	0.990	1.002
14	40	0.998	0.990	1.002
14	50	0.984	0.985	0.998
14	60	0.984	0.985	0.998
14	70	0.984	0.985	0.998
14	80	0.984	0.985	0.998
15	30	0.998	0.990	1.002
15	40	0.998	0.990	1.002
15	50	0.984	0.985	0.998
15	60	0.984	0.985	0.998
15	70	0.984	0.985	0.998
15	80	0.984	0.985	0.998

Link Only and Link and Junction Combined Casualty Beta Factor Changes over Time
 Range of Years 1995-2019 Change to Beta Factor 1.000
 2020-2144 0.000

Junction Only Accident Parameters

Base Year

1997

Junction Type	Speed Limit (mph)	Coefficient 'a'	Power 'b'	Arms	Highest Link (S/D)	Formula Type
1	50	0.195	0.460	3	S	C
1	60	0.195	0.460	3	S	C
1	70	0.195	0.460	3	S	C
1	80	0.195	0.460	3	S	C
2	20	0.195	0.460	3	S	C
2	30	0.195	0.460	3	S	C
2	40	0.195	0.460	3	S	C
3	50	0.195	0.460	3	D	C
3	60	0.195	0.460	3	D	C
3	70	0.195	0.460	3	D	C
3	80	0.195	0.460	3	D	C
4	20	0.195	0.460	3	D	C
4	30	0.195	0.460	3	D	C
4	40	0.195	0.460	3	D	C
5	50	0.361	0.440	4	S	I
5	60	0.361	0.440	4	S	I
5	70	0.361	0.440	4	S	I
5	80	0.361	0.440	4	S	I
6	20	0.361	0.440	4	S	I
6	30	0.361	0.440	4	S	I
6	40	0.361	0.440	4	S	I
7	50	0.240	0.710	4	D	C
7	60	0.240	0.710	4	D	C
7	70	0.240	0.710	4	D	C
7	80	0.240	0.710	4	D	C
8	20	0.240	0.710	4	D	C
8	30	0.240	0.710	4	D	C
8	40	0.240	0.710	4	D	C
9	50	0.361	0.440	5	S	I
9	60	0.361	0.440	5	S	I
9	70	0.361	0.440	5	S	I
9	80	0.361	0.440	5	S	I
10	20	0.361	0.440	5	S	I
10	30	0.361	0.440	5	S	I
10	40	0.361	0.440	5	S	I
11	50	0.361	0.440	5	D	I
11	60	0.361	0.440	5	D	I
11	70	0.361	0.440	5	D	I
11	80	0.361	0.440	5	D	I
12	20	0.361	0.440	5	D	I
12	30	0.361	0.440	5	D	I
12	40	0.361	0.440	5	D	I
13	50	0.195	0.460	3	S	C
13	60	0.195	0.460	3	S	C
13	70	0.195	0.460	3	S	C
13	80	0.195	0.460	3	S	C
14	20	0.195	0.460	3	S	C
14	30	0.195	0.460	3	S	C
14	40	0.195	0.460	3	S	C
15	50	0.195	0.460	3	D	C
15	60	0.195	0.460	3	D	C
15	70	0.195	0.460	3	D	C
15	80	0.195	0.460	3	D	C
16	20	0.195	0.460	3	D	C
16	30	0.195	0.460	3	D	C
16	40	0.195	0.460	3	D	C
17	50	0.361	0.440	4	S	I
17	60	0.361	0.440	4	S	I
17	70	0.361	0.440	4	S	I
17	80	0.361	0.440	4	S	I
18	20	0.361	0.440	4	S	I
18	30	0.361	0.440	4	S	I
18	40	0.361	0.440	4	S	I
19	50	0.240	0.710	4	D	C
19	60	0.240	0.710	4	D	C
19	70	0.240	0.710	4	D	C
19	80	0.240	0.710	4	D	C
20	20	0.240	0.710	4	D	C
20	30	0.240	0.710	4	D	C
20	40	0.240	0.710	4	D	C
21	50	0.361	0.440	5	S	I
21	60	0.361	0.440	5	S	I
21	70	0.361	0.440	5	S	I
21	80	0.361	0.440	5	S	I
22	20	0.361	0.440	5	S	I
22	30	0.361	0.440	5	S	I
22	40	0.361	0.440	5	S	I
23	50	0.361	0.440	5	D	I
23	60	0.361	0.440	5	D	I
23	70	0.361	0.440	5	D	I
23	80	0.361	0.440	5	D	I
24	20	0.361	0.440	5	D	I
24	30	0.361	0.440	5	D	I
24	40	0.361	0.440	5	D	I
25	50	0.195	0.460	3	S	C

25	60	0.195	0.460	3	S	C
25	70	0.195	0.460	3	S	C
25	80	0.195	0.460	3	S	C
26	20	0.195	0.460	3	S	C
26	30	0.195	0.460	3	S	C
26	40	0.195	0.460	3	S	C
27	50	0.195	0.460	3	D	C
27	60	0.195	0.460	3	D	C
27	70	0.195	0.460	3	D	C
27	80	0.195	0.460	3	D	C
28	20	0.195	0.460	3	D	C
28	30	0.195	0.460	3	D	C
28	40	0.195	0.460	3	D	C
29	50	0.361	0.440	4	S	I
29	60	0.361	0.440	4	S	I
29	70	0.361	0.440	4	S	I
29	80	0.361	0.440	4	S	I
30	20	0.361	0.440	4	S	I
30	30	0.361	0.440	4	S	I
30	40	0.361	0.440	4	S	I
31	50	0.240	0.710	4	D	C
31	60	0.240	0.710	4	D	C
31	70	0.240	0.710	4	D	C
31	80	0.240	0.710	4	D	C
32	20	0.240	0.710	4	D	C
32	30	0.240	0.710	4	D	C
32	40	0.240	0.710	4	D	C
33	50	0.361	0.440	5	S	I
33	60	0.361	0.440	5	S	I
33	70	0.361	0.440	5	S	I
33	80	0.361	0.440	5	S	I
34	20	0.361	0.440	5	S	I
34	30	0.361	0.440	5	S	I
34	40	0.361	0.440	5	S	I
35	50	0.361	0.440	5	D	I
35	60	0.361	0.440	5	D	I
35	70	0.361	0.440	5	D	I
35	80	0.361	0.440	5	D	I
36	20	0.361	0.440	5	D	I
36	30	0.361	0.440	5	D	I
36	40	0.361	0.440	5	D	I
37	50	0.223	0.610	3	S	I
37	60	0.223	0.610	3	S	I
37	70	0.223	0.610	3	S	I
37	80	0.223	0.610	3	S	I
38	20	0.223	0.610	3	S	I
38	30	0.223	0.610	3	S	I
38	40	0.223	0.610	3	S	I
39	50	0.494	0.420	3	D	C
39	60	0.494	0.420	3	D	C
39	70	0.494	0.420	3	D	C
39	80	0.494	0.420	3	D	C
40	20	0.291	0.510	3	D	C
40	30	0.291	0.510	3	D	C
40	40	0.291	0.510	3	D	C
41	50	1.378	0.200	4	S	C
41	60	1.378	0.200	4	S	C
41	70	1.378	0.200	4	S	C
41	80	1.378	0.200	4	S	C
42	20	1.378	0.200	4	S	C
42	30	1.378	0.200	4	S	C
42	40	1.378	0.200	4	S	C
43	50	0.494	0.420	4	D	C
43	60	0.494	0.420	4	D	C
43	70	0.494	0.420	4	D	C
43	80	0.494	0.420	4	D	C
44	20	0.291	0.510	4	D	C
44	30	0.291	0.510	4	D	C
44	40	0.291	0.510	4	D	C
45	50	0.254	0.620	5	S	I
45	60	0.254	0.620	5	S	I
45	70	0.254	0.620	5	S	I
45	80	0.254	0.620	5	S	I
46	20	0.254	0.620	5	S	I
46	30	0.254	0.620	5	S	I
46	40	0.254	0.620	5	S	I
47	50	0.238	0.850	5	D	I
47	60	0.238	0.850	5	D	I
47	70	0.238	0.850	5	D	I
47	80	0.238	0.850	5	D	I
48	20	0.160	0.970	5	D	I
48	30	0.160	0.970	5	D	I
48	40	0.160	0.970	5	D	I
49	50	0.033	0.760	3	S	C
49	60	0.033	0.760	3	S	C
49	70	0.033	0.760	3	S	C
49	80	0.033	0.760	3	S	C
50	20	0.033	0.760	3	S	C
50	30	0.033	0.760	3	S	C
50	40	0.033	0.760	3	S	C
51	50	0.033	0.760	3	D	C
51	60	0.033	0.760	3	D	C
51	70	0.033	0.760	3	D	C
51	80	0.033	0.760	3	D	C
52	20	0.033	0.760	3	D	C
52	30	0.033	0.760	3	D	C
52	40	0.033	0.760	3	D	C
53	50	0.024	0.890	4	S	C
53	60	0.024	0.890	4	S	C
53	70	0.024	0.890	4	S	C
53	80	0.024	0.890	4	S	C
54	20	0.048	0.740	4	S	C
54	30	0.048	0.740	4	S	C
54	40	0.048	0.740	4	S	C
55	50	0.063	0.690	4	D	C
55	60	0.063	0.690	4	D	C
55	70	0.063	0.690	4	D	C
55	80	0.063	0.690	4	D	C
56	20	0.022	0.850	4	D	C
56	30	0.022	0.850	4	D	C
56	40	0.022	0.850	4	D	C
57	50	0.007	1.770	5	S	I
57	60	0.007	1.770	5	S	I
57	70	0.007	1.770	5	S	I

57	80	0.007	1.770	5	S	I
58	20	0.014	1.530	5	S	I
58	30	0.014	1.530	5	S	I
58	40	0.014	1.530	5	S	I
59	50	0.019	1.420	5	D	I
59	60	0.019	1.420	5	D	I
59	70	0.019	1.420	5	D	I
59	80	0.019	1.420	5	D	I
60	20	0.006	1.730	5	D	I
60	30	0.006	1.730	5	D	I
60	40	0.006	1.730	5	D	I
61	50	0.033	0.760	3	S	C
61	60	0.033	0.760	3	S	C
61	70	0.033	0.760	3	S	C
61	80	0.033	0.760	3	S	C
62	20	0.033	0.760	3	S	C
62	30	0.033	0.760	3	S	C
62	40	0.033	0.760	3	S	C
63	50	0.033	0.760	3	D	C
63	60	0.033	0.760	3	D	C
63	70	0.033	0.760	3	D	C
63	80	0.033	0.760	3	D	C
64	20	0.033	0.760	3	D	C
64	30	0.033	0.760	3	D	C
64	40	0.033	0.760	3	D	C
65	50	0.101	0.660	4	S	C
65	60	0.101	0.660	4	S	C
65	70	0.101	0.660	4	S	C
65	80	0.101	0.660	4	S	C
66	20	0.263	0.540	4	S	C
66	30	0.263	0.540	4	S	C
66	40	0.263	0.540	4	S	C
67	50	0.101	0.660	4	D	C
67	60	0.101	0.660	4	D	C
67	70	0.101	0.660	4	D	C
67	80	0.101	0.660	4	D	C
68	20	0.263	0.540	4	D	C
68	30	0.263	0.540	4	D	C
68	40	0.263	0.540	4	D	C
69	50	0.044	1.280	5	S	I
69	60	0.044	1.280	5	S	I
69	70	0.044	1.280	5	S	I
69	80	0.044	1.280	5	S	I
70	20	0.095	1.140	5	S	I
70	30	0.095	1.140	5	S	I
70	40	0.095	1.140	5	S	I
71	50	0.044	1.280	5	D	I
71	60	0.044	1.280	5	D	I
71	70	0.044	1.280	5	D	I
71	80	0.044	1.280	5	D	I
72	20	0.095	1.140	5	D	I
72	30	0.095	1.140	5	D	I
72	40	0.095	1.140	5	D	I
73	50	0.012	1.040	3	S	C
73	60	0.012	1.040	3	S	C
73	70	0.012	1.040	3	S	C
73	80	0.012	1.040	3	S	C
74	20	0.012	1.040	3	S	C
74	30	0.012	1.040	3	S	C
74	40	0.012	1.040	3	S	C
75	50	0.012	1.040	3	D	C
75	60	0.012	1.040	3	D	C
75	70	0.012	1.040	3	D	C
75	80	0.012	1.040	3	D	C
76	20	0.012	1.040	3	D	C
76	30	0.012	1.040	3	D	C
76	40	0.012	1.040	3	D	C
77	50	0.070	0.640	4	S	C
77	60	0.070	0.640	4	S	C
77	70	0.070	0.640	4	S	C
77	80	0.070	0.640	4	S	C
78	20	0.070	0.640	4	S	C
78	30	0.070	0.640	4	S	C
78	40	0.070	0.640	4	S	C
79	50	0.070	0.640	4	D	C
79	60	0.070	0.640	4	D	C
79	70	0.070	0.640	4	D	C
79	80	0.070	0.640	4	D	C
80	20	0.070	0.640	4	D	C
80	30	0.070	0.640	4	D	C
80	40	0.070	0.640	4	D	C
81	50	0.013	1.470	5	S	I
81	60	0.013	1.470	5	S	I
81	70	0.013	1.470	5	S	I
81	80	0.013	1.470	5	S	I
82	20	0.013	1.470	5	S	I
82	30	0.013	1.470	5	S	I
82	40	0.013	1.470	5	S	I
83	50	0.013	1.470	5	D	I
83	60	0.013	1.470	5	D	I
83	70	0.013	1.470	5	D	I
83	80	0.013	1.470	5	D	I
84	20	0.013	1.470	5	D	I
84	30	0.013	1.470	5	D	I
84	40	0.013	1.470	5	D	I
85	50	0.033	0.760	3	S	C
85	60	0.033	0.760	3	S	C
85	70	0.033	0.760	3	S	C
85	80	0.033	0.760	3	S	C
86	20	0.033	0.760	3	S	C
86	30	0.033	0.760	3	S	C
86	40	0.033	0.760	3	S	C
87	50	0.033	0.760	3	D	C
87	60	0.033	0.760	3	D	C
87	70	0.033	0.760	3	D	C
87	80	0.033	0.760	3	D	C
88	20	0.033	0.760	3	D	C
88	30	0.033	0.760	3	D	C
88	40	0.033	0.760	3	D	C
89	50	0.024	0.890	4	S	C
89	60	0.024	0.890	4	S	C
89	70	0.024	0.890	4	S	C
89	80	0.024	0.890	4	S	C
90	20	0.048	0.740	4	S	C

90	30	0.048	0.740	4	S	C
90	40	0.048	0.740	4	S	C
91	50	0.063	0.690	4	D	C
91	60	0.063	0.690	4	D	C
91	70	0.063	0.690	4	D	C
91	80	0.063	0.690	4	D	C
92	20	0.022	0.850	4	D	C
92	30	0.022	0.850	4	D	C
92	40	0.022	0.850	4	D	C
93	50	0.007	1.770	5	S	I
93	60	0.007	1.770	5	S	I
93	70	0.007	1.770	5	S	I
93	80	0.007	1.770	5	S	I
94	20	0.014	1.530	5	S	I
94	30	0.014	1.530	5	S	I
94	40	0.014	1.530	5	S	I
95	50	0.019	1.420	5	D	I
95	60	0.019	1.420	5	D	I
95	70	0.019	1.420	5	D	I
95	80	0.019	1.420	5	D	I
96	20	0.006	1.730	5	D	I
96	30	0.006	1.730	5	D	I
96	40	0.006	1.730	5	D	I

Junction Only Accident Change Factors
Base Year

2000

Classification	Speed Limit (mph)	Beta Factor
Major	20	0.991
Major	30	0.991
Major	40	0.991
Major	50	0.984
Major	60	0.984
Major	70	0.984
Major	80	0.984
Minor	20	0.976
Minor	30	0.976
Minor	40	0.976
Minor	50	0.996
Minor	60	0.996
Minor	70	0.996
Minor	80	0.996

Junction Only Accident Beta Factor Changes over Time
Range of Years Change to Beta Factor

1995-2010	1.000
2011-2020	0.500
2021-2030	0.250
2031-2144	0.000

Junction Only Casualty Rates

Base Year

2000

Road Type	Casualties per P.I.A.		
	Fatal	Serious	Slight
1	0.0265	0.2413	1.355
2	0.0075	0.1350	1.144
3	0.0265	0.2413	1.355
4	0.0075	0.1350	1.144
5	0.0295	0.2793	1.459
6	0.0062	0.1292	1.244
7	0.0295	0.2793	1.459
8	0.0062	0.1292	1.244
9	0.0295	0.2793	1.459
10	0.0062	0.1292	1.244
11	0.0295	0.2793	1.459
12	0.0062	0.1292	1.244
13	0.0265	0.2413	1.355
14	0.0075	0.1350	1.144
15	0.0265	0.2413	1.355
16	0.0075	0.1350	1.144
17	0.0295	0.2793	1.459
18	0.0062	0.1292	1.244
19	0.0295	0.2793	1.459
20	0.0062	0.1292	1.244
21	0.0295	0.2793	1.459
22	0.0062	0.1292	1.244
23	0.0295	0.2793	1.459
24	0.0062	0.1292	1.244
25	0.0265	0.2413	1.355
26	0.0075	0.1350	1.144
27	0.0265	0.2413	1.355
28	0.0075	0.1350	1.144
29	0.0295	0.2793	1.459
30	0.0062	0.1292	1.244
31	0.0295	0.2793	1.459
32	0.0062	0.1292	1.244
33	0.0295	0.2793	1.459
34	0.0062	0.1292	1.244
35	0.0295	0.2793	1.459
36	0.0062	0.1292	1.244
37	0.0092	0.1631	1.444
38	0.0064	0.1157	1.214
39	0.0092	0.1631	1.444
40	0.0064	0.1157	1.214
41	0.0095	0.1423	1.467
42	0.0061	0.1177	1.253
43	0.0095	0.1423	1.467
44	0.0061	0.1177	1.253
45	0.0095	0.1423	1.467
46	0.0061	0.1177	1.253
47	0.0095	0.1423	1.467
48	0.0061	0.1177	1.253
49	0.0060	0.1019	1.214
50	0.0027	0.0806	1.163
51	0.0060	0.1019	1.214
52	0.0027	0.0806	1.163
53	0.0060	0.1019	1.214
54	0.0027	0.0806	1.163
55	0.0060	0.1019	1.214
56	0.0027	0.0806	1.163
57	0.0060	0.1019	1.214
58	0.0027	0.0806	1.163

59	0.0060	0.1019	1.214
60	0.0027	0.0806	1.163
61	0.0060	0.1019	1.214
62	0.0027	0.0806	1.163
63	0.0060	0.1019	1.214
64	0.0027	0.0806	1.163
65	0.0060	0.1019	1.214
66	0.0027	0.0806	1.163
67	0.0060	0.1019	1.214
68	0.0027	0.0806	1.163
69	0.0060	0.1019	1.214
70	0.0027	0.0806	1.163
71	0.0060	0.1019	1.214
72	0.0027	0.0806	1.163
73	0.0060	0.1019	1.214
74	0.0028	0.0965	1.182
75	0.0060	0.1019	1.214
76	0.0028	0.0965	1.182
77	0.0060	0.1019	1.214
78	0.0028	0.0965	1.182
79	0.0060	0.1019	1.214
80	0.0028	0.0965	1.182
81	0.0060	0.1019	1.214
82	0.0028	0.0965	1.182
83	0.0060	0.1019	1.214
84	0.0028	0.0965	1.182
85	0.0039	0.0703	1.258
86	0.0031	0.0705	1.221
87	0.0039	0.0703	1.258
88	0.0031	0.0705	1.221
89	0.0039	0.0703	1.258
90	0.0031	0.0705	1.221
91	0.0039	0.0703	1.258
92	0.0031	0.0705	1.221
93	0.0039	0.0703	1.258
94	0.0031	0.0705	1.221
95	0.0039	0.0703	1.258
96	0.0031	0.0705	1.221

Junction Only Casualty Change Factors

Base Year

2000

Classification	Speed Limit (mph)	Beta Factor		
		Fatal	Serious	Slight
Major	20	0.949	0.962	1.010
Major	30	0.949	0.962	1.010
Major	40	0.949	0.962	1.010
Major	50	0.961	0.959	1.011
Major	60	0.961	0.959	1.011
Major	70	0.961	0.959	1.011
Major	80	0.961	0.959	1.011
Minor	20	0.968	0.958	1.006
Minor	30	0.968	0.958	1.006
Minor	40	0.968	0.958	1.006
Minor	50	0.976	0.972	1.011
Minor	60	0.976	0.972	1.011
Minor	70	0.976	0.972	1.011
Minor	80	0.976	0.972	1.011

Junction Only Casualty Beta Factor Changes over Time

Range of Years Change to Beta Factor

1995-2010	1.000
2011-2144	0.000