HCS2000: Two-Lane Highways Release 4.1d

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	06/29/2005
Analysis Time Period	AM Peak
Highway	Sharp Rd.
From/To	Little Park Rd. to MD 662
Jurisdiction	Talbot County
Analysis Year	2004
Description	Corridor A - Existing Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.83	
Lane width	10.0	ft	% Trucks and buses	2	%
Segment length	1.6	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	85	%
Grade: Length		mi	Access points/mi	4	/mi
Up/down		%			

Two-way hourly volume, V	44		veh/h	
Directional split	50	/ 50	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	54	pc/h
Highest directional split proportion (note-2)	27	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	5.3	mi/h
Adj. for access points, fA	1.0	mi/h
Free-flow speed, FFS	38.7	mi/h
Adjustment for no-passing zones, fnp	0.8	mi/h
Average travel speed, ATS	37.5	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	53	pc/h
Highest directional split proportion (note-2)	27	
Base percent time-spent-following, BPTSF	4.6	%
Adj.for directional distribution and no-passing zones, fd/np	19.1	
Percent time-spent-following, PTSF	23.7	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.02	
Peak 15-min vehicle-miles of travel, VMT15	21	veh-mi
Peak-hour vehicle-miles of travel, VMT60	70	veh-mi
Peak 15-min total travel time, TT15	0.6	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	06/29/2005
Analysis Time Period	PM Peak
Highway	Sharp Rd.
From/To	Little Park Rd. to MD 662
Jurisdiction	Talbot County
Analysis Year	2004
Description	Corridor A - Existing Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.89	
Lane width	10.0	ft	% Trucks and buses	2	%
Segment length	1.6	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	85	%
Grade: Length		mi	Access points/mi	4	/mi
Up/down		%			

Two-way hourly volume, V	52	veh/h	
Directional split	52 / 48	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	59	pc/h
Highest directional split proportion (note-2)	31	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	5.3	mi/h
Adj. for access points, fA	1.0	mi/h
Free-flow speed, FFS	38.7	mi/h
Adjustment for no-passing zones, fnp	0.8	mi/h
Average travel speed, ATS	37.4	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	59	pc/h
Highest directional split proportion (note-2)	31	
Base percent time-spent-following, BPTSF	5.1	%
Adj.for directional distribution and no-passing zones, fd/np	20.2	
Percent time-spent-following, PTSF	25.3	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.02	
Peak 15-min vehicle-miles of travel, VMT15	23	veh-mi
Peak-hour vehicle-miles of travel, VMT60	83	veh-mi
Peak 15-min total travel time, TT15	0.6	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	06/29/2005
Analysis Time Period	AM Peak
Highway	Sharp Rd.
From/To	Little Park Rd. to MD 662
Jurisdiction	Talbot County
Analysis Year	2015
Description	Corridor A - Future Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.83	
Lane width	10.0	ft	% Trucks and buses	2	%
Segment length	1.6	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	85	%
Grade: Length		mi	Access points/mi	4	/mi
Up/down		%			

Two-way hourly volume, V	70		veh/h	
Directional split	50	/ 50	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	86	pc/h
Highest directional split proportion (note-2)	43	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	5.3	mi/h
Adj. for access points, fA	1.0	mi/h
Free-flow speed, FFS	38.7	mi/h
Adjustment for no-passing zones, fnp	1.2	mi/h
Average travel speed, ATS	36.8	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	85	pc/h
Highest directional split proportion (note-2)	43	
Base percent time-spent-following, BPTSF	7.2	%
Adj.for directional distribution and no-passing zones, fd/np	19.6	
Percent time-spent-following, PTSF	26.8	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.03	
Peak 15-min vehicle-miles of travel, VMT15	34	veh-mi
Peak-hour vehicle-miles of travel, VMT60	112	veh-mi
Peak 15-min total travel time, TT15	0.9	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	06/29/2005
Analysis Time Period	PM Peak
Highway	Sharp Rd.
From/To	Little Park Rd. to MD 662
Jurisdiction	Talbot County
Analysis Year	2015
Description	Corridor A - Future Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.89	
Lane width	10.0	ft	% Trucks and buses	2	%
Segment length	1.6	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	85	%
Grade: Length		mi	Access points/mi	4	/mi
Up/down		%			

Two-way hourly volume, V	90		veh/h	
Directional split	52	/ 48	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	103	pc/h
Highest directional split proportion (note-2)	54	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	5.3	mi/h
Adj. for access points, fA	1.0	mi/h
Free-flow speed, FFS	38.7	mi/h
Adjustment for no-passing zones, fnp	1.5	mi/h
Average travel speed, ATS	36.4	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	101	pc/h
Highest directional split proportion (note-2)	53	
Base percent time-spent-following, BPTSF	8.5	%
Adj.for directional distribution and no-passing zones, fd/np	20.6	
Percent time-spent-following, PTSF	29.1	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.03	
Peak 15-min vehicle-miles of travel, VMT15	40	veh-mi
Peak-hour vehicle-miles of travel, VMT60	144	veh-mi
Peak 15-min total travel time, TT15	1.1	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	06/29/2005
Analysis Time Period	AM Peak
Highway	Sharp Rd.
From/To	Little Park Rd. to MD 662
Jurisdiction	Talbot County
Analysis Year	2030
Description	Corridor A - Future Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.83	
Lane width	10.0	ft	% Trucks and buses	2	%
Segment length	1.6	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	85	%
Grade: Length		mi	Access points/mi	4	/mi
Up/down		%			

Two-way hourly volume, V	120		veh/h
Directional split	52	/ 48	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	147	pc/h
Highest directional split proportion (note-2)	76	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	5.3	mi/h
Adj. for access points, fA	1.0	mi/h
Free-flow speed, FFS	38.7	mi/h
Adjustment for no-passing zones, fnp	2.1	mi/h
Average travel speed, ATS	35.5	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	145	pc/h
Highest directional split proportion (note-2)	75	
Base percent time-spent-following, BPTSF	12.0	%
Adj.for directional distribution and no-passing zones, fd/np	21.1	
Percent time-spent-following, PTSF	33.0	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.05	
Peak 15-min vehicle-miles of travel, VMT15	58	veh-mi
Peak-hour vehicle-miles of travel, VMT60	192	veh-mi
Peak 15-min total travel time, TT15	1.6	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	06/29/2005
Analysis Time Period	PM Peak
Highway	Sharp Rd.
From/To	Little Park Rd. to MD 662
Jurisdiction	Talbot County
Analysis Year	2030
Description	Corridor A - Future Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.89	
Lane width	10.0	ft	% Trucks and buses	2	%
Segment length	1.6	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	85	%
Grade: Length		mi	Access points/mi	4	/mi
Up/down		%			

Two-way hourly volume, V	160		veh/h
Directional split	56	/ 44	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	182	pc/h
Highest directional split proportion (note-2)	102	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	5.3	mi/h
Adj. for access points, fA	1.0	mi/h
Free-flow speed, FFS	38.7	mi/h
Adjustment for no-passing zones, fnp	2.6	mi/h
Average travel speed, ATS	34.7	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	274	pc/h
Highest directional split proportion (note-2)	181	
Base percent time-spent-following, BPTSF	21.4	%
Adj.for directional distribution and no-passing zones, fd/np	17.8	
Percent time-spent-following, PTSF	39.2	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.09	
Peak 15-min vehicle-miles of travel, VMT15	171	veh-mi
Peak-hour vehicle-miles of travel, VMT60	643	veh-mi
Peak 15-min total travel time, TT15	4.9	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	06/29/2005
Analysis Time Period	AM Peak
Highway	Goldsborough Neck/ Airport Rd
From/To	Glebe Rd. to US 50
Jurisdiction	Talbot County
Analysis Year	2004
Description	Corridor B - Existing Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.94	
Lane width	15.0	ft	% Trucks and buses	2	%
Segment length	2.5	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	40	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	257		veh/h
Directional split	66	/ 34	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	277	pc/h
Highest directional split proportion (note-2)	183	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.2	mi/h
Adj. for access points, fA	2.0	mi/h
Free-flow speed, FFS	38.8	mi/h
Adjustment for no-passing zones, fnp	1.9	mi/h
Average travel speed, ATS	34.7	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	274	pc/h
Highest directional split proportion (note-2)	181	
Base percent time-spent-following, BPTSF	21.4	%
Adj.for directional distribution and no-passing zones, fd/np	17.8	
Percent time-spent-following, PTSF	39.2	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.09	
Peak 15-min vehicle-miles of travel, VMT15	171	veh-mi
Peak-hour vehicle-miles of travel, VMT60	643	veh-mi
Peak 15-min total travel time, TT15	4.9	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	06/29/2005
Analysis Time Period	PM Peak
Highway	Goldsborough Neck/ Airport Rd
From/To	Glebe Rd. to US 50
Jurisdiction	Talbot County
Analysis Year	2004
Description	Corridor B - Existing Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.90	
Lane width	15.0	ft	% Trucks and buses	2	%
Segment length	2.5	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	40	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	332		veh/h
Directional split	53	/ 47	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	374	pc/h
Highest directional split proportion (note-2)	198	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.2	mi/h
Adj. for access points, fA	2.0	mi/h
Free-flow speed, FFS	38.8	mi/h
Adjustment for no-passing zones, fnp	2.5	mi/h
Average travel speed, ATS	33.4	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	370	pc/h
Highest directional split proportion (note-2)	196	
Base percent time-spent-following, BPTSF	27.8	%
Adj.for directional distribution and no-passing zones, fd/np	18.0	
Percent time-spent-following, PTSF	45.8	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.12	
Peak 15-min vehicle-miles of travel, VMT15	231	veh-mi
Peak-hour vehicle-miles of travel, VMT60	830	veh-mi
Peak 15-min total travel time, TT15	6.9	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	06/29/2005
Analysis Time Period	AM Peak
Highway	Goldsborough Neck/ Airport Rd
From/To	Glebe Rd. to US 50
Jurisdiction	Talbot County
Analysis Year	2015
Description	Corridor B - Future Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.94	
Lane width	15.0	ft	% Trucks and buses	2	%
Segment length	2.5	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	40	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	330		veh/h
Directional split	61	/ 39	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	356	pc/h
Highest directional split proportion (note-2)	217	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.2	mi/h
Adj. for access points, fA	2.0	mi/h
Free-flow speed, FFS	38.8	mi/h
Adjustment for no-passing zones, fnp	2.4	mi/h
Average travel speed, ATS	33.6	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	352	pc/h
Highest directional split proportion (note-2)	215	
Base percent time-spent-following, BPTSF	26.6	%
Adj.for directional distribution and no-passing zones, fd/np	16.6	
Percent time-spent-following, PTSF	43.2	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.11	
Peak 15-min vehicle-miles of travel, VMT15	219	veh-mi
Peak-hour vehicle-miles of travel, VMT60	825	veh-mi
Peak 15-min total travel time, TT15	6.5	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	06/29/2005
Analysis Time Period	PM Peak
Highway	Goldsborough Neck/ Airport Rd
From/To	Glebe Rd. to US 50
Jurisdiction	Talbot County
Analysis Year	2015
Description	Corridor B - Future Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.90	
Lane width	15.0	ft	% Trucks and buses	2	%
Segment length	2.5	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	40	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	380		veh/h
Directional split	53	/ 47	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	428	pc/h
Highest directional split proportion (note-2)	227	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.2	mi/h
Adj. for access points, fA	2.0	mi/h
Free-flow speed, FFS	38.8	mi/h
Adjustment for no-passing zones, fnp	2.7	mi/h
Average travel speed, ATS	32.8	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	423	pc/h
Highest directional split proportion (note-2)	224	
Base percent time-spent-following, BPTSF	31.1	%
Adj.for directional distribution and no-passing zones, fd/np	17.9	
Percent time-spent-following, PTSF	48.9	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.13	
Peak 15-min vehicle-miles of travel, VMT15	264	veh-mi
Peak-hour vehicle-miles of travel, VMT60	950	veh-mi
Peak 15-min total travel time, TT15	8.0	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	06/29/2005
Analysis Time Period	AM Peak
Highway	Goldsborough Neck/ Airport Rd
From/To	Glebe Rd. to US 50
Jurisdiction	Talbot County
Analysis Year	2030
Description	Corridor B - Future Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.94	
Lane width	15.0	ft	% Trucks and buses	2	%
Segment length	2.5	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	40	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	410		veh/h
Directional split	66	/ 34	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	442	pc/h
Highest directional split proportion (note-2)	292	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.2	mi/h
Adj. for access points, fA	2.0	mi/h
Free-flow speed, FFS	38.8	mi/h
Adjustment for no-passing zones, fnp	2.6	mi/h
Average travel speed, ATS	32.7	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	437	pc/h
Highest directional split proportion (note-2)	288	
Base percent time-spent-following, BPTSF	31.9	%
Adj.for directional distribution and no-passing zones, fd/np	16.6	
Percent time-spent-following, PTSF	48.5	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.14	
Peak 15-min vehicle-miles of travel, VMT15	273	veh-mi
Peak-hour vehicle-miles of travel, VMT60	1025	veh-mi
Peak 15-min total travel time, TT15	8.3	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	06/29/2005
Analysis Time Period	PM Peak
Highway	Goldsborough Neck/ Airport Rd
From/To	Glebe Rd. to US 50
Jurisdiction	Talbot County
Analysis Year	2030
Description	Corridor B - Future Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.90	
Lane width	15.0	ft	% Trucks and buses	2	%
Segment length	2.5	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	40	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	510		veh/h
Directional split	53	/ 47	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	575	pc/h
Highest directional split proportion (note-2)	305	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.2	mi/h
Adj. for access points, fA	2.0	mi/h
Free-flow speed, FFS	38.8	mi/h
Adjustment for no-passing zones, fnp	2.4	mi/h
Average travel speed, ATS	31.9	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	568	pc/h
Highest directional split proportion (note-2)	301	
Base percent time-spent-following, BPTSF	39.3	%
Adj.for directional distribution and no-passing zones, fd/np	16.1	
Percent time-spent-following, PTSF	55.4	%

Level of Service and Other Performance Measures

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.18	
Peak 15-min vehicle-miles of travel, VMT15	354	veh-mi
Peak-hour vehicle-miles of travel, VMT60	1275	veh-mi
Peak 15-min total travel time, TT15	11.1	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	06/29/2005
Analysis Time Period	AM Peak
Highway	Glebe Rd.
From/To	MD 370 to Goldsborough Neck Rd
Jurisdiction	Talbot County
Analysis Year	2004
Description	Corridor C1 - Existing Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.81	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	1.8	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	100	%
Grade: Length		mi	Access points/mi	15	/mi
Up/down		%			

Two-way hourly volume, V	150		veh/h
Directional split	58	/ 42	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	188	pc/h
Highest directional split proportion (note-2)	109	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.2	mi/h
Adj. for access points, fA	3.8	mi/h
Free-flow speed, FFS	37.0	mi/h
Adjustment for no-passing zones, fnp	3.3	mi/h
Average travel speed, ATS	32.3	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	186	pc/h
Highest directional split proportion (note-2)	108	
Base percent time-spent-following, BPTSF	15.1	%
Adj.for directional distribution and no-passing zones, fd/np	23.4	
Percent time-spent-following, PTSF	38.4	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.06	
Peak 15-min vehicle-miles of travel, VMT15	83	veh-mi
Peak-hour vehicle-miles of travel, VMT60	270	veh-mi
Peak 15-min total travel time, TT15	2.6	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	06/29/2005
Analysis Time Period	PM Peak
Highway	Glebe Rd.
From/To	MD 370 to Goldsborough Neck Rd
Jurisdiction	Talbot County
Analysis Year	2004
Description	Corridor C1 - Existing Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.95	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	1.8	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	100	%
Grade: Length		mi	Access points/mi	15	/mi
Up/down		%			

Two-way hourly volume, V	194		veh/h
Directional split	56	/ 44	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	207	pc/h
Highest directional split proportion (note-2)	116	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.2	mi/h
Adj. for access points, fA	3.8	mi/h
Free-flow speed, FFS	37.0	mi/h
Adjustment for no-passing zones, fnp	3.5	mi/h
Average travel speed, ATS	31.9	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	205	pc/h
Highest directional split proportion (note-2)	115	
Base percent time-spent-following, BPTSF	16.5	%
Adj.for directional distribution and no-passing zones, fd/np	22.9	
Percent time-spent-following, PTSF	39.4	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.06	
Peak 15-min vehicle-miles of travel, VMT15	92	veh-mi
Peak-hour vehicle-miles of travel, VMT60	349	veh-mi
Peak 15-min total travel time, TT15	2.9	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	06/29/2005
Analysis Time Period	AM Peak
Highway	Glebe Rd.
From/To	Goldsborough Neck Rd to MD 322
Jurisdiction	Talbot County
Analysis Year	2004
Description	Corridor C2 - Existing Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.94	
Lane width	14.0	ft	% Trucks and buses	2	%
Segment length	0.6	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	10	%
Grade: Length		mi	Access points/mi	6	/mi
Up/down		%			

Two-way hourly volume, V	465		veh/h
Directional split	58	/ 42	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	502	pc/h
Highest directional split proportion (note-2)	291	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	1.5	mi/h
Free-flow speed, FFS	43.5	mi/h
Adjustment for no-passing zones, fnp	0.8	mi/h
Average travel speed, ATS	38.8	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	496	pc/h
Highest directional split proportion (note-2)	288	
Base percent time-spent-following, BPTSF	35.3	%
Adj.for directional distribution and no-passing zones, fd/np	5.9	
Percent time-spent-following, PTSF	41.3	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.16	
Peak 15-min vehicle-miles of travel, VMT15	74	veh-mi
Peak-hour vehicle-miles of travel, VMT60	279	veh-mi
Peak 15-min total travel time, TT15	1.9	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	06/29/2005
Analysis Time Period	PM Peak
Highway	Glebe Rd.
From/To	Goldsborough Neck Rd to MD 322
Jurisdiction	Talbot County
Analysis Year	2004
Description	Corridor C2 - Existing Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.93	
Lane width	14.0	ft	% Trucks and buses	2	%
Segment length	0.6	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	10	%
Grade: Length		mi	Access points/mi	6	/mi
Up/down		%			

Two-way hourly volume, V	561	veh/h	
Directional split	58 / 42	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.996	
Two-way flow rate,(note-1) vp	606	pc/h
Highest directional split proportion (note-2)	351	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	1.5	mi/h
Free-flow speed, FFS	43.5	mi/h
Adjustment for no-passing zones, fnp	0.8	mi/h
Average travel speed, ATS	38.0	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	604	pc/h
Highest directional split proportion (note-2)	350	
Base percent time-spent-following, BPTSF	41.2	%
Adj.for directional distribution and no-passing zones, fd/np	5.7	
Percent time-spent-following, PTSF	46.9	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.19	
Peak 15-min vehicle-miles of travel, VMT15	90	veh-mi
Peak-hour vehicle-miles of travel, VMT60	337	veh-mi
Peak 15-min total travel time, TT15	2.4	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	10/20/2005
Analysis Time Period	AM Peak
Highway	Glebe Rd.
From/To	MD 322 at Marlboro Ave.
Jurisdiction	Talbot County
Analysis Year	2004
Description	Corridor C3 - Existing Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.94	
Lane width	14.0	ft	% Trucks and buses	2	%
Segment length	0.6	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	100	%
Grade: Length		mi	Access points/mi	10	/mi
Up/down		%			

Two-way hourly volume, V	279		veh/h
Directional split	56	/ 44	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	301	pc/h
Highest directional split proportion (note-2)	169	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.2	mi/h
Adj. for access points, fA	2.5	mi/h
Free-flow speed, FFS	38.3	mi/h
Adjustment for no-passing zones, fnp	4.0	mi/h
Average travel speed, ATS	32.0	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	297	pc/h
Highest directional split proportion (note-2)	166	
Base percent time-spent-following, BPTSF	23.0	%
Adj.for directional distribution and no-passing zones, fd/np	23.1	
Percent time-spent-following, PTSF	46.1	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.09	
Peak 15-min vehicle-miles of travel, VMT15	45	veh-mi
Peak-hour vehicle-miles of travel, VMT60	170	veh-mi
Peak 15-min total travel time, TT15	1.4	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	10/20/2005
Analysis Time Period	PM Peak
Highway	Glebe Rd.
From/To	MD 322 at Marlboro Ave.
Jurisdiction	Talbot County
Analysis Year	2004
Description	Corridor C3 - Existing Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.93	
Lane width	14.0	ft	% Trucks and buses	2	%
Segment length	0.6	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	100	%
Grade: Length		mi	Access points/mi	10	/mi
Up/down		%			

Two-way hourly volume, V	461		veh/h
Directional split	55	/ 45	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	503	pc/h
Highest directional split proportion (note-2)	277	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.2	mi/h
Adj. for access points, fA	2.5	mi/h
Free-flow speed, FFS	38.3	mi/h
Adjustment for no-passing zones, fnp	4.2	mi/h
Average travel speed, ATS	30.2	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	497	pc/h
Highest directional split proportion (note-2)	273	
Base percent time-spent-following, BPTSF	35.4	%
Adj.for directional distribution and no-passing zones, fd/np	22.1	
Percent time-spent-following, PTSF	57.5	%

Level of Service and Other Performance Measures

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.16	
Peak 15-min vehicle-miles of travel, VMT15	76	veh-mi
Peak-hour vehicle-miles of travel, VMT60	281	veh-mi
Peak 15-min total travel time, TT15	2.5	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	06/29/2005
Analysis Time Period	AM Peak
Highway	Glebe Rd.
From/To	MD 370 to Goldsborough Neck Rd
Jurisdiction	Talbot County
Analysis Year	2015
Description	Corridor C1 - Future Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.81	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	1.8	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	100	%
Grade: Length		mi	Access points/mi	15	/mi
Up/down		%			

Two-way hourly volume, V	190		veh/h
Directional split	58	/ 42	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	238	pc/h
Highest directional split proportion (note-2)	138	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.2	mi/h
Adj. for access points, fA	3.8	mi/h
Free-flow speed, FFS	37.0	mi/h
Adjustment for no-passing zones, fnp	3.7	mi/h
Average travel speed, ATS	31.5	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	235	pc/h
Highest directional split proportion (note-2)	136	
Base percent time-spent-following, BPTSF	18.7	%
Adj.for directional distribution and no-passing zones, fd/np	23.2	
Percent time-spent-following, PTSF	41.9	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.07	
Peak 15-min vehicle-miles of travel, VMT15	106	veh-mi
Peak-hour vehicle-miles of travel, VMT60	342	veh-mi
Peak 15-min total travel time, TT15	3.4	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	06/29/2005
Analysis Time Period	PM Peak
Highway	Glebe Rd.
From/To	MD 370 to Goldsborough Neck Rd
Jurisdiction	Talbot County
Analysis Year	2015
Description	Corridor C1 - Future Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.95	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	1.8	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	100	%
Grade: Length		mi	Access points/mi	15	/mi
Up/down		%			

Two-way hourly volume, V	220		veh/h
Directional split	55	/ 45	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	235	pc/h
Highest directional split proportion (note-2)	129	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.2	mi/h
Adj. for access points, fA	3.8	mi/h
Free-flow speed, FFS	37.0	mi/h
Adjustment for no-passing zones, fnp	3.7	mi/h
Average travel speed, ATS	31.6	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	232	pc/h
Highest directional split proportion (note-2)	128	
Base percent time-spent-following, BPTSF	18.4	%
Adj.for directional distribution and no-passing zones, fd/np	22.9	
Percent time-spent-following, PTSF	41.3	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.07	
Peak 15-min vehicle-miles of travel, VMT15	104	veh-mi
Peak-hour vehicle-miles of travel, VMT60	396	veh-mi
Peak 15-min total travel time, TT15	3.3	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	06/29/2005
Analysis Time Period	AM Peak
Highway	Glebe Rd.
From/To	Goldsborough Neck Rd to MD 322
Jurisdiction	Talbot County
Analysis Year	2015
Description	Corridor C2 - Future Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.94	
Lane width	14.0	ft	% Trucks and buses	2	%
Segment length	0.6	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	10	%
Grade: Length		mi	Access points/mi	6	/mi
Up/down		%			

Two-way hourly volume, V	560		veh/h
Directional split	58	/ 42	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.996	
Two-way flow rate,(note-1) vp	598	pc/h
Highest directional split proportion (note-2)	347	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	1.5	mi/h
Free-flow speed, FFS	43.5	mi/h
Adjustment for no-passing zones, fnp	0.8	mi/h
Average travel speed, ATS	38.1	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	597	pc/h
Highest directional split proportion (note-2)	346	
Base percent time-spent-following, BPTSF	40.8	%
Adj.for directional distribution and no-passing zones, fd/np	5.7	
Percent time-spent-following, PTSF	46.6	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.19	
Peak 15-min vehicle-miles of travel, VMT15	89	veh-mi
Peak-hour vehicle-miles of travel, VMT60	336	veh-mi
Peak 15-min total travel time, TT15	2.3	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	06/29/2005
Analysis Time Period	PM Peak
Highway	Glebe Rd.
From/To	Goldsborough Neck Rd to MD 322
Jurisdiction	Talbot County
Analysis Year	2015
Description	Corridor C2 - Future Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.90	
Lane width	14.0	ft	% Trucks and buses	2	%
Segment length	0.6	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	10	%
Grade: Length		mi	Access points/mi	6	/mi
Up/down		%			

Two-way hourly volume, V	690		veh/h
Directional split	58	/ 42	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.996	
Two-way flow rate,(note-1) vp	770	pc/h
Highest directional split proportion (note-2)	447	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	1.5	mi/h
Free-flow speed, FFS	43.5	mi/h
Adjustment for no-passing zones, fnp	0.7	mi/h
Average travel speed, ATS	36.8	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	768	pc/h
Highest directional split proportion (note-2)	445	
Base percent time-spent-following, BPTSF	49.1	%
Adj.for directional distribution and no-passing zones, fd/np	4.2	
Percent time-spent-following, PTSF	53.3	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.24	
Peak 15-min vehicle-miles of travel, VMT15	115	veh-mi
Peak-hour vehicle-miles of travel, VMT60	414	veh-mi
Peak 15-min total travel time, TT15	3.1	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	10/20/2005
Analysis Time Period	AM Peak
Highway	Glebe Rd.
From/To	MD 322 at Marlboro Ave.
Jurisdiction	Talbot County
Analysis Year	2015
Description	Corridor C3 - Future 2015 Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.94	
Lane width	14.0	ft	% Trucks and buses	2	%
Segment length	0.6	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	100	%
Grade: Length		mi	Access points/mi	10	/mi
Up/down		%			

Two-way hourly volume, V	320		veh/h
Directional split	56	/ 44	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	345	pc/h
Highest directional split proportion (note-2)	193	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.2	mi/h
Adj. for access points, fA	2.5	mi/h
Free-flow speed, FFS	38.3	mi/h
Adjustment for no-passing zones, fnp	4.2	mi/h
Average travel speed, ATS	31.4	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	341	pc/h
Highest directional split proportion (note-2)	191	
Base percent time-spent-following, BPTSF	25.9	%
Adj.for directional distribution and no-passing zones, fd/np	23.2	
Percent time-spent-following, PTSF	49.1	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.11	
Peak 15-min vehicle-miles of travel, VMT15	52	veh-mi
Peak-hour vehicle-miles of travel, VMT60	195	veh-mi
Peak 15-min total travel time, TT15	1.7	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	10/20/2005
Analysis Time Period	PM Peak
Highway	Glebe Rd.
From/To	MD 322 at Marlboro Ave.
Jurisdiction	Talbot County
Analysis Year	2015
Description	Corridor C3 - Future 2015 Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.93	
Lane width	14.0	ft	% Trucks and buses	2	%
Segment length	0.6	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	100	%
Grade: Length		mi	Access points/mi	10	/mi
Up/down		%			

Two-way hourly volume, V	510		veh/h
Directional split	59	/ 41	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	556	pc/h
Highest directional split proportion (note-2)	328	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.2	mi/h
Adj. for access points, fA	2.5	mi/h
Free-flow speed, FFS	38.3	mi/h
Adjustment for no-passing zones, fnp	4.0	mi/h
Average travel speed, ATS	30.0	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	549	pc/h
Highest directional split proportion (note-2)	324	
Base percent time-spent-following, BPTSF	38.3	%
Adj.for directional distribution and no-passing zones, fd/np	21.1	
Percent time-spent-following, PTSF	59.4	%

Level of Service and Other Performance Measures

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.17	
Peak 15-min vehicle-miles of travel, VMT15	84	veh-mi
Peak-hour vehicle-miles of travel, VMT60	311	veh-mi
Peak 15-min total travel time, TT15	2.8	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	06/29/2005
Analysis Time Period	AM Peak
Highway	Glebe Rd.
From/To	MD 370 to Goldsborough Neck Rd
Jurisdiction	Talbot County
Analysis Year	2030
Description	Corridor C1 - Future Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.81	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	1.8	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	100	%
Grade: Length		mi	Access points/mi	15	/mi
Up/down		%			

Two-way hourly volume, V	220		veh/h
Directional split	59	/ 41	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	275	pc/h
Highest directional split proportion (note-2)	162	pc/h

Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.2	mi/h
Adj. for access points, fA	3.8	mi/h
Free-flow speed, FFS	37.0	mi/h
Adjustment for no-passing zones, fnp	3.9	mi/h
Average travel speed, ATS	31.0	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	272	pc/h
Highest directional split proportion (note-2)	160	
Base percent time-spent-following, BPTSF	21.3	%
Adj.for directional distribution and no-passing zones, fd/np	23.1	
Percent time-spent-following, PTSF	44.4	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.09	
Peak 15-min vehicle-miles of travel, VMT15	122	veh-mi
Peak-hour vehicle-miles of travel, VMT60	396	veh-mi
Peak 15-min total travel time, TT15	3.9	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	06/29/2005
Analysis Time Period	PM Peak
Highway	Glebe Rd.
From/To	MD 370 to Goldsborough Neck Rd
Jurisdiction	Talbot County
Analysis Year	2030
Description	Corridor C1 - Future Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.95	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	1.8	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	100	%
Grade: Length		mi	Access points/mi	15	/mi
Up/down		%			

Two-way hourly volume, V	280		veh/h
Directional split	57	/ 43	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	299	pc/h
Highest directional split proportion (note-2)	170	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.2	mi/h
Adj. for access points, fA	3.8	mi/h
Free-flow speed, FFS	37.0	mi/h
Adjustment for no-passing zones, fnp	4.0	mi/h
Average travel speed, ATS	30.7	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	295	pc/h
Highest directional split proportion (note-2)	168	
Base percent time-spent-following, BPTSF	22.8	%
Adj.for directional distribution and no-passing zones, fd/np	23.1	
Percent time-spent-following, PTSF	45.9	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.09	
Peak 15-min vehicle-miles of travel, VMT15	133	veh-mi
Peak-hour vehicle-miles of travel, VMT60	504	veh-mi
Peak 15-min total travel time, TT15	4.3	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	06/29/2005
Analysis Time Period	AM Peak
Highway	Glebe Rd.
From/To	Goldsborough Neck Rd to MD 322
Jurisdiction	Talbot County
Analysis Year	2030
Description	Corridor C2 - Future Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.94	
Lane width	14.0	ft	% Trucks and buses	2	%
Segment length	0.6	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	10	%
Grade: Length		mi	Access points/mi	6	/mi
Up/down		%			

Two-way hourly volume, V	620		veh/h
Directional split	58	/ 42	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.996	
Two-way flow rate,(note-1) vp	662	pc/h
Highest directional split proportion (note-2)	384	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	1.5	mi/h
Free-flow speed, FFS	43.5	mi/h
Adjustment for no-passing zones, fnp	0.8	mi/h
Average travel speed, ATS	37.6	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	661	pc/h
Highest directional split proportion (note-2)	383	
Base percent time-spent-following, BPTSF	44.1	%
Adj.for directional distribution and no-passing zones, fd/np	5.2	
Percent time-spent-following, PTSF	49.2	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.21	
Peak 15-min vehicle-miles of travel, VMT15	99	veh-mi
Peak-hour vehicle-miles of travel, VMT60	372	veh-mi
Peak 15-min total travel time, TT15	2.6	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	06/29/2005
Analysis Time Period	PM Peak
Highway	Glebe Rd.
From/To	Goldsborough Neck Rd to MD 322
Jurisdiction	Talbot County
Analysis Year	2030
Description	Corridor C2 - Future Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.90	
Lane width	14.0	ft	% Trucks and buses	2	%
Segment length	0.6	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	10	%
Grade: Length		mi	Access points/mi	6	/mi
Up/down		%			

Two-way hourly volume, V	760	veh/h	
Directional split	58 / 42	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.996	
Two-way flow rate,(note-1) vp	848	pc/h
Highest directional split proportion (note-2)	492	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	1.5	mi/h
Free-flow speed, FFS	43.5	mi/h
Adjustment for no-passing zones, fnp	0.7	mi/h
Average travel speed, ATS	36.3	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	846	pc/h
Highest directional split proportion (note-2)	491	
Base percent time-spent-following, BPTSF	52.5	%
Adj.for directional distribution and no-passing zones, fd/np	3.8	
Percent time-spent-following, PTSF	56.2	%

Level of Service and Other Performance Measures

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.26	
Peak 15-min vehicle-miles of travel, VMT15	127	veh-mi
Peak-hour vehicle-miles of travel, VMT60	456	veh-mi
Peak 15-min total travel time, TT15	3.5	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

HCS2000: Two-Lane Highways Release 4.1d

Phone: Fax:
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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	10/20/2005
Analysis Time Period	AM Peak
Highway	Glebe Rd.
From/To	MD 322 at Marlboro Ave.
Jurisdiction	Talbot County
Analysis Year	2030
Description	Corridor C3 - Future 2030 Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.94	
Lane width	14.0	ft	% Trucks and buses	2	%
Segment length	0.6	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	100	%
Grade: Length		mi	Access points/mi	10	/mi
Up/down		%			

Two-way hourly volume, V	380		veh/h
Directional split	58	/ 42	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	410	pc/h
Highest directional split proportion (note-2)	238	pc/h

Free-Flow Speed from Field Measurement:

Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h

Estimated Free-Flow Speed:

Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.2	mi/h
Adj. for access points, fA	2.5	mi/h
Free-flow speed, FFS	38.3	mi/h
Adjustment for no-passing zones, fnp	4.5	mi/h
Average travel speed, ATS	30.6	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	405	pc/h
Highest directional split proportion (note-2)	235	
Base percent time-spent-following, BPTSF	30.0	%
Adj.for directional distribution and no-passing zones, fd/np	22.7	
Percent time-spent-following, PTSF	52.6	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.13	
Peak 15-min vehicle-miles of travel, VMT15	62	veh-mi
Peak-hour vehicle-miles of travel, VMT60	232	veh-mi
Peak 15-min total travel time, TT15	2.0	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	10/20/2005
Analysis Time Period	PM Peak
Highway	Glebe Rd.
From/To	MD 322 at Marlboro Ave.
Jurisdiction	Talbot County
Analysis Year	2030
Description	Corridor C3 - Future 2030 Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.93	
Lane width	14.0	ft	% Trucks and buses	2	%
Segment length	0.6	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	100	%
Grade: Length		mi	Access points/mi	10	/mi
Up/down		%			

Two-way hourly volume, V	580		veh/h
Directional split	59	/ 41	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.996	
Two-way flow rate,(note-1) vp	626	pc/h
Highest directional split proportion (note-2)	369	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.2	mi/h
Adj. for access points, fA	2.5	mi/h
Free-flow speed, FFS	38.3	mi/h
Adjustment for no-passing zones, fnp	3.8	mi/h
Average travel speed, ATS	29.7	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	625	pc/h
Highest directional split proportion (note-2)	369	
Base percent time-spent-following, BPTSF	42.3	%
Adj.for directional distribution and no-passing zones, fd/np	19.9	
Percent time-spent-following, PTSF	62.2	%

Level of Service and Other Performance Measures

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.20	
Peak 15-min vehicle-miles of travel, VMT15	95	veh-mi
Peak-hour vehicle-miles of travel, VMT60	354	veh-mi
Peak 15-min total travel time, TT15	3.2	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	06/29/2005
Analysis Time Period	AM Peak
Highway	MD 370 (Unionville Rd.)
From/To	Miles River Rd. to MD 33
Jurisdiction	Talbot County
Analysis Year	2004
Description	Corridor D - Existing Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	1.0	ft	Peak-hour factor, PHF	0.81	
Lane width	10.0	ft	% Trucks and buses	2	%
Segment length	1.5	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	67	%
Grade: Length		mi	Access points/mi	11	/mi
Up/down		%			

Two-way hourly volume, V	209		veh/h
Directional split	58	/ 42	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	262	pc/h
Highest directional split proportion (note-2)	152	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	5.3	mi/h
Adj. for access points, fA	2.8	mi/h
Free-flow speed, FFS	37.0	mi/h
Adjustment for no-passing zones, fnp	2.8	mi/h
Average travel speed, ATS	32.1	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	259	pc/h
Highest directional split proportion (note-2)	150	
Base percent time-spent-following, BPTSF	20.4	%
Adj.for directional distribution and no-passing zones, fd/np	22.0	
Percent time-spent-following, PTSF	42.4	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.08	
Peak 15-min vehicle-miles of travel, VMT15	97	veh-mi
Peak-hour vehicle-miles of travel, VMT60	314	veh-mi
Peak 15-min total travel time, TT15	3.0	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	06/29/2005
Analysis Time Period	PM Peak
Highway	MD 370 (Unionville Rd.)
From/To	Miles River Rd. to MD 33
Jurisdiction	Talbot County
Analysis Year	2004
Description	Corridor D - Existing Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	1.0	ft	Peak-hour factor, PHF	0.95	
Lane width	10.0	ft	% Trucks and buses	2	%
Segment length	1.5	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	67	%
Grade: Length		mi	Access points/mi	11	/mi
Up/down		%			

Two-way hourly volume, V	237		veh/h
Directional split	54	/ 46	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	253	pc/h
Highest directional split proportion (note-2)	137	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	5.3	mi/h
Adj. for access points, fA	2.8	mi/h
Free-flow speed, FFS	37.0	mi/h
Adjustment for no-passing zones, fnp	2.8	mi/h
Average travel speed, ATS	32.2	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	250	pc/h
Highest directional split proportion (note-2)	135	
Base percent time-spent-following, BPTSF	19.7	%
Adj.for directional distribution and no-passing zones, fd/np	21.6	
Percent time-spent-following, PTSF	41.3	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.08	
Peak 15-min vehicle-miles of travel, VMT15	94	veh-mi
Peak-hour vehicle-miles of travel, VMT60	356	veh-mi
Peak 15-min total travel time, TT15	2.9	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	06/29/2005
Analysis Time Period	AM Peak
Highway	MD 370 (Unionville Rd.)
From/To	Miles River Rd. to MD 33
Jurisdiction	Talbot County
Analysis Year	2015
Description	Corridor D - Future Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	1.0	ft	Peak-hour factor, PHF	0.81	
Lane width	10.0	ft	% Trucks and buses	2	%
Segment length	1.5	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	67	%
Grade: Length		mi	Access points/mi	11	/mi
Up/down		%			

Two-way hourly volume, V	270		veh/h
Directional split	56	/ 44	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	338	pc/h
Highest directional split proportion (note-2)	189	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	5.3	mi/h
Adj. for access points, fA	2.8	mi/h
Free-flow speed, FFS	37.0	mi/h
Adjustment for no-passing zones, fnp	3.3	mi/h
Average travel speed, ATS	31.0	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	334	pc/h
Highest directional split proportion (note-2)	187	
Base percent time-spent-following, BPTSF	25.4	%
Adj.for directional distribution and no-passing zones, fd/np	21.8	
Percent time-spent-following, PTSF	47.3	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.11	
Peak 15-min vehicle-miles of travel, VMT15	125	veh-mi
Peak-hour vehicle-miles of travel, VMT60	405	veh-mi
Peak 15-min total travel time, TT15	4.0	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	06/29/2005
Analysis Time Period	PM Peak
Highway	MD 370 (Unionville Rd.)
From/To	Miles River Rd. to MD 33
Jurisdiction	Talbot County
Analysis Year	2015
Description	Corridor D - Future Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	1.0	ft	Peak-hour factor, PHF	0.95	
Lane width	10.0	ft	% Trucks and buses	2	%
Segment length	1.5	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	67	%
Grade: Length		mi	Access points/mi	11	/mi
Up/down		%			

Two-way hourly volume, V	300		veh/h
Directional split	53	/ 47	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	320	pc/h
Highest directional split proportion (note-2)	170	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	5.3	mi/h
Adj. for access points, fA	2.8	mi/h
Free-flow speed, FFS	37.0	mi/h
Adjustment for no-passing zones, fnp	3.2	mi/h
Average travel speed, ATS	31.3	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	316	pc/h
Highest directional split proportion (note-2)	167	
Base percent time-spent-following, BPTSF	24.3	%
Adj.for directional distribution and no-passing zones, fd/np	21.9	
Percent time-spent-following, PTSF	46.2	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.10	
Peak 15-min vehicle-miles of travel, VMT15	118	veh-mi
Peak-hour vehicle-miles of travel, VMT60	450	veh-mi
Peak 15-min total travel time, TT15	3.8	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	06/29/2005
Analysis Time Period	AM Peak
Highway	MD 370 (Unionville Rd.)
From/To	Miles River Rd. to MD 33
Jurisdiction	Talbot County
Analysis Year	2030
Description	Corridor D - Future Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	1.0	ft	Peak-hour factor, PHF	0.81	
Lane width	10.0	ft	% Trucks and buses	2	%
Segment length	1.5	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	67	%
Grade: Length		mi	Access points/mi	11	/mi
Up/down		%			

Two-way hourly volume, V	380		veh/h
Directional split	58	/ 42	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	476	pc/h
Highest directional split proportion (note-2)	276	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	5.3	mi/h
Adj. for access points, fA	2.8	mi/h
Free-flow speed, FFS	37.0	mi/h
Adjustment for no-passing zones, fnp	3.5	mi/h
Average travel speed, ATS	29.8	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	470	pc/h
Highest directional split proportion (note-2)	273	
Base percent time-spent-following, BPTSF	33.8	%
Adj.for directional distribution and no-passing zones, fd/np	20.6	
Percent time-spent-following, PTSF	54.5	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.15	
Peak 15-min vehicle-miles of travel, VMT15	176	veh-mi
Peak-hour vehicle-miles of travel, VMT60	570	veh-mi
Peak 15-min total travel time, TT15	5.9	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	06/29/2005
Analysis Time Period	PM Peak
Highway	MD 370 (Unionville Rd.)
From/To	Miles River Rd. to MD 33
Jurisdiction	Talbot County
Analysis Year	2030
Description	Corridor D - Future Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	1.0	ft	Peak-hour factor, PHF	0.95	
Lane width	10.0	ft	% Trucks and buses	2	%
Segment length	1.5	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	67	%
Grade: Length		mi	Access points/mi	11	/mi
Up/down		%			

Two-way hourly volume, V	440		veh/h
Directional split	55	/ 45	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	470	pc/h
Highest directional split proportion (note-2)	259	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	5.3	mi/h
Adj. for access points, fA	2.8	mi/h
Free-flow speed, FFS	37.0	mi/h
Adjustment for no-passing zones, fnp	3.5	mi/h
Average travel speed, ATS	29.8	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	464	pc/h
Highest directional split proportion (note-2)	255	
Base percent time-spent-following, BPTSF	33.5	%
Adj.for directional distribution and no-passing zones, fd/np	21.1	
Percent time-spent-following, PTSF	54.6	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.15	
Peak 15-min vehicle-miles of travel, VMT15	174	veh-mi
Peak-hour vehicle-miles of travel, VMT60	660	veh-mi
Peak 15-min total travel time, TT15	5.8	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/01/2005
Analysis Time Period	AM Peak
Highway	MD 33 (St. Michaels Rd.)
From/To	MD 329 to MD 370
Jurisdiction	Talbot County
Analysis Year	2004
Description	Corridor E1 - Existing Conditions Corridor Analysis

Input Data

Highway class	Class 1				
Shoulder width	10.0	ft	Peak-hour factor, PHF	0.92	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	4.0	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	10	%
Grade: Length		mi	Access points/mi	10	/mi
Up/down		%			

Two-way hourly volume, V	1223	veh/h	
Directional split	53 / 47	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.998	
Two-way flow rate,(note-1) vp	1332	pc/h
Highest directional split proportion (note-2)	706	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	60.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	2.5	mi/h
Free-flow speed, FFS	57.5	mi/h
Adjustment for no-passing zones, fnp	0.3	mi/h
Average travel speed, ATS	46.8	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.0	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	
Two-way flow rate,(note-1) vp	1329	pc/h
Highest directional split proportion (note-2)	704	
Base percent time-spent-following, BPTSF	68.9	%
Adj.for directional distribution and no-passing zones, fd/np	2.1	
Percent time-spent-following, PTSF	71.0	%

Level of Service and Other Performance Measures

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.42	
Peak 15-min vehicle-miles of travel, VMT15	1329	veh-mi
Peak-hour vehicle-miles of travel, VMT60	4892	veh-mi
Peak 15-min total travel time, TT15	28.4	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/01/2005
Analysis Time Period	PM Peak
Highway	MD 33 (St. Michaels Rd.)
From/To	MD 329 to MD 370
Jurisdiction	Talbot County
Analysis Year	2004
Description	Corridor E1 - Existing Conditions Corridor Analysis

Input Data

Highway class	Class 1				
Shoulder width	10.0	ft	Peak-hour factor, PHF	0.97	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	4.0	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	10	%
Grade: Length		mi	Access points/mi	10	/mi
Up/down		%			

Two-way hourly volume, V	1630	veh/h	
Directional split	50 / 50	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.998	
Two-way flow rate,(note-1) vp	1684	pc/h
Highest directional split proportion (note-2)	842	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	60.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	2.5	mi/h
Free-flow speed, FFS	57.5	mi/h
Adjustment for no-passing zones, fnp	0.3	mi/h
Average travel speed, ATS	44.2	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.0	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	
Two-way flow rate,(note-1) vp	1680	pc/h
Highest directional split proportion (note-2)	840	
Base percent time-spent-following, BPTSF	77.2	%
Adj.for directional distribution and no-passing zones, fd/np	1.4	
Percent time-spent-following, PTSF	78.5	%

Level of Service and Other Performance Measures

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.53	
Peak 15-min vehicle-miles of travel, VMT15	1680	veh-mi
Peak-hour vehicle-miles of travel, VMT60	6520	veh-mi
Peak 15-min total travel time, TT15	38.0	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

HCS2000: Two-Lane Highways Release 4.1d

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/01/2005
Analysis Time Period	AM Peak
Highway	MD 33 (St. Michaels Rd.)
From/To	MD 370 to MD 322
Jurisdiction	Talbot County
Analysis Year	2004
Description	Corridor E2 - Existing Conditions Corridor Analysis

Input Data

Highway class	Class 1				
Shoulder width	10.0	ft	Peak-hour factor, PHF	0.94	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	1.8	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	10	%
Grade: Length		mi	Access points/mi	9	/mi
Up/down		%			

Two-way hourly volume, V	1295	veh/h	
Directional split	51 / 49	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.998	
Two-way flow rate,(note-1) vp	1380	pc/h
Highest directional split proportion (note-2)	704	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	60.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	2.3	mi/h
Free-flow speed, FFS	57.8	mi/h
Adjustment for no-passing zones, fnp	0.3	mi/h
Average travel speed, ATS	46.7	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.0	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	
Two-way flow rate,(note-1) vp	1378	pc/h
Highest directional split proportion (note-2)	703	
Base percent time-spent-following, BPTSF	70.2	%
Adj.for directional distribution and no-passing zones, fd/np	1.9	
Percent time-spent-following, PTSF	72.1	%

Level of Service and Other Performance Measures

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.43	
Peak 15-min vehicle-miles of travel, VMT15	620	veh-mi
Peak-hour vehicle-miles of travel, VMT60	2331	veh-mi
Peak 15-min total travel time, TT15	13.3	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

HCS2000: Two-Lane Highways Release 4.1d

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/01/2005
Analysis Time Period	PM Peak
Highway	MD 33 (St. Michaels Rd.)
From/To	MD 370 to MD 322
Jurisdiction	Talbot County
Analysis Year	2004
Description	Corridor E2 - Existing Conditions Corridor Analysis

Input Data

Highway class	Class 1				
Shoulder width	10.0	ft	Peak-hour factor, PHF	0.96	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	1.8	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	10	%
Grade: Length		mi	Access points/mi	9	/mi
Up/down		%			

Two-way hourly volume, V	1703	veh/h	
Directional split	52 / 48	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.998	
Two-way flow rate,(note-1) vp	1778	pc/h
Highest directional split proportion (note-2)	925	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	60.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	2.3	mi/h
Free-flow speed, FFS	57.8	mi/h
Adjustment for no-passing zones, fnp	0.3	mi/h
Average travel speed, ATS	43.7	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.0	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	
Two-way flow rate,(note-1) vp	1774	pc/h
Highest directional split proportion (note-2)	922	
Base percent time-spent-following, BPTSF	79.0	%
Adj.for directional distribution and no-passing zones, fd/np	1.3	
Percent time-spent-following, PTSF	80.2	%

Level of Service and Other Performance Measures

Level of service, LOS	E	
Volume to capacity ratio, v/c	0.56	
Peak 15-min vehicle-miles of travel, VMT15	798	veh-mi
Peak-hour vehicle-miles of travel, VMT60	3065	veh-mi
Peak 15-min total travel time, TT15	18.3	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	10/20/2005
Analysis Time Period	AM Peak
Highway	MD 33 (Bay St.)
From/To	MD 322 to Washington St.
Jurisdiction	Talbot County
Analysis Year	2004
Description	Corridor E3 - Existing Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.94	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	0.5	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	100	%
Grade: Length		mi	Access points/mi	15	/mi
Up/down		%			

Two-way hourly volume, V	646		veh/h	
Directional split	67	/ 33	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.996	
Two-way flow rate,(note-1) vp	690	pc/h
Highest directional split proportion (note-2)	462	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	3.8	mi/h
Free-flow speed, FFS	41.3	mi/h
Adjustment for no-passing zones, fnp	3.5	mi/h
Average travel speed, ATS	32.4	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	689	pc/h
Highest directional split proportion (note-2)	462	
Base percent time-spent-following, BPTSF	45.4	%
Adj.for directional distribution and no-passing zones, fd/np	18.0	
Percent time-spent-following, PTSF	63.5	%

Level of Service and Other Performance Measures

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.22	
Peak 15-min vehicle-miles of travel, VMT15	86	veh-mi
Peak-hour vehicle-miles of travel, VMT60	323	veh-mi
Peak 15-min total travel time, TT15	2.7	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	10/20/2005
Analysis Time Period	PM Peak
Highway	MD 33 (Bay St.)
From/To	MD 322 to Washington St.
Jurisdiction	Talbot County
Analysis Year	2004
Description	Corridor E3 - Existing Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.96	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	0.5	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	100	%
Grade: Length		mi	Access points/mi	15	/mi
Up/down		%			

Two-way hourly volume, V	862		veh/h
Directional split	56	/ 44	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.996	
Two-way flow rate,(note-1) vp	902	pc/h
Highest directional split proportion (note-2)	505	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	3.8	mi/h
Free-flow speed, FFS	41.3	mi/h
Adjustment for no-passing zones, fnp	2.8	mi/h
Average travel speed, ATS	31.5	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	900	pc/h
Highest directional split proportion (note-2)	504	
Base percent time-spent-following, BPTSF	54.7	%
Adj.for directional distribution and no-passing zones, fd/np	13.7	
Percent time-spent-following, PTSF	68.3	%

Level of Service and Other Performance Measures

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.28	
Peak 15-min vehicle-miles of travel, VMT15	112	veh-mi
Peak-hour vehicle-miles of travel, VMT60	431	veh-mi
Peak 15-min total travel time, TT15	3.6	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/01/2005
Analysis Time Period	AM Peak
Highway	MD 33 (St. Michaels Rd.)
From/To	MD 329 to MD 370
Jurisdiction	Talbot County
Analysis Year	2015
Description	Corridor E1 - Future Conditions Corridor Analysis

Input Data

Highway class	Class 1				
Shoulder width	10.0	ft	Peak-hour factor, PHF	0.92	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	4.0	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	10	%
Grade: Length		mi	Access points/mi	10	/mi
Up/down		%			

Two-way hourly volume, V	1250	veh/h	
Directional split	52 / 48	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.998	
Two-way flow rate,(note-1) vp	1361	pc/h
Highest directional split proportion (note-2)	708	pc/h

Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	60.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	2.5	mi/h
Free-flow speed, FFS	57.5	mi/h
Adjustment for no-passing zones, fnp	0.3	mi/h
Average travel speed, ATS	46.6	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.0	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	
Two-way flow rate,(note-1) vp	1359	pc/h
Highest directional split proportion (note-2)	707	
Base percent time-spent-following, BPTSF	69.7	%
Adj.for directional distribution and no-passing zones, fd/np	2.0	
Percent time-spent-following, PTSF	71.7	%

Level of Service and Other Performance Measures

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.43	
Peak 15-min vehicle-miles of travel, VMT15	1359	veh-mi
Peak-hour vehicle-miles of travel, VMT60	5000	veh-mi
Peak 15-min total travel time, TT15	29.2	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/01/2005
Analysis Time Period	PM Peak
Highway	MD 33 (St. Michaels Rd.)
From/To	MD 329 to MD 370
Jurisdiction	Talbot County
Analysis Year	2015
Description	Corridor E1 - Future Conditions Corridor Analysis

Input Data

Highway class	Class 1				
Shoulder width	10.0	ft	Peak-hour factor, PHF	0.97	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	4.0	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	10	%
Grade: Length		mi	Access points/mi	10	/mi
Up/down		%			

Two-way hourly volume, V	1650	veh/h	
Directional split	50 / 50	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.998	
Two-way flow rate,(note-1) vp	1704	pc/h
Highest directional split proportion (note-2)	852	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	60.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	2.5	mi/h
Free-flow speed, FFS	57.5	mi/h
Adjustment for no-passing zones, fnp	0.3	mi/h
Average travel speed, ATS	44.0	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.0	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	
Two-way flow rate,(note-1) vp	1701	pc/h
Highest directional split proportion (note-2)	851	
Base percent time-spent-following, BPTSF	77.6	%
Adj.for directional distribution and no-passing zones, fd/np	1.3	
Percent time-spent-following, PTSF	78.9	%

Level of Service and Other Performance Measures

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.53	
Peak 15-min vehicle-miles of travel, VMT15	1701	veh-mi
Peak-hour vehicle-miles of travel, VMT60	6600	veh-mi
Peak 15-min total travel time, TT15	38.7	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/01/2005
Analysis Time Period	AM Peak
Highway	MD 33 (St. Michaels Rd.)
From/To	MD 370 to MD 322
Jurisdiction	Talbot County
Analysis Year	2015
Description	Corridor E2 - Future Conditions Corridor Analysis

Input Data

Highway class	Class 1				
Shoulder width	10.0	ft	Peak-hour factor, PHF	0.94	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	1.8	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	10	%
Grade: Length		mi	Access points/mi	9	/mi
Up/down		%			

Two-way hourly volume, V	1420	veh/h	
Directional split	50 / 50	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.998	
Two-way flow rate,(note-1) vp	1514	pc/h
Highest directional split proportion (note-2)	757	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	60.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	2.3	mi/h
Free-flow speed, FFS	57.8	mi/h
Adjustment for no-passing zones, fnp	0.3	mi/h
Average travel speed, ATS	45.7	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.0	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	
Two-way flow rate,(note-1) vp	1511	pc/h
Highest directional split proportion (note-2)	756	
Base percent time-spent-following, BPTSF	73.5	%
Adj.for directional distribution and no-passing zones, fd/np	1.6	
Percent time-spent-following, PTSF	75.1	%

Level of Service and Other Performance Measures

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.47	
Peak 15-min vehicle-miles of travel, VMT15	680	veh-mi
Peak-hour vehicle-miles of travel, VMT60	2556	veh-mi
Peak 15-min total travel time, TT15	14.9	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/01/2005
Analysis Time Period	PM Peak
Highway	MD 33 (St. Michaels Rd.)
From/To	MD 370 to MD 322
Jurisdiction	Talbot County
Analysis Year	2015
Description	Corridor E2 - Future Conditions Corridor Analysis

Input Data

Highway class	Class 1				
Shoulder width	10.0	ft	Peak-hour factor, PHF	0.96	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	1.8	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	10	%
Grade: Length		mi	Access points/mi	9	/mi
Up/down		%			

Two-way hourly volume, V	1840	veh/h	
Directional split	53 / 47	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.998	
Two-way flow rate,(note-1) vp	1920	pc/h
Highest directional split proportion (note-2)	1018	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	60.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	2.3	mi/h
Free-flow speed, FFS	57.8	mi/h
Adjustment for no-passing zones, fnp	0.3	mi/h
Average travel speed, ATS	42.6	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.0	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	
Two-way flow rate,(note-1) vp	1917	pc/h
Highest directional split proportion (note-2)	1016	
Base percent time-spent-following, BPTSF	81.5	%
Adj.for directional distribution and no-passing zones, fd/np	1.1	
Percent time-spent-following, PTSF	82.5	%

Level of Service and Other Performance Measures

Level of service, LOS	E	
Volume to capacity ratio, v/c	0.60	
Peak 15-min vehicle-miles of travel, VMT15	862	veh-mi
Peak-hour vehicle-miles of travel, VMT60	3312	veh-mi
Peak 15-min total travel time, TT15	20.2	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

HCS2000: Two-Lane Highways Release 4.1d

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	10/20/2005
Analysis Time Period	AM Peak
Highway	MD 33 (Bay St.)
From/To	MD 322 to Washington St.
Jurisdiction	Talbot County
Analysis Year	2015
Description	Corridor E3 - Future 2015 Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.94	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	0.5	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	100	%
Grade: Length		mi	Access points/mi	15	/mi
Up/down		%			

Two-way hourly volume, V	740		veh/h	
Directional split	68	/ 32	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.996	
Two-way flow rate,(note-1) vp	790	pc/h
Highest directional split proportion (note-2)	537	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	3.8	mi/h
Free-flow speed, FFS	41.3	mi/h
Adjustment for no-passing zones, fnp	3.0	mi/h
Average travel speed, ATS	32.1	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	789	pc/h
Highest directional split proportion (note-2)	537	
Base percent time-spent-following, BPTSF	50.0	%
Adj.for directional distribution and no-passing zones, fd/np	14.9	
Percent time-spent-following, PTSF	64.9	%

Level of Service and Other Performance Measures

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.25	
Peak 15-min vehicle-miles of travel, VMT15	98	veh-mi
Peak-hour vehicle-miles of travel, VMT60	370	veh-mi
Peak 15-min total travel time, TT15	3.1	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

HCS2000: Two-Lane Highways Release 4.1d

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	10/20/2005
Analysis Time Period	PM Peak
Highway	MD 33 (Bay St.)
From/To	MD 322 to Washington St.
Jurisdiction	Talbot County
Analysis Year	2015
Description	Corridor E3 - Future 2015 Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.96	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	0.5	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	100	%
Grade: Length		mi	Access points/mi	15	/mi
Up/down		%			

Two-way hourly volume, V	960		veh/h
Directional split	55	/ 45	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.996	
Two-way flow rate,(note-1) vp	1004	pc/h
Highest directional split proportion (note-2)	552	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	3.8	mi/h
Free-flow speed, FFS	41.3	mi/h
Adjustment for no-passing zones, fnp	2.6	mi/h
Average travel speed, ATS	30.9	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	1002	pc/h
Highest directional split proportion (note-2)	551	
Base percent time-spent-following, BPTSF	58.6	%
Adj.for directional distribution and no-passing zones, fd/np	12.6	
Percent time-spent-following, PTSF	71.1	%

Level of Service and Other Performance Measures

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.31	
Peak 15-min vehicle-miles of travel, VMT15	125	veh-mi
Peak-hour vehicle-miles of travel, VMT60	480	veh-mi
Peak 15-min total travel time, TT15	4.0	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

HCS2000: Two-Lane Highways Release 4.1d

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/01/2005
Analysis Time Period	AM Peak
Highway	MD 33 (St. Michaels Rd.)
From/To	MD 329 to MD 370
Jurisdiction	Talbot County
Analysis Year	2030
Description	Corridor E1 - Future Conditions Corridor Analysis

Input Data

Highway class	Class 1				
Shoulder width	10.0	ft	Peak-hour factor, PHF	0.92	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	4.0	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	10	%
Grade: Length		mi	Access points/mi	10	/mi
Up/down		%			

Two-way hourly volume, V	1310	veh/h	
Directional split	51 / 49	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.998	
Two-way flow rate,(note-1) vp	1427	pc/h
Highest directional split proportion (note-2)	728	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	60.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	2.5	mi/h
Free-flow speed, FFS	57.5	mi/h
Adjustment for no-passing zones, fnp	0.3	mi/h
Average travel speed, ATS	46.1	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.0	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	
Two-way flow rate,(note-1) vp	1424	pc/h
Highest directional split proportion (note-2)	726	
Base percent time-spent-following, BPTSF	71.4	%
Adj.for directional distribution and no-passing zones, fd/np	1.8	
Percent time-spent-following, PTSF	73.2	%

Level of Service and Other Performance Measures

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.45	
Peak 15-min vehicle-miles of travel, VMT15	1424	veh-mi
Peak-hour vehicle-miles of travel, VMT60	5240	veh-mi
Peak 15-min total travel time, TT15	30.9	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

HCS2000: Two-Lane Highways Release 4.1d

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/01/2005
Analysis Time Period	PM Peak
Highway	MD 33 (St. Michaels Rd.)
From/To	MD 329 to MD 370
Jurisdiction	Talbot County
Analysis Year	2030
Description	Corridor E1 - Future Conditions Corridor Analysis

Input Data

Highway class	Class 1				
Shoulder width	10.0	ft	Peak-hour factor, PHF	0.97	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	4.0	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	10	%
Grade: Length		mi	Access points/mi	10	/mi
Up/down		%			

Two-way hourly volume, V	1720	veh/h	
Directional split	50 / 50	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.998	
Two-way flow rate,(note-1) vp	1777	pc/h
Highest directional split proportion (note-2)	889	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	60.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	2.5	mi/h
Free-flow speed, FFS	57.5	mi/h
Adjustment for no-passing zones, fnp	0.3	mi/h
Average travel speed, ATS	43.5	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.0	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	
Two-way flow rate,(note-1) vp	1773	pc/h
Highest directional split proportion (note-2)	887	
Base percent time-spent-following, BPTSF	79.0	%
Adj.for directional distribution and no-passing zones, fd/np	1.2	
Percent time-spent-following, PTSF	80.2	%

Level of Service and Other Performance Measures

Level of service, LOS	E	
Volume to capacity ratio, v/c	0.56	
Peak 15-min vehicle-miles of travel, VMT15	1773	veh-mi
Peak-hour vehicle-miles of travel, VMT60	6880	veh-mi
Peak 15-min total travel time, TT15	40.8	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/01/2005
Analysis Time Period	AM Peak
Highway	MD 33 (St. Michaels Rd.)
From/To	MD 370 to MD 322
Jurisdiction	Talbot County
Analysis Year	2030
Description	Corridor E2 - Future Conditions Corridor Analysis

Input Data

Highway class	Class 1				
Shoulder width	10.0	ft	Peak-hour factor, PHF	0.94	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	1.8	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	10	%
Grade: Length		mi	Access points/mi	9	/mi
Up/down		%			

Two-way hourly volume, V	1540	veh/h	
Directional split	50 / 50	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.998	
Two-way flow rate,(note-1) vp	1642	pc/h
Highest directional split proportion (note-2)	821	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	60.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	2.3	mi/h
Free-flow speed, FFS	57.8	mi/h
Adjustment for no-passing zones, fnp	0.3	mi/h
Average travel speed, ATS	44.7	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.0	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	
Two-way flow rate,(note-1) vp	1638	pc/h
Highest directional split proportion (note-2)	819	
Base percent time-spent-following, BPTSF	76.3	%
Adj.for directional distribution and no-passing zones, fd/np	1.4	
Percent time-spent-following, PTSF	77.7	%

Level of Service and Other Performance Measures

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.51	
Peak 15-min vehicle-miles of travel, VMT15	737	veh-mi
Peak-hour vehicle-miles of travel, VMT60	2772	veh-mi
Peak 15-min total travel time, TT15	16.5	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/01/2005
Analysis Time Period	PM Peak
Highway	MD 33 (St. Michaels Rd.)
From/To	MD 370 to MD 322
Jurisdiction	Talbot County
Analysis Year	2030
Description	Corridor E2 - Future Conditions Corridor Analysis

Input Data

Highway class	Class 1				
Shoulder width	10.0	ft	Peak-hour factor, PHF	0.96	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	1.8	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	10	%
Grade: Length		mi	Access points/mi	9	/mi
Up/down		%			

Two-way hourly volume, V	1990	veh/h	
Directional split	53 / 47	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.998	
Two-way flow rate,(note-1) vp	2077	pc/h
Highest directional split proportion (note-2)	1101	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	60.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	2.3	mi/h
Free-flow speed, FFS	57.8	mi/h
Adjustment for no-passing zones, fnp	0.3	mi/h
Average travel speed, ATS	41.4	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.0	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	
Two-way flow rate,(note-1) vp	2073	pc/h
Highest directional split proportion (note-2)	1099	
Base percent time-spent-following, BPTSF	83.8	%
Adj.for directional distribution and no-passing zones, fd/np	0.9	
Percent time-spent-following, PTSF	84.8	%

Level of Service and Other Performance Measures

Level of service, LOS	E	
Volume to capacity ratio, v/c	0.65	
Peak 15-min vehicle-miles of travel, VMT15	933	veh-mi
Peak-hour vehicle-miles of travel, VMT60	3582	veh-mi
Peak 15-min total travel time, TT15	22.5	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	10/20/2005
Analysis Time Period	AM Peak
Highway	MD 33 (Bay St.)
From/To	MD 322 to Washington St.
Jurisdiction	Talbot County
Analysis Year	2030
Description	Corridor E3 - Future 2030 Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.94	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	0.5	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	100	%
Grade: Length		mi	Access points/mi	15	/mi
Up/down		%			

Two-way hourly volume, V	820	veh/h	
Directional split	67 / 33	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.996	
Two-way flow rate,(note-1) vp	876	pc/h
Highest directional split proportion (note-2)	587	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	3.8	mi/h
Free-flow speed, FFS	41.3	mi/h
Adjustment for no-passing zones, fnp	2.8	mi/h
Average travel speed, ATS	31.6	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	874	pc/h
Highest directional split proportion (note-2)	586	
Base percent time-spent-following, BPTSF	53.6	%
Adj.for directional distribution and no-passing zones, fd/np	13.8	
Percent time-spent-following, PTSF	67.4	%

Level of Service and Other Performance Measures

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.27	
Peak 15-min vehicle-miles of travel, VMT15	109	veh-mi
Peak-hour vehicle-miles of travel, VMT60	410	veh-mi
Peak 15-min total travel time, TT15	3.4	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

HCS2000: Two-Lane Highways Release 4.1d

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	10/20/2005
Analysis Time Period	PM Peak
Highway	MD 33 (Bay St.)
From/To	MD 322 to Washington St.
Jurisdiction	Talbot County
Analysis Year	2030
Description	Corridor E3 - Future 2030 Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.96	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	0.5	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	100	%
Grade: Length		mi	Access points/mi	15	/mi
Up/down		%			

Two-way hourly volume, V	1080		veh/h
Directional split	56	/ 44	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.996	
Two-way flow rate,(note-1) vp	1130	pc/h
Highest directional split proportion (note-2)	633	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	3.8	mi/h
Free-flow speed, FFS	41.3	mi/h
Adjustment for no-passing zones, fnp	2.3	mi/h
Average travel speed, ATS	30.2	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	1127	pc/h
Highest directional split proportion (note-2)	631	
Base percent time-spent-following, BPTSF	62.9	%
Adj.for directional distribution and no-passing zones, fd/np	11.1	
Percent time-spent-following, PTSF	74.0	%

Level of Service and Other Performance Measures

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.35	
Peak 15-min vehicle-miles of travel, VMT15	141	veh-mi
Peak-hour vehicle-miles of travel, VMT60	540	veh-mi
Peak 15-min total travel time, TT15	4.7	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

HCS2000: Two-Lane Highways Release 4.1d

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/01/2005
Analysis Time Period	AM Peak
Highway	MD 329 (Royal Oak Rd.)
From/To	MD 33 to MD 33
Jurisdiction	Talbot County
Analysis Year	2004
Description	Corridor F - Existing Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	1.0	ft	Peak-hour factor, PHF	0.88	
Lane width	10.0	ft	% Trucks and buses	2	%
Segment length	3.5	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	70	%
Grade: Length		mi	Access points/mi	26	/mi
Up/down		%			

Two-way hourly volume, V	130		veh/h
Directional split	55	/ 45	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	150	pc/h
Highest directional split proportion (note-2)	83	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	5.3	mi/h
Adj. for access points, fA	6.5	mi/h
Free-flow speed, FFS	33.2	mi/h
Adjustment for no-passing zones, fnp	1.9	mi/h
Average travel speed, ATS	30.2	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	148	pc/h
Highest directional split proportion (note-2)	81	
Base percent time-spent-following, BPTSF	12.2	%
Adj.for directional distribution and no-passing zones, fd/np	21.6	
Percent time-spent-following, PTSF	33.8	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.05	
Peak 15-min vehicle-miles of travel, VMT15	129	veh-mi
Peak-hour vehicle-miles of travel, VMT60	455	veh-mi
Peak 15-min total travel time, TT15	4.3	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

HCS2000: Two-Lane Highways Release 4.1d

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/14/2005
Analysis Time Period	PM Peak
Highway	MD 329 (Royal Oak Rd.)
From/To	MD 33 to MD 33
Jurisdiction	Talbot County
Analysis Year	2004
Description	Corridor F - Existing Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	1.0	ft	Peak-hour factor, PHF	0.90	
Lane width	10.0	ft	% Trucks and buses	2	%
Segment length	3.5	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	70	%
Grade: Length		mi	Access points/mi	26	/mi
Up/down		%			

Two-way hourly volume, V	177	veh/h	
Directional split	59 / 41	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	199	pc/h
Highest directional split proportion (note-2)	117	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	5.3	mi/h
Adj. for access points, fA	6.5	mi/h
Free-flow speed, FFS	33.2	mi/h
Adjustment for no-passing zones, fnp	2.5	mi/h
Average travel speed, ATS	29.2	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	197	pc/h
Highest directional split proportion (note-2)	116	
Base percent time-spent-following, BPTSF	15.9	%
Adj.for directional distribution and no-passing zones, fd/np	22.6	
Percent time-spent-following, PTSF	38.5	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.06	
Peak 15-min vehicle-miles of travel, VMT15	172	veh-mi
Peak-hour vehicle-miles of travel, VMT60	620	veh-mi
Peak 15-min total travel time, TT15	5.9	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

HCS2000: Two-Lane Highways Release 4.1d

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/14/2005
Analysis Time Period	AM Peak
Highway	MD 329 (Royal Oak Rd.)
From/To	MD 33 to MD 33
Jurisdiction	Talbot County
Analysis Year	2015
Description	Corridor F - Future Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	1.0	ft	Peak-hour factor, PHF	0.88	
Lane width	10.0	ft	% Trucks and buses	2	%
Segment length	3.5	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	70	%
Grade: Length		mi	Access points/mi	26	/mi
Up/down		%			

Two-way hourly volume, V	140		veh/h	
Directional split	57	/ 43	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	161	pc/h
Highest directional split proportion (note-2)	92	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	5.3	mi/h
Adj. for access points, fA	6.5	mi/h
Free-flow speed, FFS	33.2	mi/h
Adjustment for no-passing zones, fnp	2.0	mi/h
Average travel speed, ATS	29.9	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	159	pc/h
Highest directional split proportion (note-2)	91	
Base percent time-spent-following, BPTSF	13.0	%
Adj.for directional distribution and no-passing zones, fd/np	22.2	
Percent time-spent-following, PTSF	35.3	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.05	
Peak 15-min vehicle-miles of travel, VMT15	139	veh-mi
Peak-hour vehicle-miles of travel, VMT60	490	veh-mi
Peak 15-min total travel time, TT15	4.6	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/14/2005
Analysis Time Period	PM Peak
Highway	MD 329 (Royal Oak Rd.)
From/To	MD 33 to MD 33
Jurisdiction	Talbot County
Analysis Year	2015
Description	Corridor F - Future Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	1.0	ft	Peak-hour factor, PHF	0.90	
Lane width	10.0	ft	% Trucks and buses	2	%
Segment length	3.5	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	70	%
Grade: Length		mi	Access points/mi	26	/mi
Up/down		%			

Two-way hourly volume, V	185		veh/h
Directional split	57	/ 43	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	208	pc/h
Highest directional split proportion (note-2)	119	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	5.3	mi/h
Adj. for access points, fA	6.5	mi/h
Free-flow speed, FFS	33.2	mi/h
Adjustment for no-passing zones, fnp	2.5	mi/h
Average travel speed, ATS	29.0	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	206	pc/h
Highest directional split proportion (note-2)	117	
Base percent time-spent-following, BPTSF	16.6	%
Adj.for directional distribution and no-passing zones, fd/np	22.1	
Percent time-spent-following, PTSF	38.7	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.06	
Peak 15-min vehicle-miles of travel, VMT15	180	veh-mi
Peak-hour vehicle-miles of travel, VMT60	648	veh-mi
Peak 15-min total travel time, TT15	6.2	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/14/2005
Analysis Time Period	AM Peak
Highway	MD 329 (Royal Oak Rd.)
From/To	MD 33 to MD 33
Jurisdiction	Talbot County
Analysis Year	2030
Description	Corridor F - Future Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	1.0	ft	Peak-hour factor, PHF	0.88	
Lane width	10.0	ft	% Trucks and buses	2	%
Segment length	3.5	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	70	%
Grade: Length		mi	Access points/mi	26	/mi
Up/down		%			

Two-way hourly volume, V	150		veh/h
Directional split	53	/ 47	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	173	pc/h
Highest directional split proportion (note-2)	92	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	5.3	mi/h
Adj. for access points, fA	6.5	mi/h
Free-flow speed, FFS	33.2	mi/h
Adjustment for no-passing zones, fnp	2.2	mi/h
Average travel speed, ATS	29.7	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	171	pc/h
Highest directional split proportion (note-2)	91	
Base percent time-spent-following, BPTSF	14.0	%
Adj.for directional distribution and no-passing zones, fd/np	21.1	
Percent time-spent-following, PTSF	35.0	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.05	
Peak 15-min vehicle-miles of travel, VMT15	149	veh-mi
Peak-hour vehicle-miles of travel, VMT60	525	veh-mi
Peak 15-min total travel time, TT15	5.0	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/14/2005
Analysis Time Period	PM Peak
Highway	MD 329 (Royal Oak Rd.)
From/To	MD 33 to MD 33
Jurisdiction	Talbot County
Analysis Year	2030
Description	Corridor F - Future Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	1.0	ft	Peak-hour factor, PHF	0.90	
Lane width	10.0	ft	% Trucks and buses	2	%
Segment length	3.5	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	70	%
Grade: Length		mi	Access points/mi	26	/mi
Up/down		%			

Two-way hourly volume, V	195		veh/h
Directional split	59	/ 41	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	220	pc/h
Highest directional split proportion (note-2)	130	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	5.3	mi/h
Adj. for access points, fA	6.5	mi/h
Free-flow speed, FFS	33.2	mi/h
Adjustment for no-passing zones, fnp	2.6	mi/h
Average travel speed, ATS	28.9	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	217	pc/h
Highest directional split proportion (note-2)	128	
Base percent time-spent-following, BPTSF	17.4	%
Adj.for directional distribution and no-passing zones, fd/np	22.5	
Percent time-spent-following, PTSF	39.8	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.07	
Peak 15-min vehicle-miles of travel, VMT15	190	veh-mi
Peak-hour vehicle-miles of travel, VMT60	683	veh-mi
Peak 15-min total travel time, TT15	6.6	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	08/05/2005
Analysis Time Period	AM Peak
Highway	MD 33 (St. Michaels Rd.)
From/To	MD 579 West
Jurisdiction	Talbot County
Analysis Year	2004
Description	Corridor G1 - Existing Conditions Corridor Analysis

Input Data

Highway class	Class 1				
Shoulder width	10.0	ft	Peak-hour factor, PHF	0.94	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	4.0	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	75	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	293	veh/h	
Directional split	61 / 39	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	316	pc/h
Highest directional split proportion (note-2)	193	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	60.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	2.0	mi/h
Free-flow speed, FFS	58.0	mi/h
Adjustment for no-passing zones, fnp	3.3	mi/h
Average travel speed, ATS	52.3	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	312	pc/h
Highest directional split proportion (note-2)	190	
Base percent time-spent-following, BPTSF	24.0	%
Adj.for directional distribution and no-passing zones, fd/np	22.2	
Percent time-spent-following, PTSF	46.2	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.10	
Peak 15-min vehicle-miles of travel, VMT15	312	veh-mi
Peak-hour vehicle-miles of travel, VMT60	1172	veh-mi
Peak 15-min total travel time, TT15	6.0	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	08/05/2005
Analysis Time Period	PM Peak
Highway	MD 33 (St. Michaels Rd.)
From/To	MD 579 West
Jurisdiction	Talbot County
Analysis Year	2004
Description	Corridor G1 - Existing Conditions Corridor Analysis

Input Data

Highway class	Class 1				
Shoulder width	10.0	ft	Peak-hour factor, PHF	0.95	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	4.0	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	75	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	395		veh/h
Directional split	65	/ 35	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	422	pc/h
Highest directional split proportion (note-2)	274	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	60.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	2.0	mi/h
Free-flow speed, FFS	58.0	mi/h
Adjustment for no-passing zones, fnp	3.7	mi/h
Average travel speed, ATS	51.0	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	417	pc/h
Highest directional split proportion (note-2)	271	
Base percent time-spent-following, BPTSF	30.7	%
Adj.for directional distribution and no-passing zones, fd/np	21.7	
Percent time-spent-following, PTSF	52.4	%

Level of Service and Other Performance Measures

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.13	
Peak 15-min vehicle-miles of travel, VMT15	416	veh-mi
Peak-hour vehicle-miles of travel, VMT60	1580	veh-mi
Peak 15-min total travel time, TT15	8.2	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/21/2005
Analysis Time Period	AM Peak
Highway	MD 33 (St. Michaels Rd.)
From/To	MD 579 to Railroad Ave.
Jurisdiction	Talbot County
Analysis Year	2004
Description	Corridor G2 - Existing Conditions Corridor Analysis

Input Data

Highway class	Class 1				
Shoulder width	10.0	ft	Peak-hour factor, PHF	0.94	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	2.6	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	100	%
Grade: Length		mi	Access points/mi	16	/mi
Up/down		%			

Two-way hourly volume, V	953		veh/h
Directional split	56	/ 44	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.996	
Two-way flow rate,(note-1) vp	1018	pc/h
Highest directional split proportion (note-2)	570	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	60.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	4.0	mi/h
Free-flow speed, FFS	56.0	mi/h
Adjustment for no-passing zones, fnp	2.6	mi/h
Average travel speed, ATS	45.5	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	1016	pc/h
Highest directional split proportion (note-2)	569	
Base percent time-spent-following, BPTSF	59.1	%
Adj.for directional distribution and no-passing zones, fd/np	12.4	
Percent time-spent-following, PTSF	71.4	%

Level of Service and Other Performance Measures

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.32	
Peak 15-min vehicle-miles of travel, VMT15	659	veh-mi
Peak-hour vehicle-miles of travel, VMT60	2478	veh-mi
Peak 15-min total travel time, TT15	14.5	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

HCS2000: Two-Lane Highways Release 4.1d

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/21/2005
Analysis Time Period	PM Peak
Highway	MD 33 (St. Michaels Rd.)
From/To	MD 579 to Railroad Ave.
Jurisdiction	Talbot County
Analysis Year	2004
Description	Corridor G2 - Existing Conditions Corridor Analysis

Input Data

Highway class	Class 1				
Shoulder width	10.0	ft	Peak-hour factor, PHF	0.95	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	2.6	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	100	%
Grade: Length		mi	Access points/mi	16	/mi
Up/down		%			

Two-way hourly volume, V	1096	veh/h	
Directional split	61 / 39	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.996	
Two-way flow rate,(note-1) vp	1158	pc/h
Highest directional split proportion (note-2)	706	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	60.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	4.0	mi/h
Free-flow speed, FFS	56.0	mi/h
Adjustment for no-passing zones, fnp	2.2	mi/h
Average travel speed, ATS	44.8	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	1156	pc/h
Highest directional split proportion (note-2)	705	
Base percent time-spent-following, BPTSF	63.8	%
Adj.for directional distribution and no-passing zones, fd/np	10.7	
Percent time-spent-following, PTSF	74.5	%

Level of Service and Other Performance Measures

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.36	
Peak 15-min vehicle-miles of travel, VMT15	750	veh-mi
Peak-hour vehicle-miles of travel, VMT60	2850	veh-mi
Peak 15-min total travel time, TT15	16.7	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/21/2005
Analysis Time Period	AM Peak
Highway	MD 33 (St. Michaels Rd.)
From/To	Railroad Ave. to Boundary Ln.
Jurisdiction	Talbot County
Analysis Year	2004
Description	Corridor G3 - Existing Conditions Corridor Analysis

Input Data

Highway class	Class 1				
Shoulder width	4.0	ft	Peak-hour factor, PHF	0.86	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	0.5	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	100	%
Grade: Length		mi	Access points/mi	35	/mi
Up/down		%			

Two-way hourly volume, V	1142	veh/h	
Directional split	52 / 48	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.998	
Two-way flow rate,(note-1) vp	1331	pc/h
Highest directional split proportion (note-2)	692	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	1.3	mi/h
Adj. for access points, fA	8.8	mi/h
Free-flow speed, FFS	35.0	mi/h
Adjustment for no-passing zones, fnp	1.8	mi/h
Average travel speed, ATS	22.8	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.0	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	
Two-way flow rate,(note-1) vp	1328	pc/h
Highest directional split proportion (note-2)	691	
Base percent time-spent-following, BPTSF	68.9	%
Adj.for directional distribution and no-passing zones, fd/np	8.8	
Percent time-spent-following, PTSF	77.7	%

Level of Service and Other Performance Measures

Level of service, LOS	E	
Volume to capacity ratio, v/c	0.42	
Peak 15-min vehicle-miles of travel, VMT15	173	veh-mi
Peak-hour vehicle-miles of travel, VMT60	594	veh-mi
Peak 15-min total travel time, TT15	7.6	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

HCS2000: Two-Lane Highways Release 4.1d

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/21/2005
Analysis Time Period	PM Peak
Highway	MD 33 (St. Michaels Rd.)
From/To	Railroad Ave. to Boundary Ln.
Jurisdiction	Talbot County
Analysis Year	2004
Description	Corridor G3 - Existing Conditions Corridor Analysis

Input Data

Highway class	Class 1				
Shoulder width	4.0	ft	Peak-hour factor, PHF	0.80	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	0.5	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	100	%
Grade: Length		mi	Access points/mi	35	/mi
Up/down		%			

Two-way hourly volume, V	1219	veh/h	
Directional split	56 / 44	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.998	
Two-way flow rate,(note-1) vp	1527	pc/h
Highest directional split proportion (note-2)	855	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	1.3	mi/h
Adj. for access points, fA	8.8	mi/h
Free-flow speed, FFS	35.0	mi/h
Adjustment for no-passing zones, fnp	1.6	mi/h
Average travel speed, ATS	21.5	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.0	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	
Two-way flow rate,(note-1) vp	1524	pc/h
Highest directional split proportion (note-2)	853	
Base percent time-spent-following, BPTSF	73.8	%
Adj.for directional distribution and no-passing zones, fd/np	7.3	
Percent time-spent-following, PTSF	81.1	%

Level of Service and Other Performance Measures

Level of service, LOS	E	
Volume to capacity ratio, v/c	0.48	
Peak 15-min vehicle-miles of travel, VMT15	198	veh-mi
Peak-hour vehicle-miles of travel, VMT60	634	veh-mi
Peak 15-min total travel time, TT15	9.2	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

HCS2000: Two-Lane Highways Release 4.1d

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	08/05/2005
Analysis Time Period	AM Peak
Highway	MD 33 (St. Michaels Rd.)
From/To	MD 579 West
Jurisdiction	Talbot County
Analysis Year	2015
Description	Corridor G1 - Future Conditions Corridor Analysis

Input Data

Highway class	Class 1				
Shoulder width	10.0	ft	Peak-hour factor, PHF	0.94	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	4.0	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	75	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	305	veh/h	
Directional split	62 / 38	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	329	pc/h
Highest directional split proportion (note-2)	204	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	60.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	2.0	mi/h
Free-flow speed, FFS	58.0	mi/h
Adjustment for no-passing zones, fnp	3.4	mi/h
Average travel speed, ATS	52.1	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	325	pc/h
Highest directional split proportion (note-2)	202	
Base percent time-spent-following, BPTSF	24.8	%
Adj.for directional distribution and no-passing zones, fd/np	22.2	
Percent time-spent-following, PTSF	47.1	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.10	
Peak 15-min vehicle-miles of travel, VMT15	324	veh-mi
Peak-hour vehicle-miles of travel, VMT60	1220	veh-mi
Peak 15-min total travel time, TT15	6.2	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	08/05/2005
Analysis Time Period	PM Peak
Highway	MD 33 (St. Michaels Rd.)
From/To	MD 579 West
Jurisdiction	Talbot County
Analysis Year	2015
Description	Corridor G1 -Future Conditions Corridor Analysis

Input Data

Highway class	Class 1				
Shoulder width	10.0	ft	Peak-hour factor, PHF	0.95	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	4.0	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	75	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	410		veh/h
Directional split	63	/ 37	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	438	pc/h
Highest directional split proportion (note-2)	276	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	60.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	2.0	mi/h
Free-flow speed, FFS	58.0	mi/h
Adjustment for no-passing zones, fnp	3.7	mi/h
Average travel speed, ATS	50.9	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	432	pc/h
Highest directional split proportion (note-2)	272	
Base percent time-spent-following, BPTSF	31.6	%
Adj.for directional distribution and no-passing zones, fd/np	21.3	
Percent time-spent-following, PTSF	52.9	%

Level of Service and Other Performance Measures

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.14	
Peak 15-min vehicle-miles of travel, VMT15	432	veh-mi
Peak-hour vehicle-miles of travel, VMT60	1640	veh-mi
Peak 15-min total travel time, TT15	8.5	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	08/02/2005
Analysis Time Period	AM Peak
Highway	MD 33 (St. Michaels Rd.)
From/To	MD 579 to Railroad Ave.
Jurisdiction	Talbot County
Analysis Year	2015
Description	Corridor G2 - Future Conditions Corridor Analysis

Input Data

Highway class	Class 1				
Shoulder width	10.0	ft	Peak-hour factor, PHF	0.94	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	2.6	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	100	%
Grade: Length		mi	Access points/mi	16	/mi
Up/down		%			

Two-way hourly volume, V	985		veh/h
Directional split	56	/ 44	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.996	
Two-way flow rate,(note-1) vp	1052	pc/h
Highest directional split proportion (note-2)	589	pc/h

Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	60.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	4.0	mi/h
Free-flow speed, FFS	56.0	mi/h
Adjustment for no-passing zones, fnp	2.5	mi/h
Average travel speed, ATS	45.4	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	1050	pc/h
Highest directional split proportion (note-2)	588	
Base percent time-spent-following, BPTSF	60.3	%
Adj.for directional distribution and no-passing zones, fd/np	12.0	
Percent time-spent-following, PTSF	72.2	%

Level of Service and Other Performance Measures

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.33	
Peak 15-min vehicle-miles of travel, VMT15	681	veh-mi
Peak-hour vehicle-miles of travel, VMT60	2561	veh-mi
Peak 15-min total travel time, TT15	15.0	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	08/02/2005
Analysis Time Period	PM Peak
Highway	MD 33 (St. Michaels Rd.)
From/To	MD 579 to Railroad Ave.
Jurisdiction	Talbot County
Analysis Year	2015
Description	Corridor G2 - Future Conditions Corridor Analysis

Input Data

Highway class	Class 1				
Shoulder width	10.0	ft	Peak-hour factor, PHF	0.95	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	2.6	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	100	%
Grade: Length		mi	Access points/mi	16	/mi
Up/down		%			

Two-way hourly volume, V	1096	veh/h	
Directional split	61 / 39	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.996	
Two-way flow rate,(note-1) vp	1158	pc/h
Highest directional split proportion (note-2)	706	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	60.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	4.0	mi/h
Free-flow speed, FFS	56.0	mi/h
Adjustment for no-passing zones, fnp	2.2	mi/h
Average travel speed, ATS	44.8	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	1156	pc/h
Highest directional split proportion (note-2)	705	
Base percent time-spent-following, BPTSF	63.8	%
Adj.for directional distribution and no-passing zones, fd/np	10.7	
Percent time-spent-following, PTSF	74.5	%

Level of Service and Other Performance Measures

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.36	
Peak 15-min vehicle-miles of travel, VMT15	750	veh-mi
Peak-hour vehicle-miles of travel, VMT60	2850	veh-mi
Peak 15-min total travel time, TT15	16.7	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	08/02/2005
Analysis Time Period	AM Peak
Highway	MD 33 (St. Michaels Rd.)
From/To	Railroad Ave. to Boundary Ln.
Jurisdiction	Talbot County
Analysis Year	2015
Description	Corridor G3 - Future Conditions Corridor Analysis

Input Data

Highway class	Class 1				
Shoulder width	4.0	ft	Peak-hour factor, PHF	0.86	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	0.5	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	100	%
Grade: Length		mi	Access points/mi	35	/mi
Up/down		%			

Two-way hourly volume, V	1255	veh/h	
Directional split	52 / 48	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.998	
Two-way flow rate,(note-1) vp	1462	pc/h
Highest directional split proportion (note-2)	760	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	1.3	mi/h
Adj. for access points, fA	8.8	mi/h
Free-flow speed, FFS	35.0	mi/h
Adjustment for no-passing zones, fnp	1.6	mi/h
Average travel speed, ATS	22.0	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.0	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	
Two-way flow rate,(note-1) vp	1459	pc/h
Highest directional split proportion (note-2)	759	
Base percent time-spent-following, BPTSF	72.3	%
Adj.for directional distribution and no-passing zones, fd/np	7.6	
Percent time-spent-following, PTSF	79.9	%

Level of Service and Other Performance Measures

Level of service, LOS	E	
Volume to capacity ratio, v/c	0.46	
Peak 15-min vehicle-miles of travel, VMT15	190	veh-mi
Peak-hour vehicle-miles of travel, VMT60	653	veh-mi
Peak 15-min total travel time, TT15	8.6	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	08/02/2005
Analysis Time Period	PM Peak
Highway	MD 33 (St. Michaels Rd.)
From/To	Railroad Ave. to Boundary Ln.
Jurisdiction	Talbot County
Analysis Year	2015
Description	Corridor G3 - Future Conditions Corridor Analysis

Input Data

Highway class	Class 1				
Shoulder width	4.0	ft	Peak-hour factor, PHF	0.80	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	0.5	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	100	%
Grade: Length		mi	Access points/mi	35	/mi
Up/down		%			

Two-way hourly volume, V	1340	veh/h	
Directional split	56 / 44	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.998	
Two-way flow rate,(note-1) vp	1678	pc/h
Highest directional split proportion (note-2)	940	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	1.3	mi/h
Adj. for access points, fA	8.8	mi/h
Free-flow speed, FFS	35.0	mi/h
Adjustment for no-passing zones, fnp	1.4	mi/h
Average travel speed, ATS	20.5	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.0	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	
Two-way flow rate,(note-1) vp	1675	pc/h
Highest directional split proportion (note-2)	938	
Base percent time-spent-following, BPTSF	77.1	%
Adj.for directional distribution and no-passing zones, fd/np	6.3	
Percent time-spent-following, PTSF	83.4	%

Level of Service and Other Performance Measures

Level of service, LOS	E	
Volume to capacity ratio, v/c	0.52	
Peak 15-min vehicle-miles of travel, VMT15	218	veh-mi
Peak-hour vehicle-miles of travel, VMT60	697	veh-mi
Peak 15-min total travel time, TT15	10.6	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	08/05/2005
Analysis Time Period	AM Peak
Highway	MD 33 (St. Michaels Rd.)
From/To	MD 579 West
Jurisdiction	Talbot County
Analysis Year	2030
Description	Corridor G1 - Future Conditions Corridor Analysis

Input Data

Highway class	Class 1				
Shoulder width	10.0	ft	Peak-hour factor, PHF	0.94	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	4.0	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	75	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	335	veh/h	
Directional split	60 / 40	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	361	pc/h
Highest directional split proportion (note-2)	217	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	60.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	2.0	mi/h
Free-flow speed, FFS	58.0	mi/h
Adjustment for no-passing zones, fnp	3.6	mi/h
Average travel speed, ATS	51.6	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	357	pc/h
Highest directional split proportion (note-2)	214	
Base percent time-spent-following, BPTSF	26.9	%
Adj.for directional distribution and no-passing zones, fd/np	21.7	
Percent time-spent-following, PTSF	48.6	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.11	
Peak 15-min vehicle-miles of travel, VMT15	356	veh-mi
Peak-hour vehicle-miles of travel, VMT60	1340	veh-mi
Peak 15-min total travel time, TT15	6.9	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	08/05/2005
Analysis Time Period	PM Peak
Highway	MD 33 (St. Michaels Rd.)
From/To	MD 579 West
Jurisdiction	Talbot County
Analysis Year	2030
Description	Corridor G1 -Future Conditions Corridor Analysis

Input Data

Highway class	Class 1				
Shoulder width	10.0	ft	Peak-hour factor, PHF	0.95	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	4.0	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	75	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	450		veh/h	
Directional split	64	/ 36	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	480	pc/h
Highest directional split proportion (note-2)	307	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	60.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	2.0	mi/h
Free-flow speed, FFS	58.0	mi/h
Adjustment for no-passing zones, fnp	3.6	mi/h
Average travel speed, ATS	50.7	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	475	pc/h
Highest directional split proportion (note-2)	304	
Base percent time-spent-following, BPTSF	34.1	%
Adj.for directional distribution and no-passing zones, fd/np	21.0	
Percent time-spent-following, PTSF	55.1	%

Level of Service and Other Performance Measures

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.15	
Peak 15-min vehicle-miles of travel, VMT15	474	veh-mi
Peak-hour vehicle-miles of travel, VMT60	1800	veh-mi
Peak 15-min total travel time, TT15	9.4	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

HCS2000: Two-Lane Highways Release 4.1d

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	08/02/2005
Analysis Time Period	AM Peak
Highway	MD 33 (St. Michaels Rd.)
From/To	MD 579 to Railroad Ave.
Jurisdiction	Talbot County
Analysis Year	2030
Description	Corridor G2 - Future Conditions Corridor Analysis

Input Data

Highway class	Class 1				
Shoulder width	10.0	ft	Peak-hour factor, PHF	0.94	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	2.6	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	100	%
Grade: Length		mi	Access points/mi	16	/mi
Up/down		%			

Two-way hourly volume, V	1005	veh/h	
Directional split	57 / 43	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.996	
Two-way flow rate,(note-1) vp	1073	pc/h
Highest directional split proportion (note-2)	612	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	60.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	4.0	mi/h
Free-flow speed, FFS	56.0	mi/h
Adjustment for no-passing zones, fnp	2.4	mi/h
Average travel speed, ATS	45.3	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	1071	pc/h
Highest directional split proportion (note-2)	610	
Base percent time-spent-following, BPTSF	61.0	%
Adj.for directional distribution and no-passing zones, fd/np	11.7	
Percent time-spent-following, PTSF	72.7	%

Level of Service and Other Performance Measures

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.34	
Peak 15-min vehicle-miles of travel, VMT15	695	veh-mi
Peak-hour vehicle-miles of travel, VMT60	2613	veh-mi
Peak 15-min total travel time, TT15	15.4	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	08/02/2005
Analysis Time Period	PM Peak
Highway	MD 33 (St. Michaels Rd.)
From/To	MD 579 to Railroad Ave.
Jurisdiction	Talbot County
Analysis Year	2030
Description	Corridor G2 - Future Conditions Corridor Analysis

Input Data

Highway class	Class 1				
Shoulder width	10.0	ft	Peak-hour factor, PHF	0.95	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	2.6	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	100	%
Grade: Length		mi	Access points/mi	16	/mi
Up/down		%			

Two-way hourly volume, V	1180	veh/h	
Directional split	62 / 38	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.998	
Two-way flow rate,(note-1) vp	1245	pc/h
Highest directional split proportion (note-2)	772	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	60.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	4.0	mi/h
Free-flow speed, FFS	56.0	mi/h
Adjustment for no-passing zones, fnp	2.0	mi/h
Average travel speed, ATS	44.3	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.0	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	
Two-way flow rate,(note-1) vp	1242	pc/h
Highest directional split proportion (note-2)	770	
Base percent time-spent-following, BPTSF	66.4	%
Adj.for directional distribution and no-passing zones, fd/np	9.8	
Percent time-spent-following, PTSF	76.2	%

Level of Service and Other Performance Measures

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.39	
Peak 15-min vehicle-miles of travel, VMT15	807	veh-mi
Peak-hour vehicle-miles of travel, VMT60	3068	veh-mi
Peak 15-min total travel time, TT15	18.2	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	08/02/2005
Analysis Time Period	AM Peak
Highway	MD 33 (St. Michaels Rd.)
From/To	Railroad Ave. to Boundary Ln.
Jurisdiction	Talbot County
Analysis Year	2030
Description	Corridor G3 - Future Conditions Corridor Analysis

Input Data

Highway class	Class 1				
Shoulder width	4.0	ft	Peak-hour factor, PHF	0.86	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	0.5	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	100	%
Grade: Length		mi	Access points/mi	35	/mi
Up/down		%			

Two-way hourly volume, V	1300	veh/h	
Directional split	52 / 48	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.998	
Two-way flow rate,(note-1) vp	1515	pc/h
Highest directional split proportion (note-2)	788	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	1.3	mi/h
Adj. for access points, fA	8.8	mi/h
Free-flow speed, FFS	35.0	mi/h
Adjustment for no-passing zones, fnp	1.6	mi/h
Average travel speed, ATS	21.6	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.0	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	
Two-way flow rate,(note-1) vp	1512	pc/h
Highest directional split proportion (note-2)	786	
Base percent time-spent-following, BPTSF	73.5	%
Adj.for directional distribution and no-passing zones, fd/np	7.3	
Percent time-spent-following, PTSF	80.8	%

Level of Service and Other Performance Measures

Level of service, LOS	E	
Volume to capacity ratio, v/c	0.47	
Peak 15-min vehicle-miles of travel, VMT15	197	veh-mi
Peak-hour vehicle-miles of travel, VMT60	676	veh-mi
Peak 15-min total travel time, TT15	9.1	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	08/02/2005
Analysis Time Period	PM Peak
Highway	MD 33 (St. Michaels Rd.)
From/To	Railroad Ave. to Boundary Ln.
Jurisdiction	Talbot County
Analysis Year	2030
Description	Corridor G3 - Future Conditions Corridor Analysis

Input Data

Highway class	Class 1				
Shoulder width	4.0	ft	Peak-hour factor, PHF	0.80	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	0.5	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	100	%
Grade: Length		mi	Access points/mi	35	/mi
Up/down		%			

Two-way hourly volume, V	1390	veh/h	
Directional split	56 / 44	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.998	
Two-way flow rate,(note-1) vp	1741	pc/h
Highest directional split proportion (note-2)	975	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	1.3	mi/h
Adj. for access points, fA	8.8	mi/h
Free-flow speed, FFS	35.0	mi/h
Adjustment for no-passing zones, fnp	1.4	mi/h
Average travel speed, ATS	20.1	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.0	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	
Two-way flow rate,(note-1) vp	1737	pc/h
Highest directional split proportion (note-2)	973	
Base percent time-spent-following, BPTSF	78.3	%
Adj.for directional distribution and no-passing zones, fd/np	6.0	
Percent time-spent-following, PTSF	84.2	%

Level of Service and Other Performance Measures

Level of service, LOS	E	
Volume to capacity ratio, v/c	0.54	
Peak 15-min vehicle-miles of travel, VMT15	226	veh-mi
Peak-hour vehicle-miles of travel, VMT60	723	veh-mi
Peak 15-min total travel time, TT15	11.3	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	08/05/2005
Analysis Time Period	AM Peak
Highway	MD 333 (Oxford Rd.)
From/To	Almshouse Rd. to Llandaff Rd.
Jurisdiction	Talbot County
Analysis Year	2004
Description	Corridor H1 - Existing Conditions Corridor Analysis

Input Data

Highway class	Class 1				
Shoulder width	12.0	ft	Peak-hour factor, PHF	0.90	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	2.7	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	50	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	339	veh/h	
Directional split	50 / 50	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	382	pc/h
Highest directional split proportion (note-2)	191	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	55.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	2.0	mi/h
Free-flow speed, FFS	53.0	mi/h
Adjustment for no-passing zones, fnp	3.0	mi/h
Average travel speed, ATS	47.0	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	377	pc/h
Highest directional split proportion (note-2)	189	
Base percent time-spent-following, BPTSF	28.2	%
Adj.for directional distribution and no-passing zones, fd/np	20.6	
Percent time-spent-following, PTSF	48.8	%

Level of Service and Other Performance Measures

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.12	
Peak 15-min vehicle-miles of travel, VMT15	254	veh-mi
Peak-hour vehicle-miles of travel, VMT60	915	veh-mi
Peak 15-min total travel time, TT15	5.4	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	08/05/2005
Analysis Time Period	PM Peak
Highway	MD 333 (Oxford Rd.)
From/To	Almshouse Rd. to Llandaff Rd.
Jurisdiction	Talbot County
Analysis Year	2004
Description	Corridor H1 - Existing Conditions Corridor Analysis

Input Data

Highway class	Class 1				
Shoulder width	12.0	ft	Peak-hour factor, PHF	0.83	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	2.7	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	50	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	489		veh/h
Directional split	50	/ 50	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	597	pc/h
Highest directional split proportion (note-2)	299	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	55.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	2.0	mi/h
Free-flow speed, FFS	53.0	mi/h
Adjustment for no-passing zones, fnp	2.7	mi/h
Average travel speed, ATS	45.7	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	590	pc/h
Highest directional split proportion (note-2)	295	
Base percent time-spent-following, BPTSF	40.5	%
Adj.for directional distribution and no-passing zones, fd/np	17.5	
Percent time-spent-following, PTSF	58.0	%

Level of Service and Other Performance Measures

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.19	
Peak 15-min vehicle-miles of travel, VMT15	398	veh-mi
Peak-hour vehicle-miles of travel, VMT60	1320	veh-mi
Peak 15-min total travel time, TT15	8.7	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

HCS2000: Two-Lane Highways Release 4.1d

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/14/2005
Analysis Time Period	AM Peak
Highway	MD 333 (Oxford Rd.)
From/To	Llandaff Rd. to MD 322
Jurisdiction	Talbot County
Analysis Year	2004
Description	Corridor H2 - Existing Conditions Corridor Analysis

Input Data

Highway class	Class 1				
Shoulder width	12.0	ft	Peak-hour factor, PHF	0.94	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	2.7	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	50	%
Grade: Length		mi	Access points/mi	9	/mi
Up/down		%			

Two-way hourly volume, V	533	veh/h	
Directional split	64 /	36	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	575	pc/h
Highest directional split proportion (note-2)	368	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	55.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	2.3	mi/h
Free-flow speed, FFS	52.8	mi/h
Adjustment for no-passing zones, fnp	2.8	mi/h
Average travel speed, ATS	45.5	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	568	pc/h
Highest directional split proportion (note-2)	364	
Base percent time-spent-following, BPTSF	39.3	%
Adj.for directional distribution and no-passing zones, fd/np	17.4	
Percent time-spent-following, PTSF	56.7	%

Level of Service and Other Performance Measures

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.18	
Peak 15-min vehicle-miles of travel, VMT15	383	veh-mi
Peak-hour vehicle-miles of travel, VMT60	1439	veh-mi
Peak 15-min total travel time, TT15	8.4	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

HCS2000: Two-Lane Highways Release 4.1d

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/14/2005
Analysis Time Period	PM Peak
Highway	MD 333 (Oxford Rd.)
From/To	Llandaff Rd. to MD 322
Jurisdiction	Talbot County
Analysis Year	2004
Description	Corridor H2 - Existing Conditions Corridor Analysis

Input Data

Highway class	Class 1				
Shoulder width	12.0	ft	Peak-hour factor, PHF	0.92	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	2.7	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	50	%
Grade: Length		mi	Access points/mi	9	/mi
Up/down		%			

Two-way hourly volume, V	618	veh/h	
Directional split	55 / 45	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.996	
Two-way flow rate,(note-1) vp	674	pc/h
Highest directional split proportion (note-2)	371	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	55.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	2.3	mi/h
Free-flow speed, FFS	52.8	mi/h
Adjustment for no-passing zones, fnp	2.5	mi/h
Average travel speed, ATS	45.0	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	673	pc/h
Highest directional split proportion (note-2)	370	
Base percent time-spent-following, BPTSF	44.7	%
Adj.for directional distribution and no-passing zones, fd/np	15.5	
Percent time-spent-following, PTSF	60.1	%

Level of Service and Other Performance Measures

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.21	
Peak 15-min vehicle-miles of travel, VMT15	453	veh-mi
Peak-hour vehicle-miles of travel, VMT60	1669	veh-mi
Peak 15-min total travel time, TT15	10.1	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	08/05/2005
Analysis Time Period	AM Peak
Highway	MD 333 (Oxford Rd.)
From/To	Llandaff Rd. to Almshouse Rd.
Jurisdiction	Talbot County
Analysis Year	2015
Description	Corridor H1 - Future Conditions Corridor Analysis

Input Data

Highway class	Class 1				
Shoulder width	12.0	ft	Peak-hour factor, PHF	0.90	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	2.7	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	50	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	440		veh/h
Directional split	52	/ 48	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	496	pc/h
Highest directional split proportion (note-2)	258	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	55.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	2.0	mi/h
Free-flow speed, FFS	53.0	mi/h
Adjustment for no-passing zones, fnp	2.9	mi/h
Average travel speed, ATS	46.2	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	490	pc/h
Highest directional split proportion (note-2)	255	
Base percent time-spent-following, BPTSF	35.0	%
Adj.for directional distribution and no-passing zones, fd/np	19.0	
Percent time-spent-following, PTSF	54.0	%

Level of Service and Other Performance Measures

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.16	
Peak 15-min vehicle-miles of travel, VMT15	330	veh-mi
Peak-hour vehicle-miles of travel, VMT60	1188	veh-mi
Peak 15-min total travel time, TT15	7.1	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	08/05/2005
Analysis Time Period	PM Peak
Highway	MD 333 (Oxford Rd.)
From/To	Llandaff Rd. to Almshouse Rd.
Jurisdiction	Talbot County
Analysis Year	2015
Description	Corridor H1 - Future Conditions Corridor Analysis

Input Data

Highway class	Class 1				
Shoulder width	12.0	ft	Peak-hour factor, PHF	0.83	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	2.7	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	50	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	650		veh/h
Directional split	51	/ 49	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.996	
Two-way flow rate,(note-1) vp	786	pc/h
Highest directional split proportion (note-2)	401	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	55.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	2.0	mi/h
Free-flow speed, FFS	53.0	mi/h
Adjustment for no-passing zones, fnp	2.2	mi/h
Average travel speed, ATS	44.7	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	785	pc/h
Highest directional split proportion (note-2)	400	
Base percent time-spent-following, BPTSF	49.8	%
Adj.for directional distribution and no-passing zones, fd/np	13.4	
Percent time-spent-following, PTSF	63.2	%

Level of Service and Other Performance Measures

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.25	
Peak 15-min vehicle-miles of travel, VMT15	529	veh-mi
Peak-hour vehicle-miles of travel, VMT60	1755	veh-mi
Peak 15-min total travel time, TT15	11.8	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

HCS2000: Two-Lane Highways Release 4.1d

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/14/2005
Analysis Time Period	AM Peak
Highway	MD 333 (Oxford Rd.)
From/To	MD 322 to Llandaff Rd.
Jurisdiction	Talbot County
Analysis Year	2015
Description	Corridor H2 - Future Conditions Corridor Analysis

Input Data

Highway class	Class 1				
Shoulder width	12.0	ft	Peak-hour factor, PHF	0.94	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	2.7	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	50	%
Grade: Length		mi	Access points/mi	9	/mi
Up/down		%			

Two-way hourly volume, V	740		veh/h
Directional split	62	/ 38	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.996	
Two-way flow rate,(note-1) vp	790	pc/h
Highest directional split proportion (note-2)	490	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	55.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	2.3	mi/h
Free-flow speed, FFS	52.8	mi/h
Adjustment for no-passing zones, fnp	2.2	mi/h
Average travel speed, ATS	44.4	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	789	pc/h
Highest directional split proportion (note-2)	489	
Base percent time-spent-following, BPTSF	50.0	%
Adj.for directional distribution and no-passing zones, fd/np	12.0	
Percent time-spent-following, PTSF	62.0	%

Level of Service and Other Performance Measures

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.25	
Peak 15-min vehicle-miles of travel, VMT15	531	veh-mi
Peak-hour vehicle-miles of travel, VMT60	1998	veh-mi
Peak 15-min total travel time, TT15	11.9	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/14/2005
Analysis Time Period	PM Peak
Highway	MD 333 (Oxford Rd.)
From/To	MD 322 to Llandaff Rd.
Jurisdiction	Talbot County
Analysis Year	2015
Description	Corridor H2 - Future Conditions Corridor Analysis

Input Data

Highway class	Class 1				
Shoulder width	12.0	ft	Peak-hour factor, PHF	0.92	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	2.7	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	50	%
Grade: Length		mi	Access points/mi	9	/mi
Up/down		%			

Two-way hourly volume, V	820		veh/h
Directional split	55	/ 45	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.996	
Two-way flow rate,(note-1) vp	895	pc/h
Highest directional split proportion (note-2)	492	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	55.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	2.3	mi/h
Free-flow speed, FFS	52.8	mi/h
Adjustment for no-passing zones, fnp	2.0	mi/h
Average travel speed, ATS	43.8	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	893	pc/h
Highest directional split proportion (note-2)	491	
Base percent time-spent-following, BPTSF	54.4	%
Adj.for directional distribution and no-passing zones, fd/np	11.5	
Percent time-spent-following, PTSF	65.8	%

Level of Service and Other Performance Measures

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.28	
Peak 15-min vehicle-miles of travel, VMT15	602	veh-mi
Peak-hour vehicle-miles of travel, VMT60	2214	veh-mi
Peak 15-min total travel time, TT15	13.7	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	08/05/2005
Analysis Time Period	AM Peak
Highway	MD 333 (Oxford Rd.)
From/To	Llandaff Rd. to Almshouse Rd.
Jurisdiction	Talbot County
Analysis Year	2030
Description	Corridor H1 - Future Conditions Corridor Analysis

Input Data

Highway class	Class 1				
Shoulder width	12.0	ft	Peak-hour factor, PHF	0.90	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	2.7	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	50	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	480		veh/h
Directional split	52	/ 48	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	541	pc/h
Highest directional split proportion (note-2)	281	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	55.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	2.0	mi/h
Free-flow speed, FFS	53.0	mi/h
Adjustment for no-passing zones, fnp	2.8	mi/h
Average travel speed, ATS	46.0	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	534	pc/h
Highest directional split proportion (note-2)	278	
Base percent time-spent-following, BPTSF	37.5	%
Adj.for directional distribution and no-passing zones, fd/np	18.3	
Percent time-spent-following, PTSF	55.8	%

Level of Service and Other Performance Measures

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.17	
Peak 15-min vehicle-miles of travel, VMT15	360	veh-mi
Peak-hour vehicle-miles of travel, VMT60	1296	veh-mi
Peak 15-min total travel time, TT15	7.8	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	08/05/2005
Analysis Time Period	PM Peak
Highway	MD 333 (Oxford Rd.)
From/To	Llandaff Rd. to Almshouse Rd.
Jurisdiction	Talbot County
Analysis Year	2030
Description	Corridor H1 - Future Conditions Corridor Analysis

Input Data

Highway class	Class 1				
Shoulder width	12.0	ft	Peak-hour factor, PHF	0.83	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	2.7	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	50	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	670		veh/h
Directional split	51	/ 49	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.996	
Two-way flow rate,(note-1) vp	810	pc/h
Highest directional split proportion (note-2)	413	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	55.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	2.0	mi/h
Free-flow speed, FFS	53.0	mi/h
Adjustment for no-passing zones, fnp	2.1	mi/h
Average travel speed, ATS	44.6	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	809	pc/h
Highest directional split proportion (note-2)	413	
Base percent time-spent-following, BPTSF	50.9	%
Adj.for directional distribution and no-passing zones, fd/np	12.9	
Percent time-spent-following, PTSF	63.8	%

Level of Service and Other Performance Measures

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.25	
Peak 15-min vehicle-miles of travel, VMT15	545	veh-mi
Peak-hour vehicle-miles of travel, VMT60	1809	veh-mi
Peak 15-min total travel time, TT15	12.2	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/14/2005
Analysis Time Period	AM Peak
Highway	MD 333 (Oxford Rd.)
From/To	MD 322 to Llandaff Rd.
Jurisdiction	Talbot County
Analysis Year	2030
Description	Corridor H2 - Future Conditions Corridor Analysis

Input Data

Highway class	Class 1				
Shoulder width	12.0	ft	Peak-hour factor, PHF	0.94	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	2.7	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	50	%
Grade: Length		mi	Access points/mi	9	/mi
Up/down		%			

Two-way hourly volume, V	820		veh/h
Directional split	63	/ 37	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.996	
Two-way flow rate,(note-1) vp	876	pc/h
Highest directional split proportion (note-2)	552	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	55.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	2.3	mi/h
Free-flow speed, FFS	52.8	mi/h
Adjustment for no-passing zones, fnp	2.0	mi/h
Average travel speed, ATS	43.9	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	874	pc/h
Highest directional split proportion (note-2)	551	
Base percent time-spent-following, BPTSF	53.6	%
Adj.for directional distribution and no-passing zones, fd/np	11.1	
Percent time-spent-following, PTSF	64.7	%

Level of Service and Other Performance Measures

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.27	
Peak 15-min vehicle-miles of travel, VMT15	589	veh-mi
Peak-hour vehicle-miles of travel, VMT60	2214	veh-mi
Peak 15-min total travel time, TT15	13.4	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/14/2005
Analysis Time Period	PM Peak
Highway	MD 333 (Oxford Rd.)
From/To	MD 322 to Llandaff Rd.
Jurisdiction	Talbot County
Analysis Year	2030
Description	Corridor H2 - Future Conditions Corridor Analysis

Input Data

Highway class	Class 1				
Shoulder width	12.0	ft	Peak-hour factor, PHF	0.92	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	2.7	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	50	%
Grade: Length		mi	Access points/mi	9	/mi
Up/down		%			

Two-way hourly volume, V	890		veh/h
Directional split	55	/ 45	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.996	
Two-way flow rate,(note-1) vp	971	pc/h
Highest directional split proportion (note-2)	534	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	55.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	2.3	mi/h
Free-flow speed, FFS	52.8	mi/h
Adjustment for no-passing zones, fnp	1.9	mi/h
Average travel speed, ATS	43.4	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	969	pc/h
Highest directional split proportion (note-2)	533	
Base percent time-spent-following, BPTSF	57.3	%
Adj.for directional distribution and no-passing zones, fd/np	10.7	
Percent time-spent-following, PTSF	68.0	%

Level of Service and Other Performance Measures

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.30	
Peak 15-min vehicle-miles of travel, VMT15	653	veh-mi
Peak-hour vehicle-miles of travel, VMT60	2403	veh-mi
Peak 15-min total travel time, TT15	15.1	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/14/2005
Analysis Time Period	AM Peak
Highway	Llandaff Rd.
From/To	MD 565 to Baileys Neck Rd. W
Jurisdiction	Talbot County
Analysis Year	2004
Description	Corridor I - Existing Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.90	
Lane width	11.0	ft	% Trucks and buses	2	%
Segment length	1.7	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	100	%
Grade: Length		mi	Access points/mi	10	/mi
Up/down		%			

Two-way hourly volume, V	110		veh/h
Directional split	58	/ 42	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	124	pc/h
Highest directional split proportion (note-2)	72	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.7	mi/h
Adj. for access points, fA	2.5	mi/h
Free-flow speed, FFS	37.8	mi/h
Adjustment for no-passing zones, fnp	2.2	mi/h
Average travel speed, ATS	34.7	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	122	pc/h
Highest directional split proportion (note-2)	71	
Base percent time-spent-following, BPTSF	10.2	%
Adj.for directional distribution and no-passing zones, fd/np	23.6	
Percent time-spent-following, PTSF	33.7	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.04	
Peak 15-min vehicle-miles of travel, VMT15	52	veh-mi
Peak-hour vehicle-miles of travel, VMT60	187	veh-mi
Peak 15-min total travel time, TT15	1.5	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/14/2005
Analysis Time Period	PM Peak
Highway	Llandaff Rd.
From/To	MD 565 to Baileys Neck Rd. W
Jurisdiction	Talbot County
Analysis Year	2004
Description	Corridor I - Existing Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.83	
Lane width	11.0	ft	% Trucks and buses	2	%
Segment length	1.7	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	100	%
Grade: Length		mi	Access points/mi	10	/mi
Up/down		%			

Two-way hourly volume, V	80		veh/h	
Directional split	51	/ 49	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	98	pc/h
Highest directional split proportion (note-2)	50	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.7	mi/h
Adj. for access points, fA	2.5	mi/h
Free-flow speed, FFS	37.8	mi/h
Adjustment for no-passing zones, fnp	1.7	mi/h
Average travel speed, ATS	35.3	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	97	pc/h
Highest directional split proportion (note-2)	49	
Base percent time-spent-following, BPTSF	8.2	%
Adj.for directional distribution and no-passing zones, fd/np	20.7	
Percent time-spent-following, PTSF	28.8	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.03	
Peak 15-min vehicle-miles of travel, VMT15	41	veh-mi
Peak-hour vehicle-miles of travel, VMT60	136	veh-mi
Peak 15-min total travel time, TT15	1.2	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Phone: Fax:
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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/14/2005
Analysis Time Period	AM Peak
Highway	Llandaff Rd.
From/To	MD 565 to Baileys Neck Rd. W
Jurisdiction	Talbot County
Analysis Year	2015
Description	Corridor I - Future Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.90	
Lane width	11.0	ft	% Trucks and buses	2	%
Segment length	1.7	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	100	%
Grade: Length		mi	Access points/mi	10	/mi
Up/down		%			

Two-way hourly volume, V	130		veh/h	
Directional split	62	/ 38	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	146	pc/h
Highest directional split proportion (note-2)	91	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.7	mi/h
Adj. for access points, fA	2.5	mi/h
Free-flow speed, FFS	37.8	mi/h
Adjustment for no-passing zones, fnp	2.6	mi/h
Average travel speed, ATS	34.1	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	145	pc/h
Highest directional split proportion (note-2)	90	
Base percent time-spent-following, BPTSF	12.0	%
Adj.for directional distribution and no-passing zones, fd/np	24.5	
Percent time-spent-following, PTSF	36.5	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.05	
Peak 15-min vehicle-miles of travel, VMT15	61	veh-mi
Peak-hour vehicle-miles of travel, VMT60	221	veh-mi
Peak 15-min total travel time, TT15	1.8	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/14/2005
Analysis Time Period	PM Peak
Highway	Llandaff Rd.
From/To	MD 565 to Baileys Neck Rd. W
Jurisdiction	Talbot County
Analysis Year	2015
Description	Corridor I - Future Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.83	
Lane width	11.0	ft	% Trucks and buses	2	%
Segment length	1.7	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	100	%
Grade: Length		mi	Access points/mi	10	/mi
Up/down		%			

Two-way hourly volume, V	95		veh/h
Directional split	58	/ 42	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	116	pc/h
Highest directional split proportion (note-2)	67	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.7	mi/h
Adj. for access points, fA	2.5	mi/h
Free-flow speed, FFS	37.8	mi/h
Adjustment for no-passing zones, fnp	2.0	mi/h
Average travel speed, ATS	34.9	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	115	pc/h
Highest directional split proportion (note-2)	67	
Base percent time-spent-following, BPTSF	9.6	%
Adj.for directional distribution and no-passing zones, fd/np	23.6	
Percent time-spent-following, PTSF	33.2	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.04	
Peak 15-min vehicle-miles of travel, VMT15	49	veh-mi
Peak-hour vehicle-miles of travel, VMT60	162	veh-mi
Peak 15-min total travel time, TT15	1.4	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/14/2005
Analysis Time Period	AM Peak
Highway	Llandaff Rd.
From/To	MD 565 to Baileys Neck Rd. W
Jurisdiction	Talbot County
Analysis Year	2030
Description	Corridor I - Future Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.90	
Lane width	11.0	ft	% Trucks and buses	2	%
Segment length	1.7	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	100	%
Grade: Length		mi	Access points/mi	10	/mi
Up/down		%			

Two-way hourly volume, V	145		veh/h
Directional split	62	/ 38	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	163	pc/h
Highest directional split proportion (note-2)	101	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.7	mi/h
Adj. for access points, fA	2.5	mi/h
Free-flow speed, FFS	37.8	mi/h
Adjustment for no-passing zones, fnp	2.9	mi/h
Average travel speed, ATS	33.7	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	161	pc/h
Highest directional split proportion (note-2)	100	
Base percent time-spent-following, BPTSF	13.2	%
Adj.for directional distribution and no-passing zones, fd/np	24.4	
Percent time-spent-following, PTSF	37.6	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.05	
Peak 15-min vehicle-miles of travel, VMT15	68	veh-mi
Peak-hour vehicle-miles of travel, VMT60	247	veh-mi
Peak 15-min total travel time, TT15	2.0	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/14/2005
Analysis Time Period	PM Peak
Highway	Llandaff Rd.
From/To	MD 565 to Baileys Neck Rd. W
Jurisdiction	Talbot County
Analysis Year	2030
Description	Corridor I - Future Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.83	
Lane width	11.0	ft	% Trucks and buses	2	%
Segment length	1.7	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	100	%
Grade: Length		mi	Access points/mi	10	/mi
Up/down		%			

Two-way hourly volume, V	125		veh/h
Directional split	52	/ 48	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	153	pc/h
Highest directional split proportion (note-2)	80	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.7	mi/h
Adj. for access points, fA	2.5	mi/h
Free-flow speed, FFS	37.8	mi/h
Adjustment for no-passing zones, fnp	2.7	mi/h
Average travel speed, ATS	33.9	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	151	pc/h
Highest directional split proportion (note-2)	79	
Base percent time-spent-following, BPTSF	12.4	%
Adj.for directional distribution and no-passing zones, fd/np	21.7	
Percent time-spent-following, PTSF	34.1	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.05	
Peak 15-min vehicle-miles of travel, VMT15	64	veh-mi
Peak-hour vehicle-miles of travel, VMT60	213	veh-mi
Peak 15-min total travel time, TT15	1.9	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/14/2005
Analysis Time Period	AM Peak
Highway	Barber Rd.
From/To	US 50 to Koogler Rd.
Jurisdiction	Talbot County
Analysis Year	2004
Description	Corridor J - Existing Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.95	
Lane width	13.0	ft	% Trucks and buses	2	%
Segment length	1.7	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	20	%
Grade: Length		mi	Access points/mi	12	/mi
Up/down		%			

Two-way hourly volume, V	198		veh/h
Directional split	58	/ 42	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	211	pc/h
Highest directional split proportion (note-2)	122	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.2	mi/h
Adj. for access points, fA	3.0	mi/h
Free-flow speed, FFS	37.8	mi/h
Adjustment for no-passing zones, fnp	0.7	mi/h
Average travel speed, ATS	35.5	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	209	pc/h
Highest directional split proportion (note-2)	121	
Base percent time-spent-following, BPTSF	16.8	%
Adj.for directional distribution and no-passing zones, fd/np	11.5	
Percent time-spent-following, PTSF	28.3	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.07	
Peak 15-min vehicle-miles of travel, VMT15	89	veh-mi
Peak-hour vehicle-miles of travel, VMT60	337	veh-mi
Peak 15-min total travel time, TT15	2.5	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/14/2005
Analysis Time Period	PM Peak
Highway	Barber Rd.
From/To	US 50 to Koogler Rd.
Jurisdiction	Talbot County
Analysis Year	2004
Description	Corridor J - Existing Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.94	
Lane width	13.0	ft	% Trucks and buses	2	%
Segment length	1.7	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	20	%
Grade: Length		mi	Access points/mi	12	/mi
Up/down		%			

Two-way hourly volume, V	204		veh/h
Directional split	62	/ 38	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	220	pc/h
Highest directional split proportion (note-2)	136	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.2	mi/h
Adj. for access points, fA	3.0	mi/h
Free-flow speed, FFS	37.8	mi/h
Adjustment for no-passing zones, fnp	0.7	mi/h
Average travel speed, ATS	35.4	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	217	pc/h
Highest directional split proportion (note-2)	135	
Base percent time-spent-following, BPTSF	17.4	%
Adj.for directional distribution and no-passing zones, fd/np	12.1	
Percent time-spent-following, PTSF	29.5	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.07	
Peak 15-min vehicle-miles of travel, VMT15	92	veh-mi
Peak-hour vehicle-miles of travel, VMT60	347	veh-mi
Peak 15-min total travel time, TT15	2.6	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/14/2005
Analysis Time Period	AM Peak
Highway	Barber Rd.
From/To	US 50 to Koogler Rd.
Jurisdiction	Talbot County
Analysis Year	2015
Description	Corridor J - Future Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.95	
Lane width	13.0	ft	% Trucks and buses	2	%
Segment length	1.7	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	20	%
Grade: Length		mi	Access points/mi	12	/mi
Up/down		%			

Two-way hourly volume, V	330		veh/h
Directional split	61	/ 39	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	352	pc/h
Highest directional split proportion (note-2)	215	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.2	mi/h
Adj. for access points, fA	3.0	mi/h
Free-flow speed, FFS	37.8	mi/h
Adjustment for no-passing zones, fnp	1.4	mi/h
Average travel speed, ATS	33.6	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	348	pc/h
Highest directional split proportion (note-2)	212	
Base percent time-spent-following, BPTSF	26.4	%
Adj.for directional distribution and no-passing zones, fd/np	11.8	
Percent time-spent-following, PTSF	38.2	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.11	
Peak 15-min vehicle-miles of travel, VMT15	148	veh-mi
Peak-hour vehicle-miles of travel, VMT60	561	veh-mi
Peak 15-min total travel time, TT15	4.4	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/14/2005
Analysis Time Period	PM Peak
Highway	Barber Rd.
From/To	US 50 to Koogler Rd.
Jurisdiction	Talbot County
Analysis Year	2015
Description	Corridor J - Future Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.94	
Lane width	13.0	ft	% Trucks and buses	2	%
Segment length	1.7	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	20	%
Grade: Length		mi	Access points/mi	12	/mi
Up/down		%			

Two-way hourly volume, V	370		veh/h
Directional split	51	/ 49	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	399	pc/h
Highest directional split proportion (note-2)	203	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.2	mi/h
Adj. for access points, fA	3.0	mi/h
Free-flow speed, FFS	37.8	mi/h
Adjustment for no-passing zones, fnp	1.7	mi/h
Average travel speed, ATS	33.0	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	394	pc/h
Highest directional split proportion (note-2)	201	
Base percent time-spent-following, BPTSF	29.3	%
Adj.for directional distribution and no-passing zones, fd/np	12.3	
Percent time-spent-following, PTSF	41.5	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.12	
Peak 15-min vehicle-miles of travel, VMT15	167	veh-mi
Peak-hour vehicle-miles of travel, VMT60	629	veh-mi
Peak 15-min total travel time, TT15	5.1	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/14/2005
Analysis Time Period	AM Peak
Highway	Barber Rd.
From/To	US 50 to Koogler Rd.
Jurisdiction	Talbot County
Analysis Year	2030
Description	Corridor J - Future Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.95	
Lane width	13.0	ft	% Trucks and buses	2	%
Segment length	1.7	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	20	%
Grade: Length		mi	Access points/mi	12	/mi
Up/down		%			

Two-way hourly volume, V	500		veh/h
Directional split	64	/ 36	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	534	pc/h
Highest directional split proportion (note-2)	342	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.2	mi/h
Adj. for access points, fA	3.0	mi/h
Free-flow speed, FFS	37.8	mi/h
Adjustment for no-passing zones, fnp	1.6	mi/h
Average travel speed, ATS	32.0	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	527	pc/h
Highest directional split proportion (note-2)	337	
Base percent time-spent-following, BPTSF	37.1	%
Adj.for directional distribution and no-passing zones, fd/np	11.7	
Percent time-spent-following, PTSF	48.8	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.17	
Peak 15-min vehicle-miles of travel, VMT15	224	veh-mi
Peak-hour vehicle-miles of travel, VMT60	850	veh-mi
Peak 15-min total travel time, TT15	7.0	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

HCS2000: Two-Lane Highways Release 4.1d

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/14/2005
Analysis Time Period	PM Peak
Highway	Barber Rd.
From/To	US 50 to Koogler Rd.
Jurisdiction	Talbot County
Analysis Year	2030
Description	Corridor J - Future Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.94	
Lane width	13.0	ft	% Trucks and buses	2	%
Segment length	1.7	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	20	%
Grade: Length		mi	Access points/mi	12	/mi
Up/down		%			

Two-way hourly volume, V	630		veh/h
Directional split	54	/ 46	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.996	
Two-way flow rate,(note-1) vp	673	pc/h
Highest directional split proportion (note-2)	363	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.2	mi/h
Adj. for access points, fA	3.0	mi/h
Free-flow speed, FFS	37.8	mi/h
Adjustment for no-passing zones, fnp	1.5	mi/h
Average travel speed, ATS	31.1	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	672	pc/h
Highest directional split proportion (note-2)	363	
Base percent time-spent-following, BPTSF	44.6	%
Adj.for directional distribution and no-passing zones, fd/np	10.3	
Percent time-spent-following, PTSF	54.9	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.21	
Peak 15-min vehicle-miles of travel, VMT15	285	veh-mi
Peak-hour vehicle-miles of travel, VMT60	1071	veh-mi
Peak 15-min total travel time, TT15	9.2	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/14/2005
Analysis Time Period	AM Peak
Highway	Dutchman's Ln.
From/To	US 50 to Dover Neck Rd.
Jurisdiction	Talbot County
Analysis Year	2004
Description	Corridor K - Existing Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.96	
Lane width	13.0	ft	% Trucks and buses	2	%
Segment length	1.9	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	100	%
Grade: Length		mi	Access points/mi	23	/mi
Up/down		%			

Two-way hourly volume, V	490		veh/h
Directional split	66	/ 34	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	518	pc/h
Highest directional split proportion (note-2)	342	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.2	mi/h
Adj. for access points, fA	5.8	mi/h
Free-flow speed, FFS	35.0	mi/h
Adjustment for no-passing zones, fnp	4.1	mi/h
Average travel speed, ATS	26.9	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	511	pc/h
Highest directional split proportion (note-2)	337	
Base percent time-spent-following, BPTSF	36.2	%
Adj.for directional distribution and no-passing zones, fd/np	21.7	
Percent time-spent-following, PTSF	57.9	%

Level of Service and Other Performance Measures

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.16	
Peak 15-min vehicle-miles of travel, VMT15	242	veh-mi
Peak-hour vehicle-miles of travel, VMT60	931	veh-mi
Peak 15-min total travel time, TT15	9.0	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/14/2005
Analysis Time Period	PM Peak
Highway	Dutchman's Ln.
From/To	US 50 to Dover Neck Rd.
Jurisdiction	Talbot County
Analysis Year	2004
Description	Corridor K - Existing Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.97	
Lane width	13.0	ft	% Trucks and buses	2	%
Segment length	1.9	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	100	%
Grade: Length		mi	Access points/mi	23	/mi
Up/down		%			

Two-way hourly volume, V	609	veh/h	
Directional split	70 / 30	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.996	
Two-way flow rate,(note-1) vp	630	pc/h
Highest directional split proportion (note-2)	441	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.2	mi/h
Adj. for access points, fA	5.8	mi/h
Free-flow speed, FFS	35.0	mi/h
Adjustment for no-passing zones, fnp	3.8	mi/h
Average travel speed, ATS	26.4	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	629	pc/h
Highest directional split proportion (note-2)	440	
Base percent time-spent-following, BPTSF	42.5	%
Adj.for directional distribution and no-passing zones, fd/np	20.0	
Percent time-spent-following, PTSF	62.5	%

Level of Service and Other Performance Measures

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.20	
Peak 15-min vehicle-miles of travel, VMT15	298	veh-mi
Peak-hour vehicle-miles of travel, VMT60	1157	veh-mi
Peak 15-min total travel time, TT15	11.3	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/14/2005
Analysis Time Period	AM Peak
Highway	Dutchmans Ln.
From/To	US 50 to Dover Neck Rd.
Jurisdiction	Talbot County
Analysis Year	2015
Description	Corridor K - Future Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.96	
Lane width	13.0	ft	% Trucks and buses	2	%
Segment length	1.9	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	100	%
Grade: Length		mi	Access points/mi	23	/mi
Up/down		%			

Two-way hourly volume, V	610	veh/h	
Directional split	66 / 34	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.996	
Two-way flow rate,(note-1) vp	638	pc/h
Highest directional split proportion (note-2)	421	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.2	mi/h
Adj. for access points, fA	5.8	mi/h
Free-flow speed, FFS	35.0	mi/h
Adjustment for no-passing zones, fnp	3.7	mi/h
Average travel speed, ATS	26.4	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	637	pc/h
Highest directional split proportion (note-2)	420	
Base percent time-spent-following, BPTSF	42.9	%
Adj.for directional distribution and no-passing zones, fd/np	19.7	
Percent time-spent-following, PTSF	62.5	%

Level of Service and Other Performance Measures

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.20	
Peak 15-min vehicle-miles of travel, VMT15	302	veh-mi
Peak-hour vehicle-miles of travel, VMT60	1159	veh-mi
Peak 15-min total travel time, TT15	11.5	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

HCS2000: Two-Lane Highways Release 4.1d

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/14/2005
Analysis Time Period	PM Peak
Highway	Dutchmans Ln.
From/To	US 50 to Dover Neck Rd.
Jurisdiction	Talbot County
Analysis Year	2015
Description	Corridor K - Future Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.97	
Lane width	13.0	ft	% Trucks and buses	2	%
Segment length	1.9	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	100	%
Grade: Length		mi	Access points/mi	23	/mi
Up/down		%			

Two-way hourly volume, V	780	veh/h	
Directional split	71 / 29	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.996	
Two-way flow rate,(note-1) vp	807	pc/h
Highest directional split proportion (note-2)	573	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.2	mi/h
Adj. for access points, fA	5.8	mi/h
Free-flow speed, FFS	35.0	mi/h
Adjustment for no-passing zones, fnp	3.0	mi/h
Average travel speed, ATS	25.8	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	806	pc/h
Highest directional split proportion (note-2)	572	
Base percent time-spent-following, BPTSF	50.8	%
Adj.for directional distribution and no-passing zones, fd/np	14.8	
Percent time-spent-following, PTSF	65.5	%

Level of Service and Other Performance Measures

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.25	
Peak 15-min vehicle-miles of travel, VMT15	382	veh-mi
Peak-hour vehicle-miles of travel, VMT60	1482	veh-mi
Peak 15-min total travel time, TT15	14.8	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/14/2005
Analysis Time Period	AM Peak
Highway	Dutchmans Ln.
From/To	US 50 to Dover Neck Rd.
Jurisdiction	Talbot County
Analysis Year	2030
Description	Corridor K - Future Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.96	
Lane width	13.0	ft	% Trucks and buses	2	%
Segment length	1.9	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	100	%
Grade: Length		mi	Access points/mi	23	/mi
Up/down		%			

Two-way hourly volume, V	650		veh/h
Directional split	66	/ 34	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.996	
Two-way flow rate,(note-1) vp	680	pc/h
Highest directional split proportion (note-2)	449	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.2	mi/h
Adj. for access points, fA	5.8	mi/h
Free-flow speed, FFS	35.0	mi/h
Adjustment for no-passing zones, fnp	3.5	mi/h
Average travel speed, ATS	26.2	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	678	pc/h
Highest directional split proportion (note-2)	447	
Base percent time-spent-following, BPTSF	44.9	%
Adj.for directional distribution and no-passing zones, fd/np	18.4	
Percent time-spent-following, PTSF	63.3	%

Level of Service and Other Performance Measures

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.21	
Peak 15-min vehicle-miles of travel, VMT15	322	veh-mi
Peak-hour vehicle-miles of travel, VMT60	1235	veh-mi
Peak 15-min total travel time, TT15	12.3	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/14/2005
Analysis Time Period	PM Peak
Highway	Dutchmans Ln.
From/To	US 50 to Dover Neck Rd.
Jurisdiction	Talbot County
Analysis Year	2030
Description	Corridor K - Future Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.97	
Lane width	13.0	ft	% Trucks and buses	2	%
Segment length	1.9	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	100	%
Grade: Length		mi	Access points/mi	23	/mi
Up/down		%			

Two-way hourly volume, V	830	veh/h	
Directional split	70 / 30	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.996	
Two-way flow rate,(note-1) vp	859	pc/h
Highest directional split proportion (note-2)	601	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.2	mi/h
Adj. for access points, fA	5.8	mi/h
Free-flow speed, FFS	35.0	mi/h
Adjustment for no-passing zones, fnp	2.9	mi/h
Average travel speed, ATS	25.5	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	857	pc/h
Highest directional split proportion (note-2)	600	
Base percent time-spent-following, BPTSF	52.9	%
Adj.for directional distribution and no-passing zones, fd/np	14.0	
Percent time-spent-following, PTSF	66.9	%

Level of Service and Other Performance Measures

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.27	
Peak 15-min vehicle-miles of travel, VMT15	406	veh-mi
Peak-hour vehicle-miles of travel, VMT60	1577	veh-mi
Peak 15-min total travel time, TT15	15.9	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/14/2005
Analysis Time Period	AM Peak
Highway	MD 331 (Dover Rd.)
From/To	US 50 to Black Dog Alley
Jurisdiction	Talbot County
Analysis Year	2004
Description	Corridor L1 - Existing Conditions Corridor Analysis

Input Data

Highway class	Class 1				
Shoulder width	12.0	ft	Peak-hour factor, PHF	0.93	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	2.3	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	50	%
Grade: Length		mi	Access points/mi	17	/mi
Up/down		%			

Two-way hourly volume, V	1582	veh/h	
Directional split	76 / 24	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.998	
Two-way flow rate,(note-1) vp	1704	pc/h
Highest directional split proportion (note-2)	1295	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	55.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	4.3	mi/h
Free-flow speed, FFS	50.8	mi/h
Adjustment for no-passing zones, fnp	0.9	mi/h
Average travel speed, ATS	36.6	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.0	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	
Two-way flow rate,(note-1) vp	1701	pc/h
Highest directional split proportion (note-2)	1293	
Base percent time-spent-following, BPTSF	77.6	%
Adj.for directional distribution and no-passing zones, fd/np	5.6	
Percent time-spent-following, PTSF	83.2	%

Level of Service and Other Performance Measures

Level of service, LOS	E	
Volume to capacity ratio, v/c	0.53	
Peak 15-min vehicle-miles of travel, VMT15	978	veh-mi
Peak-hour vehicle-miles of travel, VMT60	3639	veh-mi
Peak 15-min total travel time, TT15	26.7	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/14/2005
Analysis Time Period	PM Peak
Highway	MD 331 (Dover Rd.)
From/To	US 50 to Black Dog Alley
Jurisdiction	Talbot County
Analysis Year	2004
Description	Corridor L1 - Existing Conditions Corridor Analysis

Input Data

Highway class	Class 1				
Shoulder width	12.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	2.3	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	50	%
Grade: Length		mi	Access points/mi	17	/mi
Up/down		%			

Two-way hourly volume, V	1864	veh/h	
Directional split	50 / 50	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.998	
Two-way flow rate,(note-1) vp	2122	pc/h
Highest directional split proportion (note-2)	1061	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	55.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	4.3	mi/h
Free-flow speed, FFS	50.8	mi/h
Adjustment for no-passing zones, fnp	0.8	mi/h
Average travel speed, ATS	33.5	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.0	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	
Two-way flow rate,(note-1) vp	2118	pc/h
Highest directional split proportion (note-2)	1059	
Base percent time-spent-following, BPTSF	84.5	%
Adj.for directional distribution and no-passing zones, fd/np	3.0	
Percent time-spent-following, PTSF	87.5	%

Level of Service and Other Performance Measures

Level of service, LOS	E	
Volume to capacity ratio, v/c	0.66	
Peak 15-min vehicle-miles of travel, VMT15	1218	veh-mi
Peak-hour vehicle-miles of travel, VMT60	4287	veh-mi
Peak 15-min total travel time, TT15	36.3	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	08/05/2005
Analysis Time Period	AM Peak
Highway	MD 331 (Dover Rd.)
From/To	Black Dog Alley East
Jurisdiction	Talbot County
Analysis Year	2004
Description	Corridor L2 - Existing Conditions Corridor Analysis

Input Data

Highway class	Class 1				
Shoulder width	12.0	ft	Peak-hour factor, PHF	0.93	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	2.0	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	50	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	1062	veh/h	
Directional split	83 / 17	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.996	
Two-way flow rate,(note-1) vp	1147	pc/h
Highest directional split proportion (note-2)	952	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	55.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	2.0	mi/h
Free-flow speed, FFS	53.0	mi/h
Adjustment for no-passing zones, fnp	1.5	mi/h
Average travel speed, ATS	42.6	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	1144	pc/h
Highest directional split proportion (note-2)	950	
Base percent time-spent-following, BPTSF	63.4	%
Adj.for directional distribution and no-passing zones, fd/np	11.0	
Percent time-spent-following, PTSF	74.5	%

Level of Service and Other Performance Measures

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.36	
Peak 15-min vehicle-miles of travel, VMT15	571	veh-mi
Peak-hour vehicle-miles of travel, VMT60	2124	veh-mi
Peak 15-min total travel time, TT15	13.4	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

HCS2000: Two-Lane Highways Release 4.1d

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	08/05/2005
Analysis Time Period	PM Peak
Highway	MD 331 (Dover Rd.)
From/To	Black Dog Alley East
Jurisdiction	Talbot County
Analysis Year	2004
Description	Corridor L2 - Existing Conditions Corridor Analysis

Input Data

Highway class	Class 1				
Shoulder width	12.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	2.0	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	50	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	1315	veh/h	
Directional split	74 / 26	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.998	
Two-way flow rate,(note-1) vp	1497	pc/h
Highest directional split proportion (note-2)	1108	pc/h

Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	55.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	2.0	mi/h
Free-flow speed, FFS	53.0	mi/h
Adjustment for no-passing zones, fnp	1.0	mi/h
Average travel speed, ATS	40.4	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.0	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	
Two-way flow rate,(note-1) vp	1494	pc/h
Highest directional split proportion (note-2)	1106	
Base percent time-spent-following, BPTSF	73.1	%
Adj.for directional distribution and no-passing zones, fd/np	6.5	
Percent time-spent-following, PTSF	79.6	%

Level of Service and Other Performance Measures

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.47	
Peak 15-min vehicle-miles of travel, VMT15	747	veh-mi
Peak-hour vehicle-miles of travel, VMT60	2630	veh-mi
Peak 15-min total travel time, TT15	18.5	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

HCS2000: Two-Lane Highways Release 4.1d

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	10/20/2005
Analysis Time Period	AM Peak
Highway	MD 331 (Dover St.)
From/To	Avon Ave. to US 50
Jurisdiction	Talbot County
Analysis Year	2004
Description	Corridor L3 - Existing Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.93	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	0.2	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	100	%
Grade: Length		mi	Access points/mi	20	/mi
Up/down		%			

Two-way hourly volume, V	883		veh/h	
Directional split	73	/ 27	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.996	
Two-way flow rate,(note-1) vp	953	pc/h
Highest directional split proportion (note-2)	696	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.2	mi/h
Adj. for access points, fA	5.0	mi/h
Free-flow speed, FFS	35.8	mi/h
Adjustment for no-passing zones, fnp	2.7	mi/h
Average travel speed, ATS	25.7	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	951	pc/h
Highest directional split proportion (note-2)	694	
Base percent time-spent-following, BPTSF	56.7	%
Adj.for directional distribution and no-passing zones, fd/np	13.6	
Percent time-spent-following, PTSF	70.3	%

Level of Service and Other Performance Measures

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.30	
Peak 15-min vehicle-miles of travel, VMT15	47	veh-mi
Peak-hour vehicle-miles of travel, VMT60	177	veh-mi
Peak 15-min total travel time, TT15	1.8	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	10/20/2005
Analysis Time Period	PM Peak
Highway	MD 331 (Dover St.)
From/To	Avon Ave. to US 50
Jurisdiction	Talbot County
Analysis Year	2004
Description	Corridor L3 - Existing Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	0.2	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	100	%
Grade: Length		mi	Access points/mi	20	/mi
Up/down		%			

Two-way hourly volume, V	1163	veh/h	
Directional split	51 / 49	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.998	
Two-way flow rate,(note-1) vp	1324	pc/h
Highest directional split proportion (note-2)	675	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.2	mi/h
Adj. for access points, fA	5.0	mi/h
Free-flow speed, FFS	35.8	mi/h
Adjustment for no-passing zones, fnp	1.9	mi/h
Average travel speed, ATS	23.7	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.0	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	
Two-way flow rate,(note-1) vp	1322	pc/h
Highest directional split proportion (note-2)	674	
Base percent time-spent-following, BPTSF	68.7	%
Adj.for directional distribution and no-passing zones, fd/np	8.9	
Percent time-spent-following, PTSF	77.6	%

Level of Service and Other Performance Measures

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.41	
Peak 15-min vehicle-miles of travel, VMT15	66	veh-mi
Peak-hour vehicle-miles of travel, VMT60	233	veh-mi
Peak 15-min total travel time, TT15	2.8	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/14/2005
Analysis Time Period	AM Peak
Highway	MD 331 (Dover Rd.)
From/To	US 50 to Black Dog Alley
Jurisdiction	Talbot County
Analysis Year	2015
Description	Corridor L1 - Future Conditions Corridor Analysis

Input Data

Highway class	Class 1				
Shoulder width	12.0	ft	Peak-hour factor, PHF	0.93	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	2.3	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	50	%
Grade: Length		mi	Access points/mi	17	/mi
Up/down		%			

Two-way hourly volume, V	1720	veh/h	
Directional split	76 / 24	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.998	
Two-way flow rate,(note-1) vp	1853	pc/h
Highest directional split proportion (note-2)	1408	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	55.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	4.3	mi/h
Free-flow speed, FFS	50.8	mi/h
Adjustment for no-passing zones, fnp	0.8	mi/h
Average travel speed, ATS	35.5	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.0	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	
Two-way flow rate,(note-1) vp	1849	pc/h
Highest directional split proportion (note-2)	1405	
Base percent time-spent-following, BPTSF	80.3	%
Adj.for directional distribution and no-passing zones, fd/np	4.8	
Percent time-spent-following, PTSF	85.2	%

Level of Service and Other Performance Measures

Level of service, LOS	E	
Volume to capacity ratio, v/c	0.58	
Peak 15-min vehicle-miles of travel, VMT15	1063	veh-mi
Peak-hour vehicle-miles of travel, VMT60	3956	veh-mi
Peak 15-min total travel time, TT15	29.9	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/14/2005
Analysis Time Period	PM Peak
Highway	MD 331 (Dover Rd.)
From/To	US 50 to Black Dog Alley
Jurisdiction	Talbot County
Analysis Year	2015
Description	Corridor L1 - Future Conditions Corridor Analysis

Input Data

Highway class	Class 1				
Shoulder width	12.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	2.3	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	50	%
Grade: Length		mi	Access points/mi	17	/mi
Up/down		%			

Two-way hourly volume, V	2030	veh/h	
Directional split	51 / 49	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.998	
Two-way flow rate,(note-1) vp	2311	pc/h
Highest directional split proportion (note-2)	1179	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	55.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	4.3	mi/h
Free-flow speed, FFS	50.8	mi/h
Adjustment for no-passing zones, fnp	0.7	mi/h
Average travel speed, ATS	32.1	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.0	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	
Two-way flow rate,(note-1) vp	2307	pc/h
Highest directional split proportion (note-2)	1177	
Base percent time-spent-following, BPTSF	86.8	%
Adj.for directional distribution and no-passing zones, fd/np	2.5	
Percent time-spent-following, PTSF	89.4	%

Level of Service and Other Performance Measures

Level of service, LOS	E	
Volume to capacity ratio, v/c	0.72	
Peak 15-min vehicle-miles of travel, VMT15	1326	veh-mi
Peak-hour vehicle-miles of travel, VMT60	4669	veh-mi
Peak 15-min total travel time, TT15	41.3	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	08/05/2005
Analysis Time Period	AM Peak
Highway	MD 331 (Dover Rd.)
From/To	Black Dog Alley East
Jurisdiction	Talbot County
Analysis Year	2015
Description	Corridor L2 - Future Conditions Corridor Analysis

Input Data

Highway class	Class 1				
Shoulder width	12.0	ft	Peak-hour factor, PHF	0.93	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	2.0	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	50	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	1130	veh/h	
Directional split	84 / 16	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.998	
Two-way flow rate,(note-1) vp	1217	pc/h
Highest directional split proportion (note-2)	1022	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	55.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	2.0	mi/h
Free-flow speed, FFS	53.0	mi/h
Adjustment for no-passing zones, fnp	1.4	mi/h
Average travel speed, ATS	42.2	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.0	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	
Two-way flow rate,(note-1) vp	1215	pc/h
Highest directional split proportion (note-2)	1021	
Base percent time-spent-following, BPTSF	65.6	%
Adj.for directional distribution and no-passing zones, fd/np	10.4	
Percent time-spent-following, PTSF	76.0	%

Level of Service and Other Performance Measures

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.38	
Peak 15-min vehicle-miles of travel, VMT15	608	veh-mi
Peak-hour vehicle-miles of travel, VMT60	2260	veh-mi
Peak 15-min total travel time, TT15	14.4	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	08/05/2005
Analysis Time Period	PM Peak
Highway	MD 331 (Dover Rd.)
From/To	Black Dog Alley East
Jurisdiction	Talbot County
Analysis Year	2015
Description	Corridor L2 - Future Conditions Corridor Analysis

Input Data

Highway class	Class 1				
Shoulder width	12.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	2.0	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	50	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	1440	veh/h	
Directional split	75 / 25	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.998	
Two-way flow rate,(note-1) vp	1640	pc/h
Highest directional split proportion (note-2)	1230	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	55.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	2.0	mi/h
Free-flow speed, FFS	53.0	mi/h
Adjustment for no-passing zones, fnp	0.9	mi/h
Average travel speed, ATS	39.3	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.0	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	
Two-way flow rate,(note-1) vp	1636	pc/h
Highest directional split proportion (note-2)	1227	
Base percent time-spent-following, BPTSF	76.3	%
Adj.for directional distribution and no-passing zones, fd/np	5.9	
Percent time-spent-following, PTSF	82.2	%

Level of Service and Other Performance Measures

Level of service, LOS	E	
Volume to capacity ratio, v/c	0.51	
Peak 15-min vehicle-miles of travel, VMT15	818	veh-mi
Peak-hour vehicle-miles of travel, VMT60	2880	veh-mi
Peak 15-min total travel time, TT15	20.8	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	10/20/2005
Analysis Time Period	AM Peak
Highway	MD 331 (Dover St.)
From/To	Avon Ave. to US 50
Jurisdiction	Talbot County
Analysis Year	2015
Description	Corridor L3 - Future 2015 Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.93	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	0.2	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	100	%
Grade: Length		mi	Access points/mi	20	/mi
Up/down		%			

Two-way hourly volume, V	980		veh/h	
Directional split	73	/ 27	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.996	
Two-way flow rate,(note-1) vp	1058	pc/h
Highest directional split proportion (note-2)	772	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.2	mi/h
Adj. for access points, fA	5.0	mi/h
Free-flow speed, FFS	35.8	mi/h
Adjustment for no-passing zones, fnp	2.5	mi/h
Average travel speed, ATS	25.1	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	1056	pc/h
Highest directional split proportion (note-2)	771	
Base percent time-spent-following, BPTSF	60.5	%
Adj.for directional distribution and no-passing zones, fd/np	12.5	
Percent time-spent-following, PTSF	73.0	%

Level of Service and Other Performance Measures

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.33	
Peak 15-min vehicle-miles of travel, VMT15	53	veh-mi
Peak-hour vehicle-miles of travel, VMT60	196	veh-mi
Peak 15-min total travel time, TT15	2.1	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	10/20/2005
Analysis Time Period	PM Peak
Highway	MD 331 (Dover St.)
From/To	Avon Ave. to US 50
Jurisdiction	Talbot County
Analysis Year	2015
Description	Corridor L3 - Future 2015 Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	0.2	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	100	%
Grade: Length		mi	Access points/mi	20	/mi
Up/down		%			

Two-way hourly volume, V	1320	veh/h	
Directional split	51 / 49	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.998	
Two-way flow rate,(note-1) vp	1503	pc/h
Highest directional split proportion (note-2)	767	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.2	mi/h
Adj. for access points, fA	5.0	mi/h
Free-flow speed, FFS	35.8	mi/h
Adjustment for no-passing zones, fnp	1.6	mi/h
Average travel speed, ATS	22.5	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.0	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	
Two-way flow rate,(note-1) vp	1500	pc/h
Highest directional split proportion (note-2)	765	
Base percent time-spent-following, BPTSF	73.2	%
Adj.for directional distribution and no-passing zones, fd/np	7.3	
Percent time-spent-following, PTSF	80.6	%

Level of Service and Other Performance Measures

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.47	
Peak 15-min vehicle-miles of travel, VMT15	75	veh-mi
Peak-hour vehicle-miles of travel, VMT60	264	veh-mi
Peak 15-min total travel time, TT15	3.3	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/14/2005
Analysis Time Period	AM Peak
Highway	MD 331 (Dover Rd.)
From/To	US 50 to Black Dog Alley
Jurisdiction	Talbot County
Analysis Year	2030
Description	Corridor L1 - Future Conditions Corridor Analysis

Input Data

Highway class	Class 1				
Shoulder width	12.0	ft	Peak-hour factor, PHF	0.93	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	2.3	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	50	%
Grade: Length		mi	Access points/mi	17	/mi
Up/down		%			

Two-way hourly volume, V	1640	veh/h	
Directional split	75 / 25	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.998	
Two-way flow rate,(note-1) vp	1767	pc/h
Highest directional split proportion (note-2)	1325	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	55.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	4.3	mi/h
Free-flow speed, FFS	50.8	mi/h
Adjustment for no-passing zones, fnp	0.9	mi/h
Average travel speed, ATS	36.2	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.0	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	
Two-way flow rate,(note-1) vp	1763	pc/h
Highest directional split proportion (note-2)	1322	
Base percent time-spent-following, BPTSF	78.8	%
Adj.for directional distribution and no-passing zones, fd/np	5.3	
Percent time-spent-following, PTSF	84.0	%

Level of Service and Other Performance Measures

Level of service, LOS	E	
Volume to capacity ratio, v/c	0.55	
Peak 15-min vehicle-miles of travel, VMT15	1014	veh-mi
Peak-hour vehicle-miles of travel, VMT60	3772	veh-mi
Peak 15-min total travel time, TT15	28.0	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/14/2005
Analysis Time Period	PM Peak
Highway	MD 331 (Dover Rd.)
From/To	US 50 to Black Dog Alley
Jurisdiction	Talbot County
Analysis Year	2030
Description	Corridor L1 - Future Conditions Corridor Analysis

Input Data

Highway class	Class 1				
Shoulder width	12.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	2.3	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	50	%
Grade: Length		mi	Access points/mi	17	/mi
Up/down		%			

Two-way hourly volume, V	2060	veh/h	
Directional split	50 / 50	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.998	
Two-way flow rate,(note-1) vp	2346	pc/h
Highest directional split proportion (note-2)	1173	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	55.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	4.3	mi/h
Free-flow speed, FFS	50.8	mi/h
Adjustment for no-passing zones, fnp	0.7	mi/h
Average travel speed, ATS	31.8	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.0	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	
Two-way flow rate,(note-1) vp	2341	pc/h
Highest directional split proportion (note-2)	1171	
Base percent time-spent-following, BPTSF	87.2	%
Adj.for directional distribution and no-passing zones, fd/np	2.4	
Percent time-spent-following, PTSF	89.7	%

Level of Service and Other Performance Measures

Level of service, LOS	E	
Volume to capacity ratio, v/c	0.73	
Peak 15-min vehicle-miles of travel, VMT15	1346	veh-mi
Peak-hour vehicle-miles of travel, VMT60	4738	veh-mi
Peak 15-min total travel time, TT15	42.3	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	08/05/2005
Analysis Time Period	AM Peak
Highway	MD 331 (Dover Rd.)
From/To	Black Dog Alley East
Jurisdiction	Talbot County
Analysis Year	2030
Description	Corridor L2 - Future Conditions Corridor Analysis

Input Data

Highway class	Class 1				
Shoulder width	12.0	ft	Peak-hour factor, PHF	0.93	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	2.0	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	50	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	1260	veh/h	
Directional split	83 / 17	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.998	
Two-way flow rate,(note-1) vp	1358	pc/h
Highest directional split proportion (note-2)	1127	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	55.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	2.0	mi/h
Free-flow speed, FFS	53.0	mi/h
Adjustment for no-passing zones, fnp	1.1	mi/h
Average travel speed, ATS	41.3	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.0	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	
Two-way flow rate,(note-1) vp	1355	pc/h
Highest directional split proportion (note-2)	1125	
Base percent time-spent-following, BPTSF	69.6	%
Adj.for directional distribution and no-passing zones, fd/np	8.6	
Percent time-spent-following, PTSF	78.2	%

Level of Service and Other Performance Measures

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.42	
Peak 15-min vehicle-miles of travel, VMT15	677	veh-mi
Peak-hour vehicle-miles of travel, VMT60	2520	veh-mi
Peak 15-min total travel time, TT15	16.4	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	08/05/2005
Analysis Time Period	PM Peak
Highway	MD 331 (Dover Rd.)
From/To	Black Dog Alley East
Jurisdiction	Talbot County
Analysis Year	2030
Description	Corridor L2 - Future Conditions Corridor Analysis

Input Data

Highway class	Class 1				
Shoulder width	12.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	2.0	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	50	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	1620	veh/h	
Directional split	75 / 25	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.998	
Two-way flow rate,(note-1) vp	1845	pc/h
Highest directional split proportion (note-2)	1384	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	55.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	2.0	mi/h
Free-flow speed, FFS	53.0	mi/h
Adjustment for no-passing zones, fnp	0.8	mi/h
Average travel speed, ATS	37.9	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.0	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	
Two-way flow rate,(note-1) vp	1841	pc/h
Highest directional split proportion (note-2)	1381	
Base percent time-spent-following, BPTSF	80.2	%
Adj.for directional distribution and no-passing zones, fd/np	4.9	
Percent time-spent-following, PTSF	85.1	%

Level of Service and Other Performance Measures

Level of service, LOS	E	
Volume to capacity ratio, v/c	0.58	
Peak 15-min vehicle-miles of travel, VMT15	920	veh-mi
Peak-hour vehicle-miles of travel, VMT60	3240	veh-mi
Peak 15-min total travel time, TT15	24.3	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	10/20/2005
Analysis Time Period	AM Peak
Highway	MD 331 (Dover St.)
From/To	Avon Ave. to US 50
Jurisdiction	Talbot County
Analysis Year	2030
Description	Corridor L3 - Future 2030 Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.93	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	0.2	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	100	%
Grade: Length		mi	Access points/mi	20	/mi
Up/down		%			

Two-way hourly volume, V	1060	veh/h	
Directional split	73 / 27	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.996	
Two-way flow rate,(note-1) vp	1144	pc/h
Highest directional split proportion (note-2)	835	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.2	mi/h
Adj. for access points, fA	5.0	mi/h
Free-flow speed, FFS	35.8	mi/h
Adjustment for no-passing zones, fnp	2.2	mi/h
Average travel speed, ATS	24.7	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	1142	pc/h
Highest directional split proportion (note-2)	834	
Base percent time-spent-following, BPTSF	63.4	%
Adj.for directional distribution and no-passing zones, fd/np	11.5	
Percent time-spent-following, PTSF	74.9	%

Level of Service and Other Performance Measures

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.36	
Peak 15-min vehicle-miles of travel, VMT15	57	veh-mi
Peak-hour vehicle-miles of travel, VMT60	212	veh-mi
Peak 15-min total travel time, TT15	2.3	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	10/20/2005
Analysis Time Period	PM Peak
Highway	MD 331 (Dover St.)
From/To	Avon Ave. to US 50
Jurisdiction	Talbot County
Analysis Year	2030
Description	Corridor L3 - Future 2030 Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	0.2	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	100	%
Grade: Length		mi	Access points/mi	20	/mi
Up/down		%			

Two-way hourly volume, V	1460	veh/h	
Directional split	50 / 50	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.998	
Two-way flow rate,(note-1) vp	1662	pc/h
Highest directional split proportion (note-2)	831	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.2	mi/h
Adj. for access points, fA	5.0	mi/h
Free-flow speed, FFS	35.8	mi/h
Adjustment for no-passing zones, fnp	1.4	mi/h
Average travel speed, ATS	21.5	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.0	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	
Two-way flow rate,(note-1) vp	1659	pc/h
Highest directional split proportion (note-2)	830	
Base percent time-spent-following, BPTSF	76.7	%
Adj.for directional distribution and no-passing zones, fd/np	6.4	
Percent time-spent-following, PTSF	83.1	%

Level of Service and Other Performance Measures

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.52	
Peak 15-min vehicle-miles of travel, VMT15	83	veh-mi
Peak-hour vehicle-miles of travel, VMT60	292	veh-mi
Peak 15-min total travel time, TT15	3.9	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/16/2005
Analysis Time Period	AM Peak
Highway	MD 328 (Matthewstown Rd.)
From/To	US 50 to Black Dog Alley
Jurisdiction	Talbot County
Analysis Year	2004
Description	Corridor M1 - Existing Conditions Corridor Analysis

Input Data

Highway class	Class 1				
Shoulder width	10.0	ft	Peak-hour factor, PHF	0.93	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	1.6	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	20	%
Grade: Length		mi	Access points/mi	25	/mi
Up/down		%			

Two-way hourly volume, V	1034	veh/h	
Directional split	64 / 36	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.996	
Two-way flow rate,(note-1) vp	1116	pc/h
Highest directional split proportion (note-2)	714	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	55.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	6.3	mi/h
Free-flow speed, FFS	48.8	mi/h
Adjustment for no-passing zones, fnp	0.9	mi/h
Average travel speed, ATS	39.2	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	1114	pc/h
Highest directional split proportion (note-2)	713	
Base percent time-spent-following, BPTSF	62.4	%
Adj.for directional distribution and no-passing zones, fd/np	5.6	
Percent time-spent-following, PTSF	68.0	%

Level of Service and Other Performance Measures

Level of service, LOS	E	
Volume to capacity ratio, v/c	0.35	
Peak 15-min vehicle-miles of travel, VMT15	445	veh-mi
Peak-hour vehicle-miles of travel, VMT60	1654	veh-mi
Peak 15-min total travel time, TT15	11.4	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/16/2005
Analysis Time Period	PM Peak
Highway	MD 328 (Matthewstown Rd.)
From/To	US 50 to Black Dog Alley
Jurisdiction	Talbot County
Analysis Year	2004
Description	Corridor M1 - Existing Conditions Corridor Analysis

Input Data

Highway class	Class 1				
Shoulder width	10.0	ft	Peak-hour factor, PHF	0.96	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	1.6	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	20	%
Grade: Length		mi	Access points/mi	25	/mi
Up/down		%			

Two-way hourly volume, V	1379		veh/h
Directional split	56	/ 44	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.998	
Two-way flow rate,(note-1) vp	1439	pc/h
Highest directional split proportion (note-2)	806	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	55.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	6.3	mi/h
Free-flow speed, FFS	48.8	mi/h
Adjustment for no-passing zones, fnp	0.6	mi/h
Average travel speed, ATS	37.0	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.0	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	
Two-way flow rate,(note-1) vp	1436	pc/h
Highest directional split proportion (note-2)	804	
Base percent time-spent-following, BPTSF	71.7	%
Adj.for directional distribution and no-passing zones, fd/np	3.6	
Percent time-spent-following, PTSF	75.3	%

Level of Service and Other Performance Measures

Level of service, LOS	E	
Volume to capacity ratio, v/c	0.45	
Peak 15-min vehicle-miles of travel, VMT15	575	veh-mi
Peak-hour vehicle-miles of travel, VMT60	2206	veh-mi
Peak 15-min total travel time, TT15	15.5	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/21/2005
Analysis Time Period	AM Peak
Highway	MD 328 (Matthewstown Rd.)
From/To	Black Dog Al. to Kittys Corner
Jurisdiction	Talbot County
Analysis Year	2004
Description	Corridor M2 - Existing Conditions Corridor Analysis

Input Data

Highway class	Class 1				
Shoulder width	10.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	4.7	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	20	%
Grade: Length		mi	Access points/mi	9	/mi
Up/down		%			

Two-way hourly volume, V	590		veh/h
Directional split	73	/ 27	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.996	
Two-way flow rate,(note-1) vp	673	pc/h
Highest directional split proportion (note-2)	491	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	55.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	2.3	mi/h
Free-flow speed, FFS	52.8	mi/h
Adjustment for no-passing zones, fnp	1.5	mi/h
Average travel speed, ATS	46.0	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	672	pc/h
Highest directional split proportion (note-2)	491	
Base percent time-spent-following, BPTSF	44.6	%
Adj.for directional distribution and no-passing zones, fd/np	10.8	
Percent time-spent-following, PTSF	55.4	%

Level of Service and Other Performance Measures

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.21	
Peak 15-min vehicle-miles of travel, VMT15	788	veh-mi
Peak-hour vehicle-miles of travel, VMT60	2773	veh-mi
Peak 15-min total travel time, TT15	17.1	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/21/2005
Analysis Time Period	PM Peak
Highway	MD 328 (Matthewstown Rd.)
From/To	Black Dog Al. to Kittys Corner
Jurisdiction	Talbot County
Analysis Year	2004
Description	Corridor M2 - Existing Conditions Corridor Analysis

Input Data

Highway class	Class 1				
Shoulder width	10.0	ft	Peak-hour factor, PHF	0.93	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	4.7	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	20	%
Grade: Length		mi	Access points/mi	9	/mi
Up/down		%			

Two-way hourly volume, V	692	veh/h	
Directional split	65 / 35	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.996	
Two-way flow rate,(note-1) vp	747	pc/h
Highest directional split proportion (note-2)	486	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	55.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	2.3	mi/h
Free-flow speed, FFS	52.8	mi/h
Adjustment for no-passing zones, fnp	1.5	mi/h
Average travel speed, ATS	45.5	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	746	pc/h
Highest directional split proportion (note-2)	485	
Base percent time-spent-following, BPTSF	48.1	%
Adj.for directional distribution and no-passing zones, fd/np	8.7	
Percent time-spent-following, PTSF	56.8	%

Level of Service and Other Performance Measures

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.23	
Peak 15-min vehicle-miles of travel, VMT15	874	veh-mi
Peak-hour vehicle-miles of travel, VMT60	3252	veh-mi
Peak 15-min total travel time, TT15	19.2	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

HCS2000: Two-Lane Highways Release 4.1d

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	10/20/2005
Analysis Time Period	AM Peak
Highway	MD 328 (Goldsborough St.)
From/To	Park St. to US 50
Jurisdiction	Talbot County
Analysis Year	2004
Description	Corridor M3 - Existing Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.93	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	0.3	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	100	%
Grade: Length		mi	Access points/mi	30	/mi
Up/down		%			

Two-way hourly volume, V	670		veh/h	
Directional split	62	/ 38	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.996	
Two-way flow rate,(note-1) vp	723	pc/h
Highest directional split proportion (note-2)	448	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.2	mi/h
Adj. for access points, fA	7.5	mi/h
Free-flow speed, FFS	33.3	mi/h
Adjustment for no-passing zones, fnp	3.3	mi/h
Average travel speed, ATS	24.3	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	722	pc/h
Highest directional split proportion (note-2)	448	
Base percent time-spent-following, BPTSF	47.0	%
Adj.for directional distribution and no-passing zones, fd/np	16.9	
Percent time-spent-following, PTSF	63.9	%

Level of Service and Other Performance Measures

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.23	
Peak 15-min vehicle-miles of travel, VMT15	54	veh-mi
Peak-hour vehicle-miles of travel, VMT60	201	veh-mi
Peak 15-min total travel time, TT15	2.2	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

HCS2000: Two-Lane Highways Release 4.1d

Phone: Fax:
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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	10/20/2005
Analysis Time Period	PM Peak
Highway	MD 328 (Goldsborough St.)
From/To	Park St. to US 50
Jurisdiction	Talbot County
Analysis Year	2004
Description	Corridor M3 - Existing Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.96	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	0.3	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	100	%
Grade: Length		mi	Access points/mi	30	/mi
Up/down		%			

Two-way hourly volume, V	948		veh/h	
Directional split	64	/ 36	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.996	
Two-way flow rate,(note-1) vp	991	pc/h
Highest directional split proportion (note-2)	634	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.2	mi/h
Adj. for access points, fA	7.5	mi/h
Free-flow speed, FFS	33.3	mi/h
Adjustment for no-passing zones, fnp	2.6	mi/h
Average travel speed, ATS	23.0	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	989	pc/h
Highest directional split proportion (note-2)	633	
Base percent time-spent-following, BPTSF	58.1	%
Adj.for directional distribution and no-passing zones, fd/np	12.5	
Percent time-spent-following, PTSF	70.6	%

Level of Service and Other Performance Measures

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.31	
Peak 15-min vehicle-miles of travel, VMT15	74	veh-mi
Peak-hour vehicle-miles of travel, VMT60	284	veh-mi
Peak 15-min total travel time, TT15	3.2	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/16/2005
Analysis Time Period	AM Peak
Highway	MD 328 (Matthewstown Rd.)
From/To	US 50 to Black Dog Alley
Jurisdiction	Talbot County
Analysis Year	2015
Description	Corridor M1 - Future Conditions Corridor Analysis

Input Data

Highway class	Class 1				
Shoulder width	10.0	ft	Peak-hour factor, PHF	0.93	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	1.6	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	20	%
Grade: Length		mi	Access points/mi	25	/mi
Up/down		%			

Two-way hourly volume, V	1560	veh/h	
Directional split	54 / 46	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.998	
Two-way flow rate,(note-1) vp	1681	pc/h
Highest directional split proportion (note-2)	908	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	55.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	6.3	mi/h
Free-flow speed, FFS	48.8	mi/h
Adjustment for no-passing zones, fnp	0.6	mi/h
Average travel speed, ATS	35.1	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.0	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	
Two-way flow rate,(note-1) vp	1677	pc/h
Highest directional split proportion (note-2)	906	
Base percent time-spent-following, BPTSF	77.1	%
Adj.for directional distribution and no-passing zones, fd/np	2.9	
Percent time-spent-following, PTSF	80.0	%

Level of Service and Other Performance Measures

Level of service, LOS	E	
Volume to capacity ratio, v/c	0.53	
Peak 15-min vehicle-miles of travel, VMT15	671	veh-mi
Peak-hour vehicle-miles of travel, VMT60	2496	veh-mi
Peak 15-min total travel time, TT15	19.1	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/16/2005
Analysis Time Period	PM Peak
Highway	MD 328 (Matthewstown Rd.)
From/To	US 50 to Black Dog Alley
Jurisdiction	Talbot County
Analysis Year	2015
Description	Corridor M1 - Future Conditions Corridor Analysis

Input Data

Highway class	Class 1				
Shoulder width	10.0	ft	Peak-hour factor, PHF	0.96	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	1.6	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	20	%
Grade: Length		mi	Access points/mi	25	/mi
Up/down		%			

Two-way hourly volume, V	1240	veh/h	
Directional split	54 / 46	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.998	
Two-way flow rate,(note-1) vp	1294	pc/h
Highest directional split proportion (note-2)	699	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	55.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	6.3	mi/h
Free-flow speed, FFS	48.8	mi/h
Adjustment for no-passing zones, fnp	0.7	mi/h
Average travel speed, ATS	38.0	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.0	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	
Two-way flow rate,(note-1) vp	1292	pc/h
Highest directional split proportion (note-2)	698	
Base percent time-spent-following, BPTSF	67.9	%
Adj.for directional distribution and no-passing zones, fd/np	4.5	
Percent time-spent-following, PTSF	72.4	%

Level of Service and Other Performance Measures

Level of service, LOS	E	
Volume to capacity ratio, v/c	0.40	
Peak 15-min vehicle-miles of travel, VMT15	517	veh-mi
Peak-hour vehicle-miles of travel, VMT60	1984	veh-mi
Peak 15-min total travel time, TT15	13.6	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	08/02/2005
Analysis Time Period	AM Peak
Highway	MD 328 (Matthewstown Rd.)
From/To	Black Dog Al. to Kittys Corner
Jurisdiction	Talbot County
Analysis Year	2015
Description	Corridor M2 - Future Conditions Corridor Analysis

Input Data

Highway class	Class 1				
Shoulder width	10.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	4.7	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	20	%
Grade: Length		mi	Access points/mi	9	/mi
Up/down		%			

Two-way hourly volume, V	680	veh/h	
Directional split	75 / 25	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.996	
Two-way flow rate,(note-1) vp	776	pc/h
Highest directional split proportion (note-2)	582	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	55.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	2.3	mi/h
Free-flow speed, FFS	52.8	mi/h
Adjustment for no-passing zones, fnp	1.4	mi/h
Average travel speed, ATS	45.3	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	774	pc/h
Highest directional split proportion (note-2)	581	
Base percent time-spent-following, BPTSF	49.4	%
Adj.for directional distribution and no-passing zones, fd/np	9.1	
Percent time-spent-following, PTSF	58.4	%

Level of Service and Other Performance Measures

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.24	
Peak 15-min vehicle-miles of travel, VMT15	908	veh-mi
Peak-hour vehicle-miles of travel, VMT60	3196	veh-mi
Peak 15-min total travel time, TT15	20.0	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	08/02/2005
Analysis Time Period	PM Peak
Highway	MD 328 (Matthewstown Rd.)
From/To	Black Dog Al. to Kittys Corner
Jurisdiction	Talbot County
Analysis Year	2015
Description	Corridor M2 - Future Conditions Corridor Analysis

Input Data

Highway class	Class 1				
Shoulder width	10.0	ft	Peak-hour factor, PHF	0.93	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	4.7	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	20	%
Grade: Length		mi	Access points/mi	9	/mi
Up/down		%			

Two-way hourly volume, V	830	veh/h	
Directional split	65 / 35	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.996	
Two-way flow rate,(note-1) vp	896	pc/h
Highest directional split proportion (note-2)	582	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	55.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	2.3	mi/h
Free-flow speed, FFS	52.8	mi/h
Adjustment for no-passing zones, fnp	1.3	mi/h
Average travel speed, ATS	44.5	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	894	pc/h
Highest directional split proportion (note-2)	581	
Base percent time-spent-following, BPTSF	54.4	%
Adj.for directional distribution and no-passing zones, fd/np	7.0	
Percent time-spent-following, PTSF	61.5	%

Level of Service and Other Performance Measures

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.28	
Peak 15-min vehicle-miles of travel, VMT15	1049	veh-mi
Peak-hour vehicle-miles of travel, VMT60	3901	veh-mi
Peak 15-min total travel time, TT15	23.6	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	10/20/2005
Analysis Time Period	AM Peak
Highway	MD 328 (Goldsborough St.)
From/To	Park St. to US 50
Jurisdiction	Talbot County
Analysis Year	2015
Description	Corridor M3 - Future 2015 Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.93	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	0.3	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	100	%
Grade: Length		mi	Access points/mi	30	/mi
Up/down		%			

Two-way hourly volume, V	750		veh/h	
Directional split	63	/ 37	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.996	
Two-way flow rate,(note-1) vp	810	pc/h
Highest directional split proportion (note-2)	510	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.2	mi/h
Adj. for access points, fA	7.5	mi/h
Free-flow speed, FFS	33.3	mi/h
Adjustment for no-passing zones, fnp	3.0	mi/h
Average travel speed, ATS	24.0	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	808	pc/h
Highest directional split proportion (note-2)	509	
Base percent time-spent-following, BPTSF	50.8	%
Adj.for directional distribution and no-passing zones, fd/np	14.4	
Percent time-spent-following, PTSF	65.2	%

Level of Service and Other Performance Measures

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.25	
Peak 15-min vehicle-miles of travel, VMT15	60	veh-mi
Peak-hour vehicle-miles of travel, VMT60	225	veh-mi
Peak 15-min total travel time, TT15	2.5	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

HCS2000: Two-Lane Highways Release 4.1d

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	10/20/2005
Analysis Time Period	PM Peak
Highway	MD 328 (Goldsborough St.)
From/To	Park St. to US 50
Jurisdiction	Talbot County
Analysis Year	2015
Description	Corridor M3 - Future 2015 Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.96	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	0.3	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	100	%
Grade: Length		mi	Access points/mi	30	/mi
Up/down		%			

Two-way hourly volume, V	1050	veh/h	
Directional split	64 / 36	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.996	
Two-way flow rate,(note-1) vp	1098	pc/h
Highest directional split proportion (note-2)	703	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.2	mi/h
Adj. for access points, fA	7.5	mi/h
Free-flow speed, FFS	33.3	mi/h
Adjustment for no-passing zones, fnp	2.4	mi/h
Average travel speed, ATS	22.4	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	1096	pc/h
Highest directional split proportion (note-2)	701	
Base percent time-spent-following, BPTSF	61.8	%
Adj.for directional distribution and no-passing zones, fd/np	11.4	
Percent time-spent-following, PTSF	73.2	%

Level of Service and Other Performance Measures

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.34	
Peak 15-min vehicle-miles of travel, VMT15	82	veh-mi
Peak-hour vehicle-miles of travel, VMT60	315	veh-mi
Peak 15-min total travel time, TT15	3.7	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/16/2005
Analysis Time Period	AM Peak
Highway	MD 328 (Matthewstown Rd.)
From/To	US 50 to Black Dog Alley
Jurisdiction	Talbot County
Analysis Year	2030
Description	Corridor M1 - Future Conditions Corridor Analysis

Input Data

Highway class	Class 1				
Shoulder width	10.0	ft	Peak-hour factor, PHF	0.93	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	1.6	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	20	%
Grade: Length		mi	Access points/mi	25	/mi
Up/down		%			

Two-way hourly volume, V	1140	veh/h	
Directional split	64 / 36	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.998	
Two-way flow rate,(note-1) vp	1228	pc/h
Highest directional split proportion (note-2)	786	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	55.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	6.3	mi/h
Free-flow speed, FFS	48.8	mi/h
Adjustment for no-passing zones, fnp	0.8	mi/h
Average travel speed, ATS	38.4	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.0	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	
Two-way flow rate,(note-1) vp	1226	pc/h
Highest directional split proportion (note-2)	785	
Base percent time-spent-following, BPTSF	66.0	%
Adj.for directional distribution and no-passing zones, fd/np	4.9	
Percent time-spent-following, PTSF	70.8	%

Level of Service and Other Performance Measures

Level of service, LOS	E	
Volume to capacity ratio, v/c	0.38	
Peak 15-min vehicle-miles of travel, VMT15	490	veh-mi
Peak-hour vehicle-miles of travel, VMT60	1824	veh-mi
Peak 15-min total travel time, TT15	12.7	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

HCS2000: Two-Lane Highways Release 4.1d

Phone: Fax:
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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/16/2005
Analysis Time Period	PM Peak
Highway	MD 328 (Matthewstown Rd.)
From/To	US 50 to Black Dog Alley
Jurisdiction	Talbot County
Analysis Year	2030
Description	Corridor M1 - Future Conditions Corridor Analysis

Input Data

Highway class	Class 1				
Shoulder width	10.0	ft	Peak-hour factor, PHF	0.96	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	1.6	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	20	%
Grade: Length		mi	Access points/mi	25	/mi
Up/down		%			

Two-way hourly volume, V	1530	veh/h	
Directional split	56 / 44	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.998	
Two-way flow rate,(note-1) vp	1597	pc/h
Highest directional split proportion (note-2)	894	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	55.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	6.3	mi/h
Free-flow speed, FFS	48.8	mi/h
Adjustment for no-passing zones, fnp	0.6	mi/h
Average travel speed, ATS	35.8	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.0	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	
Two-way flow rate,(note-1) vp	1594	pc/h
Highest directional split proportion (note-2)	893	
Base percent time-spent-following, BPTSF	75.4	%
Adj.for directional distribution and no-passing zones, fd/np	3.2	
Percent time-spent-following, PTSF	78.5	%

Level of Service and Other Performance Measures

Level of service, LOS	E	
Volume to capacity ratio, v/c	0.50	
Peak 15-min vehicle-miles of travel, VMT15	638	veh-mi
Peak-hour vehicle-miles of travel, VMT60	2448	veh-mi
Peak 15-min total travel time, TT15	17.8	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

HCS2000: Two-Lane Highways Release 4.1d

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	08/02/2005
Analysis Time Period	AM Peak
Highway	MD 328 (Matthewstown Rd.)
From/To	Black Dog Al. to Kittys Corner
Jurisdiction	Talbot County
Analysis Year	2030
Description	Corridor M2 - Future Conditions Corridor Analysis

Input Data

Highway class	Class 1				
Shoulder width	10.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	4.7	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	20	%
Grade: Length		mi	Access points/mi	9	/mi
Up/down		%			

Two-way hourly volume, V	790		veh/h
Directional split	73	/ 27	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.996	
Two-way flow rate,(note-1) vp	901	pc/h
Highest directional split proportion (note-2)	658	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	55.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	2.3	mi/h
Free-flow speed, FFS	52.8	mi/h
Adjustment for no-passing zones, fnp	1.2	mi/h
Average travel speed, ATS	44.5	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	900	pc/h
Highest directional split proportion (note-2)	657	
Base percent time-spent-following, BPTSF	54.7	%
Adj.for directional distribution and no-passing zones, fd/np	7.5	
Percent time-spent-following, PTSF	62.2	%

Level of Service and Other Performance Measures

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.28	
Peak 15-min vehicle-miles of travel, VMT15	1055	veh-mi
Peak-hour vehicle-miles of travel, VMT60	3713	veh-mi
Peak 15-min total travel time, TT15	23.7	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	08/02/2005
Analysis Time Period	PM Peak
Highway	MD 328 (Matthewstown Rd.)
From/To	Black Dog Al. to Kittys Corner
Jurisdiction	Talbot County
Analysis Year	2030
Description	Corridor M2 - Future Conditions Corridor Analysis

Input Data

Highway class	Class 1				
Shoulder width	10.0	ft	Peak-hour factor, PHF	0.93	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	4.7	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	20	%
Grade: Length		mi	Access points/mi	9	/mi
Up/down		%			

Two-way hourly volume, V	910	veh/h	
Directional split	65 / 35	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.996	
Two-way flow rate,(note-1) vp	982	pc/h
Highest directional split proportion (note-2)	638	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	55.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	2.3	mi/h
Free-flow speed, FFS	52.8	mi/h
Adjustment for no-passing zones, fnp	1.1	mi/h
Average travel speed, ATS	44.0	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	980	pc/h
Highest directional split proportion (note-2)	637	
Base percent time-spent-following, BPTSF	57.7	%
Adj.for directional distribution and no-passing zones, fd/np	6.5	
Percent time-spent-following, PTSF	64.2	%

Level of Service and Other Performance Measures

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.31	
Peak 15-min vehicle-miles of travel, VMT15	1150	veh-mi
Peak-hour vehicle-miles of travel, VMT60	4277	veh-mi
Peak 15-min total travel time, TT15	26.1	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	10/20/2005
Analysis Time Period	AM Peak
Highway	MD 328 (Goldsborough St.)
From/To	Park St. to US 50
Jurisdiction	Talbot County
Analysis Year	2030
Description	Corridor M3 - Future 2030 Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.93	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	0.3	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	100	%
Grade: Length		mi	Access points/mi	30	/mi
Up/down		%			

Two-way hourly volume, V	820	veh/h	
Directional split	62 /	38	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.996	
Two-way flow rate,(note-1) vp	885	pc/h
Highest directional split proportion (note-2)	549	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.2	mi/h
Adj. for access points, fA	7.5	mi/h
Free-flow speed, FFS	33.3	mi/h
Adjustment for no-passing zones, fnp	2.8	mi/h
Average travel speed, ATS	23.6	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	883	pc/h
Highest directional split proportion (note-2)	547	
Base percent time-spent-following, BPTSF	54.0	%
Adj.for directional distribution and no-passing zones, fd/np	13.6	
Percent time-spent-following, PTSF	67.6	%

Level of Service and Other Performance Measures

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.28	
Peak 15-min vehicle-miles of travel, VMT15	66	veh-mi
Peak-hour vehicle-miles of travel, VMT60	246	veh-mi
Peak 15-min total travel time, TT15	2.8	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	10/20/2005
Analysis Time Period	PM Peak
Highway	MD 328 (Goldsborough St.)
From/To	Park St. to US 50
Jurisdiction	Talbot County
Analysis Year	2030
Description	Corridor M3 - Future 2030 Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.96	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	0.3	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	100	%
Grade: Length		mi	Access points/mi	30	/mi
Up/down		%			

Two-way hourly volume, V	1140	veh/h	
Directional split	64 / 36	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.996	
Two-way flow rate,(note-1) vp	1192	pc/h
Highest directional split proportion (note-2)	763	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.2	mi/h
Adj. for access points, fA	7.5	mi/h
Free-flow speed, FFS	33.3	mi/h
Adjustment for no-passing zones, fnp	2.1	mi/h
Average travel speed, ATS	21.9	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	1190	pc/h
Highest directional split proportion (note-2)	762	
Base percent time-spent-following, BPTSF	64.9	%
Adj.for directional distribution and no-passing zones, fd/np	10.4	
Percent time-spent-following, PTSF	75.3	%

Level of Service and Other Performance Measures

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.37	
Peak 15-min vehicle-miles of travel, VMT15	89	veh-mi
Peak-hour vehicle-miles of travel, VMT60	342	veh-mi
Peak 15-min total travel time, TT15	4.1	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/15/2005
Analysis Time Period	AM Peak
Highway	Black Dog Alley
From/To	US 50 to MD 309
Jurisdiction	Talbot County
Analysis Year	2004
Description	Corridor N1 - Existing Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.94	
Lane width	13.0	ft	% Trucks and buses	2	%
Segment length	0.2	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	100	%
Grade: Length		mi	Access points/mi	1	/mi
Up/down		%			

Two-way hourly volume, V	726	veh/h	
Directional split	53 / 47	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.996	
Two-way flow rate,(note-1) vp	775	pc/h
Highest directional split proportion (note-2)	411	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.2	mi/h
Adj. for access points, fA	0.3	mi/h
Free-flow speed, FFS	40.5	mi/h
Adjustment for no-passing zones, fnp	3.1	mi/h
Average travel speed, ATS	31.4	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	774	pc/h
Highest directional split proportion (note-2)	410	
Base percent time-spent-following, BPTSF	49.4	%
Adj.for directional distribution and no-passing zones, fd/np	15.8	
Percent time-spent-following, PTSF	65.2	%

Level of Service and Other Performance Measures

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.24	
Peak 15-min vehicle-miles of travel, VMT15	39	veh-mi
Peak-hour vehicle-miles of travel, VMT60	145	veh-mi
Peak 15-min total travel time, TT15	1.2	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/15/2005
Analysis Time Period	PM Peak
Highway	Black Dog Alley
From/To	US 50 to MD 309
Jurisdiction	Talbot County
Analysis Year	2004
Description	Corridor N1 - Existing Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.90	
Lane width	13.0	ft	% Trucks and buses	2	%
Segment length	0.2	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	100	%
Grade: Length		mi	Access points/mi	1	/mi
Up/down		%			

Two-way hourly volume, V	635	veh/h	
Directional split	66 / 34	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.996	
Two-way flow rate,(note-1) vp	708	pc/h
Highest directional split proportion (note-2)	467	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.2	mi/h
Adj. for access points, fA	0.3	mi/h
Free-flow speed, FFS	40.5	mi/h
Adjustment for no-passing zones, fnp	3.4	mi/h
Average travel speed, ATS	31.6	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	707	pc/h
Highest directional split proportion (note-2)	467	
Base percent time-spent-following, BPTSF	46.3	%
Adj.for directional distribution and no-passing zones, fd/np	17.4	
Percent time-spent-following, PTSF	63.7	%

Level of Service and Other Performance Measures

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.22	
Peak 15-min vehicle-miles of travel, VMT15	35	veh-mi
Peak-hour vehicle-miles of travel, VMT60	127	veh-mi
Peak 15-min total travel time, TT15	1.1	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/15/2005
Analysis Time Period	AM Peak
Highway	Black Dog Alley
From/To	MD 309 to Chapel Rd.
Jurisdiction	Talbot County
Analysis Year	2004
Description	Corridor N2 - Existing Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.89	
Lane width	13.0	ft	% Trucks and buses	2	%
Segment length	1.1	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	20	%
Grade: Length		mi	Access points/mi	23	/mi
Up/down		%			

Two-way hourly volume, V	221	veh/h	
Directional split	60 / 40	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	252	pc/h
Highest directional split proportion (note-2)	151	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.2	mi/h
Adj. for access points, fA	5.8	mi/h
Free-flow speed, FFS	35.0	mi/h
Adjustment for no-passing zones, fnp	0.9	mi/h
Average travel speed, ATS	32.2	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	249	pc/h
Highest directional split proportion (note-2)	149	
Base percent time-spent-following, BPTSF	19.7	%
Adj.for directional distribution and no-passing zones, fd/np	11.8	
Percent time-spent-following, PTSF	31.4	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.08	
Peak 15-min vehicle-miles of travel, VMT15	68	veh-mi
Peak-hour vehicle-miles of travel, VMT60	243	veh-mi
Peak 15-min total travel time, TT15	2.1	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/15/2005
Analysis Time Period	PM Peak
Highway	Black Dog Alley
From/To	MD 309 to Chapel Rd.
Jurisdiction	Talbot County
Analysis Year	2004
Description	Corridor N2 - Existing Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.88	
Lane width	13.0	ft	% Trucks and buses	2	%
Segment length	1.1	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	20	%
Grade: Length		mi	Access points/mi	23	/mi
Up/down		%			

Two-way hourly volume, V	429		veh/h
Directional split	84	/ 16	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	494	pc/h
Highest directional split proportion (note-2)	415	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.2	mi/h
Adj. for access points, fA	5.8	mi/h
Free-flow speed, FFS	35.0	mi/h
Adjustment for no-passing zones, fnp	1.7	mi/h
Average travel speed, ATS	29.6	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	488	pc/h
Highest directional split proportion (note-2)	410	
Base percent time-spent-following, BPTSF	34.9	%
Adj.for directional distribution and no-passing zones, fd/np	16.1	
Percent time-spent-following, PTSF	51.0	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.15	
Peak 15-min vehicle-miles of travel, VMT15	134	veh-mi
Peak-hour vehicle-miles of travel, VMT60	472	veh-mi
Peak 15-min total travel time, TT15	4.5	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/15/2005
Analysis Time Period	AM Peak
Highway	Black Dog Alley
From/To	Chapel Rd. to MD 328
Jurisdiction	Talbot County
Analysis Year	2004
Description	Corridor N3 - Existing Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.88	
Lane width	11.0	ft	% Trucks and buses	2	%
Segment length	0.9	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	50	%
Grade: Length		mi	Access points/mi	23	/mi
Up/down		%			

Two-way hourly volume, V	276		veh/h
Directional split	55	/ 45	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	318	pc/h
Highest directional split proportion (note-2)	175	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.7	mi/h
Adj. for access points, fA	5.8	mi/h
Free-flow speed, FFS	34.5	mi/h
Adjustment for no-passing zones, fnp	2.6	mi/h
Average travel speed, ATS	29.5	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	314	pc/h
Highest directional split proportion (note-2)	173	
Base percent time-spent-following, BPTSF	24.1	%
Adj.for directional distribution and no-passing zones, fd/np	19.5	
Percent time-spent-following, PTSF	43.6	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.10	
Peak 15-min vehicle-miles of travel, VMT15	71	veh-mi
Peak-hour vehicle-miles of travel, VMT60	248	veh-mi
Peak 15-min total travel time, TT15	2.4	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/15/2005
Analysis Time Period	PM Peak
Highway	Black Dog Alley
From/To	Chapel Rd. to MD 328
Jurisdiction	Talbot County
Analysis Year	2004
Description	Corridor N3 - Existing Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.93	
Lane width	11.0	ft	% Trucks and buses	2	%
Segment length	0.9	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	50	%
Grade: Length		mi	Access points/mi	23	/mi
Up/down		%			

Two-way hourly volume, V	469		veh/h
Directional split	66	/ 34	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	511	pc/h
Highest directional split proportion (note-2)	337	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.7	mi/h
Adj. for access points, fA	5.8	mi/h
Free-flow speed, FFS	34.5	mi/h
Adjustment for no-passing zones, fnp	2.9	mi/h
Average travel speed, ATS	27.7	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	505	pc/h
Highest directional split proportion (note-2)	333	
Base percent time-spent-following, BPTSF	35.8	%
Adj.for directional distribution and no-passing zones, fd/np	18.1	
Percent time-spent-following, PTSF	54.0	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.16	
Peak 15-min vehicle-miles of travel, VMT15	113	veh-mi
Peak-hour vehicle-miles of travel, VMT60	422	veh-mi
Peak 15-min total travel time, TT15	4.1	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/15/2005
Analysis Time Period	AM Peak
Highway	Black Dog Alley
From/To	MD 328 to Kingston Rd
Jurisdiction	Talbot County
Analysis Year	2004
Description	Corridor N4 - Existing Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	1.5	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	10	%
Grade: Length		mi	Access points/mi	22	/mi
Up/down		%			

Two-way hourly volume, V	197		veh/h
Directional split	68	/ 32	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	227	pc/h
Highest directional split proportion (note-2)	154	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.2	mi/h
Adj. for access points, fA	5.5	mi/h
Free-flow speed, FFS	35.3	mi/h
Adjustment for no-passing zones, fnp	0.4	mi/h
Average travel speed, ATS	33.2	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	224	pc/h
Highest directional split proportion (note-2)	152	
Base percent time-spent-following, BPTSF	17.9	%
Adj.for directional distribution and no-passing zones, fd/np	7.7	
Percent time-spent-following, PTSF	25.5	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.07	
Peak 15-min vehicle-miles of travel, VMT15	84	veh-mi
Peak-hour vehicle-miles of travel, VMT60	296	veh-mi
Peak 15-min total travel time, TT15	2.5	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/15/2005
Analysis Time Period	PM Peak
Highway	Black Dog Alley
From/To	MD 328 to Kingston Rd
Jurisdiction	Talbot County
Analysis Year	2004
Description	Corridor N4 - Existing Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.93	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	1.5	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	10	%
Grade: Length		mi	Access points/mi	22	/mi
Up/down		%			

Two-way hourly volume, V	311	veh/h	
Directional split	76 / 24	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	339	pc/h
Highest directional split proportion (note-2)	258	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.2	mi/h
Adj. for access points, fA	5.5	mi/h
Free-flow speed, FFS	35.3	mi/h
Adjustment for no-passing zones, fnp	0.7	mi/h
Average travel speed, ATS	32.0	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	335	pc/h
Highest directional split proportion (note-2)	255	
Base percent time-spent-following, BPTSF	25.5	%
Adj.for directional distribution and no-passing zones, fd/np	8.7	
Percent time-spent-following, PTSF	34.2	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.11	
Peak 15-min vehicle-miles of travel, VMT15	125	veh-mi
Peak-hour vehicle-miles of travel, VMT60	467	veh-mi
Peak 15-min total travel time, TT15	3.9	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/15/2005
Analysis Time Period	AM Peak
Highway	Black Dog Alley
From/To	Kingston Rd to MD 331
Jurisdiction	Talbot County
Analysis Year	2004
Description	Corridor N5 - Existing Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.90	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	0.1	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	100	%
Grade: Length		mi	Access points/mi	0	/mi
Up/down		%			

Two-way hourly volume, V	271		veh/h	
Directional split	62	/ 38	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	305	pc/h
Highest directional split proportion (note-2)	189	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.2	mi/h
Adj. for access points, fA	0.0	mi/h
Free-flow speed, FFS	40.8	mi/h
Adjustment for no-passing zones, fnp	4.0	mi/h
Average travel speed, ATS	34.4	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	302	pc/h
Highest directional split proportion (note-2)	187	
Base percent time-spent-following, BPTSF	23.3	%
Adj.for directional distribution and no-passing zones, fd/np	23.2	
Percent time-spent-following, PTSF	46.5	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.10	
Peak 15-min vehicle-miles of travel, VMT15	8	veh-mi
Peak-hour vehicle-miles of travel, VMT60	27	veh-mi
Peak 15-min total travel time, TT15	0.2	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/15/2005
Analysis Time Period	PM Peak
Highway	Black Dog Alley
From/To	Kingston Rd to MD 331
Jurisdiction	Talbot County
Analysis Year	2004
Description	Corridor N5 - Existing Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.92	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	0.1	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	100	%
Grade: Length		mi	Access points/mi	0	/mi
Up/down		%			

Two-way hourly volume, V	348		veh/h	
Directional split	65	/ 35	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	384	pc/h
Highest directional split proportion (note-2)	250	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.2	mi/h
Adj. for access points, fA	0.0	mi/h
Free-flow speed, FFS	40.8	mi/h
Adjustment for no-passing zones, fnp	4.4	mi/h
Average travel speed, ATS	33.4	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	379	pc/h
Highest directional split proportion (note-2)	246	
Base percent time-spent-following, BPTSF	28.3	%
Adj.for directional distribution and no-passing zones, fd/np	22.9	
Percent time-spent-following, PTSF	51.2	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.12	
Peak 15-min vehicle-miles of travel, VMT15	9	veh-mi
Peak-hour vehicle-miles of travel, VMT60	35	veh-mi
Peak 15-min total travel time, TT15	0.3	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/15/2005
Analysis Time Period	AM Peak
Highway	Black Dog Alley
From/To	US 50 to MD 309
Jurisdiction	Talbot County
Analysis Year	2015
Description	Corridor N1 - Future Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.94	
Lane width	13.0	ft	% Trucks and buses	2	%
Segment length	0.2	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	20	%
Grade: Length		mi	Access points/mi	25	/mi
Up/down		%			

Two-way hourly volume, V	850		veh/h
Directional split	53	/ 47	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.996	
Two-way flow rate,(note-1) vp	908	pc/h
Highest directional split proportion (note-2)	481	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.2	mi/h
Adj. for access points, fA	6.3	mi/h
Free-flow speed, FFS	34.5	mi/h
Adjustment for no-passing zones, fnp	1.2	mi/h
Average travel speed, ATS	26.3	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	906	pc/h
Highest directional split proportion (note-2)	480	
Base percent time-spent-following, BPTSF	54.9	%
Adj.for directional distribution and no-passing zones, fd/np	7.7	
Percent time-spent-following, PTSF	62.6	%

Level of Service and Other Performance Measures

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.28	
Peak 15-min vehicle-miles of travel, VMT15	45	veh-mi
Peak-hour vehicle-miles of travel, VMT60	170	veh-mi
Peak 15-min total travel time, TT15	1.7	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/15/2005
Analysis Time Period	PM Peak
Highway	Black Dog Alley
From/To	US 50 to MD 309
Jurisdiction	Talbot County
Analysis Year	2015
Description	Corridor N1 - Future Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.90	
Lane width	13.0	ft	% Trucks and buses	2	%
Segment length	0.2	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	20	%
Grade: Length		mi	Access points/mi	25	/mi
Up/down		%			

Two-way hourly volume, V	710		veh/h
Directional split	66	/ 34	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.996	
Two-way flow rate,(note-1) vp	792	pc/h
Highest directional split proportion (note-2)	523	pc/h

Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.2	mi/h
Adj. for access points, fA	6.3	mi/h
Free-flow speed, FFS	34.5	mi/h
Adjustment for no-passing zones, fnp	1.4	mi/h
Average travel speed, ATS	27.0	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	790	pc/h
Highest directional split proportion (note-2)	521	
Base percent time-spent-following, BPTSF	50.1	%
Adj.for directional distribution and no-passing zones, fd/np	7.9	
Percent time-spent-following, PTSF	57.9	%

Level of Service and Other Performance Measures

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.25	
Peak 15-min vehicle-miles of travel, VMT15	39	veh-mi
Peak-hour vehicle-miles of travel, VMT60	142	veh-mi
Peak 15-min total travel time, TT15	1.4	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/15/2005
Analysis Time Period	AM Peak
Highway	Black Dog Alley
From/To	MD 309 to Chapel Rd.
Jurisdiction	Talbot County
Analysis Year	2015
Description	Corridor N2 - Future Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.89	
Lane width	11.0	ft	% Trucks and buses	2	%
Segment length	1.1	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	50	%
Grade: Length		mi	Access points/mi	21	/mi
Up/down		%			

Two-way hourly volume, V	270		veh/h
Directional split	59	/ 41	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	308	pc/h
Highest directional split proportion (note-2)	182	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.7	mi/h
Adj. for access points, fA	5.3	mi/h
Free-flow speed, FFS	35.0	mi/h
Adjustment for no-passing zones, fnp	2.5	mi/h
Average travel speed, ATS	30.1	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	304	pc/h
Highest directional split proportion (note-2)	179	
Base percent time-spent-following, BPTSF	23.4	%
Adj.for directional distribution and no-passing zones, fd/np	19.2	
Percent time-spent-following, PTSF	42.6	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.10	
Peak 15-min vehicle-miles of travel, VMT15	83	veh-mi
Peak-hour vehicle-miles of travel, VMT60	297	veh-mi
Peak 15-min total travel time, TT15	2.8	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/15/2005
Analysis Time Period	PM Peak
Highway	Black Dog Alley
From/To	MD 309 to Chapel Rd.
Jurisdiction	Talbot County
Analysis Year	2015
Description	Corridor N2 - Future Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.88	
Lane width	11.0	ft	% Trucks and buses	2	%
Segment length	1.1	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	50	%
Grade: Length		mi	Access points/mi	21	/mi
Up/down		%			

Two-way hourly volume, V	510		veh/h
Directional split	82	/ 18	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	588	pc/h
Highest directional split proportion (note-2)	482	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.7	mi/h
Adj. for access points, fA	5.3	mi/h
Free-flow speed, FFS	35.0	mi/h
Adjustment for no-passing zones, fnp	2.7	mi/h
Average travel speed, ATS	27.8	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	581	pc/h
Highest directional split proportion (note-2)	476	
Base percent time-spent-following, BPTSF	40.0	%
Adj.for directional distribution and no-passing zones, fd/np	22.0	
Percent time-spent-following, PTSF	62.0	%

Level of Service and Other Performance Measures

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.18	
Peak 15-min vehicle-miles of travel, VMT15	159	veh-mi
Peak-hour vehicle-miles of travel, VMT60	561	veh-mi
Peak 15-min total travel time, TT15	5.7	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/15/2005
Analysis Time Period	AM Peak
Highway	Black Dog Alley
From/To	Chapel Rd. to MD 328
Jurisdiction	Talbot County
Analysis Year	2015
Description	Corridor N3 - Future Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.88	
Lane width	11.0	ft	% Trucks and buses	2	%
Segment length	0.9	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	50	%
Grade: Length		mi	Access points/mi	23	/mi
Up/down		%			

Two-way hourly volume, V	335		veh/h
Directional split	57	/ 43	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	386	pc/h
Highest directional split proportion (note-2)	220	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.7	mi/h
Adj. for access points, fA	5.8	mi/h
Free-flow speed, FFS	34.5	mi/h
Adjustment for no-passing zones, fnp	3.0	mi/h
Average travel speed, ATS	28.5	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	381	pc/h
Highest directional split proportion (note-2)	217	
Base percent time-spent-following, BPTSF	28.5	%
Adj.for directional distribution and no-passing zones, fd/np	19.2	
Percent time-spent-following, PTSF	47.7	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.12	
Peak 15-min vehicle-miles of travel, VMT15	86	veh-mi
Peak-hour vehicle-miles of travel, VMT60	301	veh-mi
Peak 15-min total travel time, TT15	3.0	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/15/2005
Analysis Time Period	PM Peak
Highway	Black Dog Alley
From/To	Chapel Rd. to MD 328
Jurisdiction	Talbot County
Analysis Year	2015
Description	Corridor N3 - Future Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.93	
Lane width	11.0	ft	% Trucks and buses	2	%
Segment length	0.9	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	50	%
Grade: Length		mi	Access points/mi	23	/mi
Up/down		%			

Two-way hourly volume, V	550		veh/h
Directional split	65	/ 35	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	600	pc/h
Highest directional split proportion (note-2)	390	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.7	mi/h
Adj. for access points, fA	5.8	mi/h
Free-flow speed, FFS	34.5	mi/h
Adjustment for no-passing zones, fnp	2.7	mi/h
Average travel speed, ATS	27.2	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	593	pc/h
Highest directional split proportion (note-2)	385	
Base percent time-spent-following, BPTSF	40.6	%
Adj.for directional distribution and no-passing zones, fd/np	17.2	
Percent time-spent-following, PTSF	57.8	%

Level of Service and Other Performance Measures

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.19	
Peak 15-min vehicle-miles of travel, VMT15	133	veh-mi
Peak-hour vehicle-miles of travel, VMT60	495	veh-mi
Peak 15-min total travel time, TT15	4.9	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/15/2005
Analysis Time Period	AM Peak
Highway	Black Dog Alley
From/To	MD 328 to Kingston Rd
Jurisdiction	Talbot County
Analysis Year	2015
Description	Corridor N4 - Future Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	1.5	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	10	%
Grade: Length		mi	Access points/mi	22	/mi
Up/down		%			

Two-way hourly volume, V	245		veh/h	
Directional split	71	/ 29	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	282	pc/h
Highest directional split proportion (note-2)	200	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.2	mi/h
Adj. for access points, fA	5.5	mi/h
Free-flow speed, FFS	35.3	mi/h
Adjustment for no-passing zones, fnp	0.5	mi/h
Average travel speed, ATS	32.6	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	279	pc/h
Highest directional split proportion (note-2)	198	
Base percent time-spent-following, BPTSF	21.7	%
Adj.for directional distribution and no-passing zones, fd/np	7.8	
Percent time-spent-following, PTSF	29.5	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.09	
Peak 15-min vehicle-miles of travel, VMT15	104	veh-mi
Peak-hour vehicle-miles of travel, VMT60	368	veh-mi
Peak 15-min total travel time, TT15	3.2	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/15/2005
Analysis Time Period	PM Peak
Highway	Black Dog Alley
From/To	MD 328 to Kingston Rd
Jurisdiction	Talbot County
Analysis Year	2015
Description	Corridor N4 - Future Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.93	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	1.5	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	10	%
Grade: Length		mi	Access points/mi	22	/mi
Up/down		%			

Two-way hourly volume, V	385		veh/h	
Directional split	75	/ 25	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	420	pc/h
Highest directional split proportion (note-2)	315	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.2	mi/h
Adj. for access points, fA	5.5	mi/h
Free-flow speed, FFS	35.3	mi/h
Adjustment for no-passing zones, fnp	0.8	mi/h
Average travel speed, ATS	31.2	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	415	pc/h
Highest directional split proportion (note-2)	311	
Base percent time-spent-following, BPTSF	30.6	%
Adj.for directional distribution and no-passing zones, fd/np	7.7	
Percent time-spent-following, PTSF	38.3	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.13	
Peak 15-min vehicle-miles of travel, VMT15	155	veh-mi
Peak-hour vehicle-miles of travel, VMT60	578	veh-mi
Peak 15-min total travel time, TT15	5.0	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/15/2005
Analysis Time Period	AM Peak
Highway	Black Dog Alley
From/To	Kingston Rd to MD 331
Jurisdiction	Talbot County
Analysis Year	2015
Description	Corridor N5 -Future Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.90	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	0.1	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	100	%
Grade: Length		mi	Access points/mi	0	/mi
Up/down		%			

Two-way hourly volume, V	380	veh/h	
Directional split	61 /	39	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	428	pc/h
Highest directional split proportion (note-2)	261	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.2	mi/h
Adj. for access points, fA	0.0	mi/h
Free-flow speed, FFS	40.8	mi/h
Adjustment for no-passing zones, fnp	4.4	mi/h
Average travel speed, ATS	33.1	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	423	pc/h
Highest directional split proportion (note-2)	258	
Base percent time-spent-following, BPTSF	31.1	%
Adj.for directional distribution and no-passing zones, fd/np	22.1	
Percent time-spent-following, PTSF	53.2	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.13	
Peak 15-min vehicle-miles of travel, VMT15	11	veh-mi
Peak-hour vehicle-miles of travel, VMT60	38	veh-mi
Peak 15-min total travel time, TT15	0.3	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/15/2005
Analysis Time Period	PM Peak
Highway	Black Dog Alley
From/To	Kingston Rd to MD 331
Jurisdiction	Talbot County
Analysis Year	2015
Description	Corridor N5 - Future Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.92	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	0.1	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	100	%
Grade: Length		mi	Access points/mi	0	/mi
Up/down		%			

Two-way hourly volume, V	470		veh/h	
Directional split	64	/ 36	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	518	pc/h
Highest directional split proportion (note-2)	332	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.2	mi/h
Adj. for access points, fA	0.0	mi/h
Free-flow speed, FFS	40.8	mi/h
Adjustment for no-passing zones, fnp	4.1	mi/h
Average travel speed, ATS	32.6	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	512	pc/h
Highest directional split proportion (note-2)	328	
Base percent time-spent-following, BPTSF	36.2	%
Adj.for directional distribution and no-passing zones, fd/np	21.6	
Percent time-spent-following, PTSF	57.8	%

Level of Service and Other Performance Measures

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.16	
Peak 15-min vehicle-miles of travel, VMT15	13	veh-mi
Peak-hour vehicle-miles of travel, VMT60	47	veh-mi
Peak 15-min total travel time, TT15	0.4	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/15/2005
Analysis Time Period	AM Peak
Highway	Black Dog Alley
From/To	US 50 to MD 309
Jurisdiction	Talbot County
Analysis Year	2030
Description	Corridor N1 - Future Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.94	
Lane width	13.0	ft	% Trucks and buses	2	%
Segment length	0.2	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	20	%
Grade: Length		mi	Access points/mi	25	/mi
Up/down		%			

Two-way hourly volume, V	930		veh/h
Directional split	53	/ 47	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.996	
Two-way flow rate,(note-1) vp	993	pc/h
Highest directional split proportion (note-2)	526	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.2	mi/h
Adj. for access points, fA	6.3	mi/h
Free-flow speed, FFS	34.5	mi/h
Adjustment for no-passing zones, fnp	1.1	mi/h
Average travel speed, ATS	25.7	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	991	pc/h
Highest directional split proportion (note-2)	525	
Base percent time-spent-following, BPTSF	58.2	%
Adj.for directional distribution and no-passing zones, fd/np	7.0	
Percent time-spent-following, PTSF	65.2	%

Level of Service and Other Performance Measures

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.31	
Peak 15-min vehicle-miles of travel, VMT15	49	veh-mi
Peak-hour vehicle-miles of travel, VMT60	186	veh-mi
Peak 15-min total travel time, TT15	1.9	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/15/2005
Analysis Time Period	PM Peak
Highway	Black Dog Alley
From/To	US 50 to MD 309
Jurisdiction	Talbot County
Analysis Year	2030
Description	Corridor N1 - Future Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.90	
Lane width	13.0	ft	% Trucks and buses	2	%
Segment length	0.2	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	20	%
Grade: Length		mi	Access points/mi	25	/mi
Up/down		%			

Two-way hourly volume, V	820		veh/h
Directional split	65	/ 35	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.996	
Two-way flow rate,(note-1) vp	915	pc/h
Highest directional split proportion (note-2)	595	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.2	mi/h
Adj. for access points, fA	6.3	mi/h
Free-flow speed, FFS	34.5	mi/h
Adjustment for no-passing zones, fnp	1.2	mi/h
Average travel speed, ATS	26.2	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	913	pc/h
Highest directional split proportion (note-2)	593	
Base percent time-spent-following, BPTSF	55.2	%
Adj.for directional distribution and no-passing zones, fd/np	6.9	
Percent time-spent-following, PTSF	62.1	%

Level of Service and Other Performance Measures

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.29	
Peak 15-min vehicle-miles of travel, VMT15	46	veh-mi
Peak-hour vehicle-miles of travel, VMT60	164	veh-mi
Peak 15-min total travel time, TT15	1.8	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/15/2005
Analysis Time Period	AM Peak
Highway	Black Dog Alley
From/To	MD 309 to Chapel Rd.
Jurisdiction	Talbot County
Analysis Year	2030
Description	Corridor N2 - Future Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.89	
Lane width	11.0	ft	% Trucks and buses	2	%
Segment length	1.1	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	50	%
Grade: Length		mi	Access points/mi	21	/mi
Up/down		%			

Two-way hourly volume, V	330		veh/h
Directional split	58	/ 42	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	376	pc/h
Highest directional split proportion (note-2)	218	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.7	mi/h
Adj. for access points, fA	5.3	mi/h
Free-flow speed, FFS	35.0	mi/h
Adjustment for no-passing zones, fnp	3.0	mi/h
Average travel speed, ATS	29.2	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	372	pc/h
Highest directional split proportion (note-2)	216	
Base percent time-spent-following, BPTSF	27.9	%
Adj.for directional distribution and no-passing zones, fd/np	19.0	
Percent time-spent-following, PTSF	46.9	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.12	
Peak 15-min vehicle-miles of travel, VMT15	102	veh-mi
Peak-hour vehicle-miles of travel, VMT60	363	veh-mi
Peak 15-min total travel time, TT15	3.5	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/15/2005
Analysis Time Period	PM Peak
Highway	Black Dog Alley
From/To	MD 309 to Chapel Rd.
Jurisdiction	Talbot County
Analysis Year	2030
Description	Corridor N2 - Future Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.88	
Lane width	11.0	ft	% Trucks and buses	2	%
Segment length	1.1	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	50	%
Grade: Length		mi	Access points/mi	21	/mi
Up/down		%			

Two-way hourly volume, V	610		veh/h
Directional split	82	/ 18	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.996	
Two-way flow rate,(note-1) vp	696	pc/h
Highest directional split proportion (note-2)	571	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.7	mi/h
Adj. for access points, fA	5.3	mi/h
Free-flow speed, FFS	35.0	mi/h
Adjustment for no-passing zones, fnp	2.4	mi/h
Average travel speed, ATS	27.2	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	695	pc/h
Highest directional split proportion (note-2)	570	
Base percent time-spent-following, BPTSF	45.7	%
Adj.for directional distribution and no-passing zones, fd/np	18.4	
Percent time-spent-following, PTSF	64.1	%

Level of Service and Other Performance Measures

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.22	
Peak 15-min vehicle-miles of travel, VMT15	191	veh-mi
Peak-hour vehicle-miles of travel, VMT60	671	veh-mi
Peak 15-min total travel time, TT15	7.0	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/15/2005
Analysis Time Period	AM Peak
Highway	Black Dog Alley
From/To	Chapel Rd. to MD 328
Jurisdiction	Talbot County
Analysis Year	2030
Description	Corridor N3 - Future Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.88	
Lane width	11.0	ft	% Trucks and buses	2	%
Segment length	0.9	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	50	%
Grade: Length		mi	Access points/mi	23	/mi
Up/down		%			

Two-way hourly volume, V	390		veh/h	
Directional split	62	/ 38	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	449	pc/h
Highest directional split proportion (note-2)	278	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.7	mi/h
Adj. for access points, fA	5.8	mi/h
Free-flow speed, FFS	34.5	mi/h
Adjustment for no-passing zones, fnp	3.0	mi/h
Average travel speed, ATS	28.1	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	444	pc/h
Highest directional split proportion (note-2)	275	
Base percent time-spent-following, BPTSF	32.3	%
Adj.for directional distribution and no-passing zones, fd/np	18.3	
Percent time-spent-following, PTSF	50.7	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.14	
Peak 15-min vehicle-miles of travel, VMT15	100	veh-mi
Peak-hour vehicle-miles of travel, VMT60	351	veh-mi
Peak 15-min total travel time, TT15	3.6	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/15/2005
Analysis Time Period	PM Peak
Highway	Black Dog Alley
From/To	Chapel Rd. to MD 328
Jurisdiction	Talbot County
Analysis Year	2030
Description	Corridor N3 - Future Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.93	
Lane width	11.0	ft	% Trucks and buses	2	%
Segment length	0.9	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	50	%
Grade: Length		mi	Access points/mi	23	/mi
Up/down		%			

Two-way hourly volume, V	590		veh/h	
Directional split	73	/ 27	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.996	
Two-way flow rate,(note-1) vp	637	pc/h
Highest directional split proportion (note-2)	465	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.7	mi/h
Adj. for access points, fA	5.8	mi/h
Free-flow speed, FFS	34.5	mi/h
Adjustment for no-passing zones, fnp	2.6	mi/h
Average travel speed, ATS	27.0	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	636	pc/h
Highest directional split proportion (note-2)	464	
Base percent time-spent-following, BPTSF	42.8	%
Adj.for directional distribution and no-passing zones, fd/np	17.3	
Percent time-spent-following, PTSF	60.1	%

Level of Service and Other Performance Measures

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.20	
Peak 15-min vehicle-miles of travel, VMT15	143	veh-mi
Peak-hour vehicle-miles of travel, VMT60	531	veh-mi
Peak 15-min total travel time, TT15	5.3	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/15/2005
Analysis Time Period	AM Peak
Highway	Black Dog Alley
From/To	MD 328 to Kingston Rd
Jurisdiction	Talbot County
Analysis Year	2030
Description	Corridor N4 - Future Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	1.5	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	10	%
Grade: Length		mi	Access points/mi	22	/mi
Up/down		%			

Two-way hourly volume, V	290		veh/h	
Directional split	69	/ 31	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	334	pc/h
Highest directional split proportion (note-2)	230	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.2	mi/h
Adj. for access points, fA	5.5	mi/h
Free-flow speed, FFS	35.3	mi/h
Adjustment for no-passing zones, fnp	0.7	mi/h
Average travel speed, ATS	32.0	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	330	pc/h
Highest directional split proportion (note-2)	228	
Base percent time-spent-following, BPTSF	25.2	%
Adj.for directional distribution and no-passing zones, fd/np	7.0	
Percent time-spent-following, PTSF	32.2	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.10	
Peak 15-min vehicle-miles of travel, VMT15	124	veh-mi
Peak-hour vehicle-miles of travel, VMT60	435	veh-mi
Peak 15-min total travel time, TT15	3.9	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/15/2005
Analysis Time Period	PM Peak
Highway	Black Dog Alley
From/To	MD 328 to Kingston Rd
Jurisdiction	Talbot County
Analysis Year	2030
Description	Corridor N4 - Future Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.93	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	1.5	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	10	%
Grade: Length		mi	Access points/mi	22	/mi
Up/down		%			

Two-way hourly volume, V	430		veh/h
Directional split	77	/ 23	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	469	pc/h
Highest directional split proportion (note-2)	361	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.2	mi/h
Adj. for access points, fA	5.5	mi/h
Free-flow speed, FFS	35.3	mi/h
Adjustment for no-passing zones, fnp	0.8	mi/h
Average travel speed, ATS	30.8	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	463	pc/h
Highest directional split proportion (note-2)	357	
Base percent time-spent-following, BPTSF	33.4	%
Adj.for directional distribution and no-passing zones, fd/np	7.8	
Percent time-spent-following, PTSF	41.2	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.15	
Peak 15-min vehicle-miles of travel, VMT15	173	veh-mi
Peak-hour vehicle-miles of travel, VMT60	645	veh-mi
Peak 15-min total travel time, TT15	5.6	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/15/2005
Analysis Time Period	AM Peak
Highway	Black Dog Alley
From/To	Kingston Rd to MD 331
Jurisdiction	Talbot County
Analysis Year	2030
Description	Corridor N5 -Future Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.90	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	0.1	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	100	%
Grade: Length		mi	Access points/mi	0	/mi
Up/down		%			

Two-way hourly volume, V	580	veh/h		
Directional split	55 /	45 %		

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.996	
Two-way flow rate,(note-1) vp	647	pc/h
Highest directional split proportion (note-2)	356	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.2	mi/h
Adj. for access points, fA	0.0	mi/h
Free-flow speed, FFS	40.8	mi/h
Adjustment for no-passing zones, fnp	3.7	mi/h
Average travel speed, ATS	32.1	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	646	pc/h
Highest directional split proportion (note-2)	355	
Base percent time-spent-following, BPTSF	43.3	%
Adj.for directional distribution and no-passing zones, fd/np	19.3	
Percent time-spent-following, PTSF	62.6	%

Level of Service and Other Performance Measures

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.20	
Peak 15-min vehicle-miles of travel, VMT15	16	veh-mi
Peak-hour vehicle-miles of travel, VMT60	58	veh-mi
Peak 15-min total travel time, TT15	0.5	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/15/2005
Analysis Time Period	PM Peak
Highway	Black Dog Alley
From/To	Kingston Rd to MD 331
Jurisdiction	Talbot County
Analysis Year	2030
Description	Corridor N5 - Future Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.92	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	0.1	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	100	%
Grade: Length		mi	Access points/mi	0	/mi
Up/down		%			

Two-way hourly volume, V	640		veh/h
Directional split	59	/ 41	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.996	
Two-way flow rate,(note-1) vp	698	pc/h
Highest directional split proportion (note-2)	412	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.2	mi/h
Adj. for access points, fA	0.0	mi/h
Free-flow speed, FFS	40.8	mi/h
Adjustment for no-passing zones, fnp	3.5	mi/h
Average travel speed, ATS	31.9	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	697	pc/h
Highest directional split proportion (note-2)	411	
Base percent time-spent-following, BPTSF	45.8	%
Adj.for directional distribution and no-passing zones, fd/np	17.7	
Percent time-spent-following, PTSF	63.5	%

Level of Service and Other Performance Measures

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.22	
Peak 15-min vehicle-miles of travel, VMT15	17	veh-mi
Peak-hour vehicle-miles of travel, VMT60	64	veh-mi
Peak 15-min total travel time, TT15	0.5	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/16/2005
Analysis Time Period	AM Peak
Highway	Chapel Rd.
From/To	US 50 to Klondike Rd.
Jurisdiction	Talbot County
Analysis Year	2004
Description	Corridor O - Existing Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.93	
Lane width	11.0	ft	% Trucks and buses	2	%
Segment length	2.1	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	75	%
Grade: Length		mi	Access points/mi	15	/mi
Up/down		%			

Two-way hourly volume, V	276		veh/h	
Directional split	76	/ 24	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	301	pc/h
Highest directional split proportion (note-2)	229	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.7	mi/h
Adj. for access points, fA	3.8	mi/h
Free-flow speed, FFS	36.5	mi/h
Adjustment for no-passing zones, fnp	3.2	mi/h
Average travel speed, ATS	31.0	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	297	pc/h
Highest directional split proportion (note-2)	226	
Base percent time-spent-following, BPTSF	23.0	%
Adj.for directional distribution and no-passing zones, fd/np	27.2	
Percent time-spent-following, PTSF	50.1	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.09	
Peak 15-min vehicle-miles of travel, VMT15	156	veh-mi
Peak-hour vehicle-miles of travel, VMT60	580	veh-mi
Peak 15-min total travel time, TT15	5.0	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/16/2005
Analysis Time Period	PM Peak
Highway	Chapel Rd.
From/To	US 50 to Klondike Rd.
Jurisdiction	Talbot County
Analysis Year	2004
Description	Corridor O - Existing Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.96	
Lane width	11.0	ft	% Trucks and buses	2	%
Segment length	2.1	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	75	%
Grade: Length		mi	Access points/mi	15	/mi
Up/down		%			

Two-way hourly volume, V	342		veh/h	
Directional split	71	/ 29	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	361	pc/h
Highest directional split proportion (note-2)	256	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.7	mi/h
Adj. for access points, fA	3.8	mi/h
Free-flow speed, FFS	36.5	mi/h
Adjustment for no-passing zones, fnp	3.6	mi/h
Average travel speed, ATS	30.2	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	357	pc/h
Highest directional split proportion (note-2)	253	
Base percent time-spent-following, BPTSF	26.9	%
Adj.for directional distribution and no-passing zones, fd/np	23.5	
Percent time-spent-following, PTSF	50.5	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.11	
Peak 15-min vehicle-miles of travel, VMT15	187	veh-mi
Peak-hour vehicle-miles of travel, VMT60	718	veh-mi
Peak 15-min total travel time, TT15	6.2	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/16/2005
Analysis Time Period	AM Peak
Highway	Chapel Rd.
From/To	US 50 to Klondike Rd.
Jurisdiction	Talbot County
Analysis Year	2015
Description	Corridor O - Future Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.93	
Lane width	11.0	ft	% Trucks and buses	2	%
Segment length	2.1	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	75	%
Grade: Length		mi	Access points/mi	15	/mi
Up/down		%			

Two-way hourly volume, V	310		veh/h	
Directional split	77	/ 23	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	338	pc/h
Highest directional split proportion (note-2)	260	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.7	mi/h
Adj. for access points, fA	3.8	mi/h
Free-flow speed, FFS	36.5	mi/h
Adjustment for no-passing zones, fnp	3.4	mi/h
Average travel speed, ATS	30.5	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	334	pc/h
Highest directional split proportion (note-2)	257	
Base percent time-spent-following, BPTSF	25.4	%
Adj.for directional distribution and no-passing zones, fd/np	27.1	
Percent time-spent-following, PTSF	52.5	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.11	
Peak 15-min vehicle-miles of travel, VMT15	175	veh-mi
Peak-hour vehicle-miles of travel, VMT60	651	veh-mi
Peak 15-min total travel time, TT15	5.7	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/16/2005
Analysis Time Period	PM Peak
Highway	Chapel Rd.
From/To	US 50 to Klondike Rd.
Jurisdiction	Talbot County
Analysis Year	2015
Description	Corridor O - Future Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.96	
Lane width	11.0	ft	% Trucks and buses	2	%
Segment length	2.1	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	75	%
Grade: Length		mi	Access points/mi	15	/mi
Up/down		%			

Two-way hourly volume, V	390		veh/h	
Directional split	72	/ 28	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	412	pc/h
Highest directional split proportion (note-2)	297	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.7	mi/h
Adj. for access points, fA	3.8	mi/h
Free-flow speed, FFS	36.5	mi/h
Adjustment for no-passing zones, fnp	3.8	mi/h
Average travel speed, ATS	29.6	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	407	pc/h
Highest directional split proportion (note-2)	293	
Base percent time-spent-following, BPTSF	30.1	%
Adj.for directional distribution and no-passing zones, fd/np	23.4	
Percent time-spent-following, PTSF	53.4	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.13	
Peak 15-min vehicle-miles of travel, VMT15	213	veh-mi
Peak-hour vehicle-miles of travel, VMT60	819	veh-mi
Peak 15-min total travel time, TT15	7.2	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/16/2005
Analysis Time Period	AM Peak
Highway	Chapel Rd.
From/To	US 50 to Klondike Rd.
Jurisdiction	Talbot County
Analysis Year	2030
Description	Corridor O - Future Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.93	
Lane width	11.0	ft	% Trucks and buses	2	%
Segment length	2.1	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	75	%
Grade: Length		mi	Access points/mi	15	/mi
Up/down		%			

Two-way hourly volume, V	330		veh/h	
Directional split	79	/ 21	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	360	pc/h
Highest directional split proportion (note-2)	284	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.7	mi/h
Adj. for access points, fA	3.8	mi/h
Free-flow speed, FFS	36.5	mi/h
Adjustment for no-passing zones, fnp	3.5	mi/h
Average travel speed, ATS	30.2	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	356	pc/h
Highest directional split proportion (note-2)	281	
Base percent time-spent-following, BPTSF	26.9	%
Adj.for directional distribution and no-passing zones, fd/np	27.8	
Percent time-spent-following, PTSF	54.6	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.11	
Peak 15-min vehicle-miles of travel, VMT15	186	veh-mi
Peak-hour vehicle-miles of travel, VMT60	693	veh-mi
Peak 15-min total travel time, TT15	6.2	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/16/2005
Analysis Time Period	PM Peak
Highway	Chapel Rd.
From/To	US 50 to Klondike Rd.
Jurisdiction	Talbot County
Analysis Year	2030
Description	Corridor O - Future Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	0.0	ft	Peak-hour factor, PHF	0.96	
Lane width	11.0	ft	% Trucks and buses	2	%
Segment length	2.1	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	75	%
Grade: Length		mi	Access points/mi	15	/mi
Up/down		%			

Two-way hourly volume, V	420		veh/h	
Directional split	71	/ 29	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	444	pc/h
Highest directional split proportion (note-2)	315	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	45.0	mi/h
Adj. for lane and shoulder width, fLS	4.7	mi/h
Adj. for access points, fA	3.8	mi/h
Free-flow speed, FFS	36.5	mi/h
Adjustment for no-passing zones, fnp	3.7	mi/h
Average travel speed, ATS	29.4	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	438	pc/h
Highest directional split proportion (note-2)	311	
Base percent time-spent-following, BPTSF	32.0	%
Adj.for directional distribution and no-passing zones, fd/np	22.4	
Percent time-spent-following, PTSF	54.4	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.14	
Peak 15-min vehicle-miles of travel, VMT15	230	veh-mi
Peak-hour vehicle-miles of travel, VMT60	882	veh-mi
Peak 15-min total travel time, TT15	7.8	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/21/2005
Analysis Time Period	AM Peak
Highway	MD 309 (Cordova Rd.)
From/To	Old Cordova Rd to Connelly Rd
Jurisdiction	Talbot County
Analysis Year	2004
Description	Corridor P - Existing Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	10.0	ft	Peak-hour factor, PHF	0.88	
Lane width	13.0	ft	% Trucks and buses	2	%
Segment length	4.5	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	10	%
Grade: Length		mi	Access points/mi	5	/mi
Up/down		%			

Two-way hourly volume, V	449		veh/h
Directional split	66	/ 34	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	517	pc/h
Highest directional split proportion (note-2)	341	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	55.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	1.3	mi/h
Free-flow speed, FFS	53.8	mi/h
Adjustment for no-passing zones, fnp	0.8	mi/h
Average travel speed, ATS	48.9	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	511	pc/h
Highest directional split proportion (note-2)	337	
Base percent time-spent-following, BPTSF	36.2	%
Adj.for directional distribution and no-passing zones, fd/np	6.0	
Percent time-spent-following, PTSF	42.2	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.16	
Peak 15-min vehicle-miles of travel, VMT15	574	veh-mi
Peak-hour vehicle-miles of travel, VMT60	2021	veh-mi
Peak 15-min total travel time, TT15	11.7	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	07/21/2005
Analysis Time Period	PM Peak
Highway	MD 309 (Cordova Rd.)
From/To	Old Cordova Rd to Connelly Rd
Jurisdiction	Talbot County
Analysis Year	2004
Description	Corridor P - Existing Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	10.0	ft	Peak-hour factor, PHF	0.86	
Lane width	13.0	ft	% Trucks and buses	2	%
Segment length	4.5	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	10	%
Grade: Length		mi	Access points/mi	5	/mi
Up/down		%			

Two-way hourly volume, V	478		veh/h	
Directional split	62	/ 38	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	564	pc/h
Highest directional split proportion (note-2)	350	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	55.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	1.3	mi/h
Free-flow speed, FFS	53.8	mi/h
Adjustment for no-passing zones, fnp	0.8	mi/h
Average travel speed, ATS	48.6	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	557	pc/h
Highest directional split proportion (note-2)	345	
Base percent time-spent-following, BPTSF	38.7	%
Adj.for directional distribution and no-passing zones, fd/np	5.9	
Percent time-spent-following, PTSF	44.6	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.18	
Peak 15-min vehicle-miles of travel, VMT15	625	veh-mi
Peak-hour vehicle-miles of travel, VMT60	2151	veh-mi
Peak 15-min total travel time, TT15	12.9	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	08/02/2005
Analysis Time Period	AM Peak
Highway	MD 309 (Cordova Rd.)
From/To	Old Cordova Rd to Connelly Rd
Jurisdiction	Talbot County
Analysis Year	2015
Description	Corridor P - Future Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	10.0	ft	Peak-hour factor, PHF	0.88	
Lane width	13.0	ft	% Trucks and buses	2	%
Segment length	4.5	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	10	%
Grade: Length		mi	Access points/mi	5	/mi
Up/down		%			

Two-way hourly volume, V	520		veh/h	
Directional split	65	/ 35	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	599	pc/h
Highest directional split proportion (note-2)	389	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	55.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	1.3	mi/h
Free-flow speed, FFS	53.8	mi/h
Adjustment for no-passing zones, fnp	0.8	mi/h
Average travel speed, ATS	48.3	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	592	pc/h
Highest directional split proportion (note-2)	385	
Base percent time-spent-following, BPTSF	40.6	%
Adj.for directional distribution and no-passing zones, fd/np	5.8	
Percent time-spent-following, PTSF	46.4	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.19	
Peak 15-min vehicle-miles of travel, VMT15	665	veh-mi
Peak-hour vehicle-miles of travel, VMT60	2340	veh-mi
Peak 15-min total travel time, TT15	13.8	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	08/02/2005
Analysis Time Period	PM Peak
Highway	MD 309 (Cordova Rd.)
From/To	Old Cordova Rd to Connelly Rd
Jurisdiction	Talbot County
Analysis Year	2015
Description	Corridor P - Future Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	10.0	ft	Peak-hour factor, PHF	0.86	
Lane width	13.0	ft	% Trucks and buses	2	%
Segment length	4.5	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	10	%
Grade: Length		mi	Access points/mi	5	/mi
Up/down		%			

Two-way hourly volume, V	550		veh/h	
Directional split	62	/ 38	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.996	
Two-way flow rate,(note-1) vp	642	pc/h
Highest directional split proportion (note-2)	398	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	55.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	1.3	mi/h
Free-flow speed, FFS	53.8	mi/h
Adjustment for no-passing zones, fnp	0.8	mi/h
Average travel speed, ATS	48.0	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	641	pc/h
Highest directional split proportion (note-2)	397	
Base percent time-spent-following, BPTSF	43.1	%
Adj.for directional distribution and no-passing zones, fd/np	5.4	
Percent time-spent-following, PTSF	48.4	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.20	
Peak 15-min vehicle-miles of travel, VMT15	719	veh-mi
Peak-hour vehicle-miles of travel, VMT60	2475	veh-mi
Peak 15-min total travel time, TT15	15.0	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	08/02/2005
Analysis Time Period	AM Peak
Highway	MD 309 (Cordova Rd.)
From/To	Old Cordova Rd to Connelly Rd
Jurisdiction	Talbot County
Analysis Year	2030
Description	Corridor P - Future Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	10.0	ft	Peak-hour factor, PHF	0.88	
Lane width	13.0	ft	% Trucks and buses	2	%
Segment length	4.5	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	10	%
Grade: Length		mi	Access points/mi	5	/mi
Up/down		%			

Two-way hourly volume, V	700		veh/h
Directional split	66	/ 34	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.996	
Two-way flow rate,(note-1) vp	799	pc/h
Highest directional split proportion (note-2)	527	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	55.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	1.3	mi/h
Free-flow speed, FFS	53.8	mi/h
Adjustment for no-passing zones, fnp	0.7	mi/h
Average travel speed, ATS	46.8	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	797	pc/h
Highest directional split proportion (note-2)	526	
Base percent time-spent-following, BPTSF	50.4	%
Adj.for directional distribution and no-passing zones, fd/np	3.9	
Percent time-spent-following, PTSF	54.2	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.25	
Peak 15-min vehicle-miles of travel, VMT15	895	veh-mi
Peak-hour vehicle-miles of travel, VMT60	3150	veh-mi
Peak 15-min total travel time, TT15	19.1	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

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Two-Way Two-Lane Highway Segment Analysis

Analyst	John L. Rectanus
Agency/Co.	Wallace, Montgomery & Assoc.
Date Performed	08/02/2005
Analysis Time Period	PM Peak
Highway	MD 309 (Cordova Rd.)
From/To	Old Cordova Rd to Connelly Rd
Jurisdiction	Talbot County
Analysis Year	2030
Description	Corridor P - Future Conditions Corridor Analysis

Input Data

Highway class	Class 2				
Shoulder width	10.0	ft	Peak-hour factor, PHF	0.86	
Lane width	13.0	ft	% Trucks and buses	2	%
Segment length	4.5	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	10	%
Grade: Length		mi	Access points/mi	5	/mi
Up/down		%			

Two-way hourly volume, V	710		veh/h
Directional split	59	/ 41	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.996	
Two-way flow rate,(note-1) vp	829	pc/h
Highest directional split proportion (note-2)	489	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	-	mi/h
Observed volume, Vf	-	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	55.0	mi/h
Adj. for lane and shoulder width, fLS	0.0	mi/h
Adj. for access points, fA	1.3	mi/h
Free-flow speed, FFS	53.8	mi/h
Adjustment for no-passing zones, fnp	0.7	mi/h
Average travel speed, ATS	46.6	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	827	pc/h
Highest directional split proportion (note-2)	488	
Base percent time-spent-following, BPTSF	51.7	%
Adj.for directional distribution and no-passing zones, fd/np	3.8	
Percent time-spent-following, PTSF	55.4	%

Level of Service and Other Performance Measures

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.26	
Peak 15-min vehicle-miles of travel, VMT15	929	veh-mi
Peak-hour vehicle-miles of travel, VMT60	3195	veh-mi
Peak 15-min total travel time, TT15	19.9	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.