

ASSOCIATED PHASE	DIRECTION	TRAFFIC SIGNAL											PEDESTRIAN															
		FACTORS						CALCULATED (TEM 403-2)			FINAL CLEARANCE		PED MOVEMENT	ASSOCIATED PHASE	CROSSWALK LENGTH	PUSHBUTTON PROVIDED	DISTANCE TO PUSHBUTTON	OMUTCD 4E.06-12	OMUTCD 4E.06-07	3 fps CHECKS (OMUTCD 4E.06-14)				FINAL PED TIMING				
		PERCEPTION/REACTION TIME (1s TYP)	YELLOW CHANGE APPROACH SPEED	ALL RED APPROACH SPEED	DECELERATION RATE (10 sq. fps TYP)	WIDTH OF INTERSECTION	LENGTH OF VEHICLE (20 ft TYP)	APPROACH GRADE	YELLOW	ALL RED	Y + AR	YELLOW						ALL RED	Y + AR	WALK INTERVAL (4-7s TYP)	CALCULATED PED CLEARANCE	PED CHANGE INTERVAL (FDW)	(L+P)/(3 fps) (NOTE: P=6 IF NO PUSHBUTTON)	WALK + PED CHANGE INTERVALS	IS Y>=X?	ADDITIONAL WALK INTERVAL REQUIRED	FINAL WALK INTERVAL	FINAL PED CHANGE INTERVAL (FDW)
		t	V <sub>Y</sub>	V <sub>R</sub>	a	W	L	g	Y	AR	TOTAL	Y (3-6s TYP)						AR (1-6s TYP)	TOTAL		= 3.5 fps WALK TIME	= 3.5 fps WALK TIME - 3 sec BUFFER	X	Y		SEC	SEC	SEC
SEC	MPH	MPH	SQ. FPS	FT	FT	%	SEC	SEC	SEC	SEC	SEC	SEC	SEC	SEC	SEC	SEC	SEC	SEC	SEC	SEC	SEC	SEC	SEC					
1	NB LT	1	-	-	10	-	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
2	SB	1	42	42	10	82	20	-0.01	4.1	0.7	4.8	4.1	1	5.1	-	-	-	-	-	-	-	-	-	-	-	-		
3	EB LT	1	-	-	10	-	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
4	WB	1	-	-	10	-	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
5	SB LT	1	30	25	10	63	20	-0.01	3.2	1.3	4.5	3.2	1.3	4.5	-	-	-	-	-	-	-	-	-	-	-	-		
6	NB	1	42	42	10	80	20	3	3.8	0.6	4.4	4.1	1	5.1	-	-	-	-	-	-	-	-	-	-	-	-		
7	WB LT	1	-	-	10	-	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
8	EB	1	30	25	10	86	20	-2.5	3.4	1.9	5.3	3.4	1.9	5.3	-	-	-	-	-	-	-	-	-	-	-	-		

CITY OF COLUMBUS - PEDESTRIAN TIMINGS																
PED MOVEMENT	ASSOCIATED PHASE	YELLOW CLEARANCE INTERVAL	RED CLEARANCE INTERVAL	CROSSWALK LENGTH		IS A PUSHBUTTON PROVIDED?	DISTANCE TO PUSHBUTTON	WALK INTERVAL (4-7 SEC TYP)	CALCULATED PED CLEARANCE	PED CHANGE INTERVAL (FDW)	(L+P)/(3 fps) (NOTE: P=6 IF NO PUSHBUTTON)	WALK + PED CLEARANCE	IS Y>X?	ADDITIONAL WALK INTERVAL REQUIRED	FINAL PED TIMING	
		SEC	SEC	L	P		= 3.5 fps WALK TIME		= PED CLR - YELLOW CLR - RED CLR	X	Y	FINAL WALK INTERVAL			FINAL PED CHANGE INTERVAL (FDW)	
		SEC	SEC	FT	FT		SEC		SEC	SEC	SEC	SEC			SEC	SEC
SB	2	4.1	1	65		NO	-	7	18.6	13.5	23.7	25.6	YES	N/A	7	14
WB	8	3.4	1.9	56		YES	10	7	16.0	10.7	22.0	23.0	YES	N/A	7	11
NB	6	4.1	1	56		NO	-	7	16.0	10.9	20.7	23.0	YES	N/A	7	11
EB	8	3.4	1.9	57		YES	10	7	16.3	11.0	22.3	23.3	YES	N/A	7	11

ASSOCIATED PHASE	DIRECTION	TRAFFIC SIGNAL											PEDESTRIAN														
		FACTORS						CALCULATED (TEM 403-2)			FINAL CLEARANCE		PED MOVEMENT	ASSOCIATED PHASE	CROSSWALK LENGTH	PUSHBUTTON PROVIDED	DISTANCE TO PUSHBUTTON	OMUTCD 4E.06-12	OMUTCD 4E.06-07	3 fps CHECKS (OMUTCD 4E.06-14)				FINAL PED TIMING			
		PERCEPTION/REACTION TIME (1s TYP)	YELLOW CHANGE APPROACH SPEED	ALL RED APPROACH SPEED	DECELERATION RATE (10 sq. fps TYP)	WIDTH OF INTERSECTION	LENGTH OF VEHICLE (20 ft TYP)	APPROACH GRADE	YELLOW	ALL RED	Y + AR	YELLOW						ALL RED	Y + AR	WALK INTERVAL (4-7s TYP)	CALCULATED PED CLEARANCE	PED CHANGE INTERVAL (FDW)	(L+P)/(3 fps) (NOTE: P=6 IF NO PUSHBUTTON)	WALK + PED CHANGE INTERVALS	IS Y>=X?	ADDITIONAL WALK INTERVAL REQUIRED	FINAL WALK INTERVAL
		t	V <sub>Y</sub>	V <sub>R</sub>	a	W	L	g	Y	AR	TOTAL	Y (3-6s TYP)	AR (1-6s TYP)	TOTAL	L	P	= 3.5 fps WALK TIME	= 3.5 fps WALK TIME - 3 sec BUFFER	X	Y		SEC	SEC				
SEC	MPH	MPH	SQ. FPS	FT	FT	%	SEC	SEC	SEC	SEC	SEC	SEC	FT	FT	SEC	SEC	SEC	SEC		SEC	SEC						
1	-	1	-	-	10	-	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	SB	1	32	32	10	60	20	-0.86	3.4	0.7	4.1	3.4	1	4.4	-	-	-	-	-	-	-	-	-	-	-	-	-
3	-	1	-	-	10	-	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	-	1	-	-	10	-	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	-	1	-	-	10	-	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	NB	1	32	32	10	56	20	2.7	3.2	0.6	3.8	3.4	1	4.4	-	-	-	-	-	-	-	-	-	-	-	-	-
7	-	1	-	-	10	-	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	EB	1	32	32	10	98	20	3.3	3.1	1.5	4.6	3.1	1.5	4.6	-	-	-	-	-	-	-	-	-	-	-	-	-

CITY OF COLUMBUS - PEDESTRIAN TIMINGS																
PED MOVEMENT	ASSOCIATED PHASE	YELLOW CLEARANCE INTERVAL	RED CLEARANCE INTERVAL	CROSSWALK LENGTH		IS A PUSHBUTTON PROVIDED?	DISTANCE TO PUSHBUTTON	WALK INTERVAL (4-7 SEC TYP)	CALCULATED PED CLEARANCE	PED CHANGE INTERVAL (FDW)	(L+P)/(3 fps) (NOTE: P=6 IF NO PUSHBUTTON)	WALK + PED CLEARANCE	IS Y>X?	ADDITIONAL WALK INTERVAL REQUIRED	FINAL PED TIMING	
		SEC	SEC	L	P		= 3.5 fps WALK TIME		= PED CLR - YELLOW CLR - RED CLR	X	Y	FINAL WALK INTERVAL			FINAL PED CHANGE INTERVAL (FDW)	
		SEC	SEC	FT	FT		SEC		SEC	SEC	SEC	SEC			SEC	SEC
SB	2	3.4	1	49		NO	-	7	14.0	9.6	18.3	21.0	YES	N/A	7	10
WB	8	3.1	1.5	62		NO	-	7	17.7	13.1	22.7	24.7	YES	N/A	7	14
NB	6	3.4	1	53		NO	-	7	15.1	10.7	19.7	22.1	YES	N/A	7	11
EB	8	3.1	1.5	74		NO	-	7	21.1	16.5	26.7	28.1	YES	N/A	7	17

ASSOCIATED PHASE	DIRECTION	TRAFFIC SIGNAL											PEDESTRIAN															
		FACTORS						CALCULATED (TEM 403-2)			FINAL CLEARANCE		PED MOVEMENT	ASSOCIATED PHASE	CROSSWALK LENGTH	PUSHBUTTON PROVIDED	DISTANCE TO PUSHBUTTON	OMUTCD 4E.06-12	OMUTCD 4E.06-07	3 fps CHECKS (OMUTCD 4E.06-14)				FINAL PED TIMING				
		PERCEPTION/REACTION TIME (1s TYP)	YELLOW CHANGE APPROACH SPEED	ALL RED APPROACH SPEED	DECELERATION RATE (10 sq. fps TYP)	WIDTH OF INTERSECTION	LENGTH OF VEHICLE (20 ft TYP)	APPROACH GRADE	YELLOW	ALL RED	Y + AR	YELLOW						ALL RED	Y + AR	WALK INTERVAL (4-7s TYP)	CALCULATED PED CLEARANCE	PED CHANGE INTERVAL (FDW)	(L+P)/(3 fps) (NOTE: P=6 IF NO PUSHBUTTON)	WALK + PED CHANGE INTERVALS	IS Y>=X?	ADDITIONAL WALK INTERVAL REQUIRED	FINAL WALK INTERVAL	FINAL PED CHANGE INTERVAL (FDW)
		t	V <sub>Y</sub>	V <sub>R</sub>	a	W	L	g	Y	AR	TOTAL	Y (3-6s TYP)						AR (1-6s TYP)	TOTAL	P	= 3.5 fps WALK TIME	= 3.5 fps WALK TIME - 3 sec BUFFER	X	Y		SEC	SEC	
SEC	MPH	MPH	SQ. FPS	FT	FT	%	SEC	SEC	SEC	SEC	SEC	SEC	FT	SEC	SEC	SEC	SEC		SEC	SEC	SEC							
1	NB LT	1	30	25	10	62	20	0.32	3.2	1.2	4.4	3.2	1.2	4.4	-	-	-	-	-	-	-	-	-	-	-	-		
2	SB	1	42	42	10	79	20	-0.73	4.2	0.6	4.8	4.2	1	5.2	-	-	-	-	-	-	-	-	-	-	-	-		
3	-	1	-	-	10	-	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
4	WB	1	42	42	10	73	20	-2.85	4.4	0.5	4.9	4.4	1.6	6.0	-	-	-	-	-	-	-	-	-	-	-	-		
5	-	1	-	-	10	-	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
6	NB	1	42	42	10	70	20	0.32	4.1	0.5	4.6	4.2	1	5.2	-	-	-	-	-	-	-	-	-	-	-	-		
7	WB LT	1	30	25	10	68	20	-2.85	3.4	1.4	4.8	3.4	1.4	4.8	-	-	-	-	-	-	-	-	-	-	-	-		
8	EB	1	30	25	10	75	20	2.2	3.1	1.6	4.7	4.4	1.6	6.0	-	-	-	-	-	-	-	-	-	-	-	-		

CITY OF COLUMBUS - PEDESTRIAN TIMINGS																
PED MOVEMENT	ASSOCIATED PHASE	YELLOW CLEARANCE INTERVAL	RED CLEARANCE INTERVAL	CROSSWALK LENGTH		IS A PUSHBUTTON PROVIDED?	DISTANCE TO PUSHBUTTON	WALK INTERVAL (4-7 SEC TYP)	CALCULATED PED CLEARANCE	PED CHANGE INTERVAL (FDW)	(L+P)/(3 fps) (NOTE: P=6 IF NO PUSHBUTTON)	WALK + PED CLEARANCE	IS Y>X?	ADDITIONAL WALK INTERVAL REQUIRED	FINAL PED TIMING	
		SEC	SEC	L	P		= 3.5 fps WALK TIME		= PED CLR - YELLOW CLR - RED CLR	X	Y	FINAL WALK INTERVAL			FINAL PED CHANGE INTERVAL (FDW)	
		SEC	SEC	FT	FT		SEC		SEC	SEC	SEC	SEC			SEC	SEC
SB	2	4.2	1	49		NO	-	7	14.0	8.8	18.3	21.0	YES	N/A	7	9
WB	4	4.4	1.6	54		NO	-	7	15.4	9.4	20.0	22.4	YES	N/A	7	10
NB	6	4.2	1	52		NO	-	7	14.9	9.7	19.3	21.9	YES	N/A	7	10
EB	8	4.4	1.6	54		NO	-	7	15.4	9.4	20.0	22.4	YES	N/A	7	10

ASSOCIATED PHASE	DIRECTION	TRAFFIC SIGNAL											PEDESTRIAN															
		FACTORS						CALCULATED (TEM 403-2)			FINAL CLEARANCE		PED MOVEMENT	ASSOCIATED PHASE	CROSSWALK LENGTH	PUSHBUTTON PROVIDED	DISTANCE TO PUSHBUTTON	OMUTCD 4E.06-12	OMUTCD 4E.06-07	3 fps CHECKS (OMUTCD 4E.06-14)				FINAL PED TIMING				
		PERCEPTION/REACTION TIME (1s TYP)	YELLOW CHANGE APPROACH SPEED	ALL RED APPROACH SPEED	DECELERATION RATE (10 sq. fps TYP)	WIDTH OF INTERSECTION	LENGTH OF VEHICLE (20 ft TYP)	APPROACH GRADE	YELLOW	ALL RED	Y + AR	YELLOW						ALL RED	Y + AR	WALK INTERVAL (4-7s TYP)	CALCULATED PED CLEARANCE	PED CHANGE INTERVAL (FDW)	(L+P)/(3 fps) (NOTE: P=6 IF NO PUSHBUTTON)	WALK + PED CHANGE INTERVALS	IS Y>=X?	ADDITIONAL WALK INTERVAL REQUIRED	FINAL WALK INTERVAL	FINAL PED CHANGE INTERVAL (FDW)
		t	V <sub>Y</sub>	V <sub>R</sub>	a	W	L	g	Y	AR	TOTAL	Y (3-6s TYP)						AR (1-6s TYP)	TOTAL		= 3.5 fps WALK TIME	= 3.5 fps WALK TIME - 3 sec BUFFER	X	Y		SEC	SEC	
SEC	MPH	MPH	SQ. FPS	FT	FT	%	SEC	SEC	SEC	SEC	SEC	SEC	FT	FT	SEC	SEC	SEC	SEC	SEC	SEC	SEC							
1	NB LT	1	-	-	10	-	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2	SB	1	42	42	10	65	20	0.25	4.1	0.4	4.5	4.1	1	5.1	-	-	-	-	-	-	-	-	-	-	-	-	-	
3	EB LT	1	-	-	10	-	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
4	WB	1	42	42	10	84	20	-2.23	4.3	0.7	5.0	4.3	1	5.3	-	-	-	-	-	-	-	-	-	-	-	-	-	
5	SB LT	1	30	25	10	73	20	0.25	3.2	1.5	4.7	3.2	1.5	4.7	-	-	-	-	-	-	-	-	-	-	-	-	-	
6	NB	1	42	42	10	72	20	2.56	3.9	0.5	4.4	4.1	1	5.1	-	-	-	-	-	-	-	-	-	-	-	-	-	
7	WB LT	1	-	-	10	-	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
8	EB	1	42	42	10	76	20	2.29	3.9	0.6	4.5	4.3	1	5.3	-	-	-	-	-	-	-	-	-	-	-	-	-	

CITY OF COLUMBUS - PEDESTRIAN TIMINGS																
PED MOVEMENT	ASSOCIATED PHASE	YELLOW CLEARANCE INTERVAL	RED CLEARANCE INTERVAL	CROSSWALK LENGTH		IS A PUSHBUTTON PROVIDED?	DISTANCE TO PUSHBUTTON	WALK INTERVAL (4-7 SEC TYP)	CALCULATED PED CLEARANCE	PED CHANGE INTERVAL (FDW)	(L+P)/(3 fps) (NOTE: P=6 IF NO PUSHBUTTON)	WALK + PED CLEARANCE	IS Y>X?	ADDITIONAL WALK INTERVAL REQUIRED	FINAL PED TIMING	
		SEC	SEC	L	P		= 3.5 fps WALK TIME		= PED CLR - YELLOW CLR - RED CLR	X	Y	FINAL WALK INTERVAL			FINAL PED CHANGE INTERVAL (FDW)	
		SEC	SEC	FT	FT		SEC		SEC	SEC	SEC	SEC			SEC	SEC
SB	2	4.1	1	32		NO	-	7	9.1	4.0	12.7	16.1	YES	N/A	7	5
WB	4	4.3	1	54		YES	10	7	15.4	10.1	21.3	22.4	YES	N/A	7	11
NB	6	4.1	1	40		NO	-	7	11.4	6.3	15.3	18.4	YES	N/A	7	7
EB	8	4.3	1	52		YES	10	7	14.9	9.6	20.7	21.9	YES	N/A	7	10

ASSOCIATED PHASE	DIRECTION	TRAFFIC SIGNAL											PEDESTRIAN															
		FACTORS						CALCULATED (TEM 403-2)			FINAL CLEARANCE		PED MOVEMENT	ASSOCIATED PHASE	CROSSWALK LENGTH	PUSHBUTTON PROVIDED	DISTANCE TO PUSHBUTTON	OMUTCD 4E.06-12	OMUTCD 4E.06-07	3 fps CHECKS (OMUTCD 4E.06-14)				FINAL PED TIMING				
		PERCEPTION/REACTION TIME (1s TYP)	YELLOW CHANGE APPROACH SPEED	ALL RED APPROACH SPEED	DECELERATION RATE (10 sq. fps TYP)	WIDTH OF INTERSECTION	LENGTH OF VEHICLE (20 ft TYP)	APPROACH GRADE	YELLOW	ALL RED	Y + AR	YELLOW						ALL RED	Y + AR	WALK INTERVAL (4-7s TYP)	CALCULATED PED CLEARANCE	PED CHANGE INTERVAL (FDW)	(L+P)/(3 fps) (NOTE: P=6 IF NO PUSHBUTTON)	WALK + PED CHANGE INTERVALS	IS Y>=X?	ADDITIONAL WALK INTERVAL REQUIRED	FINAL WALK INTERVAL	FINAL PED CHANGE INTERVAL (FDW)
		t	V <sub>Y</sub>	V <sub>R</sub>	a	W	L	g	Y	AR	TOTAL	Y (3-6s TYP)						AR (1-6s TYP)	TOTAL	P	= 3.5 fps WALK TIME	= 3.5 fps WALK TIME - 3 sec BUFFER	X	Y		SEC	SEC	SEC
SEC	MPH	MPH	SQ. FPS	FT	FT	%	SEC	SEC	SEC	SEC	SEC	SEC	FT	FT	SEC	SEC	SEC	SEC	SEC	SEC	SEC	SEC						
1	-	1	-	-	10	-	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
2	SB	1	42	42	10	56	20	-2.8	4.4	0.2	4.6	4.4	1	5.4	-	-	-	-	-	-	-	-	-	-	-	-	-	
3	-	1	-	-	10	-	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
4	WB	1	42	42	10	83	20	6	3.6	0.7	4.3	3.8	1	4.8	-	-	-	-	-	-	-	-	-	-	-	-	-	
5	-	1	-	-	10	-	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
6	NB	1	42	42	10	50	20	2.8	3.8	0.1	3.9	4.4	1	5.4	-	-	-	-	-	-	-	-	-	-	-	-	-	
7	-	1	-	-	10	-	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
8	EB	1	42	42	10	100	20	3	3.8	0.9	4.7	3.8	1	4.8	-	-	-	-	-	-	-	-	-	-	-	-	-	

CITY OF COLUMBUS - PEDESTRIAN TIMINGS															
PED MOVEMENT	ASSOCIATED PHASE	YELLOW CLEARANCE INTERVAL	RED CLEARANCE INTERVAL	CROSSWALK LENGTH	IS A PUSHBUTTON PROVIDED?	DISTANCE TO PUSHBUTTON	WALK INTERVAL (4-7 SEC TYP)	CALCULATED PED CLEARANCE	PED CHANGE INTERVAL (FDW)	(L+P)/(3 fps) (NOTE: P=6 IF NO PUSHBUTTON)	WALK + PED CLEARANCE	IS Y>X?	ADDITIONAL WALK INTERVAL REQUIRED	FINAL PED TIMING	
		L	P	= 3.5 fps WALK TIME		= PED CLR - YELLOW CLR - RED CLR		X	Y	FINAL WALK INTERVAL	FINAL PED CHANGE INTERVAL (FDW)				
		SEC	SEC	FT		FT		SEC	SEC	SEC	SEC			SEC	SEC
SB	2	4.4	1	34	NO	-	7	9.7	4.3	13.3	16.7	YES	N/A	7	5
WB	4	3.8	1	62	NO	-	7	17.7	12.9	22.7	24.7	YES	N/A	7	13
NB	6	4.4	1	39	NO	-	7	11.1	5.7	15.0	18.1	YES	N/A	7	6
EB	8	3.8	1	85	NO	-	7	24.3	19.5	30.3	31.3	YES	N/A	7	20