City Of Los Angeles
Department Of Transportation

MANUAL TRAFFIC COUNT SUMMARY

STREET:
North/South KOHLER ST

East/West 8TH ST

Day: MONDAY Date: June 7, 2010 Weather: SUNNY

Hours: 7-10AM 11-2PM

School Day: YES District: CENTRAL I/S CODE 8813

	N/B	S/B	E/B	W/B
DUAL-WHEELED	44	38	96	156
BIKES	18	7	5	2
BUSES	1	0	0	6

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	26	9.15	17	9.15	46	8.45	81	8.30
PM PK 15 MIN	48	11.00	18	11.30	62	11.00	83	11.00
AM PK HOUR	74	8.30	45	8.45	162	8.30	305	8.30
PM PK HOUR	89	11.00	57	11.00	206	11.00	266	11.00

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	13	15	24	52
8-9	14	8	35	57
9-10	15	4	38	57
11-12	20	18	51	89
12-1	14	7	19	40
1-2	8	5	30	43
TOTAL	84	57	197	338

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	18	5	15	38
8-9	15	6	7	28
9-10	24	6	14	44
11-12	28	15	14	57
12-1	8	1	5	14
1-2	6	4	8	18
TOTAL	99	37	63	199

TOTAL	**XING S/L**		**XING N/L**	
N-S	Ped	Sch	Ped	Sch
90	24	0	23	0
85	20	1	30	0
101	33	0	18	0
146	20	0	13	0
54	7	0	12	0
61	10	0	10	0
537	114	1	106	0

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	10	115	21	146
8-9	9	125	13	147
9-10	3	124	16	143
11-12	11	178	17	206
12-1	6	123	12	141
1-2	5	132	12	149
TOTAL	44	797	91	932

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	36	209	25	270
8-9	30	238	29	297
9-10	25	230	24	279
11-12	35	201	30	266
12-1	11	159	12	182
1-2	9	151	10	170
TOTAL	146	1188	130	1464

TOTAL	**XING W/L**		**XING E/L**	
E-W	Ped	Sch	Ped	Sch
416	19	0	8	0
444	23	0	27	0
422	10	0	14	0
472	19	0	13	0
323	13	0	4	0
319	22	0	2	0
2396	106	0	68	0

(Rev Oct 06)

CHECK 133 113 111 70

City of Los Angeles
Department of Transportation

FETSIM COUNT SHEET (R 3-89)

North/South St: KOHLER ST

East/West St: 8TH ST

Date: June 7, 2010

NOTE: THESE COUNTS WERE CALCULATED IN ACCORDANCE WITH THE COUNT DEFINITION OUTLINED
Peak hour volumes were calculated by determining the 1/2 hour during which the total volume on all approaches was a maximum, i.e., from 7.00-7.30 or from 4.15-4.45. Then these volumes were multiplied by 2 to get the hourly volumes. These numbers are not the same as the ones in the Traffic Count Summary forms.

A.M.	Format		P.M.	LINK	Format
18	28		10	2	4
18	58		4	2	14
4	18		2	128	8
32	36		6	128	4

TRAFFIC COUNT SUMMARY Format

SB APPROACH

	Lt	Rt	Lt	Th	Rt	
AM	18	58	28	2	18	9.00
PM	4	14	4	2	10	13.30

WB APPROACH

	Lt	Rt	Lt	Th	Rt
AM	4	18	36	128	32
PM	2	8	4	128	6

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% CALCULATION WORKSPACE !

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% NORTHBOUND AM !

% !

% Period	Total Vehicles			Cross	Hour	D.W	Pedestrns			Period	!
% Endng	L	T	R	Tot.	Tot.	Veh.	Bus	Ped	Sch	Begng	!
% ----	----	----	----	----	----	----	----	----	----	----	!
% 7.15	7	3	9	19	52	2	0	7	0	7.00	!
% 7.30	2	5	8	15	37	4	0	10	0	7.15	!
% 7.45	3	6	4	13	43	2	0	5	0	7.30	!
% 8.00	1	1	3	5	38	1	0	2	0	7.45	!
% 8.15	1	1	2	4	57	2	0	3	0	8.00	!
% 8.30	5	3	13	21	69	2	0	7	1	8.15	!
% 8.45	1	1	6	8	74	0	0	2	0	8.30	!
% 9.00	7	3	14	24	73	4	0	8	0	8.45	!
% 9.15	3	1	12	16	57	3	0	7	0	9.00	!
% 9.30	6	3	17	26		7	0	14	0	9.15	!
% 9.45	3	0	4	7		2	1	6	0	9.30	!
% 10.00	3	0	5	8		1	0	6	0	9.45	!
%	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	!
% NORTHBOUND PM											!
%											!
% Period	Total Vehicles			Cross	Hour	D.W	Pedestrns			Period	!
% Endng	L	T	R	Tot.	Tot.	Veh.	Bus	Ped	Sch	Begng	!
% ----	----	----	----	----	----	----	----	----	----	----	!
% 11.15	14	10	24	48	89	3	0	1	0	11.00	!
% 11.30	4	6	13	23	63	1	0	12	0	11.15	!
% 11.45	1	1	11	13	47	2	0	4	0	11.30	!
% 12.00	1	1	3	5	41	0	0	3	0	11.45	!
% 12.15	7	4	11	22	40	2	0	1	0	12.00	!
% 12.30	3	1	3	7	26	1	0	2	0	12.15	!
% 12.45	3	2	2	7	44	0	0	3	0	12.30	!
% 13.00	1	0	3	4	43	0	0	1	0	12.45	!
% 13.15	1	0	7	8	43	0	0	2	0	13.00	!
% 13.30	5	4	16	25		4	0	4	0	13.15	!
% 13.45	1	0	5	6		1	0	2	0	13.30	!
% 14.00	1	1	2	4		0	0	2	0	13.45	!
%											!
% ----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	
% EASTBOUND AM											!
%											!
% Period	Total Vehicles			Cross	Hour	D.W	Pedestrns			Period	!
% Endng	L	T	R	Tot.	Tot.	Veh.	Bus	Ped	Sch	Begng	!
% ----	----	----	----	----	----	----	----	----	----	----	!
% 7.15	2	28	8	38	146	8	0	7	0	7.00	!
% 7.30	6	28	6	40	135	7	0	5	0	7.15	!
% 7.45	1	36	5	42	134	4	0	6	0	7.30	!
% 8.00	1	23	2	26	127	2	0	1	0	7.45	!
% 8.15	0	25	2	27	147	3	0	2	0	8.00	!
% 8.30	3	33	3	39	158	2	0	11	0	8.15	!
% 8.45	2	30	3	35	162	3	0	8	0	8.30	!
% 9.00	4	37	5	46	159	6	0	2	0	8.45	!
% 9.15	2	32	4	38	143	4	0	3	0	9.00	!
% 9.30	0	38	5	43		5	0	3	0	9.15	!
% 9.45	1	28	3	32		4	0	4	0	9.30	!
% 10.00	0	26	4	30		5	0	0	0	9.45	!
%	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	!

EASTBOUND PM

Period Endng	Total Vehicles L	T	R	Cross Tot.	Hour Tot.	D.W Veh.	Bus	Pedestrns Ped	Sch	Period Begng
11.15	4	52	6	62	206	8	0	9	0	11.00
11.30	5	47	6	58	189	7	0	5	0	11.15
11.45	2	45	3	50	165	5	0	4	0	11.30
12.00	0	34	2	36	149	2	0	1	0	11.45
12.15	4	37	4	45	141	6	0	7	0	12.00
12.30	1	30	3	34	129	4	0	2	0	12.15
12.45	1	29	4	34	142	2	0	1	0	12.30
13.00	0	27	1	28	147	2	0	3	0	12.45
13.15	1	29	3	33	149	0	0	4	0	13.00
13.30	3	39	5	47		4	0	9	0	13.15
13.45	1	36	2	39		2	0	6	0	13.30
14.00	0	28	2	30		1	0	3	0	13.45

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FETSIM WORKSPACE SEE COMMENTS BELOW

A.M. VOLUME TOTAL	BEG TIME	NB L	NB T	NB R	NB TOT	SB L	SB T	SB R
275	7.00	9	8	17	34	11	4	10
271	7.15	5	11	12	28	7	2	8
231	7.30	4	7	7	18	7	1	5
219	7.45	2	2	5	9	8	3	5
247	8.00	6	4	15	25	6	3	5
265	8.15	6	4	19	29	9	3	3
282	8.30	8	4	20	32	9	3	2
292	8.45	10	4	26	40	10	3	4
300	9.00	9	4	29	42	14	4	9
279	9.15	9	3	21	33	14	3	11
223	9.30	6	0	9	15	10	2	5

MAX 1/2 HOUR VOLUME PE 300
TIME MAX PEAK STARTS 9.00

P.M. VOLUME TOTAL	BEG TIME	NB L	NB T	NB R	NB TOT	SB L	SB T	SB R
362	11.00	18	16	37	71	14	4	5
303	11.15	5	7	24	36	14	8	6
256	11.30	2	2	14	18	14	11	9
226	11.45	8	5	14	27	8	5	6
218	12.00	10	5	14	29	5	1	2
192	12.15	6	3	5	14	4	1	4
159	12.30	4	2	5	11	3	0	3
154	12.45	2	0	10	12	4	1	0
224	13.00	6	4	23	33	4	3	3
218	13.15	6	4	21	31	2	2	6
156	13.30	2	1	7	10	2	1	5

MAX 1/2 HOUR VOLUME PE 362
TIME MAX PEAK STARTS 13.30

COMMEN

A. DESIGN RULES FOR CALCULATING HOUR COUNT:

1. FIND MAX 1/2 HOUR COUNT BY ADDING 2 SUCCESSIVE 15 MINUTE VOLUME COUNTS WITH @SUM FNC THEN FIND MAX USING @MAX FUNCTION. @VLOOKUP LOOKS FOR THE HIGHEST VOLUME.

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SOUTHBOUND AM %

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Period	Total Vehicles			Cross	Hour	D.W	Pedestrns		Period	%
Endng	L	T	R	Tot.	Tot.	Veh.	Bus	Ped	Sch	Begng	%
7.15	5	2	4	11	38	3	0	6	0	7.00	%
7.30	6	2	6	14	33	4	0	7	0	7.15	%
7.45	1	0	2	3	27	0	0	5	0	7.30	%
8.00	6	1	3	10	31	2	0	5	0	7.45	%
8.15	2	2	2	6	28	1	0	14	0	8.00	%
8.30	4	1	3	8	32	1	0	3	0	8.15	%
8.45	5	2	0	7	41	1	0	6	0	8.30	%
9.00	4	1	2	7	45	4	0	7	0	8.45	%
9.15	6	2	2	10	44	3	0	4	0	9.00	%
9.30	8	2	7	17		3	0	3	0	9.15	%
9.45	6	1	4	11		1	0	6	0	9.30	%
10.00	4	1	1	6		1	0	5	0	9.45	%

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SOUTHBOUND PM %

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Period	Total Vehicles			Cross	Hour	D.W	Pedestrns		Period	%
Endng	L	T	R	Tot.	Tot.	Veh.	Bus	Ped	Sch	Begng	%
11.15	8	2	3	13	57	3	0	4	0	11.00	%
11.30	6	2	2	10	47	0	0	6	0	11.15	%
11.45	8	6	4	18	42	3	0	3	0	11.30	%
12.00	6	5	5	16	28	5	0	0	0	11.45	%
12.15	2	0	1	3	14	0	0	3	0	12.00	%
12.30	3	1	1	5	14	3	0	3	0	12.15	%
12.45	1	0	3	4	16	0	0	3	0	12.30	%
13.00	2	0	0	2	15	0	0	3	0	12.45	%
13.15	2	1	0	3	18	0	0	2	0	13.00	%
13.30	2	2	3	7		0	0	2	0	13.15	%
13.45	0	0	3	3		0	0	4	0	13.30	%
14.00	2	1	2	5		0	0	2	0	13.45	%

%

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WESTBOUND AM %

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Period	Total Vehicles			Cross	Hour	D.W	Pedestrns		Period	%
Endng	L	T	R	Tot.	Tot.	Veh.	Bus	Ped	Sch	Begng	%
7.15	10	44	7	61	270	7	0	1	0	7.00	%
7.30	12	60	5	77	285	10	6	3	0	7.15	%
7.45	9	52	6	67	274	10	0	2	0	7.30	%
8.00	5	53	7	65	288	7	0	2	0	7.45	%
8.15	12	56	8	76	297	13	0	7	0	8.00	%
8.30	4	59	3	66	298	7	0	7	0	8.15	%
8.45	9	64	8	81	305	12	0	9	0	8.30	%
9.00	5	59	10	74	294	12	0	4	0	8.45	%
9.15	7	61	9	77	279	10	0	5	0	9.00	%
9.30	11	55	7	73		10	0	3	0	9.15	%
9.45	6	60	4	70		6	0	4	0	9.30	%
10.00	1	54	4	59		4	0	2	0	9.45	%

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WESTBOUND PM

Period Endng	Total Vehicles L	T	R	Cross Tot.	Hour Tot.	D.W Veh.	Pedestrns Bus	Ped	Sch	Period Begng
11.15	9	60	14	83	266	9	0	6	0	11.00
11.30	9	50	6	65	230	5	0	4	0	11.15
11.45	12	47	7	66	220	11	0	3	0	11.30
12.00	5	44	3	52	200	0	0	0	0	11.45
12.15	2	39	6	47	182	2	0	1	0	12.00
12.30	7	46	2	55	177	4	0	2	0	12.15
12.45	1	42	3	46	181	1	0	0	0	12.30
13.00	1	32	1	34	167	0	0	1	0	12.45
13.15	2	39	1	42	170	0	0	1	0	13.00
13.30	5	48	6	59		7	0	0	0	13.15
13.45	1	30	1	32		6	0	1	0	13.30
14.00	1	34	2	37		3	0	0	0	13.45

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	EB				WB			
TOT	L	T	R	TOT	L	T	R	TOT
25	8	56	14	78	22	104	12	138
17	7	64	11	82	21	112	11	144
13	2	59	7	68	14	105	13	132
16	1	48	4	53	17	109	15	141
14	3	58	5	66	16	115	11	142
15	5	63	6	74	13	123	11	147
14	6	67	8	81	14	123	18	155
17	6	69	9	84	12	120	19	151
27	2	70	9	81	18	116	16	150
28	1	66	8	75	17	115	11	143
17	1	54	7	62	7	114	8	129

	EB				WB			
TOT	L	T	R	TOT	L	T	R	TOT
23	9	99	12	120	18	110	20	148
28	7	92	9	108	21	97	13	131
34	2	79	5	86	17	91	10	118
19	4	71	6	81	7	83	9	99
8	5	67	7	79	9	85	8	102
9	2	59	7	68	8	88	5	101
6	1	56	5	62	2	74	4	80
5	1	56	4	61	3	71	2	76
10	4	68	8	80	7	87	7	101
10	4	75	7	86	6	78	7	91
8	1	64	4	69	2	64	3	69

2. TAKE MAX 1/2 HOUR VOLUMES AND MULTIPLY BY TWO TO GET HOURLY VOLUMES CONSISTENT WITH DEFINITION OF VOLUME IN FETSIM '89 ORIENTATION MANUAL.

B. ALT-W WILL EXECUTE THE PRINTING MACRO FOR THIS FETSIM COUNT

CAN THEN SIMPLY

HIT ALT-S TO PRINT THE SUMMARY SHEET AND THEN ALT-W TO PRINT

CTION OUR SHEETS.

TRAFFIC SIGNAL WARRANTS

CALC DATE: June 7, 2010

CHK DATE:

DISTRICT: CENTRAL

Major St: 8TH ST Critical Approach Speed: mph
Minor St: KOHLER ST Critical Approach Speed: mph

Critical speed of major street traffic >=40 mph

OR

In built up area of isolated community of =< 10,000 population .... RURAL(R)

OTHERWISE .... URBAN (U)

WARRANT 1- Minimum Vehicular Volume 100% SATISFIED YES NO

80% SATISFIED YES NO

MINIMUM REQUIREMENTS
(80% SHOWN IN BRACKETS)

APPROACH	U	R	U	R	Hour					
LANES	1		2 or	more	7-8	8-9	9-10	11-12	12-1	1-2
Both Approaches	500	350	600	420						
Major Street	(400)	(280)	(480)	(336)	416	444	422	472	323	319
Highest Approch	150	105	200	140						
Minor street	(120)	(84)	(160)	(112)	52	57	57	89	40	43

NOTE: Heavier left turn movement from Major Street included when LT-phasing is proposed

WARRANT2- Interruption of ContinuousTraffic 100% SATISFIED YES NO

80% SATISFIED YES NO

MINIMUM REQUIREMENTS
(80% SHOWN IN BRACKETS)

APPROACH	U	R	U	R	Hour					
LANES	1		2 or	more	7-8	8-9	9-10	11-12	12-1	1-2
Both Approaches	750	525	900	630						
Major Street	(600)	(420)	(720)	(504)	416	444	422	472	323	319
HighestApprch	75	53	100	70						
Minor Street	(60)	(42)	(80)	(56)	52	57	57	89	40	43

*NOTE: Heavier left turn movement from Major Street included when LT-phasing is proposed

WARRANT 3- Minimum Pedetrian Volume 100% SATISFIED YES NO

80% SATISFIED YES NO

MINIMUM REQUIREMENTS
(80% SHOWN IN BRACKETS)

				Hour					
		U	R	7-8	8-9	9-10	11-12	12-1	1-2
Both Approaches	no	600	420						
Major Street	median	(480)	(336)	416	444	422	472	323	319
	Raised	1000	700						
Volume	4'median	(800)	(560)						
Peds on highest volume		150	105						
x-walk xing major st		(120)	(84)	19	27	14	19	13	22

IF MIDBLOCK SIGNAL PROPOSED

MIN. REQUIREMENT	DISTANCE TO NEAREST ESTABLISHED CROSSWALK			FULFILLED	
150 FEET	N/E:	FT	S/W: FT	YES	NO

The satisfaction of a warrant is not necessarily justification for a signal. Delay, congestion, confusion or other evidence of the need for right of way assignment must be shown.

WARRANT 4 - Schools Crossings Not Applicable
See School Crossings Warrant Sheet

WARRANT 5 - Progressive Movement SATISFIED YES NO

MINIMUM REQUIREMENTS	DISTANCE TO NEAREST SIGNAL				FULFILLED	
> 1000 ft	N	S	E	W	YES	NO
ON ONE WAY ISOLATED ST. OR ST. WITH ONE WAY TRAFFIC SIGNIFICANCE AND ADJACENT SIGNALS ARE SO FAR APART THAT NECESSARY PLATOONING IL SPEED CONTROL WOULD BE LOST.						
ON 2-WAY ST. WHERE ADJACENT SIGNALS DO NOT PROVIDE NECESSARY PLATOONING & SPEED CONTROL. PROPOSED SIGNALS COULD CONSTITUTE A PROGRESSIVE SIGNAL SYSTEM					YES	NO

WARRANT 6 - Accident Experience SATISFIED YES NO

REQUIREMENT	WARRANT	(X)	FULFILLED	
ONE WARRANT SATISFIED	WARRANT 1 - MINIMUM VEHICULAR VOLUME			
	OR			
80%	WARRANT 2 - INTERRUPTION OF CONTINUOUS TRAFFIC			
	OR			
	WARRANT 3 - MINIMUM PEDESTRIAN VOLUME		YES	NO
SIGNAL WILL NOT SERIOUSLY DISRUPT PROGRESSIVE TRAFFIC FLOW				
ADEQUATE TRIAL OF LESS RESTRICTIVE REMEDIES HAS FAILED TO REDUCE ACC. FREQ.				
ACC WITHIN A 12 MON. PERIOD SUSCEPTIBLE OF CORR. lL INVOLVING INJURY OR > $200 DAMAGE				
MINIMUM REQUIREMENT	NUMBER OF ACCIDENTS			
3 OR MORE			YES	NO

* NOTE: Left turn accidents can be included when LT-phasing is proposed

WARRANT 7 - Systems Warrant SATISFIED YES NO

Minimum Volume Requirement	ENTERING VOLUMES - ALL APPROACHES	(X)	FULFILLED	
	DURING TYPICAL WEEKDAY PEAK HOUR			
	618 veh/hr			
800 VEH/HR	DURING EACH OF ANY 5 HRS OF A SAT AND/OR SUNDAY			
	veh/hr			
			YES	NO

CHARACTERISTICS OF MAJOR ROUTES	MAJOR S/MINOR ST		
HWY SYSTEM SERVING AS PRINCIPLE NETWORK FOR THROUGH TRAFFIC			
CONNECTS AREAS OF PRINCIPLE TRAFFIC GENERATION			
RURAL OR SUBURBAN HWY OUTSIDE OF, ENTERING, OR TRAVERSING A CITY			
HAS SURFACE STREET FWY OR EXPWAY RAMP TERMINALS			
APPEARS AS MAJOR ROUTE ON AN OFFICIAL PLAN			
ANY MAJOR ROUTE CHARACTERISTICS MET, BOTH STREETS		YES	NO

The satisfaction of a warrant is not necessarily justification for a signal. Delay, congestion, confusion or other evidence of the need for right of way assignment must be shown.

WARRANT 8 - Combination of Warrants SATISFIED YES NO

REQUIREMENT	WARRANT	(X)	FULFILLED
TWO WARRANTS	1 - MINIMUM VEHICULAR VOLUME		
SATISFIED	2 - INTERRUPTION OF CONTINUOUS TRAFFIC		
80%	3 - MINIMUM PEDESTRIAN VOLUME		YES NO

WARRANT 9 - Four Hour Volume SATISFIED YES NO

Approach Lanes	One	2 or more	Hour 11-12	8-9	9-10	7-8
Both Approaches, Major Street			472	444	422	416
Highest Approaches, Minor Street			89	57	57	52

*Refer to Fig. 9-2A (URBAN AREAS) or Figure 9-2B (RURAL AREAS) to determine if this warrant is satisfied.

WARRANT 10 - Peak Hour Delay SATISFIED YES NO

1. The total delay experienced for traffic on one minor street approach controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach and five vehicle-hours for a two-lane approach; and YES NO

2. The volume on the same minor street approach equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; and YES NO

3. The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more approaches or 650 vph for intersections with three approaches YES NO

WARRANT 11 - Peak Hour Volume SATISFIED* YES NO

Approach Lanes	One	2 or more	Hour 11-12
Both Approaches , Major Street			472
Highest Approaches, Minor Street			89

*Refer to Fig. 9-2C (URBAN AREAS) or Figure 9-2D (RURAL AREAS) to determine if this warrant is satisfied.

– The satisfaction of a warrant is not necessarily justification for a signal. Delay, congestion, confusion or other evidence of the need for right of way assignment must be shown.

CALCULATIONS

MAX OF WARRANT PAIRS	561		CH	CI	CJ	CK	CL	CM			
NEXT MAX	501	TOTAL EACH CELL	468	501	479	561	363	362			
NEXT MAX	479										
NEXT MAX	468		MAX		NEXT		NEXT				
			561		468		468				
			561		0		0				
			561		479		0				
			501		0		0				
			561		363		363				
			561		362		362				