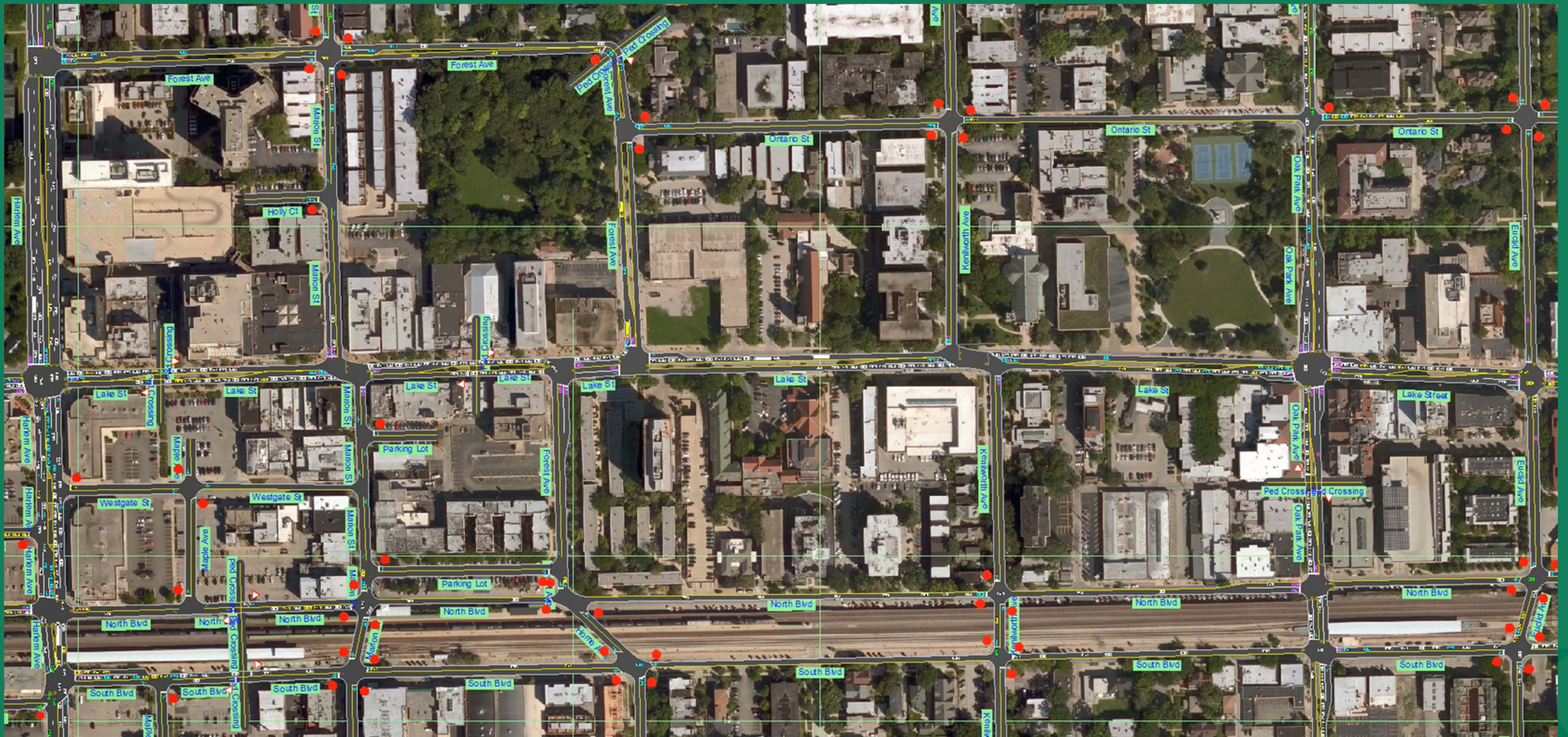


LAKE STREET IMPROVEMENTS TRAFFIC STUDY

- *Wide Area Network*
- *Short-Term Modifications*
- *Broad Range of Alternatives*
- *Long-Term Design*

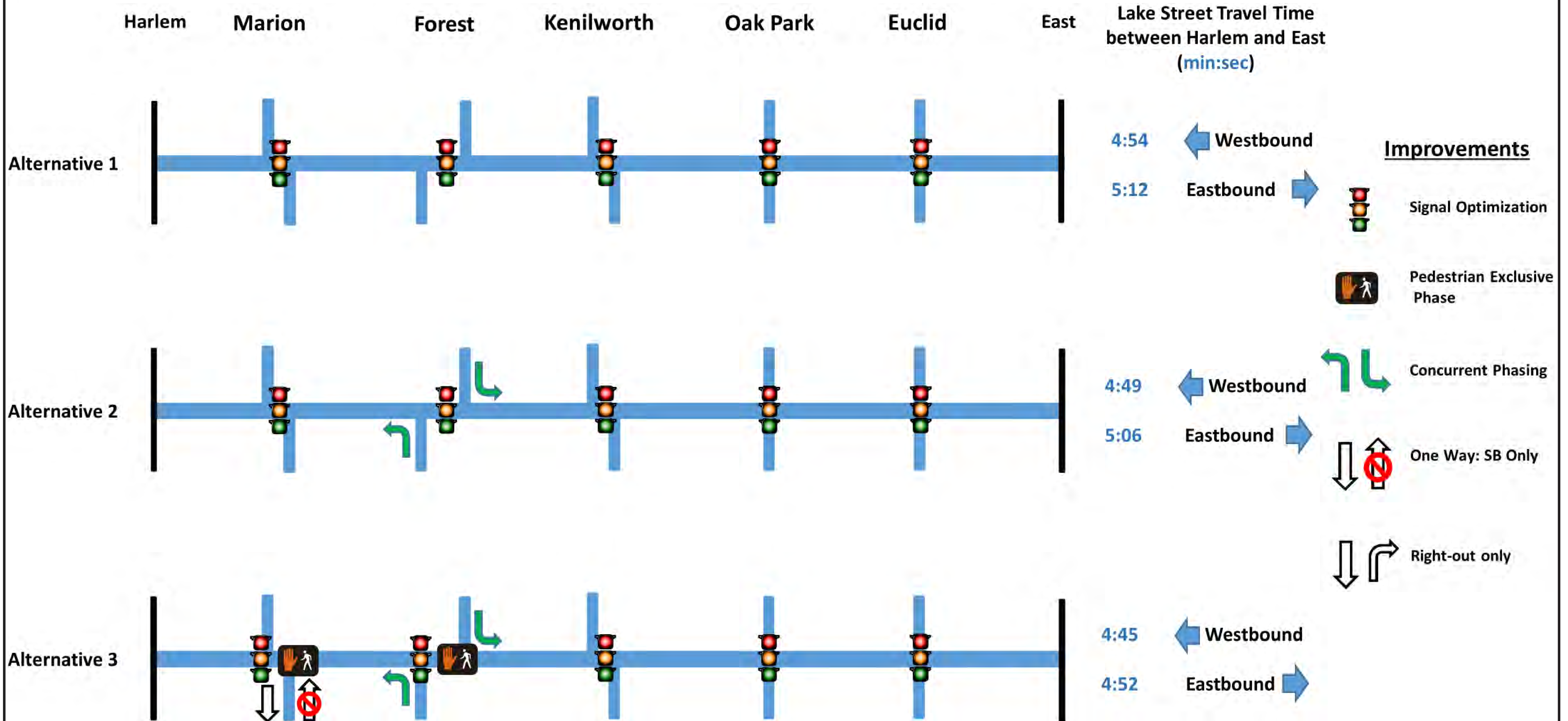


Summary of Lake Street Traffic Study

- The design work included a comprehensive traffic study of the Lake Street corridor and parallel streets to identify any potential improvements to the equipment or operations of the traffic signals, roadway geometry, one-way designations, on-street parking locations, bus routing, loading zones, etc., so that the proposed Lake Street streetscape project allows for Lake Street to operate in the best possible manner for pedestrians and vehicles.
- Traffic data was collected in 2016 and was used to develop a model which includes 34 intersections with 12 traffic signals. Projected traffic from the approved developments of District House, Vantage, Emerson, and Lincoln were input into the model along with regional growth factors to predict the future traffic conditions out to the year 2025. Anticipated traffic from the development at 1000 Lake Street (Albion) was also input into the long term traffic numbers to account for this potential private development.
- The traffic model was then used to evaluate alternatives for improving traffic congestion on Lake Street. Six alternatives were identified which included modifications to signal timing to give more green to Lake Street, all pedestrian crossing phases, changing how Forest Avenue operates, and potential restrictions to movements on Marion at Lake Street. The alternatives were presented at stakeholder meeting and the public open house and after receiving public, staff, and stakeholder comments a preferred alternative was selected.
- The following slides illustrate the various alternatives which were considered as well as the preferred alternative. Short term improvements were identified which will be implemented in the summer of 2017 which include signal timing changes and changing the way Forest Avenue operates. Forest Ave will now get green lights for both northbound and southbound traffic at the same time. Long term improvements which will get constructed as part of the proposed streetscape project include the short term improvements plus an all pedestrian phase at the Lake and Forest intersection which will allow pedestrians to have a dedicated time to cross the street while all vehicles have a red light.
- A travel time analysis was conducted to illustrate the time it would take to drive Lake Street from Harlem to East Avenue under the current conditions, in the year 2025 with the added traffic from the developments (No-Build scenario), with the short term improvements, and with the long term improvements described above.

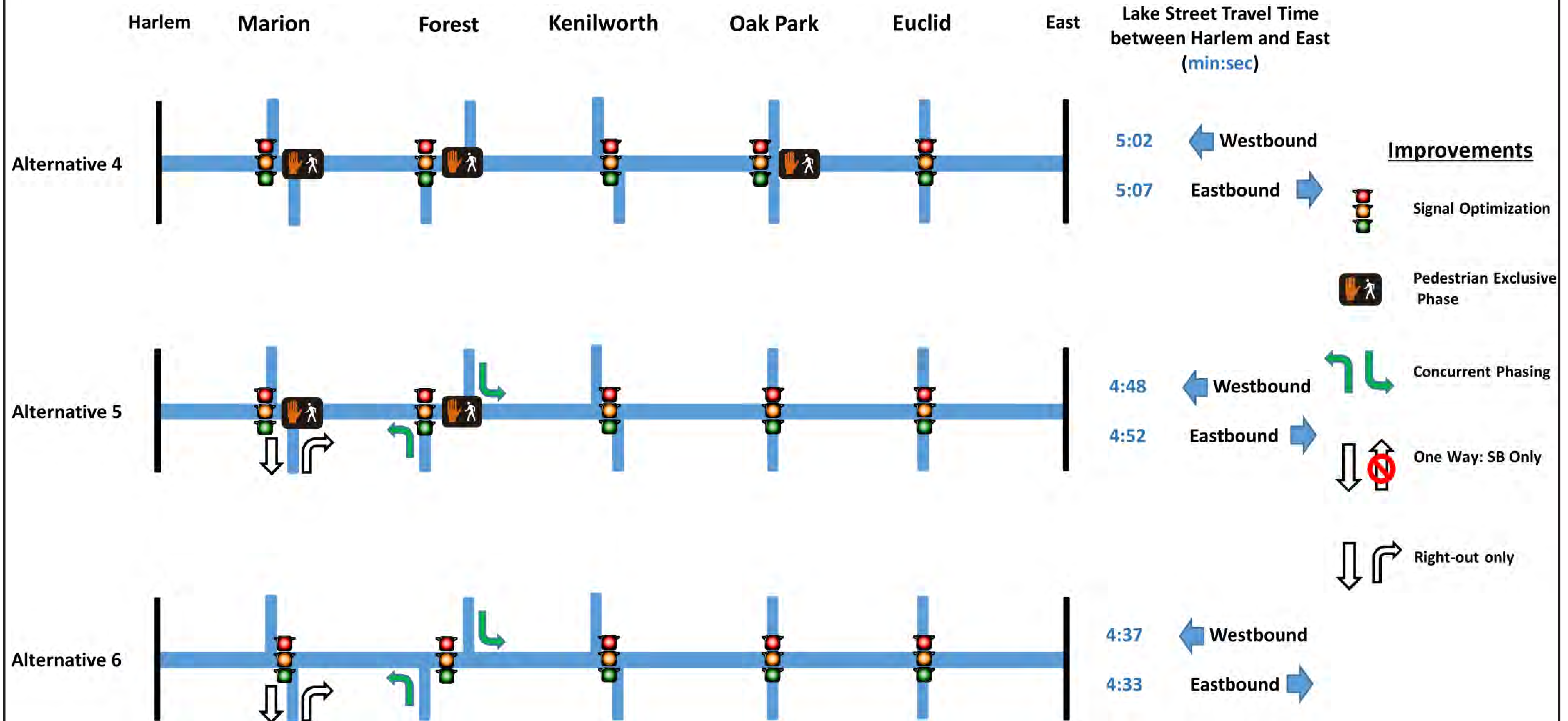


Village of Oak Park Synchro Traffic Model – Alternatives



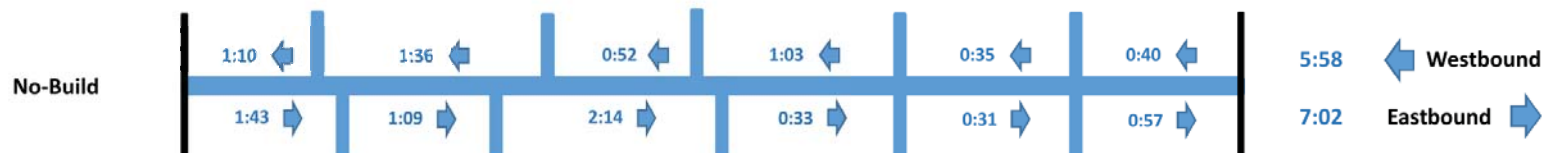


Village of Oak Park Synchro Traffic Model – Alternatives

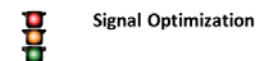


Traffic Study

Harlem Marion Forest Kenilworth Oak Park Euclid East Lake Street Travel Time between Harlem and East (min:sec)



Improvements



Signal Optimization



Pedestrian Exclusive Phase



Concurrent Phasing



CRASH SUMMARY

Totals (2011-2015)

- Crashes – 348
- w/injuries – 28 (8%)

Predominant Crash Type

- Rear-End @ 46.3%
- Sideswipe Same Direction @ 29.3%

Typical Counter Measures

- Reduce/Eliminate Congestion
- Improve Signal Coordination
- Improve Intersection Geometry

Oak Park	LAKE STREET PROJECT LIMITS (Harlem to Euclid)											
	2011		2012		2013		2014		2015		2011-2015	
TYPE OF CRASH	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Pedestrian		0.0%		0.0%		0.0%	1	1.4%	2	2.5%	3	0.9%
Pedcyclist	2	2.7%		0.0%		0.0%		0.0%		0.0%	2	0.6%
Parked motor vehicle	3	4.1%	5	7.8%	2	3.3%	8	11.6%	6	7.4%	24	6.9%
Turning	6	8.1%	2	3.1%	6	10.0%	4	5.8%	1	1.2%	19	5.5%
Rear End	35	47.3%	27	42.2%	31	51.7%	28	40.6%	40	49.4%	161	46.3%
Sideswipe same direction	23	31.1%	17	26.6%	13	21.7%	20	29.0%	29	35.8%	102	29.3%
Sideswipe different direction	1	1.4%	2	3.1%		0.0%	1	1.4%	1	1.2%	5	1.4%
Head on	1	1.4%	1	1.6%	1	1.7%		0.0%		0.0%	3	0.9%
Angle	3	4.1%	10	15.6%	7	11.7%	7	10.1%	2	2.5%	29	8.3%
INJURY CLASSIFICATION	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
K-Fatal		0.0%		0.0%		0.0%		0.0%		0.0%	0	0.0%
A-incapacitating injury		0.0%		0.0%		0.0%		0.0%		0.0%	0	0.0%
B-Nonincapacitating injury	1	1.4%	2	3.1%		0.0%	1	1.4%	2	2.5%	6	1.7%
C-Reported not evident	4	5.4%	3	4.7%	2	3.3%	7	10.1%	6	7.4%	22	6.3%
O-No indication of injury	69	93.2%	59	92.2%	56	96.7%	61	88.4%	73	90.1%	320	92.0%
CRASH TYPE	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
No injury/Drive Away	64	86.5%	52	81.3%	52	86.7%	57	82.6%	70	86.4%	295	84.8%
Injury and/or Tow due to Crash	10	13.5%	12	18.8%	8	13.3%	12	17.4%	11	13.6%	53	15.2%
WEATHER	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Clear	53	71.6%	52	81.3%	46	76.7%	52	75.4%	63	77.8%	266	76.4%
Rain	11	14.9%	9	14.1%	6	10.0%	9	13.0%	6	7.4%	41	11.8%
Snow	3	4.1%	2	3.1%	3	5.0%	2	2.9%	3	3.7%	13	3.7%
Fog/smoke/haze		0.0%		0.0%		0.0%		0.0%		0.0%	0	0.0%
Sleet/hail	1	1.4%		0.0%		0.0%		0.0%		0.0%	1	0.3%
Severe cross wind		0.0%		0.0%		0.0%		0.0%		0.0%	0	0.0%
Other	3	4.1%		0.0%		0.0%		0.0%	1	1.2%	4	1.1%
Cloudy/overcast		0.0%		0.0%	4	6.7%	4	5.8%	6	7.4%	14	4.0%
Unknown	3	4.1%	1	1.6%	1	1.7%	2	2.9%	2	2.5%	9	2.6%
LIGHTING CONDITION	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Daylight or Dawn	56	75.7%	51	79.7%	48	80.0%	45	65.2%	67	82.7%	267	76.7%
Darkness or Dusk	16	21.6%	13	20.3%	12	20.0%	24	34.8%	13	16.0%	78	22.4%
Unknown	2	2.7%		0.0%		0.0%		0.0%	1	1.2%	3	0.9%
TOTAL CRASHES		2011		2012		2013		2014		2015		Total
	74	21.3%	64	18.4%	60	17.2%	69	19.8%	81	23.3%		348