

## A G E N D A

REGULAR MEETING OF THE MAYOR AND BOARD OF TRUSTEES OF THE VILLAGE OF WILLOWBROOK TO BE HELD ON MONDAY, JULY 11, 2016, AT 6:30 P.M. AT THE **BURR RIDGE POLICE DEPARTMENT TRAINING ROOM, 7700 COUNTY LINE ROAD, BURR RIDGE, DUPAGE COUNTY, ILLINOIS**

1. CALL TO ORDER
2. ROLL CALL
3. PLEDGE OF ALLEGIANCE
4. PUBLIC HEARING - TO CONSIDER THE PROPOSAL TO APPROVE A BUSINESS DISTRICT PLAN (THE "BUSINESS DISTRICT PLAN") AND THE DESIGNATION OF A BUSINESS DISTRICT TO BE KNOWN AS THE ILLINOIS ROUTE 83/PLAINFIELD ROAD BUSINESS DISTRICT (THE "BUSINESS DISTRICT")
5. VISITOR'S BUSINESS - Public comment is limited to three minutes per person
6. OMNIBUS VOTE AGENDA:
  - a. Waive Reading of Minutes (APPROVE)
  - b. Minutes - Regular Board Meeting - June 27, 2016 (APPROVE)
  - c. Warrants - \$186,123.25 (APPROVE)
  - d. Monthly Financial Report - June 30, 2016 (APPROVE)
  - e. Ordinance - An Ordinance Amending Title 3, Chapter 12, Section 3-12-5(B) of the Village Code - Classifications: Class B License (PASS)
  - f. Resolution - A Resolution Approving a Plat of Easement - 6345/6353 Meadow Lane (ADOPT)
  - g. Motion - Board Advice and Consent to Mayor's Re-Appointment of Caroline A. Dittman as a Member of the Police Pension Fund Board (PASS)
  - h. Proclamation - A Proclamation Recognizing Sergeant Arthur P. Svehla for 30 Years of Service to the Village of Willowbrook (APPROVE)

NEW BUSINESS

7. ORDINANCE - AN ORDINANCE OF THE VILLAGE OF WILLOWBROOK, DUPAGE COUNTY, ILLINOIS, APPROVING A BUSINESS DISTRICT PLAN FOR THE VILLAGE OF WILLOWBROOK, ILLINOIS ROUTE 83/PLAINFIELD ROAD BUSINESS DISTRICT
8. ORDINANCE - AN ORDINANCE OF THE VILLAGE OF WILLOWBROOK, DUPAGE COUNTY, ILLINOIS, DESIGNATING THE VILLAGE OF WILLOWBROOK, ILLINOIS ROUTE 83/PLAINFIELD ROAD BUSINESS DISTRICT
9. ORDINANCE - AN ORDINANCE OF THE VILLAGE OF WILLOWBROOK, DUPAGE COUNTY, ILLINOIS, IMPOSING A BUSINESS DISTRICT RETAILERS' OCCUPATION TAX AND A BUSINESS DISTRICT SERVICE OCCUPATION TAX WITHIN THE VILLAGE OF WILLOWBROOK, ILLINOIS ROUTE 83/PLAINFIELD ROAD BUSINESS DISTRICT
10. RESOLUTION - A RESOLUTION AWARDDING THE FISCAL YEAR 2016/17 MOTOR FUEL TAX ROADWAY MAINTENANCE PROGRAM CONTRACT TO CROWLEY-SHEPPARD ASPHALT, INC. IN THE AMOUNT OF \$263,720.81

PRIOR BUSINESS

11. COMMITTEE REPORTS
12. ATTORNEY'S REPORT
13. CLERK'S REPORT
14. ADMINISTRATOR'S REPORT
15. MAYOR'S REPORT
16. CLOSED SESSION
17. ADJOURNMENT

MINUTES OF THE REGULAR MEETING OF THE MAYOR AND BOARD OF TRUSTEES OF THE VILLAGE OF WILLOWBROOK HELD ON MONDAY, JUNE 27, 2016 AT THE BURR RIDGE POLICE DEPARTMENT, TRAINING ROOM, 7700 COUNTY LINE ROAD, VILLAGE OF BURR RIDGE, DUPAGE COUNTY, ILLINOIS.

1. CALL TO ORDER

The meeting was called to order at the hour of 6:30 p.m. by Mayor Frank Trilla.

2. ROLL CALL

Those present at roll call were Mayor Frank Trilla, Village Clerk Leroy Hansen, Trustees Sue Berglund, Terrence Kelly, Michael Mistele, Gayle Neal, and Paul Oggerino.

ABSENT: Trustee Umberto Davi

Also present were Village Attorney Thomas Bastian, Village Administrator Timothy Halik, Director of Finance Carrie Dittman, Chief Mark Shelton, Deputy Chief Robert Schaller, Planning Consultant Anna Franco, Assistant to the Village Administrator Garrett Hummel, and Administrative Intern Tiffany Kolodziej.

A QUORUM WAS DECLARED

3. PLEDGE OF ALLEGIANCE

Mayor Trilla asked Planning Consultant Franco to lead everyone in saying the Pledge of Allegiance.

4. VISITORS' BUSINESS

None presented.

5. OMNIBUS VOTE AGENDA

- a. Waive Reading of Minutes (APPROVE)
- b. Minutes - Regular Board Meeting - June 13, 2016 (APPROVE)
- c. Warrants - \$369,354.68 (APPROVE)
- d. Ordinance - An Ordinance Amending Title 3, Chapter 12, Section 3-12-5(B) of the Village Code - Classifications, Class B License - Ordinance No. 16-O-26 (PASS)

Mayor Trilla asked the Board if there were any items to be removed from the Omnibus Vote Agenda.

MOTION: Made by Trustee Mistele and seconded by Trustee Oggerino to approve the Omnibus Vote Agenda as presented.

ROLL CALL VOTE: AYES: Trustees Berglund, Kelly, Mistele, Neal, and Oggerino. NAYS: None. ABSENT: Trustee Davi.

MOTION DECLARED CARRIED

NEW BUSINESS

6. DELINQUENT WATER BILLS

Administrator Halik advised that there were three (3) delinquent water bills. Staff requested authorization to proceed in accordance with past practices, which was granted.

7. ORDINANCE - AN ORDINANCE PROPOSING A BUSINESS DISTRICT PLAN AND THE DESIGNATION OF THE ROUTE 83/PLAINFIELD ROAD BUSINESS DISTRICT AND CALLING A PUBLIC HEARING IN CONNECTION THEREWITH

Administrator Halik advised that there are two (2) pending redevelopment projects for commercial projects located near Kingery Highway and Plainfield Road. Both projects have faced financial challenges due in part to off-site improvements that include traffic flow improvement requirements. As a result, the Village received a request for the consideration of public subsidies in order to make the projects financially viable.

After discussions, it was determined that the creation of a new Business District Sales Tax was the preferred method to raise funding to provide a subsidy. If the tax district is approved, the sales tax rate within the boundaries of the district would be 8%, as opposed to the current 7% elsewhere in town. The 1% increment amount would be collected by the State, forwarded to the Village, and deposited into a separate fund. As the fund builds, eligible project expenses could be reimbursed to the developers.

In accordance with State law, this ordinance would propose the approval of a Business District plan, designate a Business District, and set a time and place for a Public Hearing to occur to receive comments on the proposed plan. The Public Hearing will occur at the Village Board regularly scheduled meeting on July 11, 2016.

The Village hired Ehlers Associates to develop the Business District Plan. Administrator Halik introduced Ms. Maureen Barry of Ehlers Associates, who provided an overview of the plan.



Ms. Barry related that the Business District plan covers the shopping areas in the Town Center and the new development where Pete's Fresh Market will be located. State law limits the assessment of the Business District sales tax to 23 years.

MOTION: Made by Trustee Neal and seconded by Trustee Berglund to pass Ordinance 16-O-27 as presented.

PREVIOUS ROLL CALL VOTE: AYES: Trustees Berglund, Kelly, Mistele, Neal, and Oggerino. NAYS: None. ABSENT: Trustee Davi.

MOTION DECLARED CARRIED

8. RESOLUTION - A RESOLUTION AUTHORIZING THE MAYOR AND VILLAGE CLERK OF THE VILLAGE OF WILLOWBROOK TO ENTER INTO AN AT-RISK CONSTRUCTION AGREEMENT WITH PULTE HOME CORPORATION TO BEGIN DEMOLITION, MASS GRADING AND INSTALLATION OF STORM IMPROVEMENTS (HEREINAFTER CUMULATIVELY REFERENCED AS "AT RISK CONSTRUCTION") - 6256 CLARENDON HILLS ROAD - CARRINGTON CLUB BY PULTE (REDEVELOPMENT OF ARABIAN KNIGHTS HORSE FARM)

Planning Consultant Franco related that the At Risk Agreement will allow Pulte Homes to proceed with demolition of existing buildings on the site, mass grading, and installation of limited storm sewer improvements prior to final plan approval.

MOTION: Made by Trustee Mistele and seconded by Trustee Oggerino to adopt Resolution 16-R-39 as presented.

PREVIOUS ROLL CALL VOTE: AYES: Trustees Berglund, Kelly, Mistele, Neal, and Oggerino. NAYS: None. ABSENT: Trustee Davi.

MOTION DECLARED CARRIED

9. RESOLUTION - A RESOLUTION AUTHORIZING THE EXECUTION OF A LETTER OF INTENT TO PARTICIPATE IN THE DUPAGE JUDICIAL INFORMATION SYSTEM (DuJIS)

Chief Shelton related that this resolution authorizes the Village to participate in a new DuJIS System. This system will become a central depository of records throughout agencies within DuPage County. The system will include all reports, video records, fingerprint scans, and evidence inventory.

DuJIS will not be in full function until the fourth quarter of 2018.

MOTION: Made by Trustee Kelly and seconded by Trustee Mistele to adopt Resolution 16-R-40 as presented.

PREVIOUS ROLL CALL VOTE: AYES: Trustees Berglund, Kelly, Mistele, Neal, and Oggerino. NAYS: None. ABSENT: Trustee Davi.

MOTION DECLARED CARRIED

10. ORDINANCE - AN ORDINANCE AUTHORIZING THE MAYOR AND VILLAGE CLERK TO ACCEPT AND EXECUTE A PROPOSAL FOR HOTEL TROLLEY SHUTTLE SERVICES - THE TROLLEY CAR & BUS COMPANY

Finance Director Dittman related that the that Hotel/Motel Committee has been exploring different ways to promote additional tourism within the Village. Representatives from the hotels advised that one item that is lacking is a transportation service to take guests around the Village.

Village staff conducted research on shuttle services that other municipalities utilize. After meeting with the Trolley Car & Bus Company, a route was developed.

After months of planning, the program will run on Summer weekends beginning July 1<sup>st</sup> and run through September 11<sup>th</sup>. The trolley will run on Fridays, Saturdays, and Sundays. The trolley will make pickups from the hotels and run on a 30-minute loop.

In revenue collected in the increased Hotel/Motel tax will fund the trolley service.

MOTION: Made by Trustee Mistele and seconded by Trustee Berglund to pass Ordinance 16-O-28 as presented.

PREVIOUS ROLL CALL VOTE: AYES: Trustees Berglund, Kelly, Mistele, Neal, and Oggerino. NAYS: None. ABSENT: Trustee Davi.

MOTION DECLARED CARRIED

PRIOR BUSINESS

11. COMMITTEE REPORTS

Trustee Neal read the following tribute in memorium to War Veteran and Willowbrook resident James R. Reid, Sr.:

"James R. Reid Sr., age 91, long-time resident of Willowbrook went peacefully on May 9<sup>th</sup>, 2016. Jim grew

up on the south side of Chicago graduated from Calumet High School, served in the US army in World War II.

He was in the 90<sup>th</sup> Infantry Division (The Tough Ombres), 344<sup>th</sup> field Artillery, in General Patton's 3<sup>rd</sup> Army.

He landed on Utah Beach, D-Day +1, on June 7, 1944. He fought in all five (5) of the major battles in Europe, serving under five (5) generals; wounded at the crossing of the Moselle River and ended up in Czechoslovakia.

He was the recipient of:

The Purple Heart  
Bronze Star Medal  
The Good Conduct Medal

On June 7<sup>th</sup>, 2014, he was awarded the French Legion of Honor Medal (France's highest honor created by Napoleon Bonaparte in 1802) by Graham Paul, consul general of France to Chicago in a commemorative ceremony marking the 70<sup>th</sup> anniversary of D-day that as held at The First Division Museum at Cantigny. (I urge you all to see YouTube coverage of the ceremony)

He was an active member of the 90<sup>th</sup> Infantry Division Association of WWII veterans, serving as its President in 1991, and then beginning in 2001, its Treasurer.

Mr. Reid's memorial service was held at Wheaton College church on June 7<sup>th</sup>, 2016, exactly 72 years to the day of the infamous and his own landing on Utah Beach. Jim's service was attended by retired colonels, an active Army Chaplain, three (3) other veterans of the 90<sup>th</sup> Infantry, current Army personnel, Members of The Tri State Fire Protection District, friends, family, and with no less than three (3) pastors officiating at his service.

James Reid was a resident of Willowbrook and he was also a war hero. In his life, he honored his country and its history, his fellow soldiers, his family and all the meaningful relationships formed in his life; those relationships were part of his personal items of life display at his service. Three (3) tables of: awards, medals, the story of his military service, pictures with his family, and of others who were important parts of his life.

Tonight we sit in a room, where one of those heartfelt relationships is sitting in a chair not far from me; Chief Mark Shelton. A framed picture taken of Mr. Reid with our Chief Shelton was on Jim's life story table. It was in a place of prominence, near his medals.

I know the impression that not only our Chief, but also our Sergeant Drake made on Jim, because each time I saw him, he never, absolutely never failed to mention them by name. He told his nurses, his doctors, family and fellow veterans of the 90<sup>th</sup> Infantry association. He told them of Mark and Chris's kindness: of sitting with him, making sure he got home, patiently waiting for him to enter and exit his car, helping him upstairs, visiting with him at home and the hospital. 'And never once', he told me, 'although I am old, did they ever treat me as if I was less than a man.' At the service more than one person told me of our how our police and Tri State Fire Protection District meant so much to Jim and his family. He knew their names, their first names...and was always, in his time of need, grateful to know who was helping him.

There are times we must remind ourselves that besides acts of courage, integrity and commitment, our men and women in blue also exhibit the core of their character, the random acts of kindness, respect, sincerity, concern, gratitude and compassion; many times done when no one is looking. But therein lies the irony, someone is looking, someone is taking it all in.

We should all find great pride in knowing that our men and women may very well be the last face, the last helping hand, the last touch, provide the last act of kindness, and possibly be the last protector that our residents have, and for that, we can be very proud."

Trustee Kelly had no report.

Trustee Mistele had no report.

Trustee Berglund had no report.

Trustee Oggerino thanked Chief Shelton and Deputy Chief Schaller for their work in the move to the temporary police facility located at 825 Midway Drive.

12. ATTORNEY'S REPORT

Attorney Bastian thanked the Village staff for their help during Administrator Halik's absence.

13. CLERK'S REPORT

Clerk Hansen had no report.

14. ADMINISTRATOR'S REPORT

Administrator Halik turned the floor over to Assistant to the Village Administrator Hummel. Mr. Hummel advised that he had attended a quarterly IRMA Board meeting. The Village's Public Works Department was one of eight (8) departments recognized in 2015 for having no accidents.

15. MAYOR'S REPORT

Mayor Trilla advised that he had the privilege of meeting Mr. Reid and related what a great person he was. Mayor Trilla also thanked the Chief and Deputy Chief for their work in the move, and thanked Trustee Neal and staff for their work on the trolley service.

16. CLOSED SESSION

Mayor Trilla stated that there was no need for Closed Session during tonight's meeting.

17. ADJOURNMENT

MOTION: Made by Trustee Mistele and seconded by Trustee Oggerino, to adjourn the Regular Meeting at the hour of 7:12 p.m.

ROLL CALL VOTE: AYES: Trustees Berglund, Kelly, Mistele, Neal, and Oggerino. NAYS: None. ABSENT: Trustee Davi.

MOTION DECLARED CARRIED

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Village Board Minutes  
June 27, 2016

PRESENTED, READ and APPROVED.

July 11, 2016.

\_\_\_\_\_  
Mayor

Minutes transcribed by Deputy Clerk Cindy Stuchl.

## WARRANTS

July 11, 2016

GENERAL CORPORATE FUND	-----	\$159,889.18
WATER FUND	-----	19,350.68
L.A.F.E.R FUND		6,883.39
TOTAL WARRANTS	-----	\$186,123.25

  
\_\_\_\_\_  
Carrie Dittman, Director of Finance

APPROVED:

\_\_\_\_\_  
Frank A. Trilla, Mayor

CHECK DISBURSEMENT REPORT FOR WILLOWBROOK  
 CHECK DATE FROM 07/12/2016 - 07/12/2016

Check Date	Bank	Check #	Invoice	Payee	Description	Account	Dept	Amount
Fund: 01 GENERAL FUND								
07/12/2016	APCHK	88936#	37556 37558	AMERICAN FIRST AID SERVICE I	OPERATING EQUIPMENT	630-401	30	24.50
					MAINTENANCE - PW BUILDING	725-418	35	41.45
				CHECK APCHK 88936 TOTAL FOR				65.95
07/12/2016	APCHK	88937	64398	AMERICAN SWING PRODUCTS INC	PARK LANDSCAPE SUPPLIES	565-341	20	186.10
07/12/2016	APCHK	88938	2016 #18	ANDRIAN GROU	PARK PERMIT FEES	310-814	00	200.00
07/12/2016	APCHK	88939	16883395 16856391 16866230	ARAMARK UNIFORMS SERVICES	UNIFORMS	710-345	35	80.97
					UNIFORMS	710-345	35	478.28
					UNIFORMS	710-345	35	241.64
				CHECK APCHK 88939 TOTAL FOR				800.89
07/12/2016	APCHK	88941	FY2017-272	CHICAGO METRO AGENCY FOR PLA	FEES/DUES/SUBSCRIPTIONS	510-307	15	323.15
07/12/2016	APCHK	88942	16 PERMIT #17	CHRIST OASIS MINISTRIES	PARK PERMIT FEES	310-814	00	300.00
07/12/2016	APCHK	88943	129843	CHRISTOPHER B. BURKE	FEES - ENGINEERING	720-245	35	13,307.25
07/12/2016	APCHK	88944	16 UNFRMS	CHRISTOPHER M. DRAKE	UNIFORMS	630-345	30	221.90
07/12/2016	APCHK	88945	2253	CITY WIDE OF ILLINOIS	MAINTENANCE - BUILDING	466-228	10	1,975.00
07/12/2016	APCHK	88946#	VH JULY 2016 PW JULY 16	CONCAST CABLE	EDP SOFTWARE	460-212	10	129.85
					EQUIPMENT MAINTENANCE	715-263	35	104.85
				CHECK APCHK 88946 TOTAL FOR				234.70
07/12/2016	APCHK	88947	1844110006JUN16	COMMONWEALTH EDISON	ENERGY - STREET LIGHTS	745-207	35	654.99
07/12/2016	APCHK	88948	HEERY BASKET	CYNTHIA STUCL	PUBLIC RELATIONS	475-365	10	121.16
07/12/2016	APCHK	88950	MAY/JUN 16	DAVE HILBERT	SUMMER PROGRAM MATERIALS & SERVICE	575-119	20	264.00
07/12/2016	APCHK	88951*#	JULY 2016 JULY 2016 JULY 2016 JULY 2016 JULY 2016 JULY 2016 JULY 2016	DELTA DENTAL PLAN OF ILLINOI	EMP DED PAY- INSURANCE	210-204	00	1,029.23
					EMPLOYEE BENEFIT - MEDICAL INSURAN	455-141	10	271.09
					EMPLOYEE BENEFITS - MEDICAL INSURA	510-141	15	57.16
					EMPLOYEE BENEFIT - MEDICAL INSURAN	610-141	25	156.77
					EMPLOYEE BENEFIT - MEDICAL INSURAN	630-141	30	2,384.33
					EMPLOYEE BENEFITS - MEDICAL INSURA	710-141	35	156.77
					EMPLOYEE BENEFITS - MEDICAL INSURA	810-141	40	171.48
				CHECK APCHK 88951 TOTAL FOR				4,226.83
07/12/2016	APCHK	88952	MAY/JUN 16	DENNIS KOWSKI	SUMMER PROGRAM MATERIALS & SERVICE	575-119	20	33.00



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Check Date	Bank	Check #	Invoice	Payee	Description	Account	Dept	Amount
Fund: 01 GENERAL FUND								
07/12/2016	APCHK	88953	2ND QTR 16/17	DU-COMM	RADIO DISPATCHING	675-235	30	59,841.50
07/12/2016	APCHK	88954#	100 COUPONS JUN16 100 COUPONS JUN16	DUPAGE COUNTY	TAXI CAB VOUCHER INVENTORY SENIOR CITIZEN TAXI PROGRAM	190-103 475-372	00 10	250.00 250.00
				CHECK APCHK 88954 TOTAL FOR				500.00
07/12/2016	APCHK	88955	528/518 FY16/17	DUPAGE JUV OFCRS ASSN	FEES/DUES/SUBSCRIPTIONS	630-307	30	50.00
07/12/2016	APCHK	88956	70598	EHLERS & ASSOCIATES INC	PLAN REVIEW - ENGINEERING - REIMB.	520-254	15	6,500.00
07/12/2016	APCHK	88958#	3320 #2 3320 #2	FALCO'S LANDSCAPING INC	CONTRACTED MAINTENANCE ROUTE 83 BEAUTIFICATION	570-281 755-281	20 35	4,562.37 4,100.12
				CHECK APCHK 88958 TOTAL FOR				8,662.49
07/12/2016	APCHK	88959	5-457-12602	FEDERAL EXPRESS CORP.	POSTAGE & METER RENT	455-311	10	54.48
07/12/2016	APCHK	88960	303689	FIRE & SECURITY SYSTEMS INC.	MAINTENANCE - BUILDING	466-228	10	320.00
07/12/2016	APCHK	88962	115158052316 115158061516	GRAND SLAM ENTERPRISES INC	MAINTENANCE - GAS TANKS AND PUMPS MAINTENANCE - GAS TANKS AND PUMPS	725-412 725-412	35 35	6,914.89 1,503.92
				CHECK APCHK 88962 TOTAL FOR				8,418.81
07/12/2016	APCHK	88964*#	7021684 7021684 7021684	HOME DEPOT CREDIT SERVICES	BUILDING MAINTENANCE SUPPLIES OPERATING SUPPLIES & EQUIPMENT STREET & ROW MAINTENANCE OTHER	466-351 715-401 755-328	10 35 35	9.84 39.97 62.94
				CHECK APCHK 88964 TOTAL FOR				112.75
07/12/2016	APCHK	88965	S90971	HOMER INDUSTRIES	PARK LANDSCAPE SUPPLIES	565-341	20	1,440.00
07/12/2016	APCHK	88966	JUNE 2016	I.R.M.A.	SELF INSURANCE - DEDUCTIBLE	645-273	30	4,989.11
07/12/2016	APCHK	88967	VANDERJACK HUNTLEY	ILL. NOTARY DISCOUNT BONDING	FEES/DUES/SUBSCRIPTIONS FEES/DUES/SUBSCRIPTIONS	630-307 630-307	30 30	53.95 53.95
				CHECK APCHK 88967 TOTAL FOR				107.90
07/12/2016	APCHK	88968	2017 NPDES FEES	ILLINOIS ENVIRONMENTAL	FEES - ENGINEERING	820-245	40	1,000.00
07/12/2016	APCHK	88969	16 UNIFORMS	JAMES MARTINO	UNIFORMS	630-345	30	382.65
07/12/2016	APCHK	88970	MAY/JUN 16	JOE CONSOLVO	SUMMER PROGRAM MATERIALS & SERVICE	575-119	20	132.00

CHECK DISBURSEMENT REPORT FOR WILLOWBROOK  
CHECK DATE FROM 07/12/2016 - 07/12/2016

Check Date	Bank	Check #	Invoice	Payee	Description	Account	Dept	Amount
Fund: 01 GENERAL FUND								
07/12/2016	APCHK	88971	8/20/16-11/20/16	JULIE, INC.	J.U.L.I.E.	755-332	35	1,193.14
07/12/2016	APCHK	88972	I160531144	LAHO TRUCK SERVICE INC	MAINTENANCE - VEHICLES	735-409	35	340.00
07/12/2016	APCHK	88973	MAY/JUN 16	LARY DENZ	SUMMER PROGRAM MATERIALS & SERVICE	575-119	20	297.00
07/12/2016	APCHK	88974	MAY/JUN 16	MARC SILHAN	SUMMER PROGRAM MATERIALS & SERVICE	575-119	20	33.00
07/12/2016	APCHK	88975	MAY/JUN 16	MARK CAPOSIENO	SUMMER PROGRAM MATERIALS & SERVICE	575-119	20	264.00
07/12/2016	APCHK	88976	07/06/2016	MARK F KONIECZKA	Refund: MR Unapplied Payments	210-101	00	25.00
07/12/2016	APCHK	88977	16 PERMIT #23	MARY ESKANDER	PARK PERMIT FEES	310-814	00	200.00
07/12/2016	APCHK	88978	16 PERMIT #1	MATHAL NEDUMGOTTIL	PARK PERMIT FEES	310-814	00	300.00
07/12/2016	APCHK	88979	MAY/JUNE 16	MEL KREJCI	SUMMER PROGRAM MATERIALS & SERVICE	575-119	20	140.00
07/12/2016	APCHK	88980	13099	METRO REPORTING SERVICE LTD.	FEES - COURT REPORTER	520-246	15	246.45
			13016		FEES - COURT REPORTER	520-246	15	540.45
								<u>786.90</u>
07/12/2016	APCHK	88983	39303229304 JUN16	NICOR GAS	NICOR GAS (825 MIDWAY)	466-237	10	49.39
07/12/2016	APCHK	88984	2201	NJ RYAN TREE & LANDSCAPE LLC	TREE MAINTENANCE	750-338	35	17,550.00
			2199		REIMB EXP - BRUSH PICKUP	755-284	35	9,675.00
								<u>27,225.00</u>
07/12/2016	APCHK	88985	208583	NORTH EAST MULTI REGIONAL TR	SCHOOLS/CONFERENCES/TRAVEL	630-304	30	300.00
			208808		SCHOOLS/CONFERENCES/TRAVEL	630-304	30	400.00
			208759		SCHOOLS/CONFERENCES/TRAVEL	630-304	30	199.00
								<u>899.00</u>
07/12/2016	APCHK	88986	16/17 SUBSCRPTN	PROGRESSIVE BUSINESS PUBLICA	FEES/DUES/SUBSCRIPTIONS	455-307	10	230.00
07/12/2016	APCHK	88987	88712	PUBLIC SAFETY DIRECT INC	MAINTENANCE - VEHICLES	630-409	30	100.00
			88705		NEW VEHICLES	680-625	30	275.00
								<u>375.00</u>
07/12/2016	APCHK	88988	7028/PASSERO	RED WING SHOE STORE	UNIFORMS	710-345	35	202.49
07/12/2016	APCHK	88989	2016 RUN	RENE SCHURMAN	FAMILY SPECIAL EVENT - RACE	585-154	20	77.89
07/12/2016	APCHK	88990	07/06/2016	RENT RITE EQUIPMENT	Refund: MR Unapplied Payments	210-101	00	25.00

CHECK DISBURSEMENT REPORT FOR WILLOWBROOK  
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Check Date	Bank	Check #	Invoice	Payee	Description	Account	Dept	Amount
Fund: 01 GENERAL FUND								
07/12/2016	APCHK	88991	MAY/JUN 16	RICK ROCK	SUMMER PROGRAM MATERIALS & SERVICE	575-119	20	132.00
07/12/2016	APCHK	88992	2016 # 24	ROSE ALCANTARA	PARK PERMIT FEES	310-814	00	100.00
07/12/2016	APCHK	88993	SUPPLIES	ROY GIUNTOLI	OPERATING EQUIPMENT	810-401	40	28.24
07/12/2016	APCHK	88994	129061 129111	RUTLEDGE PRINTING CO.	OFFICE SUPPLIES PRINTING & PUBLISHING	630-301 630-302	30 30	107.40 129.20
				CHECK APCHK 88994 TOTAL FOR				236.60
07/12/2016	APCHK	88995	2530	SORIANA DISTRIBUTORS	MAINTENANCE SUPPLIES	570-331	20	165.00
07/12/2016	APCHK	88996	216563	SPORTSFIELD, INC.	LANDSCAPE MAINTENANCE SERVICES	565-342	20	1,924.10
07/12/2016	APCHK	88997#	8039716513 8039716513 8039716513 8038808760	STAPLES	OFFICE SUPPLIES COMMISSARY PROVISION OFFICE SUPPLIES OFFICE SUPPLIES	455-301 455-355 610-301 630-301	10 10 25 30	87.48 64.63 8.98 36.99
				CHECK APCHK 88997 TOTAL FOR				198.08
07/12/2016	APCHK	88999	IN475406 IN475538	SUBURBAN DOOR CHECK & LOCK S	MAINTENANCE - BUILDING MAINTENANCE - BUILDING	466-228 466-228	10 10	582.25 458.25
				CHECK APCHK 88999 TOTAL FOR				1,040.50
07/12/2016	APCHK	89000	74743 MSTELE 16/17	SUBURBAN LIFE PUBLICATIONS	FEES/DUES/SUBSCRIPTIONS	410-307	05	42.00
07/12/2016	APCHK	89001*#	2016-119 2016-107	SUNSET SEWER & WATER	STORM WATER IMPROVEMENTS MAINTENAN STORM WATER IMPROVEMENTS MAINTENAN	750-381 750-381	35 35	366.00 2,408.00
				CHECK APCHK 89001 TOTAL FOR				2,774.00
07/12/2016	APCHK	89002	109985	TAMELING INDUSTRIES	STREET & ROW MAINTENANCE	750-328	35	40.50
07/12/2016	APCHK	89003	SI443247	TASER INTERNATIONAL	OPERATING EQUIPMENT	630-401	30	370.00
07/12/2016	APCHK	89004	16-1724	THOMPSON ELEV. INSPECT. SERV	ELEVATOR INSPECTION - REIMB.	830-117	40	143.00
07/12/2016	APCHK	89005	53107 53113	TOM & JERRY'S SHELL SERVICES	MAINTENANCE - VEHICLES MAINTENANCE - VEHICLES	735-409 735-409	35 35	976.45 108.19
				CHECK APCHK 89005 TOTAL FOR				1,084.64
07/12/2016	APCHK	89006	16 PERMIT #19	TRACIE COOKSEY	PARK PERMIT FEES	310-814	00	200.00

CHECK DISBURSEMENT REPORT FOR WILLOWBROOK  
CHECK DATE FROM 07/12/2016 - 07/12/2016

Check Date	Bank	Check #	Invoice	Payee	Description	Account	Dept	Amount
Fund: 01 GENERAL FUND								
07/12/2016	APCHK	89007	86914	TRAFFIC CONTROL & PROTECTION	ROAD SIGNS	755-333	35	84.00
			86913		ROAD SIGNS	755-333	35	1,375.25
				CHECK APCHK 89007 TOTAL FOR				1,459.25
07/12/2016	APCHK	89009	0610981194	UNIFIRST	MAINTENANCE - PW BUILDING	725-418	35	68.35
07/12/2016	APCHK	89011	3104056-0	WAREHOUSE DIRECT	OFFICE SUPPLIES	630-301	30	110.77
			3102174-0		OFFICE SUPPLIES	630-301	30	21.15
			3104602-0		OFFICE SUPPLIES	630-301	30	17.25
			3108605-0		OFFICE SUPPLIES	630-301	30	64.84
			3101560-0		OPERATING EQUIPMENT	630-401	30	156.36
			3102987-0		OPERATING EQUIPMENT	630-401	30	69.98
			3102885-0		OPERATING EQUIPMENT	630-401	30	64.42
			3104154-0		OPERATING EQUIPMENT	630-401	30	127.70
			3105513-0		OPERATING EQUIPMENT	630-401	30	259.12
			3107579-0		OPERATING EQUIPMENT	630-401	30	72.60
			3108605-0		OPERATING EQUIPMENT	630-401	30	54.38
				CHECK APCHK 89011 TOTAL FOR				1,018.57
07/12/2016	APCHK	89012	8024465/1	WILLOWBROOK FORD INC.	MAINTENANCE - VEHICLES	630-409	30	258.42
			6216364/1		MAINTENANCE - VEHICLES	630-409	30	45.95
				CHECK APCHK 89012 TOTAL FOR				304.37
07/12/2016	APCHK	89013	9002304723	ZEP MANUFACTURING COMPANY	MAINTENANCE SUPPLIES	570-331	20	470.56
					Total for fund 01 GENERAL FUND			159,889.18
Fund: 02 WATER FUND								
07/12/2016	APCHK	88940	826930710JUN16	AT & T MOBILITY	PHONE - TELEPHONES	401-201	50	61.81
07/12/2016	APCHK	88949	07/06/2016	D'ADAMO, TONY	CUSTOMER OVERPAYMENT	280-135	00	119.82
07/12/2016	APCHK	88951**#	JULY 2016	DELTA DENTAL PLAN OF ILLINOI	EMPLOYEE BENEFITS -- MEDICAL INSURA	401-141	50	156.77
07/12/2016	APCHK	88957	15-131791 MAY16	ENVIRO TEST INC	SAMPLING ANALYSIS	420-362	50	90.00
07/12/2016	APCHK	88961	116-12682	GEMINI GROUP L.L.C..	PRINTING & PUBLISHING	401-302	50	2,873.52
07/12/2016	APCHK	88963	16-494	H-B-K WATER METER SERVICE	NEW METERING EQUIPMENT	435-461	50	4,692.64
07/12/2016	APCHK	88981	311450	METROPOLITAN INDUSTRIES INC	EDP	440-695	50	138.00
07/12/2016	APCHK	88998	07/06/2016	STRUCKMEYER, JEAN	CUSTOMER OVERPAYMENT	280-135	00	86.71

CHECK DISBURSEMENT REPORT FOR WILLOWBROOK  
CHECK DATE FROM 07/12/2016 - 07/12/2016

Check Date	Bank	Check #	Invoice	Payee	Description	Account	Dept	Amount
Fund: 02 WATER FUND								
07/12/2016	APCHK	89001*	2016-169	SUNSET SEWER & WATER	WATER DISTRIBUTION REPAIRS/MAINTEN	430-277	50	2,335.93
			2016-170		WATER DISTRIBUTION REPAIRS/MAINTEN	430-277	50	2,068.40
CHECK APCHK 89001 TOTAL FOR								4,404.33
07/12/2016	APCHK	89008	15848	UNDERGROUND PIPE & VALVE, CO	MATERIAL & SUPPLIES - DISTRIBUTION	430-476	50	5,257.00
			15848-01		MATERIAL & SUPPLIES - DISTRIBUTION	430-476	50	1,395.00
CHECK APCHK 89008 TOTAL FOR								6,652.00
07/12/2016	APCHK	89010	9767323286 JUN16	VERIZON WIRELESS	PHONE - TELEPHONES	401-201	50	75.08
Fund: 14 LAND ACQUISITION, FACILITY, EXPANSION &								19,350.68
07/12/2016	APCHK	88964**	2023846	HOME DEPOT CREDIT SERVICES	POLICE DEPT REMODEL (7760 QUINCY)	930-411	75	283.35
			7044496		POLICE DEPT REMODEL (7760 QUINCY)	930-411	75	70.85
			7023229		POLICE DEPT REMODEL (7760 QUINCY)	930-411	75	20.32
			0024301		POLICE DEPT REMODEL (7760 QUINCY)	930-411	75	2.64
			1024128		POLICE DEPT REMODEL (7760 QUINCY)	930-411	75	45.33
			2023977		POLICE DEPT REMODEL (7760 QUINCY)	930-411	75	50.49
			2023962		POLICE DEPT REMODEL (7760 QUINCY)	930-411	75	5.48
CHECK APCHK 88964 TOTAL FOR								478.46
07/12/2016	APCHK	88982	305838	MIDCO	POLICE DEPT REMODEL (7760 QUINCY)	930-411	75	6,404.93
Fund: 14 LAND ACQUISITION, FACILITY, EXPANSION &								6,883.39
TOTAL - ALL FUNDS								186,123.25

'\*' - INDICATES CHECK DISTRIBUTED TO MORE THAN ONE FUND

'#' - INDICATES CHECK DISTRIBUTED TO MORE THAN ONE DEPARTMENT

Payroll Liability Check Register  
For Check Dates 06/01/2016 to 06/30/2016

Check Number	Vendor Name	Check Date	Check Amount
52518	AFLAC	06/24/2016	1,957.06
52505	COMMUNITY BANK OF WILLOWBROOK	06/10/2016	604.15
52519	COMMUNITY BANK OF WILLOWBROOK	06/24/2016	604.15
EFT27	EFTPS	06/10/2016	26,988.60
EFT29	EFTPS	06/24/2016	47,911.46
52506	I C M A RETIREMENT TRUST - 457	06/10/2016	725.00
52520	I C M A RETIREMENT TRUST - 457	06/24/2016	725.00
EFT30	I.M.R.F. PENSION FUND	06/24/2016	20,625.88
EFT28	ILLINOIS DEPT. OF REVENUE	06/10/2016	4,138.10
EFT31	ILLINOIS DEPT. OF REVENUE	06/24/2016	5,497.54
52522	ILLINOIS FRATERNAL	06/24/2016	860.00
52507	ILLINOIS STATE DISBURSEMENT UNIT	06/10/2016	1,848.93
52521	ILLINOIS STATE DISBURSEMENT UNIT	06/24/2016	1,848.93
52508	NATIONWIDE RETIREMENT SOLUTIONS	06/10/2016	2,821.30
52523	NATIONWIDE RETIREMENT SOLUTIONS	06/24/2016	2,910.64
52509	VILLAGE OF WILLOWBROOK	06/10/2016	37,974.00
52524	VILLAGE OF WILLOWBROOK	06/24/2016	38,095.03
Total Checks: 17		Total Paid:	\$196,135.77




## MONTHLY FINANCIAL REPORT

JUNE 2016

RESPECTFULLY SUBMITTED BY:

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Frank A. Trilla, Mayor

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Carrie Dittman, Director of Finance

# VILLAGE OF WILLOWBROOK FINANCIAL REPORT MUNICIPAL SALES AND USE TAXES

MONTH DIST	SALE MADE		12-13	13-14	14-15	15-16	16-17
MAY	FEB	\$	261,216	\$ 250,138	\$ 245,589	\$ 253,282	\$ 267,882
JUNE	MAR		308,159	304,370	293,285	301,469	312,681
JULY	APR		288,609	295,557	293,319	267,013	
AUG	MAY		316,487	334,102	342,029	328,251	
SEPT	JUNE		336,664	338,139	330,203	349,847	
OCT	JULY		291,508	300,405	318,631	306,409	
NOV	AUG		330,699	332,925	349,800	337,896	
DEC	SEPT		300,348	288,422	287,860	360,843	
JAN	OCT		282,374	283,164	303,324	318,340	
FEB	NOV		306,325	295,860	296,349	304,839	
MARCH	DEC		377,505	387,074	365,874	393,072	
APRIL	JAN		277,850	234,816	253,532	266,970	
TOTAL		\$	3,677,745	\$ 3,644,970	\$ 3,679,794	\$ 3,788,231	\$ 580,563
MTH AVG		\$	306,479	\$ 303,747	\$ 306,650	\$ 315,686	\$ 290,282
<b>BUDGET</b>		\$	3,493,374	\$ 3,447,000	\$ 3,450,000	\$ 3,600,000	\$ 3,600,000

YEAR TO DATE LAST YEAR :           \$ 554,751  
YEAR TO DATE THIS YEAR :           \$ 580,563  
DIFFERENCE :                           \$ 25,812

PERCENTAGE CHANGE :

**4.65%**

CURRENT FISCAL YEAR :

BUDGETED REVENUE:                               \$ 3,600,000  
PERCENTAGE OF YEAR COMPLETED :           16.67%  
PERCENTAGE OF REVENUE TO DATE :           16.13%  
PROJECTION OF ANNUAL REVENUE :           \$ 3,964,494  
EST. DOLLAR DIFF ACTUAL TO BUDGET       \$ 364,494  
EST. PERCENT DIFF ACTUAL TO BUDGET       **10.1%**



VILLAGE OF WILLOWBROOK  
MONTHLY CASH AND INVESTMENT BALANCE BY FUND  
FOR THE MONTH ENDED 06/30/2016

ACCOUNT	BALANCE
<b>Fund 01 GENERAL FUND</b>	
CHECKING - 0283	0.00
COMMUNITY BANK OF WB - 0275	777,535.81
IL FUNDS - 5435	3,653,106.61
COMMUNITY BANK OF WB MM - 1771	301,956.18
COMMUNITY BANK RD LGHT - 0724	959.78
COMMUNITY BANK OF WB FSA - 3804	12,464.56
U.S. BANK RED LIGHT - 4216	13,900.00
COMMUNITY BANK DRUG ACCT - 4171	114,885.09
COMMUNITY BANK WB CADETS - 10620387	173.72
PETTY CASH REVLVING	950.00
IMET - GENERAL	28.69
<b>Total For Fund 01:</b>	<b>4,875,960.44</b>
<b>Fund 02 WATER FUND</b>	
IL FUNDS WATER - 5914	448,347.00
COMMUNITY BANK OF WB WTR - 4163	769,832.50
COMMUNITY BANK OF WB - 0275	0.00
<b>Total For Fund 02:</b>	<b>1,218,179.50</b>
<b>Fund 03 HOTEL/MOTEL TAX FUND</b>	
IL FUNDS HOTEL/MOTEL - 5948	69,471.11
COMMUNITY BANK OF WB - 0275	87,289.97
<b>Total For Fund 03:</b>	<b>156,761.08</b>
<b>Fund 04 MOTOR FUEL TAX FUND</b>	
IL FUNDS MFT - 5443	461,194.95
<b>Total For Fund 04:</b>	<b>461,194.95</b>
<b>Fund 06 SSA ONE BOND &amp; INTEREST FUND</b>	
IL FUNDS SSA BOND - 4621	73,655.90
<b>Total For Fund 06:</b>	<b>73,655.90</b>
<b>Fund 07 POLICE PENSION FUND</b>	
COMMUNITY BANK OF WB PP - 4155	903.33
COMMUNITY BANK OF WB - 0275	0.00
MONEY MARKET - MB FINANCIAL BANK	406,818.89
US TREASURIES	61,606.41
US AGENCIES	3,173,973.38
MUNICIPAL BONDS	709,610.73
CORPORATE BONDS	3,498,331.04
EQUITIES	4,314,452.19
MUTUAL FUNDS	5,670,738.13
MARKET VALUE CONTRA	1,060,499.28
<b>Total For Fund 07:</b>	<b>18,896,933.38</b>
<b>Fund 09 WATER CAPITAL IMPROVEMENTS FUND</b>	
IL FUNDS WTR CAP - 1206	372,701.38
<b>Total For Fund 09:</b>	<b>372,701.38</b>
<b>Fund 10 CAPITAL PROJECT FUND</b>	
IL FUNDS CAP PROJECTS - 3133	96,845.19
<b>Total For Fund 10:</b>	<b>96,845.19</b>
<b>Fund 11 DEBT SERVICE FUND</b>	
IL FUNDS BOND PROCEEDS DS - 2756	50,449.11
<b>Total For Fund 11:</b>	<b>50,449.11</b>
<b>Fund 14 LAND ACQUISITION, FACILITY, EXPANSION &amp;</b>	
IL FUNDS BOND PROCEEDS LAFER - 2772	2,942,801.71
<b>Total For Fund 14:</b>	<b>2,942,801.71</b>
<b>TOTAL CASH &amp; INVESTMENTS:</b>	<b>29,145,482.64</b>

ACCOUNT BALANCE REPORT FOR WILLOWBROOK  
PERIOD ENDING 06/30/2016  
CASH & INVESTMENTS BY FUND AND ACCOUNT TYPE

Page: 1/2

GL NUMBER	DESCRIPTION	END BALANCE 06/30/2016
<b>Fund 01 - GENERAL FUND</b>		
<b>MONEY MARKET</b>		
01-00-110-322	IL FUNDS - 5435	3,653,106.61
01-00-110-323	COMMUNITY BANK OF WB MM - 1771	301,956.18
01-00-110-325	COMMUNITY BANK RD LGHT - 0724	959.78
01-00-110-380	COMMUNITY BANK DRUG ACCT - 4171	114,885.09
01-00-120-155	IMET - GENERAL	28.69
0.00		<u>4,070,936.35</u>
<b>PETTY CASH</b>		
01-00-110-911	PETTY CASH REVLING	950.00
0.00		<u>950.00</u>
<b>SAVINGS</b>		
01-00-110-257	COMMUNITY BANK OF WB - 0275	777,535.81
01-00-110-332	COMMUNITY BANK OF WB FSA - 3804	12,464.56
01-00-110-335	U.S. BANK RED LIGHT - 4216	13,900.00
01-00-110-385	COMMUNITY BANK WB CADETS - 10620387	173.72
0.00		<u>804,074.09</u>
<b>Fund 02 - WATER FUND</b>		
<b>MONEY MARKET</b>		
02-00-110-113	IL FUNDS WATER - 5914	448,347.00
02-00-110-209	COMMUNITY BANK OF WB WTR - 4163	769,832.50
0.00		<u>1,218,179.50</u>
<b>Fund 03 - HOTEL/MOTEL TAX FUND</b>		
<b>MONEY MARKET</b>		
03-00-110-114	IL FUNDS HOTEL/MOTEL - 5948	69,471.11
0.00		<u>69,471.11</u>
<b>SAVINGS</b>		
03-00-110-257	COMMUNITY BANK OF WB - 0275	87,289.97
0.00		<u>87,289.97</u>
<b>Fund 04 - MOTOR FUEL TAX FUND</b>		
<b>MONEY MARKET</b>		
04-00-110-116	IL FUNDS MFT - 5443	461,194.95
0.00		<u>461,194.95</u>
<b>Fund 06 - SSA ONE BOND &amp; INTEREST FUND</b>		
<b>MONEY MARKET</b>		
06-00-110-117	IL FUNDS SSA BOND - 4621	73,655.90
0.00		<u>73,655.90</u>
<b>Fund 07 - POLICE PENSION FUND</b>		
<b>MONEY MARKET</b>		
07-00-110-202	COMMUNITY BANK OF WB PP - 4155	903.33
0.00		<u>903.33</u>
<b>SAVINGS</b>		
07-00-110-335	MONEY MARKET - MB FINANCIAL BANK	406,818.89
0.00		<u>406,818.89</u>
<b>AGENCY CERTIFICATES</b>		
07-00-120-260	US AGENCIES	3,173,973.38
0.00		<u>3,173,973.38</u>
<b>CORPORATE BONDS</b>		
07-00-120-288	CORPORATE BONDS	3,498,331.04
0.00		<u>3,498,331.04</u>
<b>EQUITIES</b>		
07-00-120-289	EQUITIES	4,314,452.19
0.00		<u>4,314,452.19</u>

ACCOUNT BALANCE REPORT FOR WILLOWBROOK  
PERIOD ENDING 06/30/2016  
CASH & INVESTMENTS BY FUND AND ACCOUNT TYPE

Page: 2/2

GL NUMBER	DESCRIPTION	END BALANCE 06/30/2016
Fund 07 - POLICE PENSION FUND		
MUNICIPAL BONDS		
07-00-120-270	MUNICIPAL BONDS	709,610.73
0.00		709,610.73
MUTUAL FUNDS		
07-00-120-290	MUTUAL FUNDS	5,670,738.13
0.00		5,670,738.13
MARKET VALUE		
07-00-120-900	MARKET VALUE CONTRA	1,060,499.28
0.00		1,060,499.28
TREASURY NOTES		
07-00-120-250	US TREASURIES	61,606.41
0.00		61,606.41
Fund 09 - WATER CAPITAL IMPROVEMENTS FUND		
MONEY MARKET		
09-00-110-324	IL FUNDS WTR CAP - 1206	372,701.38
0.00		372,701.38
Fund 10 - CAPITAL PROJECT FUND		
MONEY MARKET		
10-00-110-115	IL FUNDS CAP PROJECTS - 3133	96,845.19
0.00		96,845.19
Fund 11 - DEBT SERVICE FUND		
MONEY MARKET		
11-00-110-111	IL FUNDS BOND PROCEEDS DS - 2756	50,449.11
0.00		50,449.11
Fund 14 - LAND ACQUISITION, FACILITY, EXPANSION &		
MONEY MARKET		
14-00-110-112	IL FUNDS BOND PROCEEDS LAFER - 2772	2,942,801.71
0.00		2,942,801.71

ACCOUNT BALANCE REPORT FOR WILLOWBROOK  
PERIOD ENDING 06/30/2016  
CASH & INVESTMENTS BY INSTITUTION

Page: 1/1

GL NUMBER	DESCRIPTION	END BALANCE 06/30/2016
<b>COMMUNITY BANK OF WB</b>		
01-00-110-257	COMMUNITY BANK OF WB - 0275	777,535.81
01-00-110-323	COMMUNITY BANK OF WB MM - 1771	301,956.18
01-00-110-325	COMMUNITY BANK RD LGHT - 0724	959.78
01-00-110-332	COMMUNITY BANK OF WB FSA - 3804	12,464.56
01-00-110-380	COMMUNITY BANK DRUG ACCT - 4171	114,885.09
01-00-110-385	COMMUNITY BANK WB CADETS - 10620387	173.72
02-00-110-209	COMMUNITY BANK OF WB WTR - 4163	769,832.50
03-00-110-257	COMMUNITY BANK OF WB - 0275	87,289.97
07-00-110-202	COMMUNITY BANK OF WB PP - 4155	903.33
0.00		<u>2,066,000.94</u>
<b>ILLINOIS FUNDS</b>		
01-00-110-322	IL FUNDS - 5435	3,653,106.61
02-00-110-113	IL FUNDS WATER - 5914	448,347.00
03-00-110-114	IL FUNDS HOTEL/MOTEL - 5948	69,471.11
04-00-110-116	IL FUNDS MFT - 5443	461,194.95
06-00-110-117	IL FUNDS SSA BOND - 4621	73,655.90
09-00-110-324	IL FUNDS WTR CAP - 1206	372,701.38
10-00-110-115	IL FUNDS CAP PROJECTS - 3133	96,845.19
11-00-110-111	IL FUNDS BOND PROCEEDS DS - 2756	50,449.11
14-00-110-112	IL FUNDS BOND PROCEEDS LAFER - 2772	2,942,801.71
0.00		<u>8,168,572.96</u>
<b>IMET</b>		
01-00-120-155	IMET - GENERAL	28.69
0.00		<u>28.69</u>
<b>MARKET VALUE CONTRA</b>		
07-00-120-900	MARKET VALUE CONTRA	1,060,499.28
0.00		<u>1,060,499.28</u>
<b>MBFINANCIAL BANK</b>		
07-00-110-335	MONEY MARKET - MB FINANCIAL BANK	406,818.89
07-00-120-250	US TREASURIES	61,606.41
07-00-120-260	US AGENCIES	3,173,973.38
07-00-120-270	MUNICIPAL BONDS	709,610.73
07-00-120-288	CORPORATE BONDS	3,498,331.04
07-00-120-289	EQUITIES	4,314,452.19
07-00-120-290	MUTUAL FUNDS	5,670,738.13
0.00		<u>17,835,530.77</u>
<b>U.S. BANK</b>		
01-00-110-335	U.S. BANK RED LIGHT - 4216	13,900.00
0.00		<u>13,900.00</u>
<b>VILLAGE OF WILLOWBROOK</b>		
01-00-110-911	PETTY CASH REV LING	950.00
0.00		<u>950.00</u>
<b>Total - All Funds:</b>		<u>29,145,482.64</u>

INTERFUND ACTIVITY REPORT FOR WILLOWBROOK  
Period Ending 06/30/2016  
Due To/From Other Funds

Page:

1/1

GL Number	Description	Balance
Fund 01: GENERAL FUND		
Due From Other Funds		
01-00-140-102	DUE TO/FROM WATER FUND	21,309.24
01-00-140-107	DUE TO/FROM POLICE PENSION FUND	38,263.79
01-00-140-114	DUE TO/FROM LAND ACQUISITION/FAC EXP/REN	1,553.22
	<b>Total Due From Other Funds</b>	<b>61,126.25</b>
Fund 02: WATER FUND		
Due From Other Funds		
02-00-140-101	DUE TO/FROM GENERAL FUND	(21,309.24)
	<b>Total Due From Other Funds</b>	<b>(21,309.24)</b>
Fund 07: POLICE PENSION FUND		
Due From Other Funds		
07-00-140-101	DUE TO/FROM GENERAL FUND	(38,263.79)
	<b>Total Due From Other Funds</b>	<b>(38,263.79)</b>
Fund 14: LAND ACQUISITION, FACILITY, EXPANSION &		
Due From Other Funds		
14-00-140-101	DUE TO/FROM GENERAL FUND	(1,553.22)
	<b>Total Due From Other Funds</b>	<b>(1,553.22)</b>

REVENUE REPORT FOR WILLOWBROOK  
PERIOD ENDING 06/30/2016

Page: 1/6

GL NUMBER	DESCRIPTION	ACTIVITY FOR MONTH 06/30/2016	YTD BALANCE 06/30/2016	2016-17 ORIGINAL BUDGET	% BDGT USED	AVAILABLE BALANCE
<b>Fund 01 - GENERAL FUND</b>						
<b>PROPERTY TAX</b>						
01-00-310-101	PROPERTY TAX LEVY - SRA	30,086.28	30,086.28	74,620.00	40.32	44,533.72
01-00-310-102	PROPERTY TAX LEVY - ROAD & BRIDGE	53,238.48	53,366.35	106,201.00	50.25	52,834.65
		83,324.76	83,452.63	180,821.00	46.15	97,368.37
<b>PROPERTY TAX</b>						
<b>OTHER TAXES</b>						
01-00-310-201	MUNICIPAL SALES TAX	312,681.60	580,563.10	3,600,000.00	16.13	3,019,436.90
01-00-310-202	ILLINOIS INCOME TAX	199,128.84	252,539.68	740,418.00	34.11	487,878.32
01-00-310-203	AMUSEMENT TAX	5,608.26	16,725.21	74,790.00	22.36	58,064.79
01-00-310-204	REPLACEMENT TAX	0.00	237.79	1,220.00	19.49	982.21
01-00-310-205	UTILITY TAX	73,714.81	150,144.30	1,000,000.00	15.01	849,855.70
01-00-310-208	PLACES OF EATING TAX	45,625.19	87,067.34	475,000.00	18.33	387,932.66
01-00-310-209	WATER TAX	16,807.61	30,013.56	177,000.00	16.96	146,986.44
01-00-310-210	WATER TAX - CLARENDON WATER CO	0.00	0.00	1,000.00	0.00	1,000.00
		653,566.31	1,117,290.98	6,069,428.00	18.41	4,952,137.02
<b>OTHER TAXES</b>						
<b>LICENSES</b>						
01-00-310-302	LIQUOR LICENSES	0.00	2,500.00	80,000.00	3.13	77,500.00
01-00-310-303	BUSINESS LICENSES	(75.00)	197.50	82,000.00	0.24	81,802.50
01-00-310-305	VENDING MACHINE	(45.00)	(45.00)	2,000.00	(2.25)	2,045.00
01-00-310-306	SCAVENGER LICENSES	0.00	0.00	8,000.00	0.00	8,000.00
		(120.00)	2,652.50	172,000.00	1.54	169,347.50
<b>LICENSES</b>						
<b>PERMITS</b>						
01-00-310-401	BUILDING PERMITS	12,845.87	41,225.18	225,000.00	18.32	183,774.82
01-00-310-402	SIGN PERMITS	0.00	580.77	5,000.00	11.62	4,419.23
01-00-310-403	OTHER PERMITS	94.00	124.00	500.00	24.80	376.00
01-00-310-404	COUNTY BMP FEE	0.00	0.00	2,000.00	0.00	2,000.00
		12,939.87	41,929.95	232,500.00	18.03	190,570.05
<b>PERMITS</b>						
<b>FINES</b>						
01-00-310-501	CIRCUIT COURT FINES	6,264.93	13,644.94	105,000.00	13.00	91,355.06
01-00-310-502	TRAFFIC FINES	3,100.00	6,810.00	25,000.00	27.24	18,190.00
01-00-310-503	RED LIGHT FINES	76,985.00	137,439.00	525,000.00	26.18	387,561.00
		86,349.93	157,893.94	655,000.00	24.11	497,106.06
<b>FINES</b>						
<b>OVERHEAD REIMBURSEMENT</b>						
01-00-310-601	ADMINISTRATIVE SUPPORT REIMB - WATE	43,582.58	87,165.16	522,991.00	16.67	435,825.84
		43,582.58	87,165.16	522,991.00	16.67	435,825.84
<b>OVERHEAD REIMBURSEMENT</b>						
<b>CHARGES &amp; FEES</b>						
01-00-310-700	PLANNING APPLICATION FEES	0.00	0.00	10,000.00	0.00	10,000.00
01-00-310-701	PUBLIC HEARING FEES	0.00	0.00	2,550.00	0.00	2,550.00
01-00-310-702	PLANNING REVIEW FEES	0.00	0.00	6,000.00	0.00	6,000.00
01-00-310-704	ACCIDENT REPORT COPIES	155.00	271.00	2,000.00	13.55	1,729.00
01-00-310-705	VIDEO GAMING FEES	0.00	2,958.37	20,000.00	14.79	17,041.63
01-00-310-706	COPIES-ORDINANCES & MAPS	0.00	10.00	50.00	20.00	40.00

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GL NUMBER	DESCRIPTION	ACTIVITY FOR MONTH 06/30/2016	YTD BALANCE 06/30/2016	2016-17 ORIGINAL BUDGET	% BDGT USED	AVAILABLE BALANCE
<b>Fund 01 - GENERAL FUND</b>						
01-00-310-723	ELEVATOR INSPECTION FEES	0.00	450.00	5,000.00	9.00	4,550.00
01-00-310-724	BURGLAR ALARM FEES	(80.00)	50.00	15,000.00	0.33	14,950.00
	<b>CHARGES &amp; FEES</b>	75.00	3,739.37	60,600.00	6.17	56,860.63
<b>PARK &amp; RECREATION CHARGES</b>						
01-00-310-813	PARK & REC CONTRIBUTION	0.00	115.00	2,250.00	5.11	2,135.00
01-00-310-814	PARK PERMIT FEES	890.00	2,270.00	3,000.00	75.67	730.00
01-00-310-815	SUMMER RECREATION FEES	0.00	0.00	840.00	0.00	840.00
01-00-310-816	WINTER RECREATION FEES	0.00	0.00	8,485.00	0.00	8,485.00
01-00-310-817	SPECIAL EVENTS	91.00	1,598.87	2,600.00	61.50	1,001.13
01-00-310-818	FALL RECREATION FEES	0.00	0.00	6,718.00	0.00	6,718.00
01-00-310-819	BURR RIDGE/WILLOWBROOK BASEBALL R	0.00	0.00	6,500.00	0.00	6,500.00
01-00-310-820	HOLIDAY CONTRIBUTION	0.00	0.00	1,300.00	0.00	1,300.00
01-00-310-822	BRWB BASEBALL REIMB FACILITY	0.00	0.00	6,600.00	0.00	6,600.00
01-00-310-823	SPRING RECREATION FEES	0.00	0.00	765.00	0.00	765.00
	<b>PARK &amp; RECREATION CHARGES</b>	981.00	3,983.87	39,058.00	10.20	35,074.13
<b>OTHER REVENUE</b>						
01-00-310-901	REIMBURSEMENTS - IRMA	9,559.45	9,559.45	5,000.00	191.19	(4,559.45)
01-00-310-904	REIMB - ETSB CAPITAL (DUCOMM)	0.00	0.00	72,000.00	0.00	72,000.00
01-00-310-907	BID PROPOSAL DEPOSIT	105.00	105.00	0.00	100.00	(105.00)
01-00-310-909	SALE - FIXED ASSETS	0.00	0.00	7,500.00	0.00	7,500.00
01-00-310-910	REIMBURSEMENTS - TREE PLANTING	75.00	225.00	500.00	45.00	275.00
01-00-310-911	OTHER REIMBURSEMENTS-REFUNDS	0.00	111.06	8,000.00	1.39	7,888.94
01-00-310-912	REIMBURSEMENTS-BRUSH PICK-UP	0.00	0.00	11,600.00	0.00	11,600.00
01-00-310-913	OTHER RECEIPTS	70.05	1,798.85	500.00	359.77	(1,298.85)
01-00-310-914	REIMB - PARK & REC MEMORIAL PROGRAM	0.00	0.00	1,000.00	0.00	1,000.00
01-00-310-915	REIMBURSEMENTS - POLICE SPECIAL DET	0.00	0.00	4,000.00	0.00	4,000.00
01-00-310-916	DONATIONS	40.00	40.00	0.00	100.00	(40.00)
01-00-310-917	REIMBURSEMENTS - PUBLIC WORKS OTHE	0.00	1,967.48	16,500.00	11.92	14,532.52
01-00-310-919	REIMBURSEMENTS - CD ENGINEERING	0.00	0.00	1,000.00	0.00	1,000.00
01-00-310-920	REIMBURSEMENTS - PW ENGINEERING	0.00	0.00	1,000.00	0.00	1,000.00
01-00-310-922	FEDERAL/STATE GRANTS	0.00	0.00	456,189.00	0.00	456,189.00
01-00-310-925	NICOR GAS ANNUAL PAYMENT	0.00	0.00	17,472.00	0.00	17,472.00
01-00-310-926	CABLE FRANCHISE FEES	0.00	0.00	208,000.00	0.00	208,000.00
01-00-310-930	DRUG FORFEITURES - DEA	0.00	0.00	40,000.00	0.00	40,000.00
	<b>OTHER REVENUE</b>	9,849.50	13,806.84	850,261.00	1.62	836,454.16
<b>NON-OPERATING</b>						
01-00-320-108	INTEREST INCOME	1,093.96	2,223.14	1,750.00	127.04	(473.14)
	<b>NON-OPERATING</b>	1,093.96	2,223.14	1,750.00	127.04	(473.14)
<b>Fund 01 - GENERAL FUND:</b>						
	<b>TOTAL REVENUES</b>	891,642.91	1,514,138.38	8,784,409.00	17.24	7,270,270.62

REVENUE REPORT FOR WILLOWBROOK  
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GL NUMBER	DESCRIPTION	ACTIVITY FOR MONTH 06/30/2016	YTD BALANCE 06/30/2016	2016-17 ORIGINAL BUDGET	% BDGT USED	AVAILABLE BALANCE
<b>Fund 02 - WATER FUND</b>						
<b>CHARGES &amp; FEES</b>						
02-00-310-712	WATER SALES	336,148.16	599,309.37	3,545,000.00	16.91	2,945,690.63
02-00-310-713	WATER PENALTIES	2,325.86	3,258.33	0.00	100.00	(3,258.33)
02-00-310-718	SHUTOFF/NSF FEE	2,260.00	3,025.00	0.00	100.00	(3,025.00)
<b>CHARGES &amp; FEES</b>		<b>340,734.02</b>	<b>605,592.70</b>	<b>3,545,000.00</b>	<b>17.08</b>	<b>2,939,407.30</b>
<b>OTHER REVENUE</b>						
02-00-310-714	WATER METER SALES	0.00	365.71	2,600.00	14.07	2,234.29
02-00-310-716	WATER METER READ SALES	455.95	455.95	6,000.00	7.60	5,544.05
02-00-310-717	OTHER REVENUE	0.00	0.00	1,000.00	0.00	1,000.00
<b>OTHER REVENUE</b>		<b>455.95</b>	<b>821.66</b>	<b>9,600.00</b>	<b>8.56</b>	<b>8,778.34</b>
<b>NON-OPERATING</b>						
02-00-320-108	INTEREST INCOME	287.08	562.15	1,000.00	56.22	437.85
02-00-320-713	WATER CONNECTION FEES	0.00	0.00	3,000.00	0.00	3,000.00
<b>NON-OPERATING</b>		<b>287.08</b>	<b>562.15</b>	<b>4,000.00</b>	<b>14.05</b>	<b>3,437.85</b>
<b>Fund 02 - WATER FUND:</b>						
<b>TOTAL REVENUES</b>		<b>341,477.05</b>	<b>606,976.51</b>	<b>3,558,600.00</b>	<b>17.06</b>	<b>2,951,623.49</b>
<b>Fund 03 - HOTEL/MOTEL TAX FUND</b>						
<b>OTHER TAXES</b>						
03-00-310-205	HOTEL/MOTEL TAX	21,088.91	39,612.33	243,000.00	16.30	203,387.67
<b>OTHER TAXES</b>		<b>21,088.91</b>	<b>39,612.33</b>	<b>243,000.00</b>	<b>16.30</b>	<b>203,387.67</b>
<b>NON-OPERATING</b>						
03-00-320-108	INTEREST INCOME	19.32	37.01	30.00	123.37	(7.01)
<b>NON-OPERATING</b>		<b>19.32</b>	<b>37.01</b>	<b>30.00</b>	<b>123.37</b>	<b>(7.01)</b>
<b>Fund 03 - HOTEL/MOTEL TAX FUND:</b>						
<b>TOTAL REVENUES</b>		<b>21,108.23</b>	<b>39,649.34</b>	<b>243,030.00</b>	<b>16.31</b>	<b>203,380.66</b>
<b>Fund 04 - MOTOR FUEL TAX FUND</b>						
<b>OTHER TAXES</b>						
04-00-310-216	MFT RECEIPTS	19,302.28	38,737.72	221,186.00	17.51	182,448.28
<b>OTHER TAXES</b>		<b>19,302.28</b>	<b>38,737.72</b>	<b>221,186.00</b>	<b>17.51</b>	<b>182,448.28</b>
<b>NON-OPERATING</b>						
04-00-320-108	INTEREST INCOME	127.35	238.98	150.00	159.32	(88.98)



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GL NUMBER	DESCRIPTION	ACTIVITY FOR MONTH 06/30/2016	YTD BALANCE 06/30/2016	2016-17 ORIGINAL BUDGET	% BDGT USED	AVAILABLE BALANCE
Fund 04 - MOTOR FUEL TAX FUND						
NON-OPERATING		127.35	238.98	150.00	159.32	(88.98)
Fund 04 - MOTOR FUEL TAX FUND:						
TOTAL REVENUES		19,429.63	38,976.70	221,336.00	17.61	182,359.30
Fund 06 - SSA ONE BOND & INTEREST FUND						
PROPERTY TAX		158,298.56	158,298.56	319,485.00	49.55	161,186.44
06-00-310-101	PROPERTY TAX RECEIPTS	158,298.56	158,298.56	319,485.00	49.55	161,186.44
NON-OPERATING		2.09	3.36	35.00	9.60	31.64
06-00-320-108	INTEREST INCOME	2.09	3.36	35.00	9.60	31.64
NON-OPERATING						
Fund 06 - SSA ONE BOND & INTEREST FUND:						
TOTAL REVENUES		158,300.65	158,301.92	319,520.00	49.54	161,218.08
Fund 07 - POLICE PENSION FUND						
OTHER REVENUE		61,985.38	123,970.76	805,810.00	15.38	681,839.24
07-00-310-607	VILLAGE CONTRIBUTION	14,083.65	30,810.90	202,140.00	15.24	171,329.10
07-00-310-906	POLICE CONTRIBUTIONS	76,069.03	154,781.66	1,007,950.00	15.36	853,168.34
NON-OPERATING		41,482.02	41,484.94	500,000.00	8.30	458,515.06
07-00-320-108	INTEREST INCOME	10,463.14	10,463.14	0.00	100.00	(10,463.14)
07-00-320-110	UNREALIZED GAIN OR LOSS ON INVESTME	51,945.16	51,948.08	500,000.00	10.39	448,051.92
NON-OPERATING						
Fund 07 - POLICE PENSION FUND:						
TOTAL REVENUES		128,014.19	206,729.74	1,507,950.00	13.71	1,301,220.26
Fund 09 - WATER CAPITAL IMPROVEMENTS FUND						
NON-OPERATING		0.00	0.00	931,460.00	0.00	931,460.00
09-00-320-105	IEPA LOAN PROCEEDS	105.71	202.42	50.00	404.84	(152.42)
09-00-320-108	INTEREST INCOME					

REVENUE REPORT FOR WILLOWBROOK  
PERIOD ENDING 06/30/2016

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GL NUMBER	DESCRIPTION	ACTIVITY FOR MONTH 06/30/2016	YTD BALANCE 06/30/2016	2016-17 ORIGINAL BUDGET	% BDGT USED	AVAILABLE BALANCE
Fund 09 - WATER CAPITAL IMPROVEMENTS FUND						
NON-OPERATING		105.71	202.42	931,510.00	0.02	931,307.58
TRANSFERS IN						
09-00-330-102	TRANSFER FROM WATER	0.00	0.00	100,000.00	0.00	100,000.00
TRANSFERS IN		0.00	0.00	100,000.00	0.00	100,000.00
Fund 09 - WATER CAPITAL IMPROVEMENTS FUND:						
TOTAL REVENUES		105.71	202.42	1,031,510.00	0.02	1,031,307.58
Fund 10 - CAPITAL PROJECT FUND						
NON-OPERATING		26.97	51.62	0.00	100.00	(51.62)
10-00-320-108	INTEREST INCOME	26.97	51.62	0.00	100.00	(51.62)
NON-OPERATING						
Fund 10 - CAPITAL PROJECT FUND:						
TOTAL REVENUES		26.97	51.62	0.00	100.00	(51.62)
Fund 11 - DEBT SERVICE FUND						
NON-OPERATING		14.04	14.50	0.00	100.00	(14.50)
11-00-320-108	INTEREST INCOME	14.04	14.50	0.00	100.00	(14.50)
NON-OPERATING						
TRANSFERS IN						
11-00-330-101	TRANSFER FROM GENERAL FUND	0.00	105,897.50	278,979.00	37.96	173,081.50
11-00-330-102	TRANSFER FROM WATER	0.00	7,717.50	47,051.00	16.40	39,333.50
TRANSFERS IN		0.00	113,615.00	326,030.00	34.85	212,415.00
Fund 11 - DEBT SERVICE FUND:						
TOTAL REVENUES		14.04	113,629.50	326,030.00	34.85	212,400.50
Fund 14 - LAND ACQUISITION, FACILITY, EXPANSION &						
NON-OPERATING		837.35	1,609.90	500.00	321.98	(1,109.90)
14-00-320-108	INTEREST INCOME	837.35	1,609.90	500.00	321.98	(1,109.90)
NON-OPERATING						

REVENUE REPORT FOR WILLOWBROOK

PERIOD ENDING 06/30/2016

ACTIVITY FOR

MONTH

06/30/2016

YTD BALANCE

06/30/2016

2016-17

ORIGINAL

BUDGET

% BDGT

USED

AVAILABLE

BALANCE

GL NUMBER DESCRIPTION

Fund 14 - LAND ACQUISITION, FACILITY, EXPANSION &  
TRANSFERS IN  
14-00-330-101 TRANSFER FROM GENERAL FUND  
TRANSFERS IN

0.00	0.00	25,000.00	0.00	25,000.00
0.00	0.00	25,000.00	0.00	25,000.00

Fund 14 - LAND ACQUISITION, FACILITY, EXPANSION & :

TOTAL REVENUES

837.35	1,609.90	25,500.00	6.31	23,890.10
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TOTAL REVENUES - ALL FUNDS

1,560,956.73	2,680,266.03	16,017,885.00	100.00	13,337,618.97
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EXPENDITURE REPORT FOR WILLOWBROOK  
PERIOD ENDING 06/30/2016

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GL NUMBER	DESCRIPTION	ACTIVITY FOR MONTH 06/30/16	YTD BALANCE 06/30/2016	2016-17 ORIGINAL BUDGET	% BDGT USED	AVAILABLE BALANCE	APPROP.	APPROP. AVAIL.
Fund 01 - GENERAL FUND								
Dept 05-VILLAGE BOARD & CLERK								
GENERAL MANAGEMENT								
01-05-400-147	EMPLOYEE BENEFITS - MEDICA	51.44	110.12	687.00	16.03	576.88	1,374.00	1,263.88
01-05-400-161	SOCIAL SECURITY/FICA	219.91	470.88	2,939.00	16.02	2,468.12	5,878.00	5,407.12
01-05-410-101	SALARIES PRESIDENT & VILLAG	2,600.00	5,700.00	40,200.00	14.18	34,500.00	80,400.00	74,700.00
01-05-410-125	SALARY - VILLAGE CLERK	600.00	1,200.00	7,200.00	16.67	6,000.00	14,400.00	13,200.00
01-05-410-141	LIFE INS BENEFIT -APPOINTED/	78.21	156.42	1,300.00	12.03	1,143.58	2,600.00	2,443.58
01-05-410-201	PHONE - TELEPHONES	60.77	60.77	720.00	8.44	659.23	1,440.00	1,379.23
01-05-410-301	OFFICE SUPPLIES	0.00	0.00	750.00	0.00	750.00	1,500.00	1,500.00
01-05-410-303	FUEL/MILEAGE/WASH	0.00	0.00	100.00	0.00	100.00	200.00	200.00
01-05-410-304	SCHOOLS/CONFERENCES/TRA	1,005.00	1,005.00	5,310.00	18.93	4,305.00	10,620.00	9,615.00
01-05-410-307	FEES/DUES/SUBSCRIPTIONS	0.00	285.00	2,008.00	14.19	1,723.00	4,016.00	3,731.00
01-05-410-308	WELLNESS	0.00	0.00	600.00	0.00	600.00	1,200.00	1,200.00
GENERAL MANAGEMENT		4,615.33	8,988.19	61,814.00	14.54	52,825.81	123,628.00	114,639.81
COMMUNITY RELATIONS								
01-05-420-365	PUBLIC RELATIONS	0.00	0.00	500.00	0.00	500.00	1,000.00	1,000.00
COMMUNITY RELATIONS		0.00	0.00	500.00	0.00	500.00	1,000.00	1,000.00
Total Dept 05-VILLAGE BOARD & CLERK		4,615.33	8,988.19	62,314.00	14.42	53,325.81	124,628.00	115,639.81
Dept 07-BOARD OF POLICE COMMISSIONERS								
ADMINISTRATION								
01-07-435-104	PART TIME - CLERICAL	0.00	0.00	500.00	0.00	500.00	1,000.00	1,000.00
01-07-435-148	LIFE INS BENEFIT -APPOINTED/	29.20	58.40	565.00	10.34	506.60	1,130.00	1,071.60
01-07-435-239	FEES - BOPC ATTORNEY	0.00	0.00	6,000.00	0.00	6,000.00	12,000.00	12,000.00
01-07-435-301	OFFICE SUPPLIES	0.00	0.00	100.00	0.00	100.00	200.00	200.00
01-07-435-302	PRINTING & PUBLISHING	0.00	0.00	1,000.00	0.00	1,000.00	2,000.00	2,000.00
01-07-435-304	SCHOOLS/CONFERENCES/TRA	60.00	60.00	0.00	100.00	(60.00)	0.00	(60.00)
01-07-435-307	FEES/DUES/SUBSCRIPTIONS	0.00	0.00	500.00	0.00	500.00	1,000.00	1,000.00
01-07-435-311	POSTAGE & METER RENT	0.00	0.00	500.00	0.00	500.00	1,000.00	1,000.00
ADMINISTRATION		89.20	118.40	9,165.00	1.29	9,046.60	18,330.00	18,211.60
OTHER								
01-07-440-542	EXAMS - WRITTEN	0.00	0.00	8,000.00	0.00	8,000.00	16,000.00	16,000.00
01-07-440-543	EXAMS - PHYSICAL	106.00	212.00	700.00	30.29	488.00	1,400.00	1,188.00
01-07-440-544	EXAMS - PSYCHOLOGICAL	0.00	0.00	3,500.00	0.00	3,500.00	7,000.00	7,000.00
01-07-440-545	EXAMS - POLYGRAPH	0.00	500.00	1,000.00	50.00	500.00	2,000.00	1,500.00
OTHER		106.00	712.00	13,200.00	5.39	12,488.00	26,400.00	25,688.00
Total Dept 07-BOARD OF POLICE COMMISSIONERS		195.20	830.40	22,365.00	3.71	21,534.60	44,730.00	43,899.60
Dept 10-ADMINISTRATION								
GENERAL MANAGEMENT								
01-10-400-147	EMPLOYEE BENEFITS - MEDICA	271.74	566.94	3,426.00	16.55	2,859.06	6,852.00	6,285.06

EXPENDITURE REPORT FOR WILLOWBROOK  
PERIOD ENDING 06/30/2016

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GL NUMBER	DESCRIPTION	ACTIVITY FOR	YTD BALANCE	2016-17	% BDGT USED	AVAILABLE BALANCE	APPROP. AVAIL.
		MONTH 06/30/16	06/30/2016	ORIGINAL BUDGET			
Fund 01 - GENERAL FUND							
01-10-400-151	IMRF	3,141.77	6,565.64	40,107.00	16.37	33,541.36	80,214.00
01-10-400-161	SOCIAL SECURITY/FICA	1,161.89	2,424.04	11,715.00	20.69	9,290.96	23,430.00
01-10-455-101	SALARIES - MANAGEMENT STA	6,379.09	14,352.96	82,929.00	17.31	68,576.04	165,858.00
01-10-455-102	OVERTIME	726.28	1,474.36	5,000.00	29.49	3,525.64	10,000.00
01-10-455-106	ASST TO VILLAGE ADMINISTRA	5,033.92	10,067.84	65,439.00	15.39	55,371.16	130,878.00
01-10-455-107	ADMINISTRATIVE INTERN	965.56	1,931.86	10,234.00	18.88	8,302.14	20,468.00
01-10-455-126	SALARIES - CLERICAL	5,592.64	11,185.28	72,704.00	15.38	61,518.72	145,408.00
01-10-455-131	PERSONNEL RECRUITMENT	0.00	0.00	550.00	0.00	550.00	1,100.00
01-10-455-141	EMPLOYEE BENEFIT - MEDICAL	1,634.72	2,749.04	29,219.00	9.41	26,469.96	58,438.00
01-10-455-144	EMPLOYEE BENEFIT - UNEMPL	0.00	0.00	213.00	0.00	213.00	426.00
01-10-455-201	PHONE - TELEPHONES	87.35	1,119.68	13,260.00	8.44	12,140.32	26,520.00
01-10-455-266	CODIFY ORDINANCES	0.00	0.00	3,000.00	0.00	3,000.00	6,000.00
01-10-455-301	OFFICE SUPPLIES	441.31	664.80	10,000.00	6.65	9,335.20	20,000.00
01-10-455-302	PRINTING & PUBLISHING	0.00	0.00	3,000.00	0.00	3,000.00	6,000.00
01-10-455-303	FUEL/MILEAGE/WASH	113.64	139.15	2,800.00	4.97	2,660.85	5,600.00
01-10-455-304	SCHOOLS/CONFERENCES/TRA	103.04	103.04	5,116.00	2.01	5,012.96	10,232.00
01-10-455-305	STRATEGIC PLANNING	0.00	0.00	2,000.00	0.00	2,000.00	4,000.00
01-10-455-307	FEES/DUES/SUBSCRIPTIONS	8,764.22	8,802.22	15,010.00	58.64	6,207.78	30,020.00
01-10-455-311	POSTAGE & METER RENT	444.17	435.82	6,955.00	6.27	6,519.18	13,910.00
01-10-455-315	COPY SERVICE	660.99	833.89	4,000.00	20.85	3,166.11	8,000.00
01-10-455-355	COMMISSARY PROVISION	0.00	0.00	1,500.00	0.00	1,500.00	3,000.00
01-10-455-409	MAINTENANCE - VEHICLES	0.00	0.00	1,000.00	0.00	1,000.00	2,000.00
01-10-455-411	MAINTENANCE - EQUIPMENT	0.00	0.00	750.00	0.00	750.00	1,500.00
GENERAL MANAGEMENT		35,522.33	63,416.56	389,927.00	16.26	326,510.44	779,854.00
716,437.44							
COMMUNITY RELATIONS							
01-10-475-365	PUBLIC RELATIONS	529.35	877.28	10,000.00	8.77	9,122.72	20,000.00
01-10-475-366	NEWSLETTER	0.00	0.00	2,000.00	0.00	2,000.00	4,000.00
01-10-475-370	MEALS-ON-WHEELS	0.00	0.00	2,000.00	0.00	2,000.00	4,000.00
01-10-475-372	SENIOR CITIZEN TAXI PROGRA	0.00	0.00	1,200.00	0.00	1,200.00	2,400.00
2,400.00							
29,522.72							
COMMUNITY RELATIONS							
529.35	877.28	15,200.00	5.77	14,322.72	30,400.00	29,522.72	
CAPITAL IMPROVEMENTS							
01-10-485-602	BUILDING IMPROVEMENTS	0.00	0.00	52,500.00	0.00	52,500.00	105,000.00
01-10-485-611	FURNITURE & OFFICE EQUIPME	0.00	0.00	2,500.00	0.00	2,500.00	5,000.00
01-10-485-641	EDP EQUIPMENT	2,275.00	4,779.95	16,399.00	29.15	11,619.05	32,798.00
01-10-485-642	PEG CHANNEL EQUIPMENT	0.00	0.00	8,000.00	0.00	8,000.00	16,000.00
01-10-485-643	9/11 ARTIFACT	0.00	0.00	20,000.00	0.00	20,000.00	40,000.00
40,000.00							
194,018.05							
CAPITAL IMPROVEMENTS							
2,275.00	4,779.95	99,399.00	4.81	94,619.05	198,798.00	194,018.05	
DATA PROCESSING							
01-10-460-212	EDP SOFTWARE	129.85	1,079.66	3,784.00	28.53	2,704.34	7,568.00
01-10-460-305	PERSONNEL TRAINING	0.00	0.00	250.00	0.00	250.00	500.00
01-10-460-331	OPERATING SUPPLIES	0.00	0.00	500.00	0.00	500.00	1,000.00
1,000.00							
7,988.34							
DATA PROCESSING							
129.85	1,079.66	4,534.00	23.81	3,454.34	9,068.00	7,988.34	
BUILDINGS							
01-10-466-228	MAINTENANCE - BUILDING	4,434.79	7,502.67	58,773.00	12.77	51,270.33	117,546.00
117,546.00							
110,043.33							

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GL NUMBER	DESCRIPTION	ACTIVITY FOR MONTH 06/30/16	YTD BALANCE 06/30/2016	2016-17 ORIGINAL BUDGET	% BDGT USED	AVAILABLE BALANCE	APPROP.	APPROP. AVAIL.
Fund 01 - GENERAL FUND								
01-10-466-235	NICOR GAS (7760 QUINCY)	141.12	141.12	5,250.00	2.69	5,108.88	10,500.00	10,358.88
01-10-466-236	NICOR GAS (835 MIDWAY)	8.03	8.03	4,000.00	0.20	3,991.97	8,000.00	7,991.97
01-10-466-237	NICOR GAS (825 MIDWAY)	50.34	50.34	1,250.00	4.03	1,199.66	2,500.00	2,449.66
01-10-466-240	ENERGY/COMED (835 MIDWAY)	0.00	337.99	3,000.00	11.27	2,662.01	6,000.00	5,662.01
01-10-466-241	ENERGY/COMED (825 MIDWAY)	0.00	0.00	500.00	0.00	500.00	1,000.00	1,000.00
01-10-466-250	SANITARY (7760 QUINCY)	0.00	0.00	300.00	0.00	300.00	600.00	600.00
01-10-466-251	SANITARY (835 MIDWAY)	0.00	0.00	400.00	0.00	400.00	800.00	800.00
01-10-466-252	SANITARY (825 MIDWAY)	0.00	0.00	200.00	0.00	200.00	400.00	400.00
01-10-466-293	LANDSCAPE - VILLAGE HALL	447.41	463.86	5,500.00	8.43	5,036.14	11,000.00	10,536.14
01-10-466-351	BUILDING MAINTENANCE SUPP	526.42	633.72	8,000.00	7.92	7,366.28	16,000.00	15,366.28
01-10-466-385	SANITARY USER CHARGE	0.00	0.00	200.00	0.00	200.00	400.00	400.00
BUILDINGS		5,608.11	9,137.73	87,373.00	10.46	78,235.27	174,746.00	165,608.27
LEGAL								
01-10-470-239	FEES - VILLAGE ATTORNEY	7,949.30	15,889.00	75,000.00	21.19	59,111.00	150,000.00	134,111.00
01-10-470-241	FEES - SPECIAL ATTORNEY	0.00	0.00	3,000.00	0.00	3,000.00	6,000.00	6,000.00
01-10-470-242	FEES - LABOR COUNSEL	0.00	0.00	10,000.00	0.00	10,000.00	20,000.00	20,000.00
LEGAL		7,949.30	15,889.00	88,000.00	18.06	72,111.00	176,000.00	160,111.00
RISK MANAGEMENT								
01-10-480-272	INSURANCE - IRMA	0.00	0.00	244,034.00	0.00	244,034.00	488,068.00	488,068.00
01-10-480-273	SELF INSURANCE - DEDUCTIBL	0.00	0.00	2,500.00	0.00	2,500.00	5,000.00	5,000.00
01-10-480-276	WELLNESS	212.00	414.50	12,220.00	3.39	11,805.50	24,440.00	24,025.50
RISK MANAGEMENT		212.00	414.50	258,754.00	0.16	258,339.50	517,508.00	517,093.50
TRANSFERS TO OTHER FUNDS								
01-10-900-111	TRANSFER TO DEBT SERVICE	0.00	0.00	67,184.00	0.00	67,184.00	134,368.00	134,368.00
01-10-900-112	TRANSFER TO DEBT SERVICE -	0.00	105,897.50	211,795.00	50.00	105,897.50	423,590.00	317,692.50
01-10-900-114	TRANSFER TO LAFER	0.00	0.00	25,000.00	0.00	25,000.00	50,000.00	50,000.00
TRANSFERS TO OTHER FUNDS		0.00	105,897.50	303,979.00	34.84	198,081.50	607,958.00	502,060.50
Total Dept 10-ADMINISTRATION								
		52,225.94	201,492.18	1,247,166.00	16.16	1,045,673.82	2,494,332.00	2,292,839.82
Dept 15-PLANNING & ECONOMIC DEVELOPMENT								
GENERAL MANAGEMENT								
01-15-400-147	EMPLOYEE BENEFITS - MEDICA	29.17	64.64	424.00	15.25	359.36	848.00	783.36
01-15-400-151	IMRF	366.92	811.96	5,194.00	15.63	4,382.04	10,388.00	9,576.04
01-15-400-161	SOCIAL SECURITY/FICA	124.76	276.44	1,815.00	15.23	1,538.56	3,630.00	3,353.56
01-15-510-102	OVERTIME	0.00	336.95	500.00	67.39	163.05	1,000.00	663.05
01-15-510-126	SALARIES - CLERICAL	2,102.70	4,316.05	28,775.00	15.00	24,458.95	57,550.00	53,233.95
01-15-510-141	EMPLOYEE BENEFITS - MEDICA	752.64	1,505.28	9,313.00	16.16	7,807.72	18,626.00	17,120.72
01-15-510-144	EMPLOYEE BENEFITS - UNEMP	0.00	0.00	36.00	0.00	36.00	72.00	72.00
01-15-510-232	CONSULTANTS - DESIGN & OTH	0.00	0.00	31,500.00	0.00	31,500.00	63,000.00	63,000.00
01-15-510-301	OFFICE SUPPLIES	42.90	42.90	200.00	21.45	157.10	400.00	357.10
01-15-510-302	PRINTING & PUBLISHING	170.76	170.76	3,000.00	5.69	2,829.24	6,000.00	5,829.24
01-15-510-304	SCHOOLS/CONFERENCES/TRA	0.00	0.00	2,500.00	0.00	2,500.00	5,000.00	5,000.00

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GL NUMBER	DESCRIPTION	ACTIVITY FOR MONTH 06/30/16	YTD BALANCE 06/30/2016	2016-17 ORIGINAL BUDGET	% BDGT USED	AVAILABLE BALANCE	APPROP. AVAIL.
Fund 01 - GENERAL FUND							
01-15-510-307	FEES/DUES/SUBSCRIPTIONS	11.00	194.00	800.00	24.25	606.00	1,406.00
01-15-510-311	POSTAGE & METER RENT	0.00	0.00	750.00	0.00	750.00	1,500.00
01-15-510-340	PLAN COMMISSION COMPENSA	58.39	116.78	650.00	17.97	533.22	1,183.22
01-15-510-401	OPERATING EQUIPMENT	0.00	0.00	500.00	0.00	500.00	1,000.00
GENERAL MANAGEMENT		3,659.24	7,835.76	85,957.00	9.12	78,121.24	164,078.24
CAPITAL IMPROVEMENTS							
01-15-540-641	EDP NEW EQUIPMENT	0.00	1,004.98	2,400.00	41.87	1,395.02	3,795.02
CAPITAL IMPROVEMENTS		0.00	1,004.98	2,400.00	41.87	1,395.02	3,795.02
DATA PROCESSING							
01-15-515-212	EDP SOFTWARE	0.00	307.49	450.00	68.33	142.51	592.51
01-15-515-305	EDP PERSONNEL TRAINING	0.00	0.00	1,350.00	0.00	1,350.00	2,700.00
01-15-515-306	CONSULTING SERVICES	0.00	0.00	1,500.00	0.00	1,500.00	3,000.00
DATA PROCESSING		0.00	307.49	3,300.00	9.32	2,992.51	6,292.51
ENGINEERING							
01-15-520-229	RENT - MEETING ROOM	0.00	0.00	250.00	0.00	250.00	500.00
01-15-520-245	FEES - ENGINEERING	0.00	85.00	3,000.00	2.83	2,915.00	5,915.00
01-15-520-246	FEES - COURT REPORTER	727.43	727.43	2,000.00	36.37	1,272.57	3,272.57
01-15-520-254	PLAN REVIEW - ENGINEERING	1,885.50	1,885.50	10,000.00	18.86	8,114.50	18,114.50
01-15-520-257	PLAN REVIEW - PLANNER	16,042.68	16,042.68	75,000.00	21.39	58,957.32	133,957.32
01-15-520-258	PLAN REVIEW - TRAFFIC CONS	224.10	224.10	7,200.00	3.11	6,975.90	14,175.90
ENGINEERING		18,879.71	18,964.71	97,450.00	19.46	78,485.29	175,935.29
RISK MANAGEMENT							
01-15-535-273	SELF INSURANCE - DEDUCTIBL	0.00	0.00	2,500.00	0.00	2,500.00	5,000.00
RISK MANAGEMENT		0.00	0.00	2,500.00	0.00	2,500.00	5,000.00
Total Dept 15-PLANNING & ECONOMIC DEVELOPMEN							
		22,538.95	28,112.94	191,607.00	14.67	163,494.06	355,101.06
Dept 20-PARKS & RECREATION							
CAPITAL IMPROVEMENTS							
01-20-595-641	EDP EQUIPMENT	0.00	704.98	1,600.00	44.06	895.02	2,495.02
01-20-595-695	PARK IMPROVEMENTS - NEIGH	0.00	0.00	856,189.00	0.00	856,189.00	1,712,378.00
01-20-595-696	COMMUNITY PARK DEVELOPME	0.00	0.00	4,210.00	0.00	4,210.00	8,420.00
CAPITAL IMPROVEMENTS		0.00	704.98	861,999.00	0.08	861,294.02	1,723,293.02
ADMINISTRATION							
01-20-400-147	EMPLOYEE BENEFITS - MEDICA	48.49	131.74	411.00	32.05	279.26	690.26
01-20-400-151	IMRF	573.89	1,456.58	4,190.00	34.76	2,733.42	8,380.00
01-20-400-161	SOCIAL SECURITY/FICA	207.32	563.24	1,759.00	32.02	1,195.76	2,954.76
01-20-550-101	SALARIES - PERMANENT EMPL	2,226.30	5,331.60	27,025.00	19.73	21,693.40	48,718.40
01-20-550-103	PART TIME - PROGRAM SUPER	0.00	0.00	1,350.00	0.00	1,350.00	2,700.00
01-20-550-144	EMPLOYEE BENEFITS - UNEMP	0.00	0.00	97.00	0.00	97.00	194.00

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	APPROP.	APPROP. AVAIL.
2,112.00	1,943.80	
200.00	200.00	
400.00	367.63	
4,720.00	848.04	
532.00	532.00	
650.00	650.00	
550.00	550.00	
11,938.00	11,938.00	
<u>30,766.00</u>	<u>79,210.31</u>	
600.00	395.01	
30,000.00	30,000.00	
<u>30,600.00</u>	<u>30,395.01</u>	
5,000.00	5,000.00	
<u>5,000.00</u>	<u>5,000.00</u>	
2,000.00	2,000.00	
31,000.00	30,739.60	
55,966.00	117,097.18	
<u>7,000.00</u>	<u>7,000.00</u>	
<u>85,966.00</u>	<u>156,836.78</u>	
14,000.00	10,643.43	
20,160.00	19,724.55	
1,814.00	1,455.00	
310.00	310.00	
51,100.00	42,678.63	
22,700.00	21,590.83	
<u>400.00</u>	<u>400.00</u>	
<u>10,484.00</u>	<u>96,802.44</u>	
4,506.00	4,506.00	
14,488.00	13,581.39	
<u>9,334.00</u>	<u>9,334.00</u>	
<u>28,328.00</u>	<u>27,421.39</u>	
884.00	884.00	
108.00	108.00	
<u>9,334.00</u>	<u>9,334.00</u>	
<u>10,326.00</u>	<u>10,326.00</u>	



EXPENDITURE REPORT FOR WILLOWBROOK  
PERIOD ENDING 06/30/2016

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GL NUMBER	DESCRIPTION	ACTIVITY FOR MONTH 06/30/16	YTD BALANCE 06/30/2016	2016-17 ORIGINAL BUDGET	% BDGT USED	AVAILABLE BALANCE	APPROP.	APPROP. AVAIL.
Fund 01 - GENERAL FUND								
WINTER PROGRAM								
01-20-585-112	RECREATION INSTRUCTORS	0.00	0.00	500.00	0.00	500.00	1,000.00	1,000.00
01-20-585-121	WINTER PROGRAM MATERIALS	0.00	0.00	6,429.00	0.00	6,429.00	12,858.00	12,858.00
01-20-585-150	CHILDRENS SPECIAL EVENTS -	0.00	0.00	2,597.00	0.00	2,597.00	5,194.00	5,194.00
01-20-585-151	FAMILY SPECIAL EVENT - MOVI	0.00	753.00	1,361.00	55.33	608.00	2,722.00	1,969.00
01-20-585-152	FAMILY SPECIAL EVENT - TREE	0.00	0.00	7,500.00	0.00	7,500.00	15,000.00	15,000.00
01-20-585-153	FAMILY SPECIAL EVENT - BACK	0.00	0.00	3,184.00	0.00	3,184.00	6,368.00	6,368.00
01-20-585-154	FAMILY SPECIAL EVENT - RACE	5,000.00	10,205.87	21,000.00	48.60	10,794.13	42,000.00	31,794.13
01-20-585-232	RENT - FACILITY	0.00	0.00	300.00	0.00	300.00	600.00	600.00
01-20-585-517	SENIORS PROGRAM	0.00	0.00	4,667.00	0.00	4,667.00	9,334.00	9,334.00
WINTER PROGRAM		5,000.00	10,958.87	47,538.00	23.05	36,579.13	95,076.00	84,117.13
SPRING PROGRAM								
01-20-586-112	RECREATION INSTRUCTORS - S	0.00	0.00	289.00	0.00	289.00	578.00	578.00
01-20-586-121	SPRING PROGRAM MATERIALS	0.00	0.00	170.00	0.00	170.00	340.00	340.00
SPRING PROGRAM		0.00	0.00	459.00	0.00	459.00	918.00	918.00
SPECIAL RECREATION								
01-20-590-518	SPECIAL RECREATION ASSOC	18,522.19	18,522.19	37,045.00	50.00	18,522.81	74,090.00	55,567.81
01-20-590-520	ADA RECREATION ACCOMMOD	0.00	0.00	11,175.00	0.00	11,175.00	22,350.00	22,350.00
01-20-590-521	ADA PARK IMPROVEMENTS	0.00	0.00	66,492.00	0.00	66,492.00	132,984.00	132,984.00
SPECIAL RECREATION		18,522.19	18,522.19	114,712.00	16.15	96,189.81	229,424.00	210,901.81
Total Dept 20-PARKS & RECREATION			65,664.11	1,245,443.00	5.27	1,179,778.89	2,490,886.00	2,425,221.89
Dept 25-FINANCE DEPARTMENT								
GENERAL MANAGEMENT								
01-25-400-147	EMPLOYEE BENEFITS - MEDICA	248.88	498.01	3,253.00	15.31	2,754.99	6,506.00	6,007.99
01-25-400-151	IMRF	2,765.99	5,515.32	33,171.00	16.63	27,655.68	66,342.00	60,826.68
01-25-400-161	SOCIAL SECURITY/FICA	1,064.15	2,129.44	13,505.00	15.77	11,375.56	27,010.00	24,880.56
01-25-610-101	SALARIES	9,619.36	19,238.72	125,050.00	15.38	105,811.28	250,100.00	230,861.28
01-25-610-102	OVERTIME	546.64	997.80	1,500.00	66.52	502.20	3,000.00	2,002.20
01-25-610-104	PART TIME - CLERICAL	1,782.77	3,679.42	23,911.00	15.39	20,231.58	47,822.00	44,142.58
01-25-610-126	SALARIES - CLERICAL	5,684.96	11,369.92	73,904.00	15.38	62,534.08	147,808.00	136,438.08
01-25-610-141	EMPLOYEE BENEFIT - MEDICAL	2,121.96	4,243.92	26,074.00	16.28	21,830.08	52,148.00	47,904.08
01-25-610-144	EMPLOYEE BENEFIT - UNEMPL	0.00	0.00	274.00	0.00	274.00	548.00	548.00
01-25-610-301	OFFICE SUPPLIES	0.00	714.80	3,730.00	19.16	3,015.20	7,460.00	6,745.20
01-25-610-302	PRINTING & PUBLISHING	0.00	0.00	1,150.00	0.00	1,150.00	2,300.00	2,300.00
01-25-610-303	FUEL/MILEAGE/WASH	0.00	0.00	200.00	0.00	200.00	400.00	400.00
01-25-610-304	SCHOOLS/CONFERENCES/TRA	0.00	0.00	4,225.00	0.00	4,225.00	8,450.00	8,450.00
01-25-610-307	FEES/DUES/SUBSCRIPTIONS	89.46	245.46	2,015.00	12.18	1,769.54	4,030.00	3,784.54
01-25-610-311	POSTAGE & METER RENT	0.00	0.00	600.00	0.00	600.00	1,200.00	1,200.00
GENERAL MANAGEMENT		23,924.17	48,632.81	312,562.00	15.56	263,929.19	625,124.00	576,491.19
CAPITAL IMPROVEMENTS								
01-25-625-611	FURNITURE & OFFICE EQUIPME	350.00	350.00	0.00	100.00	(350.00)	0.00	(350.00)

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Fund 01 - GENERAL FUND							
01-25-625-641	EDP EQUIPMENT	0.00	1,904.96	4,800.00	39.69	2,895.04	7,695.04
CAPITAL IMPROVEMENTS		350.00	2,254.96	4,800.00	46.98	2,545.04	7,345.04
DATA PROCESSING							
01-25-615-212	EDP SOFTWARE	0.00	4,344.97	37,505.00	11.59	33,160.03	70,665.03
01-25-615-213	VILLAGE-WIDE IT SOFTWARE/LI	0.00	0.00	6,711.00	0.00	6,711.00	13,422.00
01-25-615-263	MAINTENANCE - OFFICE MACHI	0.00	0.00	500.00	0.00	500.00	1,000.00
01-25-615-305	PERSONNEL TRAINING	0.00	0.00	500.00	0.00	500.00	1,000.00
01-25-615-306	IT - CONSULTING SERVICES	12,500.00	25,000.00	25,000.00	100.00	0.00	25,000.00
01-25-615-307	ERP CONSULTING SERVICES	300.00	300.00	0.00	100.00	(300.00)	0.00
01-25-615-331	OPERATING SUPPLIES	73.17	73.17	500.00	14.63	426.83	926.83
DATA PROCESSING		12,873.17	29,718.14	70,716.00	42.02	40,997.86	111,713.86
FINANCIAL AUDIT							
01-25-620-251	AUDIT SERVICES	3,800.00	3,800.00	25,031.00	15.18	21,231.00	46,262.00
01-25-620-252	FINANCIAL SERVICES	1,170.00	1,170.00	4,840.00	24.17	3,670.00	8,510.00
FINANCIAL AUDIT		4,970.00	4,970.00	29,871.00	16.64	24,901.00	54,772.00
Total Dept 25-FINANCE DEPARTMENT		42,117.34	85,575.91	417,949.00	20.48	332,373.09	750,322.09
Dept 30-POLICE DEPARTMENTS							
CAPITAL IMPROVEMENTS							
01-30-680-611	FURNITURE & OFFICE EQUIPME	0.00	0.00	5,000.00	0.00	5,000.00	10,000.00
01-30-680-625	NEW VEHICLES	12,575.16	100,865.16	130,000.00	77.59	29,134.84	159,134.84
01-30-680-641	EDP NEW EQUIPMENT	0.00	11,954.71	20,797.00	57.48	8,842.29	29,639.29
CAPITAL IMPROVEMENTS		12,575.16	112,819.87	155,797.00	72.41	42,977.13	198,774.13
ADMINISTRATION							
01-30-400-147	EMPLOYEE BENEFITS - MEDICA	2,841.20	6,360.88	38,004.00	16.74	31,643.12	69,647.12
01-30-400-151	IMRF	2,367.55	4,743.31	30,848.00	15.38	26,104.69	56,952.69
01-30-400-161	SOCIAL SECURITY/FICA	949.03	1,900.15	12,343.00	15.39	10,442.85	22,785.85
01-30-630-101	SALARIES - PERMANENT EMPL	157,388.03	360,806.78	2,156,912.00	16.73	1,796,105.22	3,953,017.22
01-30-630-102	OVERTIME	34,436.08	65,757.53	285,000.00	23.07	219,242.47	504,242.47
01-30-630-103	OVERTIME - SPECIAL DETAIL &	0.00	0.00	23,000.00	0.00	23,000.00	46,000.00
01-30-630-104	PART TIME - CLERICAL	2,164.88	3,896.64	25,202.00	15.46	21,305.36	46,507.36
01-30-630-106	ACCREDITATION MANAGER	0.00	0.00	12,245.00	0.00	12,245.00	24,490.00
01-30-630-126	SALARIES - CLERICAL	12,760.17	25,520.32	165,880.00	15.38	140,359.68	306,239.68
01-30-630-127	OVERTIME - CLERICAL	535.01	1,117.05	8,000.00	13.96	6,882.95	14,882.95
01-30-630-141	EMPLOYEE BENEFIT - MEDICAL	28,368.76	56,851.84	318,338.00	17.86	261,486.16	579,824.16
01-30-630-144	EMPLOYEE BENEFIT - UNEMPL	0.00	0.00	1,985.00	0.00	1,985.00	3,970.00
01-30-630-155	POLICE PENSION	61,985.38	123,970.76	805,810.00	15.38	681,839.24	1,487,649.24
01-30-630-201	PHONE - TELEPHONES	925.00	1,858.46	28,000.00	6.64	26,141.54	54,141.54
01-30-630-202	ACCREDITATION	0.00	0.00	5,000.00	0.00	5,000.00	10,000.00
01-30-630-238	FIAT	0.00	3,500.00	3,500.00	100.00	0.00	7,000.00
01-30-630-241	FEES - FIELD COURT ATTORNE	0.00	0.00	12,000.00	0.00	12,000.00	24,000.00
01-30-630-242	DUPAGE CHILDREN'S CENTER	0.00	0.00	3,000.00	0.00	3,000.00	6,000.00

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Fund 01 - GENERAL FUND							
01-30-630-245	FIRING RANGE	0.00	0.00	2,000.00	0.00	2,000.00	4,000.00
01-30-630-246	RED LIGHT - ADJUDICATOR	0.00	0.00	7,000.00	0.00	7,000.00	14,000.00
01-30-630-247	RED LIGHT - CAMERA FEES	13,485.00	13,485.00	269,700.00	5.00	256,215.00	539,400.00
01-30-630-248	RED LIGHT - COM ED	111.53	224.17	2,400.00	9.34	2,175.83	4,800.00
01-30-630-249	RED LIGHT - MISC FEE	2,757.99	2,872.98	14,000.00	20.52	11,127.02	28,000.00
01-30-630-301	OFFICE SUPPLIES	165.84	515.18	6,600.00	7.81	6,084.82	13,200.00
01-30-630-302	PRINTING & PUBLISHING	0.00	669.56	5,450.00	12.29	4,780.44	10,900.00
01-30-630-303	FUEL/MILEAGE/WASH	3,917.58	4,266.39	92,300.00	4.62	88,033.61	184,600.00
01-30-630-304	SCHOOLS/CONFERENCES/TRA	1,106.09	1,122.90	25,000.00	4.49	23,877.10	50,000.00
01-30-630-305	TUITION REIMBURSEMENT	0.00	0.00	3,000.00	0.00	3,000.00	6,000.00
01-30-630-307	FEES/DUES/SUBSCRIPTIONS	4,373.43	8,494.33	12,500.00	67.95	4,005.67	25,000.00
01-30-630-308	CADET PROGRAM	0.00	287.50	4,000.00	7.19	3,712.50	8,000.00
01-30-630-311	POSTAGE & METER RENT	476.97	476.97	4,000.00	11.92	3,523.03	8,000.00
01-30-630-315	COPY SERVICE	259.44	259.44	4,000.00	6.49	3,740.56	8,000.00
01-30-630-331	OPERATING SUPPLIES	0.00	0.00	2,000.00	0.00	2,000.00	4,000.00
01-30-630-345	UNIFORMS	237.55	1,541.35	29,000.00	5.32	27,458.65	58,000.00
01-30-630-346	AMMUNITION	0.00	0.00	12,000.00	0.00	12,000.00	24,000.00
01-30-630-401	OPERATING EQUIPMENT	909.54	2,992.40	23,000.00	13.01	20,007.60	46,000.00
01-30-630-405	FURNITURE & OFFICE EQUIPME	0.00	0.00	500.00	0.00	500.00	1,000.00
01-30-630-409	MAINTENANCE - VEHICLES	2,439.11	2,597.01	72,000.00	3.61	69,402.99	144,000.00
01-30-630-421	MAINTENANCE - RADIO EQUIPM	0.00	0.00	6,300.00	0.00	6,300.00	12,600.00
ADMINISTRATION		334,961.16	696,088.90	4,531,817.00	15.36	3,835,728.10	9,063,634.00
DATA PROCESSING							8,367,545.10
01-30-640-212	EDP SOFTWARE	0.00	3,484.83	10,500.00	33.19	7,015.17	21,000.00
01-30-640-263	EDP EQUIPMENT MAINTENANC	0.00	0.00	11,000.00	0.00	11,000.00	22,000.00
01-30-640-306	CONSULTING SERVICES	0.00	0.00	1,500.00	0.00	1,500.00	3,000.00
DATA PROCESSING		0.00	3,484.83	23,000.00	15.15	19,515.17	46,000.00
RISK MANAGEMENT							
01-30-645-273	SELF INSURANCE - DEDUCTIBL	153.08	153.08	12,500.00	1.22	12,346.92	25,000.00
RISK MANAGEMENT		153.08	153.08	12,500.00	1.22	12,346.92	25,000.00
PATROL							
01-30-650-268	ANIMAL CONTROL	0.00	0.00	800.00	0.00	800.00	1,600.00
01-30-650-343	JAIL SUPPLIES	0.00	0.00	1,000.00	0.00	1,000.00	2,000.00
01-30-650-349	DRUG FORFEITURE EXP - FEDE	7,360.00	7,360.00	40,000.00	18.40	32,640.00	80,000.00
PATROL		7,360.00	7,360.00	41,800.00	17.61	34,440.00	83,600.00
INVESTIGATIVE							
01-30-655-335	CAMERA SUPPLIES	0.00	0.00	400.00	0.00	400.00	800.00
01-30-655-339	CONFIDENTIAL FUNDS	0.00	0.00	1,000.00	0.00	1,000.00	2,000.00
INVESTIGATIVE		0.00	0.00	1,400.00	0.00	1,400.00	2,800.00
TRAFFIC SAFETY							
01-30-660-105	PART TIME - CROSSING GUARD	141.22	702.65	5,049.00	13.92	4,346.35	10,098.00
TRAFFIC SAFETY		141.22	702.65	5,049.00	13.92	4,346.35	10,098.00

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<b>Fund 01 - GENERAL FUND</b>							
<b>ESDA COORDINATOR</b>							
01-30-665-263	SIREN MAINTENANCE	0.00	0.00	500.00	0.00	500.00	1,000.00
ESDA COORDINATOR		0.00	0.00	500.00	0.00	500.00	1,000.00
<b>CRIME PREVENTION</b>							
01-30-670-302	PRINTING & PUBLISHING	0.00	0.00	1,000.00	0.00	1,000.00	2,000.00
01-30-670-331	COMMODITIES	0.00	0.00	4,500.00	0.00	4,500.00	9,000.00
CRIME PREVENTION		0.00	0.00	5,500.00	0.00	5,500.00	11,000.00
<b>TELECOMMUNICATIONS</b>							
01-30-675-235	RADIO DISPATCHING	0.00	59,841.50	311,366.00	19.22	251,524.50	562,890.50
TELECOMMUNICATIONS		0.00	59,841.50	311,366.00	19.22	251,524.50	562,890.50
<b>Total Dept 30-POLICE DEPARTMENT</b>							
		355,190.62	880,450.83	5,088,729.00	17.30	4,208,278.17	9,297,007.17
<b>Dept 35-PUBLIC WORKS DEPARTMENT</b>							
<b>CAPITAL IMPROVEMENTS</b>							
01-35-765-641	EDP NEW EQUIPMENT	0.00	1,357.47	2,400.00	56.56	1,042.53	3,442.53
01-35-765-685	STREET IMPROVEMENTS	0.00	0.00	272,306.00	0.00	272,306.00	544,612.00
CAPITAL IMPROVEMENTS		0.00	1,357.47	274,706.00	0.49	273,348.53	548,054.53
<b>ADMINISTRATION</b>							
01-35-400-147	EMPLOYEE BENEFITS - MEDICA	298.56	552.29	3,125.00	17.67	2,572.71	5,697.71
01-35-400-151	IMRF	2,543.85	5,147.67	36,003.00	14.30	30,855.33	66,858.33
01-35-400-161	SOCIAL SECURITY/FICA	1,276.53	2,361.41	12,484.00	18.92	10,122.59	22,606.59
01-35-710-101	SALARIES - PERMANENT EMPL	10,647.99	22,093.38	151,562.00	14.58	129,468.62	281,030.62
01-35-710-102	OVERTIME	1,966.32	3,478.97	18,620.00	18.68	15,141.03	33,761.03
01-35-710-103	PART TIME - LABOR	6,087.07	8,775.34	21,560.00	40.70	12,784.66	34,344.66
01-35-710-126	SALARIES - CLERICAL	1,827.36	3,654.71	23,754.00	15.39	20,099.29	43,853.29
01-35-710-141	EMPLOYEE BENEFITS - MEDICA	1,261.02	2,522.03	27,629.00	9.13	25,106.97	52,735.97
01-35-710-144	EMPLOYEE BENEFITS - UNEMP	0.00	0.00	178.00	0.00	178.00	356.00
01-35-710-201	TELEPHONES	139.41	139.41	2,500.00	5.58	2,360.59	4,860.59
01-35-710-301	OFFICE SUPPLIES	0.00	0.00	500.00	0.00	500.00	1,000.00
01-35-710-302	PRINTING & PUBLISHING	0.00	0.00	1,250.00	0.00	1,250.00	2,500.00
01-35-710-303	FUEL/MILEAGE/WASH	528.28	528.28	12,500.00	4.23	11,971.72	24,471.72
01-35-710-304	SCHOOLS/CONFERENCES/TRAVEL	0.00	42.00	3,000.00	1.40	2,958.00	5,958.00
01-35-710-306	REIMB PERSONAL EXPENSE	0.00	0.00	300.00	0.00	300.00	600.00
01-35-710-307	FEES/DUES/SUBSCRIPTIONS	100.00	100.00	350.00	28.57	250.00	600.00
01-35-710-311	POSTAGE & METER RENT	0.00	0.00	1,500.00	0.00	1,500.00	3,000.00
01-35-710-345	UNIFORMS	211.61	211.61	4,500.00	4.70	4,288.39	8,788.39
01-35-710-405	FURNITURE & OFFICE EQUIPME	0.00	0.00	500.00	0.00	500.00	1,000.00
ADMINISTRATION		26,888.00	49,607.10	321,815.00	15.41	272,207.90	594,022.90
<b>DATA PROCESSING</b>							
01-35-715-212	EDP SOFTWARE	0.00	409.98	450.00	91.11	40.02	490.02
01-35-715-263	EQUIPMENT MAINTENANCE	104.85	209.70	0.00	100.00	(209.70)	(209.70)

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Fund 01 - GENERAL FUND								
01-35-715-401	OPERATING SUPPLIES & EQUIP	42.77	42.77	5,000.00	0.86	4,957.23	10,000.00	9,957.23
DATA PROCESSING		147.62	662.45	5,450.00	12.16	4,787.55	10,900.00	10,237.55
ENGINEERING								
01-35-720-245	FEES - ENGINEERING	15,475.50	15,475.50	164,623.00	9.40	149,147.50	329,246.00	313,770.50
01-35-720-254	PLAN REVIEW - ENGINEER	0.00	0.00	1,500.00	0.00	1,500.00	3,000.00	3,000.00
ENGINEERING		15,475.50	15,475.50	166,123.00	9.32	150,647.50	332,246.00	316,770.50
BUILDINGS								
01-35-725-412	MAINTENANCE - GAS TANKS AN	0.00	0.00	8,400.00	0.00	8,400.00	16,800.00	16,800.00
01-35-725-413	MAINTENANCE - GARAGE	139.00	139.00	3,000.00	4.63	2,861.00	6,000.00	5,861.00
01-35-725-414	MAINTENANCE - SALT BINS	0.00	0.00	500.00	0.00	500.00	1,000.00	1,000.00
01-35-725-415	NICOR GAS	35.47	35.47	4,000.00	0.89	3,964.53	8,000.00	7,964.53
01-35-725-417	SANITARY USER CHARGE	0.00	0.00	200.00	0.00	200.00	400.00	400.00
01-35-725-418	MAINTENANCE - PW BUILDING	915.70	2,329.12	8,500.00	27.40	6,170.88	17,000.00	14,670.88
BUILDINGS		1,090.17	2,503.59	24,600.00	10.18	22,096.41	49,200.00	46,696.41
EQUIPMENT REPAIR								
01-35-735-409	MAINTENANCE - VEHICLES	184.26	184.26	20,000.00	0.92	19,815.74	40,000.00	39,815.74
01-35-735-411	MAINTENANCE - EQUIPMENT	28.24	28.24	4,000.00	0.71	3,971.76	8,000.00	7,971.76
EQUIPMENT REPAIR		212.50	212.50	24,000.00	0.89	23,787.50	48,000.00	47,787.50
SNOW REMOVAL								
01-35-740-287	SNOW REMOVAL CONTRACT	0.00	0.00	60,000.00	0.00	60,000.00	120,000.00	120,000.00
01-35-740-306	REIMB PERSONAL EXPENSES	0.00	0.00	200.00	0.00	200.00	400.00	400.00
01-35-740-411	MAINTENANCE - EQUIPMENT	0.00	0.00	6,000.00	0.00	6,000.00	12,000.00	12,000.00
SNOW REMOVAL		0.00	0.00	66,200.00	0.00	66,200.00	132,400.00	132,400.00
STREET LIGHTING								
01-35-745-207	ENERGY - STREET LIGHTS	1,619.33	2,571.48	16,640.00	15.45	14,068.52	33,280.00	30,708.52
01-35-745-223	MAINTENANCE - STREET LIGHT	2,228.00	3,158.00	15,000.00	21.05	11,842.00	30,000.00	26,842.00
01-35-745-224	MAINTENANCE - TRAFFIC SIGN	0.00	0.00	7,000.00	0.00	7,000.00	14,000.00	14,000.00
STREET LIGHTING		3,847.33	5,729.48	38,640.00	14.83	32,910.52	77,280.00	71,550.52
STORM WATER IMPROVEMENTS								
01-35-750-286	JET CLEANING CULVERT	0.00	0.00	20,000.00	0.00	20,000.00	40,000.00	40,000.00
01-35-750-289	SITE IMPROVEMENTS	0.00	0.00	20,000.00	0.00	20,000.00	40,000.00	40,000.00
01-35-750-290	EQUIPMENT RENTAL	68.20	134.61	5,000.00	2.69	4,865.39	10,000.00	9,865.39
01-35-750-328	STREET & ROW MAINTENANCE	16,461.84	30,181.55	90,000.00	33.54	59,818.45	180,000.00	149,818.45
01-35-750-329	MAINTENANCE - SAW MILL CRE	0.00	0.00	1,500.00	0.00	1,500.00	3,000.00	3,000.00
01-35-750-338	TREE MAINTENANCE	5,733.00	5,733.00	256,640.00	2.23	250,907.00	513,280.00	507,547.00
01-35-750-381	STORM WATER IMPROVEMENT	270.72	270.72	40,000.00	0.68	39,729.28	80,000.00	79,729.28
STORM WATER IMPROVEMENTS		22,533.76	36,319.88	433,140.00	8.39	396,820.12	866,280.00	829,960.12
STREET MAINTENANCE								
01-35-755-279	TRASH REMOVAL	0.00	0.00	1,250.00	0.00	1,250.00	2,500.00	2,500.00
01-35-755-281	ROUTE 83 BEAUTIFICATION	5,563.18	7,026.24	49,000.00	14.34	41,973.76	98,000.00	90,973.76

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ORIGINAL  
BUDGET

% BDGT  
USED

AVAILABLE  
BALANCE

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<b>Fund 01 - GENERAL FUND</b>								
01-35-755-282	REIMB EXP - CONSTRUCTION	0.00	0.00	500.00	0.00	500.00	1,000.00	1,000.00
01-35-755-283	REIMB EXP - OTHER	0.00	0.00	1,500.00	0.00	1,500.00	3,000.00	3,000.00
01-35-755-284	REIMB EXP - BRUSH PICKUP	0.00	0.00	20,000.00	0.00	20,000.00	40,000.00	40,000.00
01-35-755-290	EQUIPMENT RENTAL	0.00	0.00	750.00	0.00	750.00	1,500.00	1,500.00
01-35-755-328	STREET & ROW MAINTENANCE	0.00	0.00	20,000.00	0.00	20,000.00	40,000.00	40,000.00
01-35-755-331	OPERATING SUPPLIES	860.00	860.00	60,000.00	1.43	59,140.00	120,000.00	119,140.00
01-35-755-332	J.U.L.I.E.	0.00	0.00	2,387.00	0.00	2,387.00	4,774.00	4,774.00
01-35-755-333	ROAD SIGNS	231.70	231.70	9,000.00	2.57	8,768.30	18,000.00	17,768.30
01-35-755-401	OPERATING EQUIPMENT	140.99	140.99	2,500.00	5.64	2,359.01	5,000.00	4,859.01
	<b>STREET MAINTENANCE</b>	<b>6,795.87</b>	<b>8,258.93</b>	<b>166,887.00</b>	<b>4.95</b>	<b>158,628.07</b>	<b>333,774.00</b>	<b>325,515.07</b>
<b>NUISANCE CONTROL</b>								
01-35-760-258	PEST CONTROL	0.00	0.00	1,000.00	0.00	1,000.00	2,000.00	2,000.00
01-35-760-259	MOSQUITO ABATEMENT	6,425.00	19,275.00	32,100.00	60.05	12,825.00	64,200.00	44,925.00
	<b>NUISANCE CONTROL</b>	<b>6,425.00</b>	<b>19,275.00</b>	<b>33,100.00</b>	<b>58.23</b>	<b>13,825.00</b>	<b>66,200.00</b>	<b>46,925.00</b>
<b>Total Dept 35-PUBLIC WORKS DEPARTMENT</b>								
		<b>83,415.75</b>	<b>139,401.90</b>	<b>1,554,661.00</b>	<b>8.97</b>	<b>1,415,259.10</b>	<b>3,109,322.00</b>	<b>2,969,920.10</b>
<b>Dept 40-BUILDING &amp; ZONING DEPARTMENT</b>								
<b>GENERAL MANAGEMENT</b>								
01-40-400-147	EMPLOYEE BENEFITS - MEDICA	132.91	298.45	1,707.00	17.48	1,408.55	3,414.00	3,115.55
01-40-400-151	IMRF	1,663.33	3,717.10	20,882.00	17.80	17,164.90	41,764.00	38,046.90
01-40-400-161	SOCIAL SECURITY/FICA	568.24	1,276.06	7,298.00	17.49	6,021.94	14,596.00	13,319.94
01-40-810-101	SALARIES - PERMANENT EMPL	5,655.20	11,310.40	73,517.00	15.38	62,206.60	147,034.00	135,723.60
01-40-810-102	OVERTIME	1,552.55	5,453.41	15,413.00	35.38	9,959.59	30,826.00	25,372.59
01-40-810-126	SALARIES - CLERICAL	2,324.18	4,537.71	28,775.00	15.77	24,237.29	57,550.00	53,012.29
01-40-810-141	EMPLOYEE BENEFITS - MEDICA	2,281.91	4,563.82	27,975.00	16.31	23,411.18	55,950.00	51,386.18
01-40-810-144	EMPLOYEE BENEFITS - UNEMP	0.00	0.00	107.00	0.00	107.00	214.00	214.00
01-40-810-201	TELEPHONES	(44.55)	(44.55)	1,000.00	(4.46)	1,044.55	2,044.55	2,044.55
01-40-810-301	OFFICE SUPPLIES	216.01	216.01	750.00	28.80	533.99	1,500.00	1,283.99
01-40-810-302	PRINTING & PUBLISHING	0.00	0.00	750.00	0.00	750.00	1,500.00	1,500.00
01-40-810-303	FUEL/MILEAGE/WASH	72.78	72.78	1,250.00	5.82	1,177.22	2,500.00	2,427.22
01-40-810-304	SCHOOLS/CONFERENCES/TRA	0.00	20.00	1,000.00	2.00	980.00	2,000.00	1,980.00
01-40-810-307	FEES/DUES/SUBSCRIPTIONS	0.00	0.00	500.00	0.00	500.00	1,000.00	1,000.00
01-40-810-311	POSTAGE & METER RENT	0.00	0.00	400.00	0.00	400.00	800.00	800.00
01-40-810-401	OPERATING EQUIPMENT	0.00	0.00	200.00	0.00	200.00	400.00	400.00
01-40-810-409	MAINTENANCE - VEHICLES	2,182.35	2,182.35	1,000.00	218.24	(1,182.35)	2,000.00	(182.35)
	<b>GENERAL MANAGEMENT</b>	<b>16,604.91</b>	<b>33,603.54</b>	<b>182,524.00</b>	<b>18.41</b>	<b>148,920.46</b>	<b>365,048.00</b>	<b>331,444.46</b>
<b>CAPITAL IMPROVEMENTS</b>								
01-40-835-611	FURNITURE & OFFICE EQUIPME	700.00	700.00	0.00	100.00	(700.00)	0.00	(700.00)
	<b>CAPITAL IMPROVEMENTS</b>	<b>700.00</b>	<b>700.00</b>	<b>0.00</b>	<b>100.00</b>	<b>(700.00)</b>	<b>0.00</b>	<b>(700.00)</b>
<b>DATA PROCESSING</b>								
01-40-815-212	EDP SOFTWARE	0.00	307.49	450.00	68.33	142.51	900.00	592.51
01-40-815-305	EDP PERSONNEL TRAINING	0.00	0.00	1,350.00	0.00	1,350.00	2,700.00	2,700.00

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Fund 01 - GENERAL FUND							
01-40-815-306	CONSULTING SERVICES	0.00	0.00	750.00	0.00	750.00	1,500.00
01-40-815-345	UNIFORMS	0.00	0.00	400.00	0.00	400.00	800.00
01-40-815-401	EDP OPERATING EQUIPMENT	0.00	1,033.32	2,400.00	43.06	1,366.68	3,766.68
DATA PROCESSING		0.00	1,340.81	5,350.00	25.06	4,009.19	9,359.19
ENGINEERING							
01-40-820-245	FEES - ENGINEERING	0.00	0.00	4,000.00	0.00	4,000.00	8,000.00
01-40-820-246	FEES - DRAINAGE ENGINEER	209.00	209.00	6,000.00	3.48	5,791.00	11,791.00
01-40-820-247	REIMB EXP - ENGINEERING	0.00	0.00	500.00	0.00	500.00	1,000.00
01-40-820-254	PLAN REVIEW - ENGINEER	254.50	254.50	5,000.00	5.09	4,745.50	9,745.50
01-40-820-255	PLAN REVIEW - STRUCTURAL	0.00	0.00	5,000.00	0.00	5,000.00	10,000.00
01-40-820-258	PLAN REVIEW - BUILDING CODE	2,918.83	2,918.83	30,000.00	9.73	27,081.17	57,081.17
01-40-820-259	PLAN REVIEW - DRAINAGE ENGI	1,359.68	1,359.68	12,500.00	10.88	11,140.32	23,640.32
ENGINEERING		4,742.01	4,742.01	63,000.00	7.53	58,257.99	121,257.99
INSPECTION							
01-40-830-109	PART TIME - INSPECTOR	2,877.00	2,877.00	30,000.00	9.59	27,123.00	57,123.00
01-40-830-115	PLUMBING INSPECTION	675.00	675.00	6,000.00	11.25	5,325.00	11,325.00
01-40-830-117	ELEVATOR INSPECTION	0.00	0.00	7,000.00	0.00	7,000.00	14,000.00
01-40-830-119	CODE ENFORCEMENT INSPECT	0.00	0.00	4,000.00	0.00	4,000.00	8,000.00
INSPECTION		3,552.00	3,552.00	47,000.00	7.56	43,448.00	90,448.00
Total Dept 40-BUILDING & ZONING DEPARTMENT							
		25,598.92	43,938.36	297,874.00	14.75	253,935.64	551,809.64
Fund 01 - GENERAL FUND:							
TOTAL EXPENDITURES							
		630,324.37	1,454,454.82	10,128,108.00	14.36	8,673,653.18	18,801,761.18

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Fund 02 - WATER FUND								
Dept 50-WATER DEPARTMENT								
CAPITAL IMPROVEMENTS								
02-50-440-694	DISTRIBUTION SYSTEM REPLA	0.00	0.00	10,000.00	0.00	10,000.00	20,000.00	20,000.00
02-50-440-695	EDP	0.00	0.00	23,276.00	0.00	23,276.00	46,552.00	46,552.00
CAPITAL IMPROVEMENTS								
		0.00	0.00	33,276.00	0.00	33,276.00	66,552.00	66,552.00
ADMINISTRATION								
02-50-400-147	EMPLOYEE BENEFITS - MEDICA	253.57	484.23	3,177.00	15.24	2,692.77	6,354.00	5,869.77
02-50-400-151	IMRF	2,974.02	5,588.32	36,035.00	15.51	30,446.68	72,070.00	66,481.68
02-50-400-161	SOCIAL SECURITY/FICA	1,084.47	2,070.93	13,585.00	15.24	11,514.07	27,170.00	25,099.07
02-50-401-101	SALARIES - PERMANENT EMPL	9,469.12	19,735.62	137,419.00	14.36	117,683.38	274,838.00	255,102.38
02-50-401-102	OVERTIME	5,610.65	8,362.38	32,944.00	25.38	24,581.62	65,888.00	57,525.62
02-50-401-103	PART TIME - LABOR	595.03	1,644.55	25,000.00	6.58	23,355.45	50,000.00	48,355.45
02-50-401-126	SALARIES - CLERICAL	1,827.20	3,654.41	23,754.00	15.38	20,099.59	47,508.00	43,853.59
02-50-401-141	EMPLOYEE BENEFITS - MEDICA	1,316.23	2,632.47	28,347.00	9.29	25,714.53	56,694.00	54,061.53
02-50-401-144	EMPLOYEE BENEFITS - UNEMP	0.00	0.00	178.00	0.00	178.00	356.00	356.00
02-50-401-201	PHONE - TELEPHONES	214.49	914.02	9,600.00	9.52	8,685.98	19,200.00	18,285.98
02-50-401-239	FEES - VILLAGE ATTORNEY	0.00	0.00	1,000.00	0.00	1,000.00	2,000.00	2,000.00
02-50-401-301	OFFICE SUPPLIES	0.00	31.88	1,500.00	2.13	1,468.12	3,000.00	2,968.12
02-50-401-302	PRINTING & PUBLISHING	0.00	0.00	6,000.00	0.00	6,000.00	12,000.00	12,000.00
02-50-401-303	FUEL/MILEAGE/WASH	528.29	528.29	3,500.00	15.09	2,971.71	7,000.00	6,471.71
02-50-401-304	SCHOOLS/CONFERENCES/TRA	0.00	0.00	2,000.00	0.00	2,000.00	4,000.00	4,000.00
02-50-401-306	REIMBURSE PERSONAL EXPEN	0.00	0.00	150.00	0.00	150.00	300.00	300.00
02-50-401-307	FEES/DUES/SUBSCRIPTIONS	0.00	330.00	550.00	60.00	220.00	1,100.00	770.00
02-50-401-311	POSTAGE & METER RENT	0.00	0.00	6,500.00	0.00	6,500.00	13,000.00	13,000.00
02-50-401-405	FURNITURE & OFFICE EQUIPME	0.00	0.00	500.00	0.00	500.00	1,000.00	1,000.00
ADMINISTRATION		23,873.07	45,977.10	331,739.00	13.86	285,761.90	663,478.00	617,500.90
OTHER								
02-50-449-102	INTEREST EXPENSE	0.00	5,017.00	10,034.00	50.00	5,017.00	20,068.00	15,051.00
02-50-449-104	BOND PRINCIPAL EXPENSE	0.00	0.00	10,286.00	0.00	10,286.00	20,572.00	20,572.00
02-50-449-105	INTEREST EXPENSE - IEPA LOA	0.00	0.00	17,145.00	0.00	17,145.00	34,290.00	34,290.00
02-50-449-106	PRINCIPAL EXPENSE - IEPA LO	0.00	0.00	38,840.00	0.00	38,840.00	77,680.00	77,680.00
OTHER		0.00	5,017.00	76,305.00	6.57	71,288.00	152,610.00	147,593.00
DATA PROCESSING								
02-50-417-212	EDP SOFTWARE	0.00	409.95	750.00	54.66	340.05	1,500.00	1,090.05
02-50-417-305	EDP PERSONNEL TRAINING	0.00	0.00	1,350.00	0.00	1,350.00	2,700.00	2,700.00
02-50-417-401	EDP OPERATING EQUIPMENT	0.00	1,957.46	4,000.00	48.94	2,042.54	8,000.00	6,042.54
DATA PROCESSING		0.00	2,367.41	6,100.00	38.81	3,732.59	12,200.00	9,832.59
ENGINEERING								
02-50-405-245	FEES - ENGINEERING	0.00	0.00	2,000.00	0.00	2,000.00	4,000.00	4,000.00
ENGINEERING		0.00	0.00	2,000.00	0.00	2,000.00	4,000.00	4,000.00
TRANSFERS TO OTHER FUNDS								
02-50-410-501	REIMBURSE OVERHEAD GENER	43,582.58	87,165.16	522,991.00	16.67	435,825.84	1,045,982.00	958,816.84
02-50-900-109	TRANSFER TO WATER CAPITAL	0.00	0.00	100,000.00	0.00	100,000.00	200,000.00	200,000.00



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<b>Fund 02 - WATER FUND</b>							
02-50-900-111	TRANSFER TO DEBT SERVICE	0.00	0.00	31,616.00	0.00	31,616.00	63,232.00
02-50-900-112	TRANSFER TO DEBT SERVICE -	0.00	7,717.50	15,435.00	50.00	7,717.50	23,152.50
<b>TRANSFERS TO OTHER FUNDS</b>		43,582.58	94,882.66	670,042.00	14.16	575,159.34	1,245,201.34
<b>WATER PRODUCTION</b>							
02-50-420-206	ENERGY - ELECTRIC PUMP	1,196.80	1,897.05	12,000.00	15.81	10,102.95	22,102.95
02-50-420-294	LANDSCAPING - WELLS 1 & 3	0.00	0.00	500.00	0.00	500.00	1,000.00
02-50-420-297	LANDSCAPING - STANDPIPE	0.00	0.00	1,000.00	0.00	1,000.00	2,000.00
02-50-420-361	CHEMICALS	272.00	272.00	1,750.00	15.54	1,478.00	3,228.00
02-50-420-362	SAMPLING ANALYSIS	0.00	0.00	2,678.00	0.00	2,678.00	5,356.00
02-50-420-488	MAINTENANCE - PUMPS & WELL	0.00	0.00	500.00	0.00	500.00	1,000.00
02-50-420-491	PUMP INSPECTION REPAIR MAI	0.00	0.00	500.00	0.00	500.00	1,000.00
02-50-420-575	PURCHASE OF WATER	145,080.00	145,080.00	1,624,000.00	8.93	1,478,920.00	3,102,920.00
<b>WATER PRODUCTION</b>		146,548.80	147,249.05	1,642,928.00	8.96	1,495,678.95	3,138,606.95
<b>WATER STORAGE</b>							
02-50-425-473	WELLHOUSE REPAIRS & MAINT	0.00	0.00	1,500.00	0.00	1,500.00	3,000.00
02-50-425-474	WELLHOUSE REPAIRS & MAIN -	0.00	0.00	1,000.00	0.00	1,000.00	2,000.00
02-50-425-475	MATERIALS & SUPPLIES- STAN	0.00	0.00	1,000.00	0.00	1,000.00	2,000.00
02-50-425-485	REPAIRS & MAINTENANCE-STA	665.31	1,769.68	5,985.00	29.57	4,215.32	10,200.32
<b>WATER STORAGE</b>		665.31	1,769.68	9,485.00	18.66	7,715.32	17,200.32
<b>TRANSPORTATION/DISTRIBUTION</b>							
02-50-430-276	LEAK SURVEYS	642.00	642.00	10,000.00	6.42	9,358.00	19,358.00
02-50-430-277	WATER DISTRIBUTION REPAIRS	20,475.29	23,296.44	95,000.00	24.52	71,703.56	166,703.56
02-50-430-299	LANDSCAPING - OTHER	184.88	369.76	4,000.00	9.24	3,630.24	7,630.24
02-50-430-401	OPERATING EQUIPMENT	0.00	0.00	1,000.00	0.00	1,000.00	2,000.00
02-50-430-425	J. U. L. I. E. MAINTENANCE & SU	0.00	0.00	750.00	0.00	750.00	1,500.00
02-50-430-476	MATERIAL & SUPPLIES - DISTRI	788.16	2,694.72	12,500.00	21.56	9,805.28	22,305.28
<b>TRANSPORTATION/DISTRIBUTION</b>		22,090.33	27,002.92	123,250.00	21.91	96,247.08	219,497.08
<b>METERS &amp; BILLING</b>							
02-50-435-278	METERS FLOW TESTING	0.00	0.00	2,000.00	0.00	2,000.00	4,000.00
02-50-435-461	NEW METERING EQUIPMENT	33,046.45	33,046.45	7,500.00	440.62	(25,546.45)	(18,046.45)
02-50-435-462	METER REPLACEMENT	0.00	0.00	500.00	0.00	500.00	1,000.00
02-50-435-463	MAINTENANCE - METER EQUIP	0.00	0.00	5,000.00	0.00	5,000.00	10,000.00
<b>METERS &amp; BILLING</b>		33,046.45	33,046.45	15,000.00	220.31	(18,046.45)	(3,046.45)
<b>Total Dept 50-WATER DEPARTMENT</b>		269,806.54	357,312.27	2,910,125.00	12.28	2,552,812.73	5,462,937.73
<b>Fund 02 - WATER FUND:</b>							
<b>TOTAL EXPENDITURES</b>		269,806.54	357,312.27	2,910,125.00	12.28	2,552,812.73	5,462,937.73

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APPROP. APPROP. AVAIL.

2016-17  
ORIGINAL  
BUDGET% BDGT  
USEDYTD BALANCE  
06/30/2016ACTIVITY FOR  
MONTH  
06/30/16

DESCRIPTION

GL NUMBER

AVAILABLE  
BALANCE

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APPROP. APPROP. AVAIL.

ACTIVITY FOR  
MONTH  
06/30/16

2016-17  
ORIGINAL  
BUDGET

YTD BALANCE  
06/30/2016

% BDGT  
USED

AVAILABLE  
BALANCE

GL NUMBER	DESCRIPTION	ACTIVITY FOR MONTH 06/30/16	YTD BALANCE 06/30/2016	2016-17 ORIGINAL BUDGET	% BDGT USED	AVAILABLE BALANCE	APPROP.	APPROP. AVAIL.
Fund 03 - HOTEL/MOTEL TAX FUND								
Dept 53-HOTEL/MOTEL								
COMMUNITY RELATIONS								
03-53-435-303	WILLOWBROOK MOBILE PHONE	0.00	0.00	1,024.00	0.00	1,024.00	2,048.00	2,048.00
03-53-435-308	GRANT PILOT PROGRAM	0.00	0.00	5,000.00	0.00	5,000.00	10,000.00	10,000.00
03-53-435-316	LANDSCAPE BEAUTIFICATION	0.00	1,620.80	3,000.00	54.03	1,379.20	6,000.00	4,379.20
03-53-435-317	ADVERTISING	0.00	0.00	100,000.00	0.00	100,000.00	200,000.00	200,000.00
03-53-435-319	CHAMBER DIRECTORY	0.00	0.00	3,000.00	0.00	3,000.00	6,000.00	6,000.00
03-53-435-320	TRANSPORTATION	0.00	0.00	60,000.00	0.00	60,000.00	120,000.00	120,000.00
COMMUNITY RELATIONS								
		0.00	1,620.80	172,024.00	0.94	170,403.20	344,048.00	342,427.20
ADMINISTRATION								
03-53-401-307	FEES/DUES/SUBSCRIPTIONS	0.00	0.00	12,150.00	0.00	12,150.00	24,300.00	24,300.00
03-53-401-311	POSTAGE & METER RENT	0.00	0.00	125.00	0.00	125.00	250.00	250.00
ADMINISTRATION								
		0.00	0.00	12,275.00	0.00	12,275.00	24,550.00	24,550.00
SPECIAL EVENTS								
03-53-436-378	WINE & DINE INTELLIGENTLY	0.00	0.00	2,000.00	0.00	2,000.00	4,000.00	4,000.00
03-53-436-379	SPECIAL PROMOTIONAL EVENT	2,500.00	2,500.00	2,500.00	100.00	0.00	5,000.00	2,500.00
SPECIAL EVENTS								
		2,500.00	2,500.00	4,500.00	55.56	2,000.00	9,000.00	6,500.00
Total Dept 53-HOTEL/MOTEL								
		2,500.00	4,120.80	188,799.00	2.18	184,678.20	377,598.00	373,477.20
Fund 03 - HOTEL/MOTEL TAX FUND:								
TOTAL EXPENDITURES								
		2,500.00	4,120.80	188,799.00	2.18	184,678.20	377,598.00	373,477.20

EXPENDITURE REPORT FOR WILLOWBROOK  
PERIOD ENDING 06/30/2016

Page: 17/23

APPROP. APPROP. AVAIL.

ACTIVITY FOR  
MONTH  
06/30/16

2016-17  
ORIGINAL  
BUDGET

YTD BALANCE  
06/30/2016

% BDGT  
USED

AVAILABLE  
BALANCE

GL NUMBER DESCRIPTION

Fund 04 - MOTOR FUEL TAX FUND									
Dept 56-MOTOR FUEL TAX									
CAPITAL IMPROVEMENTS									
04-56-430-684	STREET MAINTENANCE CONTR	0.00	0.00	248,392.00	0.00	248,392.00	496,784.00	496,784.00	
04-56-430-685	LAFO PROJECT	0.00	0.00	163,762.00	0.00	163,762.00	327,524.00	327,524.00	
CAPITAL IMPROVEMENTS		0.00	0.00	412,154.00	0.00	412,154.00	824,308.00	824,308.00	

Total Dept 56-MOTOR FUEL TAX

0.00	0.00	412,154.00	0.00	412,154.00	824,308.00	824,308.00			
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Fund 04 - MOTOR FUEL TAX FUND:

TOTAL EXPENDITURES

0.00	0.00	412,154.00	0.00	412,154.00	824,308.00	824,308.00			
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EXPENDITURE REPORT FOR WILLOWBROOK  
PERIOD ENDING 06/30/2016

Page: 18/23

APPROP. APPROP. AVAIL.

ACTIVITY FOR  
MONTH  
06/30/16

2016-17  
ORIGINAL  
BUDGET

% BDGT  
USED

AVAILABLE  
BALANCE

GL NUMBER DESCRIPTION

Fund 06 - SSA ONE BOND & INTEREST FUND  
Dept 60-SSA BOND

OTHER BOND PRINCIPAL EXPENSE

06-60-550-401 BOND INTEREST EXPENSE

06-60-550-402

OTHER

0.00 89,742.50 89,742.50 0.00 140,000.00 0.00 140,000.00 280,000.00 280,000.00  
89,742.50 89,742.50 50.00 179,485.00 358,970.00 269,227.50  
89,742.50 89,742.50 28.09 319,485.00 638,970.00 549,227.50

Total Dept 60-SSA BOND

89,742.50 89,742.50 28.09 319,485.00 638,970.00 549,227.50

Fund 06 - SSA ONE BOND & INTEREST FUND:

TOTAL EXPENDITURES

89,742.50 89,742.50 28.09 319,485.00 638,970.00 549,227.50

EXPENDITURE REPORT FOR WILLOWBROOK  
PERIOD ENDING 06/30/2016

Page: 19/23

GL NUMBER	DESCRIPTION	ACTIVITY FOR MONTH 06/30/16	YTD BALANCE 06/30/2016	2016-17 ORIGINAL BUDGET	% BDGT USED	AVAILABLE BALANCE	APPROP. AVAIL.
Fund 07 - POLICE PENSION FUND							
Dept 62							
ADMINISTRATION							
07-62-401-242	LEGAL FEES	0.00	0.00	2,000.00	0.00	2,000.00	4,000.00
07-62-401-251	AUDIT FEES	0.00	0.00	3,869.00	0.00	3,869.00	7,738.00
07-62-401-252	ACTUARY SERVICES	0.00	0.00	4,400.00	0.00	4,400.00	8,800.00
07-62-401-253	FINANCIAL ADVISORY FEES	0.00	0.00	33,917.00	0.00	33,917.00	67,834.00
07-62-401-254	FIDUCIARY INSURANCE	0.00	0.00	3,098.00	0.00	3,098.00	6,196.00
07-62-401-304	SCHOOL/CONFERENCES/TRAV	0.00	0.00	3,237.00	0.00	3,237.00	6,474.00
07-62-401-307	FEES/DUES/SUBSCRIPTIONS	0.00	0.00	819.00	0.00	819.00	1,638.00
07-62-401-531	FILING FEE - IL DEPT OF INSUR	0.00	3,862.74	3,863.00	99.99	0.26	7,726.00
ADMINISTRATION							
		0.00	3,862.74	55,203.00	7.00	51,340.26	110,406.00
PENSION BENEFITS							
07-62-401-581	PENSION BENEFITS	76,794.38	153,360.72	844,957.00	18.15	691,596.28	1,336,553.28
07-62-401-582	WIDOW'S PENSION	3,209.37	6,418.74	38,512.00	16.67	32,093.26	70,605.26
07-62-401-583	DISABILITY BENEFITS	4,492.91	8,985.82	58,770.00	15.29	49,784.18	108,554.18
PENSION BENEFITS							
		84,496.66	168,765.28	942,239.00	17.91	773,473.72	1,536,553.28
Total Dept 62							
		84,496.66	172,628.02	997,442.00	17.31	824,813.98	1,622,255.98
Fund 07 - POLICE PENSION FUND:							
TOTAL EXPENDITURES							
		84,496.66	172,628.02	997,442.00	17.31	824,813.98	1,622,255.98

EXPENDITURE REPORT FOR WILLOWBROOK  
PERIOD ENDING 06/30/2016

Page: 20/23

APPROP. APPROP. AVAIL.

ACTIVITY FOR  
MONTH  
06/30/16

2016-17  
ORIGINAL  
BUDGET

YTD BALANCE  
06/30/2016

% BDGT  
USED

AVAILABLE  
BALANCE

GL NUMBER	DESCRIPTION	ACTIVITY FOR MONTH 06/30/16	YTD BALANCE 06/30/2016	2016-17 ORIGINAL BUDGET	% BDGT USED	AVAILABLE BALANCE	APPROP.	APPROP. AVAIL.
Fund 09 - WATER CAPITAL IMPROVEMENTS FUND								
Dept 65-WATER CAPITAL IMPROVEMENTS								
CAPITAL IMPROVEMENTS								
09-65-440-600	WATER SYSTEM IMPROVEMEN	0.00	0.00	20,765.00	0.00	20,765.00	41,530.00	41,530.00
09-65-440-603	VALVE INSERTION PROGRAM	0.00	0.00	6,000.00	0.00	6,000.00	12,000.00	12,000.00
09-65-440-604	WATER TANK REPAIRS	7,439.53	7,439.53	981,760.00	0.76	974,320.47	1,963,520.00	1,956,080.47
CAPITAL IMPROVEMENTS		7,439.53	7,439.53	1,008,525.00	0.74	1,001,085.47	2,017,050.00	2,009,610.47

Total Dept 65-WATER CAPITAL IMPROVEMENTS		7,439.53	7,439.53	1,008,525.00	0.74	1,001,085.47	2,017,050.00	2,009,610.47
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Fund 09 - WATER CAPITAL IMPROVEMENTS FUND:								
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TOTAL EXPENDITURES		7,439.53	7,439.53	1,008,525.00	0.74	1,001,085.47	2,017,050.00	2,009,610.47
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EXPENDITURE REPORT FOR WILLOWBROOK  
PERIOD ENDING 06/30/2016

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GL NUMBER	DESCRIPTION	ACTIVITY FOR MONTH 06/30/16	YTD BALANCE 06/30/2016	2016-17 ORIGINAL BUDGET	% BDGT USED	AVAILABLE BALANCE	APPROP.	APPROP. AVAIL.
Fund 10 - CAPITAL PROJECT FUND								
Dept 68-CAPITAL PROJECTS								
CAPITAL IMPROVEMENTS								
10-68-540-423	TRAFFIC IMPROVEMENTS	0.00	0.00	85,500.00	0.00	85,500.00	171,000.00	171,000.00
	CAPITAL IMPROVEMENTS	0.00	0.00	85,500.00	0.00	85,500.00	171,000.00	171,000.00
Total Dept 68-CAPITAL PROJECTS								
		0.00	0.00	85,500.00	0.00	85,500.00	171,000.00	171,000.00
Fund 10 - CAPITAL PROJECT FUND:								
TOTAL EXPENDITURES								
		0.00	0.00	85,500.00	0.00	85,500.00	171,000.00	171,000.00



EXPENDITURE REPORT FOR WILLOWBROOK  
PERIOD ENDING 06/30/2016

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APPROP. APPROP. AVAIL.

ACTIVITY FOR  
MONTH  
06/30/16

2016-17  
ORIGINAL  
BUDGET

YTD BALANCE  
06/30/2016

% BDGT  
USED

AVAILABLE  
BALANCE

GL NUMBER	DESCRIPTION	06/30/16	06/30/2016	2016-17 ORIGINAL BUDGET	% BDGT USED	AVAILABLE BALANCE	APPROP.	APPROP. AVAIL.
Fund 11 - DEBT SERVICE FUND								
Dept 70-DEBT SERVICE FUND								
OTHER								
11-70-550-401	BOND PRINCIPAL EXPENSE	0.00	0.00	199,714.00	0.00	199,714.00	399,428.00	399,428.00
11-70-550-402	BOND INTEREST EXPENSE	0.00	63,158.00	126,316.00	50.00	63,158.00	252,632.00	189,474.00
11-70-550-404	BOND ISSUANCE COSTS	0.00	0.00	850.00	0.00	850.00	1,700.00	1,700.00
OTHER		0.00	63,158.00	326,880.00	19.32	263,722.00	653,760.00	590,602.00

Total Dept 70-DEBT SERVICE FUND		0.00	63,158.00	326,880.00	19.32	263,722.00	653,760.00	590,602.00
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Fund 11 - DEBT SERVICE FUND:								
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TOTAL EXPENDITURES		0.00	63,158.00	326,880.00	19.32	263,722.00	653,760.00	590,602.00
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EXPENDITURE REPORT FOR WILLOWBROOK  
PERIOD ENDING 06/30/2016

Page: 23/23

GL NUMBER	DESCRIPTION	ACTIVITY FOR MONTH 06/30/16	YTD BALANCE 06/30/2016	2016-17 ORIGINAL BUDGET	% BDGT USED	AVAILABLE BALANCE	APPROP. AVAIL.
Fund 14 - LAND ACQUISITION, FACILITY, EXPANSION & Dept 75							
CAPITAL IMPROVEMENTS							
14-75-930-411	POLICE DEPT REMODEL (7760	35,551.03	35,551.03	3,060,000.00	1.16	3,024,448.97	6,120,000.00
14-75-930-412	CRC REMODEL (825 MIDWAY D	0.00	0.00	25,000.00	0.00	25,000.00	50,000.00
CAPITAL IMPROVEMENTS							
		35,551.03	35,551.03	3,085,000.00	1.15	3,049,448.97	6,170,000.00
Total Dept 75		35,551.03	35,551.03	3,085,000.00	1.15	3,049,448.97	6,134,448.97
Fund 14 - LAND ACQUISITION, FACILITY, EXPANSION							
TOTAL EXPENDITURES							
		35,551.03	35,551.03	3,085,000.00	1.15	3,049,448.97	6,134,448.97
TOTAL EXPENDITURES - ALL FUNDS							
		1,119,860.63	2,184,406.97	19,462,018.00	11.22	17,277,611.03	38,924,036.00
							36,739,629.03

# VILLAGE OF WILLOWBROOK

## BOARD MEETING AGENDA ITEM - HISTORY/COMMENTARY

### ITEM TITLE:

AN ORDINANCE AMENDING TITLE 3, CHAPTER 12, SECTION 3-12-5 (B)  
OF THE VILLAGE CODE – CLASSIFICATIONS: CLASS B LICENSE

AGENDA NO.

6e

AGENDA DATE: 7/11/16

STAFF REVIEW: Tim Halik,  
Village Administrator

SIGNATURE:



LEGAL REVIEW: Thomas Bastian,  
Village Attorney

SIGNATURE:



RECOMMENDED BY: Tim Halik,  
Village Administrator

SIGNATURE:



REVIEWED & APPROVED BY COMMITTEE:

YES ☐

NO ☐

N/A ☒

### ITEM HISTORY (PREVIOUS VILLAGE BOARD REVIEWS, ACTIONS RELATED TO THIS ITEM, OTHER HISTORY)

The Pei Wei restaurant located within the Town Center was previously issued a Class B Liquor License which enabled the sale of alcoholic beverages to be consumed on-site. Unfortunately, the restaurant voluntarily closed on June 26, 2016. This location will convert to a Noodles Restaurant.

### ITEM COMMENTARY (BACKGROUND, DISCUSSION, RECOMMENDATIONS, ETC.)

Since it is not the Village's practice to hold an available liquor license, the attached ordinance amendment will serve to reduce the number of available Class B liquor licenses from Fifteen (15) to fourteen (14). Should another eligible business request such a license, and the Deputy Liquor Control Commissioner agrees to issue such a license to the location, a new license would be created.

### ACTION PROPOSED:

Pass the Ordinance.

ORDINANCE NO. 16-O-\_\_\_\_\_

AN ORDINANCE AMENDING TITLE 3, CHAPTER 12, SECTION  
3-12-5(B) OF THE VILLAGE CODE – CLASSIFICATIONS: CLASS B LICENSE

---

BE IT ORDAINED by the Mayor and Board of Trustees of the Village of Willowbrook, DuPage County, Illinois, that the Village Code of the Village of Willowbrook be amended as follows:

SECTION ONE: That Title 3, Chapter 12, Section 3-12-5(B) of the Village Code of the Village of Willowbrook, entitled "Class B License", is hereby amended by deleting the last sentence contained therein in its entirety and in lieu thereof, the following language shall be substituted:

...“There shall be no more than fourteen (14) class B licenses issued at any one time.”

SECTION TWO: That all ordinances and resolutions, or parts thereof, in conflict with the provisions with this Ordinance are, to the extent of such conflict, expressly repealed.

SECTION THREE: That this Ordinance shall be in full force and effect from and after its passage, approval and publication in pamphlet form as provided by law.

PASSED and APPROVED this 11<sup>th</sup> day of July, 2016.

APPROVED:

---

Mayor

ATTEST:

\_\_\_\_\_  
Village Clerk

ROLL CALL VOTE:

AYES: \_\_\_\_\_

NAYS: \_\_\_\_\_

ABSTENTIONS: \_\_\_\_\_

ABSENT: \_\_\_\_\_

# VILLAGE OF WILLOWBROOK

## BOARD MEETING

### AGENDA ITEM - HISTORY/COMMENTARY

**ITEM TITLE:**

Resolution –

A Resolution Approving a Plat of Easement – 6345/6353 Meadow Lane

**AGENDA NO.**

6f

**AGENDA DATE:** 7/11/16**STAFF REVIEW:** Tim Halik,  
Village Administrator**SIGNATURE:****LEGAL REVIEW:** Thomas Bastian, Village Attorney**SIGNATURE:****RECOMMENDED BY:** Tim Halik, Village Administrator**SIGNATURE:****REVIEWED & APPROVED BY COMMITTEE:** YES ☐ NO ☒ N/A ☐**ITEM HISTORY (PREVIOUS VILLAGE BOARD REVIEWS, ACTIONS RELATED TO THIS ITEM, OTHER HISTORY)**

The Village has received a request from a resident within the Waterford Subdivision to replace a side yard drain tile system which was intended to convey stormwater from several rear yards within the subdivision to a storm sewer catch basin located upon the Village right-of-way. This tile is currently functioning poorly which is causing stormwater to accumulate within the rear yards, which in-turn is causing residential sump pumps in the area to run excessively.

Further investigation into this drain tile system revealed that it is back-pitched and otherwise constructed in an unorthodox manner. Its method of construction does not follow typical engineering design. In addition, it was discovered that that current tile system is not located upon a dedicated drainage easement upon the private property. Therefore, the system is privately owned. However, it appears that no Village permit was obtained when this system was initially installed.

**ITEM COMMENTARY (BACKGROUND, DISCUSSION, KEY POINTS, RECOMMENDATIONS, ETC.)**

Given this drain tile system serves several residential properties within the subdivision, and is already connected to the Village storm sewer system, it would meet our criteria for being a storm drainage improvement that we would desire to monitor during and after storms to ensure it remains in proper working condition. However, public works crews would require access to this area in order to do so. The owners of both residential properties upon which the current improvement is located have agreed to grant an easement to the Village. Once crews have legal access to the improvement, a determination can be made as to how the system needs to be repaired or replaced.

**ACTION PROPOSED:**

Adopt the Resolution.

RESOLUTION NO. 16-R-\_\_\_\_\_

A RESOLUTION APPROVING A PLAT OF EASEMENT – 6345/6353 Meadow Lane  
\_\_\_\_\_

BE IT RESOLVED by the Mayor and Board of Trustees of the Village of Willowbrook,  
DuPage County, Illinois, as follows:

SECTION ONE: That the Plat of Easement, as prepared by Thompson Surveying, Ltd., consisting of one (1) sheet, dated August 28, 2014, attached hereto and incorporated herein as Exhibit "A", be and the same is hereby approved and that the Mayor and Village Clerk and all other necessary and appropriate officers of the Village are authorized to cause said Plat to be recorded as required at the DuPage County Recorder's Office.

SECTION TWO: That all resolutions, or parts thereof, in conflict with the provisions of this Resolution are, to the extent of such conflict, expressly repealed.

SECTION THREE: That this Resolution shall be in full force and effect from and after its adoption and approval as provided by law.

ADOPTED and APPROVED this 11<sup>th</sup> day of July, 2016.

APPROVED:

\_\_\_\_\_  
Mayor

ATTEST:

\_\_\_\_\_  
Village Clerk

ROLL CALL VOTE:

AYES: \_\_\_\_\_

NAYS: \_\_\_\_\_

ABSTENTIONS: \_\_\_\_\_

ABSENT: \_\_\_\_\_





# VILLAGE OF WILLOWBROOK

## BOARD MEETING AGENDA ITEM - HISTORY/COMMENTARY

### ITEM TITLE:

MOTION – BOARD ADVICE AND CONSENT TO MAYOR’S RE-APPOINTMENT OF CAROLINE A. DITTMAN AS A MEMBER OF THE POLICE PENSION FUND BOARD

AGENDA NO.

6g

AGENDA DATE: 7/11/16

STAFF REVIEW: Tim Halik, Village Administrator

SIGNATURE: Tim Halik

LEGAL REVIEW: Thomas Bastian, Village Attorney

SIGNATURE: THOMAS BASTIAN TH

RECOMMENDED BY: Mayor Frank Trilla

SIGNATURE: Frank Trilla/es

REVIEWED & APPROVED BY COMMITTEE:

YES ☐

NO ☐

N/A ☒

### ITEM HISTORY (PREVIOUS VILLAGE BOARD REVIEWS, ACTIONS RELATED TO THIS ITEM, OTHER PERTINENT HISTORY)

In accordance with Section 2-5-3 of the Village Code of Ordinances, the Village President (aka., Mayor) shall appoint two (2) members to the police pension fund board, which consists of a total of five (5) members. In April of 2015, the Mayor re-appointed Trustee Umberto Davi to serve as the President of the Willowbrook Police Pension Fund Board. However, a second re-appointment was not made at the time.

The police pension fund board administers the police pension fund and designates the beneficiaries thereof. The Mayor has the authority to appoint to fill the vacancy on the pension fund board, or to re-appoint existing members, with the advice and consent of the Board of Trustees. This re-appointment would fill a vacancy of the second position with a term expiring in May 2018.

### ITEM COMMENTARY (BACKGROUND, DISCUSSION, RECOMMENDATIONS, ETC.)

The Mayor recommends the re-appointment of Caroline A. Dittman to fill the second position on the police pension fund board.

### ACTION PROPOSED:

A motion to approve the Mayor’s recommendation to re-appoint Caroline A. Dittman as a member of the police pension fund board with a term expiring in May 2018.

# VILLAGE OF WILLOWBROOK

## BOARD MEETING

### AGENDA ITEM - HISTORY/COMMENTARY

**ITEM TITLE:** A PROCLAMATION RECOGNIZING SERGEANT ARTHUR P. SVEHLA FOR 30 YEARS OF SERVICE TO THE VILLAGE OF WILLOWBROOK

**AGENDA NO.**

**6h**

**AGENDA DATE:** 07/11/16

**STAFF REVIEW:** MARK SHELTON

**SIGNATURE:** 

**LEGAL REVIEW:** THOMAS BASTIAN

**SIGNATURE:** THOMAS BASTIAN TH

**RECOMMENDED BY VILLAGE ADMIN.:**

**SIGNATURE:** TEHL

**REVIEWED & APPROVED BY COMMITTEE:** YES ☐ NO ☐ N/A ☒

#### ITEM HISTORY (PREVIOUS VILLAGE BOARD REVIEWS, ACTIONS RELATED TO THIS ITEM, OTHER PERTINENT HISTORY)

The Village of Willowbrook has recognized employees with various years of service and dedication to their profession while serving its residents and businesses. Sergeant Arthur P. Svehla has been a Police Officer with the Village of Willowbrook for 30 years.

#### ITEM COMMENTARY (BACKGROUND, DISCUSSION, KEY POINTS, RECOMMENDATIONS, ETC.)

On July 7, 1986, the Village of Willowbrook first employed Arthur P. Svehla in the capacity of Patrol Officer. During Sergeant Svehla's 30 years of tenure, he has received numerous letters and commendations within the department. Sergeant Svehla continues to exhibit his dedication, courtesy and commitment to the residents, businesses and employees of the Village of Willowbrook.

#### ACTION PROPOSED:

Accept Proclamation.

# Village of Willowbrook

## Proclamation

**WHEREAS**, on July 7, 1986, the Village of Willowbrook first employed Arthur P. Svehla in the capacity of Patrol Officer. He was promoted to Sergeant on March 23, 2009; and

**WHEREAS**, during Sergeant Svehla's 30 years of tenure, he has become a State Certified Breathalyzer Officer, Truck Enforcement Officer, Field Training Officer and is currently in charge of Willowbrook's Field Training Officers Program; and

**WHEREAS**, Sergeant Svehla has received numerous letters and commendations within the department. On February 22, 1995, Sergeant Svehla, received a theft in progress call of two subjects stealing a TV from the Fairfield Inn motel. Sergeant Svehla conducted a traffic stop of a vehicle leaving the Fairfield Inn parking lot. Two subjects were arrested and the TV was recovered.

**WHEREAS**, on August 18, 2010, Sergeant Svehla, through his own initiative, conducted a traffic stop on a Dodge pick-up truck that had been reported stolen. One person was arrested for possession of a stolen motor vehicle and the vehicle was recovered.

**WHEREAS**, Sergeant Svehla continues to be a leader in traffic enforcement for the department while supervising the day shift for the past seven (7) years.

**NOW, THEREFORE, BE IT RESOLVED** by the Mayor and Board of Trustees of the Village of Willowbrook, DuPage County, Illinois that we hereby recognize and commend Sergeant Arthur P. Svehla in this his 30th year of service to the Village of Willowbrook. On behalf of the citizens of the Village of Willowbrook, we wish to thank Sergeant Svehla for his unselfish commitment in making the community of Willowbrook a nicer place to live and work.

Proclaimed this 11<sup>th</sup> day of July, 2016.

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Mayor

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Village Clerk

# VILLAGE OF WILLOWBROOK

## BOARD MEETING AGENDA ITEM - HISTORY/COMMENTARY

### ITEM TITLE:

AN ORDINANCE OF THE VILLAGE OF WILLOWBROOK, DUPAGE COUNTY, ILLINOIS, APPROVING A BUSINESS DISTRICT PLAN FOR THE VILLAGE OF WILLOWBROOK, ILLINOIS ROUTE 83/PLAINFIELD ROAD BUSINESS DISTRICT

AGENDA NO.

7

AGENDA DATE: 7/11/16

STAFF REVIEW: T. Halik, Vill. Admin. / C. Dittman, Dir. Of Finance

SIGNATURE:

T. Halik / C. Dittman

LEGAL REVIEW: Thomas Bastian, Village Attorney

SIGNATURE:

THOMAS BASTIAN TH

RECOMMENDED BY: Tim Halik, Village Administrator

SIGNATURE:

T. Halik

REVIEWED BY FINANCE & ADMINISTRATION COMMITTEE: YES ☒ on June 13, 2016 NO ☐ N/A ☐

### ITEM HISTORY (PREVIOUS VILLAGE BOARD REVIEWS, ACTIONS RELATED TO THIS ITEM, OTHER HISTORY)

As members of the Board are aware, owners of commercial properties located near Kingery Highway and Plainfield Road have faced challenges finalizing their proposed re-development projects plans given the high cost of required off-site improvements, including necessary traffic improvements. The Village has received requests for the consideration of public subsidies in order to make these projects financially viable. The public finance consultant Ehlers Associates was hired to review the financial data, including project pro formas and gap analysis reports, to assist in determining whether a public subsidy is warranted, and if so, what amount. The final report concluded that a public subsidy is warranted. After continued discussions with the commercial property owners, it was agreed that the creation of a new Business District Sales Tax was the preferred method to raise funding to provide the subsidies. If approved as proposed, the sales tax rate within the boundaries of the new Business District would be 1% higher (i.e., 8% versus 7% elsewhere in town). This 1% sales tax increment would be collected from the state, forwarded to the Village, and deposited into a separate Village fund. Eligible project expenses could be reimbursed to the developers from this fund to offset extraordinary development costs. In accordance with state law, the maximum term of a Business District is 23 years.

One of the benefits of this approach is that the sales tax rate in Willowbrook is already comparatively low as compared to other surrounding jurisdictions (please see attached sales tax comparison). After discussions, Ehlers was then asked to draft a Business District Plan for consideration (see attached draft copy of Plan).

### ITEM COMMENTARY (BACKGROUND, DISCUSSION, RECOMMENDATIONS, ETC.)

In accordance with the Illinois Business District Development and Redevelopment Law (65 ILCS 5/11-74.3-1 et seq.), attached is a proposed Business District Adoption Schedule as prepared by Ehlers Associates. Below are the general steps required to create this new Business District:

- June 27, 2016 – Adopt ord. proposing business district plan, setting time/place for a public hearing.
- July 1, 2016 – First public notice appears in Hinsdale Suburban Life.
- July 8, 2016 – Second public notice appears in Hinsdale Suburban Life.
- July 11, 2016 – Public hearing held before the Village Board to receive public comments.
- July 11, 2016 – Consideration of ord. to approve bus. district plan and designating the bus. district.
- October 1, 2016 – Deadline to file business district documents with the IDOR.

**ACTION PROPOSED:** Pass Ordinance. This is one (1) of three (3) ordinances to be considered by the Village Board this evening in order to establish the Illinois Route 83/Plainfield Road Business District. This particular ordinance will serve to formally approve the Business District Plan, after receiving public comments.

ORDINANCE NO. 16-O-\_\_\_\_\_

AN ORDINANCE OF THE VILLAGE OF WILLOWBROOK,  
DUPAGE COUNTY, ILLINOIS, APPROVING A BUSINESS DISTRICT  
PLAN FOR THE VILLAGE OF WILLOWBROOK, ILLINOIS  
ROUTE 83/PLAINFIELD ROAD BUSINESS DISTRICT

NOW, THEREFORE, BE IT ORDAINED by the Mayor and Board of Trustees of the Village of Willowbrook, DuPage County, Illinois, as follows:

Section 1.      Authority.      This Ordinance is adopted pursuant to the Business District Development and Business District Law, 65 ILCS 5/11-74.3-1 et seq., as amended (the "Act").

Section 2.      Recitals.

a) The Village of Willowbrook, DuPage County, Illinois (the "Village"), is a duly constituted, organized and validly existing municipality within the State of Illinois, and is operating under the Illinois Municipal Code, 65 ILCS 5/1-1-1 et seq., as amended.

b) The Village desires to impose a retailers' occupation tax and a service occupation tax within a business district for the planning, execution, and implementation of business district plans and to pay for business district project costs pursuant to the Act for a proposed business district located within the corporate limits of the Village (the "Business

District") legally described in Exhibit A attached to and made a part of this Ordinance.

The boundaries of the Business District are generally described as a contiguous area bounded by 69<sup>th</sup> Street on the north, 72<sup>nd</sup> Court on the south, Illinois Route 83 on the west and Adams Street and Willow Way Lane on the east, and includes adjacent rights of way. A map of the boundaries of the Business District is attached hereto and made a part hereof as Exhibit B.

A list of the parcel identification numbers ("PINS") for each property within the Business District is attached hereto and made a part hereof as Exhibit C.

- c) The proposed plan and project are fully described in the document entitled "Village of Willowbrook, Illinois Route 83/Plainfield Road Business District Plan" dated June, 2016, prepared by Ehlers (the "Plan Consultant"), a copy of which is attached to this Ordinance as Exhibit D and made a part of this Ordinance (the "Business District Plan"). The Business District Plan includes a section which documents the eligibility and qualifications of the proposed Business District for designation as a "blighted area" as those terms are defined in the Act.

- d) Pursuant to Section 11-74.3-2 of the Act, the Village caused a public hearing to be held relative to the proposed Business District Plan and the designation of the proposed Business District commencing at 6:30 p.m. on July 11, 2016, at the Burr Ridge Police Department Training Room, 7700 County Line Road, Burr Ridge, Illinois. At the public hearing, all interested persons were given the opportunity to file written objections to, and were heard orally in respect to, any issues embodied in the notice of the public hearing mentioned in paragraph (e) below.
- e) Due notice of such public hearings was given by publication in the Suburban Life on July 1, 2016 and July 8, 2016, through a notice of public hearing in substantially the form attached to this Ordinance as Exhibit E. A publisher's affidavit with newspaper clipping attached evidencing such publications is attached to this Ordinance as Exhibit F.
- f) The proposed Business District Plan sets forth the conditions in the proposed Business District qualifying the area as a "blighted area" as defined in the Act and the Village Board has carefully reviewed and is familiar with the proposed Business District and the Business District Plan.

- g) The Village Board has reviewed the conditions pertaining to lack of growth and private investment in the proposed Business District to determine whether private development would take place in the proposed Business District as a whole without the adoption of the proposed Business District Plan.
- h) The Village Board has reviewed the conditions pertaining to real property in the proposed Business District to determine whether contiguous parcels of real property and improvements on such parcels in the proposed Business District would be substantially benefited by the proposed Business District Plan improvements.
- i) The Village Board has reviewed all documents and materials relating to the development of the Village as a whole, including the Village Comprehensive Plan, to determine whether the proposed Business District Plan conforms to such documents.

Section 3.      Findings.      The Village Board finds and determines as follows:

- a) The factual recitals in Section 2 are incorporated into this Section 3 as findings of fact.
- b) There exist conditions which cause the area proposed to be designated as the Business District to be



classified as a "blighted area" as defined in Section 11-74.3-5 of the Act.

c) Of the factors set forth in Section 11-74.3-5 of the Act as characterizing "blighted areas," five are present in the Business District to a meaningful extent and are reasonably distributed throughout the Business District. The factors present are: defective, non-existent or inadequate street layout; unsanitary or unsafe conditions; deterioration of site improvements; improper subdivision or obsolete platting; and economic underutilization of the area. The Act only requires the finding of any one of the stated factors.

d) The Business District includes only real property and improvements which will be substantially benefited by the improvements proposed in the Business District Plan. The blight factors are reasonably present and distributed throughout the Business District. The existence of the blight factors within the proposed Business District retards the provision of housing accommodations or constitutes an economic or social liability or a menace to the public health, safety, morals or welfare in its present condition and use.

- e) The proposed Business District on the whole has not been subject to growth and development through investment by private enterprise and is not reasonably anticipated to be developed or redeveloped without the adoption of the proposed Business District Plan.
- f) The proposed Business District Plan conforms to the comprehensive plan for the development of the Village as a whole.
- g) The proposed Business District includes only those contiguous parcels of real property and improvements which will be substantially benefited by the proposed Business District Plan improvements.
- h) As set forth in the Business District Plan and pursuant to Section 11.74.3-6 of the Act, the Village may issue obligations (notes, bonds, debt certificates or other as allowed by Illinois Statute) secured by the Business District tax revenues. In addition, the Village may secure the obligations with other designated revenues, or a pledge of the full faith and credit of the municipality, or other general or special revenue sources as it deems appropriate. All financial obligations, if any, incurred to finance Business District Plan improvements must be retired by the 23rd year from the date of designation of the

Business District by the Village with the exception that the final maturity date of any bonds issued may not exceed 20 years from the date of issuance. One or more series of obligations may be issued to implement the Business District Plan.

- i) The Suburban Life is a newspaper published in DuPage County, Illinois, and of general circulation in the Village and is qualified to carry legal notices.

Section 4.      Approval of Business District Plan.      The Business District Plan, which was the subject matter of the public hearing held on July 11, 2016, is hereby approved.

Section 5.      Filing with County Clerk.      The Village Clerk is directed to file a certified copy of this Ordinance with the DuPage County Clerk after the adoption and approval of this Ordinance.

Section 6.      Invalid Portions are Severable.      If any section, paragraph or provision of this Ordinance shall be held to be invalid or unenforceable for any reason, the invalidity or unenforceability of such section, paragraph or provision shall not affect any of the remaining provisions of this Ordinance.

Section 7.      Superceder.      All ordinances, resolutions, motions and orders in conflict with this Ordinance are repealed to the extent of such conflict.

Section 8.      Effective Date.    This Ordinance shall be in full force and effect immediately upon its passage and approval, as provided by law.

**PASSED and APPROVED** this 11<sup>th</sup> day of July, 2016, by a roll call vote as follows:

ROLL CALL VOTE:	AYES:	_____
	NAYS:	_____
	ABSTENTIONS:	_____
	ABSENT:	_____

APPROVED:

\_\_\_\_\_  
Mayor

ATTEST:

\_\_\_\_\_  
Village Clerk

**EXHIBIT A**  
**TO**  
**ORDINANCE NO. 16-0-\_\_\_\_\_**

**LEGAL DESCRIPTION OF**  
**VILLAGE OF WILLOWBROOK, ILLINOIS**  
**ROUTE 83/PLAINFIELD ROAD BUSINESS DISTRICT**

THAT PART OF THE SOUTH HALF OF SECTION 23 AND THE NORTH HALF OF SECTION 26 TOWNSHIP 38 NORTH, RANGE 11 EAST OF THE THIRD PRINCIPAL MERIDIAN IN DUPAGE COUNTY, ILLINOIS, BEING DESCRIBED AS FOLLOWS:

BEGINNING AT THE MOST EASTERLY SOUTHEAST CORNER OF LOT 1 IN PERSEVERANCE SUBDIVISION, BEING A SUBDIVISION IN THE SOUTHEAST QUARTER OF SAID SECTION 23 AND THE NORTHEAST QUARTER OF SAID SECTION 26, ACCORDING TO THE PLAT THEREOF RECORDED JULY 30, 2007 AS DOCUMENT NO. R2007-141528; THENCE NORTHERLY, WESTERLY, NORTHERLY, EASTERLY AND NORTHERLY ALONG THE EAST LINE OF SAID LOT 1 TO A POINT ON THE SOUTH LINE OF LOT 1 IN WILLOWBROOK CENTER UNIT NO. 1, BEING A SUBDIVISION IN THE SOUTHEAST QUARTER OF SAID SECTION 23, ACCORDING TO THE PLAT THEREOF RECORDED OCTOBER 16, 1963 AS DOCUMENT NO. R63-37895; THENCE EASTERLY ALONG SAID SOUTH LINE TO THE SOUTHEAST CORNER OF SAID LOT 1; THENCE NORTHERLY ALONG THE EAST LINE OF SAID LOT 1 TO A POINT ON THE SOUTH LINE OF LOT 2 IN LENZ'S ASSESSMENT PLAT, BEING A SUBDIVISION IN THE SOUTHEAST QUARTER OF SAID SECTION 23, ACCORDING TO THE PLAT THEREOF RECORDED JULY 5, 1955 AS DOCUMENT NO. 763597; THENCE EASTERLY ALONG SAID SOUTH LINE AND ALONG THE EASTERLY EXTENSION THEREOF TO A POINT ON THE EAST RIGHT-OF-WAY LINE OF ADAMS STREET; THENCE NORTHERLY ALONG SAID EAST RIGHT-OF-WAY LINE TO A POINT ON THE NORTHERLY RIGHT-OF-WAY LINE OF PLAINFIELD ROAD; THENCE SOUTHWESTERLY ALONG SAID NORTHERLY RIGHT-OF-WAY LINE TO THE SOUTHWESTERLY CORNER OF LOT 1 IN 1<sup>ST</sup> BURLINGTON BANK, WILLOWBROOK RESUBDIVISION, BEING A SUBDIVISION IN THE SOUTHEAST QUARTER OF SAID SECTION 23, ACCORDING TO THE PLAT THEREOF RECORDED SEPTEMBER 23, 1986 AS DOCUMENT NO. R86-115152; THENCE NORTHERLY ALONG THE WEST LINE OF SAID LOT 1 AND ALONG THE NORTHERLY EXTENSION THEREOF TO A POINT ON THE NORTH RIGHT-OF-WAY LINE OF 69<sup>TH</sup> STREET; THENCE WESTERLY ALONG SAID NORTH RIGHT-OF-WAY LINE TO THE SOUTHWEST CORNER OF LOT 14 IN SCHILLER'S ADDITION, BEING A SUBDIVISION IN THE SOUTHEAST QUARTER OF SAID SECTION 23, ACCORDING TO THE PLAT THEREOF RECORDED JUNE 14, 1950 AS DOCUMENT NO. 595530; THENCE NORTHERLY ALONG THE WEST LINE OF SAID LOT 14 TO THE SOUTHWEST CORNER OF

LOT 12 IN WEST TOWN DEVELOPMENT COMPANY'S RESUBDIVISION, BEING A SUBDIVISION IN THE SOUTHEAST QUARTER OF SAID SECTION 23, ACCORDING TO THE PLAT THEREOF RECORDED JULY 22, 1955 AS DOCUMENT NO. 766039; THENCE NORTHERLY ALONG THE WEST LINE OF SAID LOT 12 AND ALONG THE WEST LINE OF LOT 13 IN SAID WEST TOWN DEVELOPMENT COMPANY'S RESUBDIVISION TO THE NORTHEAST CORNER OF PARCEL 1 IN WILLOWBROOK OFFICE PARK LOT 12 ASSESSMENT PLAT, BEING A SUBDIVISION IN THE SOUTHEAST QUARTER OF SAID SECTION 23, ACCORDING TO THE PLAT THEREOF RECORDED SEPTEMBER 8, 2005 AS DOCUMENT NO. R2005-197465; THENCE WESTERLY, SOUTHERLY, SOUTHWESTERLY AND WESTERLY ALONG THE NORTH LINE OF SAID PARCEL 1 115.50 FEET (MORE OR LESS) TO A POINT ON THE NORTHEASTERLY LINE OF A PERMANENT EASEMENT (AS SHOWN ON AN EASEMENT EXHIBIT PREPARED BY MANHARD CONSULTING, LTD AND DATED JUNE 9, 2016); THENCE NORTHWESTERLY ALONG SAID NORTHEASTERLY PERMANENT EASEMENT LINE TO A POINT ON THE EAST RIGHT-OF-WAY LINE OF ILLINOIS ROUTE 83; THENCE NORTHERLY ALONG SAID EAST RIGHT-OF-WAY LINE TO A POINT OF INTERSECTION WITH THE EASTERLY EXTENSION OF THE NORTH LINE OF LOT 15 IN BLOCK 35 IN TRI STATE VILLAGE UNIT NO. 5, BEING A SUBDIVISION IN THE SOUTHWEST QUARTER OF SAID SECTION 23 AND THE NORTHWEST QUARTER OF SAID SECTION 26, ACCORDING TO THE PLAT THEREOF RECORDED JULY 20, 1944 AS DOCUMENT NO. 465114; THENCE WESTERLY ALONG SAID EASTERLY EXTENSION TO A POINT ON THE WEST RIGHT-OF-WAY LINE OF SAID ILLINOIS ROUTE 83; THENCE SOUTHERLY ALONG SAID WEST RIGHT-OF-WAY LINE TO A POINT OF INTERSECTION WITH THE WESTERLY EXTENSION OF THE SOUTH RIGHT-OF-WAY LINE OF 72<sup>ND</sup> COURT; THENCE EASTERLY ALONG SAID WESTERLY EXTENSION TO A POINT OF INTERSECTION WITH SAID EAST RIGHT-OF-WAY LINE OF ILLINOIS ROUTE 83; THENCE EASTERLY, SOUTHERLY AND EASTERLY ALONG SAID SOUTH RIGHT-OF-WAY LINE OF 72<sup>ND</sup> COURT TO A POINT ON THE EAST LINE OF LOT 6 IN HINSDALE HIGHLAND ESTATES, BEING A SUBDIVISION IN THE NORTHEAST QUARTER OF SAID SECTION 26, ACCORDING TO THE PLAT THEREOF RECORDED JULY 23, 1954 AS DOCUMENT NO. 720969; THENCE NORTHERLY ALONG SAID EAST LINE EXTENDED NORTHERLY TO THE POINT OF BEGINNING.

EXCEPTING THEREFROM THE FOLLOWING DESCRIBED PARCEL (P.I.N. 09-23-405-019):

THAT PART OF LOT 4 WHICH LIES EAST OF THE EAST LINE OF ILLINOIS ROUTE 83 AND NORTHERLY OF THE NORTHERLY RIGHT-OF-WAY LINE OF PLAINFIELD ROAD AS PER PLAT OF DEDICATION RECORDED JUNE 27, 1961 AS DOCUMENT NO. R61-11952 AND WHICH LIES SOUTH OF A LINE DRAWN PERPENDICULAR TO THE EAST LINE OF SAID ILLINOIS ROUTE 83 TO A POINT WHICH IS 298.40 FEET NORTH OF THE CENTER LINE OF PLAINFIELD ROAD (MEASURED ALONG THE EAST LINE OF SAID ROUTE 83),

ALSO, THAT PART OF LOT 3 WHICH LIES NORTHERLY OF THE NORTHERLY RIGHT-OF-WAY LINE OF PLAINFIELD ROAD AS PER PLAT OF DEDICATION RECORDED JUNE 27, 1961 AS DOCUMENT NO. R61-11952, AND WHICH LIES SOUTHERLY OF A LINE DRAWN FROM A POINT IN THE WEST LINE OF SAID LOT 3, SAID POINT BEING 138.94 FEET NORTH OF THE NORTH LINE OF SAID PLAINFIELD ROAD (MEASURED ALONG SAID WEST LINE OF LOT 3) TO A POINT IN THE NORTHERLY LINE OF SAID PLAINFIELD ROAD, SAID LOTS 3 AND 4 BEING IN OWNER'S SUBDIVISION OF THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 23, AND THE WEST HALF OF THE NORTHEAST QUARTER OF SECTION 26, ALL IN TOWNSHIP 38 NORTH, RANGE 11 EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED APRIL 24, 1931 AS DOCUMENT NO. 311500, IN DUPAGE COUNTY, ILLINOIS.

MAP OF VILLAGE OF WILLOWBROOK, ILLINOIS  
ROUTE 83/PLAINFIELD ROAD BUSINESS DISTRICT BOUNDARIES





EXHIBIT C  
TO  
ORDINANCE NO.16-O-\_\_\_\_\_

VILLAGE OF WILLOWBROOK, ILLINOIS  
ROUTE 83/PLAINFIELD ROAD BUSINESS DISTRICT PLAN

PINs
09-23-400-036
09-23-405-018
09-23-406-003
09-23-406-015
09-23-406-018
09-26-200-010
09-23-400-035*

\*A portion of this parcel is included for easement access only.

EXHIBIT D  
TO  
ORDINANCE NO.16-O-\_\_\_\_\_

VILLAGE OF WILLOWBROOK, ILLINOIS  
ROUTE 83/PLAINFIELD ROAD BUSINESS DISTRICT PLAN

Village of Willowbrook, Illinois  
Route 83/Plainfield Road Business District  
Business District Plan

June 2016



# Village of Willowbrook, Illinois

## Route 83/Plainfield Road Business District

### Business District Plan

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## I. Introduction

Municipalities are authorized to create Business Districts by the Illinois Municipal Code, Business District Development and Redevelopment Law, specifically in 65 ILCS 5/11-74.3 *et seq.*, as amended (the “Business District Act” or the “Act”). This document, entitled, *Village of Willowbrook, Illinois, Route 83/Plainfield Road Business District, Business District Plan, June, 2016* (the “Business District Plan”), is to serve as a Business District Plan for the area generally bounded by 69<sup>th</sup> Street on the north, 72<sup>nd</sup> Court on the south, Illinois Route 83 on the west, and Adams Street and Willow Way Lane on the east in Willowbrook, Illinois. The area includes all adjoining rights-of-way and a portion of PIN 09-23-400-035 for easement access but does not include PIN 09-23-405-019. The Village of Willowbrook (the “Village”) has determined that this area would benefit from designation as a Business District, as specifically provided for in the Business District Act. This area is subsequently referred to in this Business District Plan as the “Route 83/Plainfield Road Business District”, or the “Business District”.

Ehlers & Associates, Inc. (“Ehlers”) was retained to assist the Village in assessing the qualifications of the Route 83/Plainfield Road Business District for Business District designation under the Business District Act and in preparing this Business District Plan. In accordance with the Business District Act, this Business District Plan includes the following:

- A specific description of the Business District boundaries and a map illustrating the boundaries.
- A general description of each project proposed to be undertaken within the Business District, including a description of the approximate location of each project and a description of any developer, user, or tenant of any property to be located or improved within the proposed business district.
- The name of the proposed Business District.
- The estimated Business District Project Costs.
- The anticipated sources of funds to pay Business District Project Costs.
- The anticipated type and term of any obligations to be issued.
- The rate of any tax to be imposed pursuant to the Business District Act and the period of time for which the tax shall be imposed.

The Route 83/Plainfield Road Business District boundaries are generally described in **Sections III and IV**, depicted in **Exhibit A**, a map of the Business District with property identification numbers (“PINs”). It illustrates that all parcels in the Business District are contiguous. **Exhibit B** is the legal description of the Route 83/Plainfield Road Business District, specifically describing the Business District boundaries. All exhibits to this Business District Plan are incorporated herein by this reference thereto.

## A. The Village of Willowbrook

The Village of Willowbrook is located in northeastern Illinois in DuPage County just north of the Historic Route 66. The Ridgemoor Homeowners Association led the effort to incorporate and in 1960 Willowbrook became one of the State's smallest villages.

Despite its small size, Willowbrook is well served by an abundance of hotels and retail centers, including the Willowbrook Town Center, which is located within the Business District. Willowbrook's quality of life is further enhanced by the Village's ten community parks, the nearby Waterfall Glen Forest Preserve, quality public schools, strong neighborhoods and sense of community.

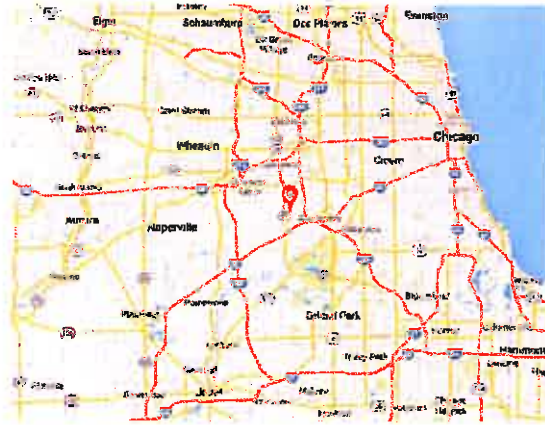
According to 2010 United States Census data, Willowbrook then had a population of 8,540 persons, which was a 4.76% decrease in population since the 2000 census. Also as of 2010, there were 4,032 households residing in the Village, the average household size was 2.08 persons and the median income for a household was \$54,880. The most recent estimates by the U.S. Census Bureau indicate a population of 8,613 (2015), 3,999 households (2014), average household size of 2.14 (2014) and household median income of \$58,970 (2014).

There are five public school districts serving the Village: Gower School District No. 62, Maercker School District No. 60, Community Consolidated School District No. 181, and Darien School District No. 61 provide primary education, and Hinsdale School District No. 86 provides secondary education.

Willowbrook's central location along I-55 provides convenient access to major interstates, including I-290, I-294, I-355 and I-80, as well as easy access to Chicago's O'Hare International Airport and Midway Airport.

Village residents have many recreational opportunities. The Village of Willowbrook owns and maintains 10 parks and playgrounds covering 54 acres. Willowbrook is one of seven communities that comprise the Gateway Special Recreation Association, which provides services to persons with disabilities.

The Village of Willowbrook's governing body is composed of the Mayor, six trustees, and the Village Clerk, all of whom are elected by Village residents. Trustees are also assigned to supporting committees that provide recommendations to the Village Board on issues relating to public safety, municipal services, finance and administration. The Village has five commissions and boards that are appointed by the Mayor. Various departments oversee the day-to-day work of the Village. These departments are headed by an administrative staff who operate under the direction of the Village Administrator.



*Village of Willowbrook*

#### **B. Route 83/Plainfield Road Business District**

The Business District is located in the center of Willowbrook at the intersections of the two heavily traveled roads, Illinois Route 83 (also known as Illinois 83 and as Kingery Highway), a Strategic Regional Arterial (SRA) route as defined by the Illinois Department of Transportation and Plainfield Road, a minor arterial road. The Business District consists of six PINs and a portion of PIN 09-23-400-035 for easement access, and currently has 30 tenant businesses:

- PIN 09-23-400-036 is located at the northern-most part of the Business District. It is irregular in size and shape and not conducive to contemporary development. It includes parts of a pond, a sidewalk and a street.
- PIN 09-23-405-018 is located north of Plainfield Road and extends north to 69<sup>th</sup> Street. It includes an approximately 117,150 square foot retail building constructed in 1971. The building has been vacant since the previous occupant, Kmart, closed in May 2013.
- PIN 09-23-406-003 is located south of Plainfield Road between Adams Street and the Willowbrook Town Center Access Drive. It is occupied by Willowbrook Lanes, and is the oldest of the buildings in the Business District, constructed in 1958.
- PIN 09-23-406-015 is located south of Plainfield Road immediately west of Adams Street. It is occupied by the TFC Bank building, constructed in 1974.
- PIN 09-23-406-018 is located south of Plainfield Road and west of the Willowbrook Town Center Access Drive. It is occupied by the PNC Bank building, constructed in 2007.
- PIN 09-26-200-010 is located south of Plainfield Road and extends south to the north side of 72<sup>nd</sup> Court between Willowbrook Town Center Access Drive and



Kingery Highway. It is located primarily south and west of block 406 and includes the Willowbrook Town Center. Willowbrook Town Center was developed in 2007 on a previously vacant track of land. It currently includes eight buildings with 25 tenant businesses.

There is one parcel, 09-23-405-019, currently occupied by a gasoline filling station, that is inside of the physical boundaries of the area, but excluded as part of the Business District. A portion of PIN 09-23-400-035, on the northern boundary, has been included for easement access.

The development of the Willowbrook Town Center in 2007 increased the amount of traffic to the area. A recent traffic study identified that the Business District's intersections primarily operate at a Level E, which represents saturated or at-capacity conditions and long delays during peak hours.

The Business District is primarily served by two signaled intersections along Route 83 at 69<sup>th</sup> Street and 72<sup>nd</sup> Court, and four stop sign controlled intersections, Route 83 at 69<sup>th</sup> Street and 72<sup>nd</sup> Court, Plainfield Road at Adams Street and at the Willowbrook Town Center Access Drive. Four of the five intersections were evaluated as part of the Traffic Impact Study prepared by Kenig, Lindren, O'Hara, Aboona, Inc. (see Exhibit H).



*Aerial View of Business District*

## II. Business District Act

The Business District Act is intended to be used by municipalities to invigorate economically sluggish areas by addressing problems that cause the area to qualify as a Business District and a "blighted area" ("Blighted Area") under the Business District Act. Municipalities are authorized to carry out development and redevelopment projects to achieve their goals for the Business District.

### A. Statutory Basis for a Business District

The Business District Act finds and declares:

1. It is essential to the economic and social welfare of each municipality that business districts be developed, redeveloped, improved, maintained, and revitalized, that jobs and opportunity for employment be created within the municipality, and that, if blighting conditions are present, blighting conditions be eradicated by assuring opportunities for development or redevelopment, encouraging private investment, and attracting sound and stable business and commercial growth. It is further found and determined that as a result of economic conditions unfavorable to the creation, development, improvement, maintenance, and redevelopment of certain business and commercial areas within municipalities opportunities for private investment and sound and stable commercial growth have been and will continue to be negatively impacted and business and commercial areas within many municipalities have deteriorated and will continue to deteriorate, thereby causing a serious menace to the health, safety, morals, and general welfare of the people of the entire state, unemployment, a decline in tax revenues, excessive and disproportionate expenditure of public funds, inadequate public and private investment, the unmarketability of property, and the growth of delinquencies and crime. In order to reduce threats to and to promote and protect the health, safety, morals, and welfare of the public and to provide incentives which will create employment and job opportunities, will retain commercial businesses in the state and related job opportunities and will eradicate blighting conditions if blighting conditions are present, and for the relief of unemployment and the maintenance of existing levels of employment, it is essential that plans for business districts be created and implemented and that business districts be created, developed, improved, maintained, and redeveloped.
2. The creation, development, improvement, maintenance, and redevelopment of business districts will stimulate economic activity in the state, create and maintain jobs, increase tax revenues, encourage the creation of new and lasting infrastructure, other improvements, and facilities, and cause the attraction and retention of businesses and commercial enterprises which generate economic activity and services and increase the general tax base, including, but not limited to, increased retail sales, hotel or restaurant sales, manufacturing sales, or

entertainment industry sales, thereby increasing employment and economic growth.

3. It is hereby declared to be the policy of the state, in the interest of promoting the health, safety, morals, and general welfare of all the people of the state, to provide incentives which will create new job opportunities and retain existing commercial businesses within the state and related job opportunities, and it is further determined and declared that the relief of conditions of unemployment, the maintenance of existing levels of employment, the creation of new job opportunities, the retention of existing commercial businesses, the increase of industry and commerce within the state, the reduction of the evils attendant upon unemployment, and the increase and maintenance of the tax base of the state and its political subdivisions are public purposes and for the public safety, benefit, and welfare of the residents of this state.
4. The exercise of the powers provided in this Law is dedicated to the promotion of the public interest, to the enhancement of the tax base within business districts, municipalities, and the state and its political subdivisions, the creation of employment, and the eradication of blight, if present within the business district, and the use of such powers for the creation, development, improvement, maintenance, and redevelopment of business districts of a municipality is hereby declared to be for the public safety, benefit, and welfare of the residents of the state and essential to the public interest and declared to be for public purposes.

#### B. Municipal Powers Under the Business District Act

Municipal powers under the Business District Act include the following:

1. To make and enter into all contracts necessary or incidental to the implementation and furtherance of a business district plan. A contract by and between the municipality and any developer or other nongovernmental person to pay or reimburse said developer or other nongovernmental person for business district project costs incurred or to be incurred by said developer or other nongovernmental person shall not be deemed an economic incentive agreement under Section 8-1.1-20, notwithstanding the fact that such contract provides for the sharing, rebate, or payment of retailers' occupation taxes or service occupation taxes (including, without limitation, taxes imposed pursuant to subsection (10)) the municipality receives from the development or redevelopment of properties in the business district. Contracts entered into pursuant to this subsection shall be binding upon successor corporate authorities of the municipality and any party to such contract may seek to enforce and compel performance of the contract by civil action, mandamus, injunction, or other proceeding.
2. Within a business district, to acquire by purchase, donation, or lease, and to own, convey, lease, mortgage, or dispose of land and other real or personal property or rights or interests therein; and to grant or acquire licenses, easements, and options

with respect thereto, all in the manner and at such price authorized by law. No conveyance, lease, mortgage, disposition of land or other property acquired by the municipality or agreement relating to the development of property, shall be made or executed except pursuant to prior official action of the municipality. No conveyance, lease, mortgage, or other disposition of land owned by the municipality, and no agreement relating to the development of property, within a business district shall be made without making public disclosure of the terms and disposition of all bids and proposals submitted to the municipality in connection therewith.

3. To acquire property by eminent domain in accordance with the Eminent Domain Act.
4. To clear any area within a business district by demolition or removal of any existing buildings, structures, fixtures, utilities, or improvements, and to clear and grade land.
5. To install, repair, construct, reconstruct, or relocate public streets, public utilities, and other public site improvements within or without a business district which are essential to the preparation of a business district for use in accordance with a business district plan.
6. To renovate, rehabilitate, reconstruct, relocate, repair, or remodel any existing buildings, structures, works, utilities, or fixtures within any business district.
7. To construct public improvements, including but not limited to buildings, structures, works, utilities, or fixtures within any business district.
8. To fix, charge, and collect fees, rents, and charges for the use of any building, facility, or property or any portion thereof owned or leased by the municipality within a business district.
9. To pay or cause to be paid business district project costs. Any payments to be made by the municipality to developers or other nongovernmental persons for business district project costs incurred by such developer or other nongovernmental person shall be made only pursuant to the prior official action of the municipality evidencing intent to pay or cause to be paid such business district project costs. A municipality is not required to obtain any right, title, or interest in any real or personal property in order to pay business district project costs associated with such property. The municipality shall adopt such accounting procedures as shall be necessary to determine that such business district project costs are properly paid.
10. To apply for and accept grants, guarantees, donations of property or labor or any other thing of value for use in connection with a business district project.

11. If the municipality has by ordinance found and determined that the business district is a "blighted area" under this Law, to impose a retailers' occupation tax and a service occupation tax in the business district for the planning, execution, and implementation of business district plans and to pay for business district project costs as set forth in the business district plan approved by the municipality.
12. If the municipality has by ordinance found and determined that the business district is a "blighted area" under this Law, to impose a hotel operators' occupation tax in the business district for the planning, execution, and implementation of business district plans and to pay for the business district project costs as set forth in the business district plan approved by the municipality.

The Business District Act specifies that a municipality may impose a retailers' occupation and a service occupation tax (collectively the "Business District Sales Tax" or "Business District Sales Taxes") and a hotel operators' occupation tax (the "Business District Hotel/Motel Tax" or "Business District Hotel/Motel Taxes") applying revenues toward development and redevelopment within the Business District.

The Business District Sales Taxes may be imposed at a rate not to exceed one percent (1.0%) of the gross receipts from sales of tangible personal property within the Business District, and must be imposed in quarter percent (0.25%) increments. The Business District Sales Taxes may not be imposed on "tangible personal property titled or registered with an agency of this state's government or food for human consumption that is to be consumed off the premises where it is sold (other than alcoholic beverages, soft drinks, and food that has been prepared for immediate consumption), prescription and nonprescription medicines, drugs, medical appliances, modifications to a motor vehicle for the purposes of rendering it usable by a disabled person, and insulin, urine testing materials, syringes, and needles used by diabetics, for human use," and may not be imposed for more than twenty-three (23) years. These Business District Sales Taxes, if imposed, shall be collected by the Illinois Department of Revenue and then disbursed to the Village.

The Business District Hotel/Motel Tax may be imposed at a rate of not to exceed one percent (1.0%) of the gross rental receipts from the rental leasing or letting of hotel rooms within the Business District (excluding, however, gross rental receipts from the rental leasing or letting of a hotel to permanent residents, as defined in the Hotel Operators' Occupation Tax Act), must be imposed in quarter percent (0.25%) increments, may not be imposed for more than twenty-three (23) years and, if imposed, must be collected by the Village.

### III. Business District Eligibility Analysis

#### A. Qualifications for a Business District

Pursuant to 65 ILCS 5/11-74.3-5, a business district is defined as “a contiguous area which includes only parcels of real property directly and substantially benefited by the proposed business district plan.” The Business District Act further states that a business district may, but need not be, a blighted area, but no municipality shall be authorized to impose Business District Sales Taxes or Business District Hotel/Motel Taxes unless it is determined by ordinance to be a blighted area under the Business District Act.

A Blighted Area is defined by the Business District Act as “an area that is a blighted area which, by reason of the predominance of defective, non-existent, or inadequate street layout, unsanitary or unsafe conditions, deterioration of site improvements, improper subdivision or obsolete platting, or the existence of conditions which endanger life or property by fire or other causes, or any combination of those factors, retards the provision of housing accommodations or constitutes an economic or social liability, an economic underutilization of the area, or a menace to the public health, safety, morals, or welfare.”

#### B. Business District Boundaries

The Business District consists of six parcels and four blocks (including partial blocks). The entire area encompasses approximately 55 acres, including right-of-way within the Business District boundaries and a portion of PIN 09-23-400-035 on the northern boundary for easement access. Approximately 33% of the 55 acres is dedicated to right-of-ways. There is one parcel, 09-23-405-019, currently occupied by a gasoline filling station, that is inside of the physical boundaries of the area, but excluded as part of the Business District.

The Business District is generally bounded by 69<sup>th</sup> Street on the north, 72<sup>nd</sup> Court on the south, Illinois Route 83 on the west, and Adams Street and Willow Way Lane on the east, and includes the adjoining rights-of-way. The boundaries of the Route 83/Plainfield Road Business District have been drawn to include only real property directly and substantially benefited by the proposed project to be undertaken as part of the Business District Plan.

**Exhibit A** is the map of the Route 83/Plainfield Road Business District with PINs. It illustrates that all parcels in the Business District are contiguous. **Exhibit B** is the legal description of the Route 83/Plainfield Road Business District, specifically describing the Business District boundaries.

Parcels (with PINs) within the Business District are listed in **Exhibit C**. Street addresses for parcels within the Business District are listed in **Exhibit D**.

### C. Eligibility Analysis Methodology

In determining whether or not the proposed Business District meets the eligibility requirements of the Business District Act, at the Village's direction, Ehlers conducted research and field surveys.

Every parcel was visually examined during the survey. The survey and analysis of existing conditions within the Business District area was completed in April 2016 to document the extent to which each "blighted area" factor is present within the Business District. Various types of research and field surveys were undertaken including:

1. Exterior survey of the condition and use of properties and buildings.
2. Field survey of environmental conditions covering street, sidewalks, lighting, traffic, parking facilities, landscaping, fences and walls, and general property maintenance.
3. Analysis of tax maps to ascertain platting.
4. Review of previously prepared plats, plans, and studies.
5. Review of County and Township Records.
6. Contacts with Village officials and private parties knowledgeable of area conditions, history, age of buildings and site improvements, real estate matters and related items, as well as examination of existing information related to the Business District.

### D. Business District Eligibility Findings

The Business District is a "blighted area" as defined in the Business District Act due to the following factors:

- Defective, non-existent, or inadequate street layout
- Unsanitary or unsafe conditions
- Deterioration of site improvements
- Improper subdivision or obsolete platting
- Economic underutilization of the area

All of these factors combined constitute an economic liability and an economic underutilization of the area within the Route 83/Plainfield Road Business District in its present condition and use. Based on the presence of these factors, which is described in more detail below, the Route 83/Plainfield Road Business District is a "blighted area" as defined by the Business District Act.

#### **Defective, non-existent, or inadequate street layout**

**Finding:** The entire Business District suffers from a predominance of defective, non-existent, and inadequate street layout as evidenced by the current traffic conditions, the

need for additional signalization and the number of traffic accidents in the Business District.

The Business District is primarily served by two signaled intersections along Route 83 at 69<sup>th</sup> Street and 72<sup>nd</sup> Court, and four stop sign controlled intersections, Route 83 at 69<sup>th</sup> Street and 72<sup>nd</sup> Court, Plainfield Road at Adams Street and at the Willowbrook Town Center Access Drive. Four of the five intersections were evaluated as part of the *Traffic Impact Study Redevelopment of Kmart Store Parcel, Willowbrook, Illinois* prepared by Kenig, Lindren, O'Hara, Aboona, Inc. in April 2015. This study is attached as **Exhibit H**.

The Traffic Impact Study identified that three of the four Business District intersections are operating at-capacity and with long delays during peak hours. According to the Highway Capacity Manual grading scale, conditions at the three intersections (IL Route 83/Plainfield Road; IL Route 83/69<sup>th</sup> Street; and the Plainfield Road/Willowbrook Town Center Access Drive) range from Level E, which represents saturated or at-capacity conditions, to Level F, which represents oversaturated conditions and extensive delays. The Business District's newest signalized intersection at IL Route 83 and 72<sup>nd</sup> Court received a Level A grade, which is the best traffic flow and least amount of delays, to a grade of Level C, a mid-range grade.

In addition, a traffic signal warrant study was conducted to determine if a traffic signal is warranted at the intersection where Plainfield Road intersects the Willowbrook Town Center Access Drive on the south side and the vacant property on the north side. Per the guidelines established by the Illinois Department of Transportation, a traffic signal is warranted based on the existing traffic volumes and will be necessary with increased traffic from future development.

Traffic crash data provided by the Village of Willowbrook identifies an increase of 38% in the number of accidents over the past three years from 121 in 2013 to 168 in 2015. This is a large increase in accidents over a three-year period. According to the State of Illinois, approximately 59.6% of the accidents in 2014 occurred in the Business District, which only has four intersections in a relatively small area.

Defective, non-existent, or inadequate street layout is present in all of the parcels (100%). **Exhibit E** identifies parcels with this condition.

#### **Unsanitary or unsafe conditions**

**Finding:** The evidence cited for the previous factor also leads to unsafe conditions within the Business District. Current traffic conditions, the need for additional signalization and the number of traffic accidents in the Business District (see detailed analysis above) will require improvements to the public intersections and to the private properties within the Business District.

Unsafe conditions are present in all of the parcels (100%). **Exhibit E** identifies parcels with this condition.



#### **Deterioration of site improvements**

**Finding:** Field surveys were conducted in April 2016 to identify the physical condition of buildings, parking lots, service and loading areas, curbing, and sidewalks. The newer buildings on PIN 09-26-200-010 (Willowbrook Town Center) are generally in good condition and show minimal signs of deterioration.

PIN 09-23-405-018 (the former Kmart building) shows significant signs of deterioration throughout the parcel. The age of the building and the lack of an occupant have contributed to the building's deteriorated state. The building has damaged doors, holes and cracks in the facade, loose/missing materials around the entire building, broken windows, damaged awnings, rusting and inadequate sidewalks. The parking lot also has uneven surfaces, deteriorated light poles, cracks and holes in the pavement.

PIN 09-23-406-003 (Willowbrook Lanes) shows evidence of deterioration, which includes loose and missing shingles, peeling paint and rusting, and deteriorated sidewalks. Awnings, gutter/downspouts and tuck-pointing are also in a state of disrepair.

PIN 09-23-406-015 (TCF Bank) shows evidence of deterioration, which includes deteriorated surface parking lots and loose and missing materials.

Deterioration of site improvements is present in three of the six parcels (50%). **Exhibit E** identifies parcels with this condition.

#### **Improper subdivision or obsolete platting**

**Finding:** Evidence of obsolete platting exists within the Business District. Parcel 09-23-400-036 is irregular in size and shape and is not conducive to contemporary development. It includes parts of a pond, a sidewalk and a street. Parcel 09-23-406-018 (occupied by PNC Bank) is surrounded by parcel 09-26-200-010 (Willowbrook Town Center) on three sides with no access to Plainfield Road. Therefore, this factor is found to be present to a limited extent.

Obsolete platting is present in two of the six parcels (33%). **Exhibit E** identifies parcels with this condition.

#### **Economic underutilization of the area**

**Finding:** All of the factors noted above together constitute an economic liability to the Business District in its present condition and use. In addition, the Equalized Assessed Value ("EAV") of a property, as well as the level of vacancies in commercial spaces, are key indicators of the economic viability of an area.

Although not specifically outlined in the Business District Act, the TIF Act outlines three standards to measure EAV:

- If the EAV in an area has decreased for three of the last five calendar years prior to the year in which the area is designated.
- If the EAV in an area is increasing at an annual rate that is less than the balance of the municipality for three of the last five calendar years for which information is available.
- If the EAV in an area is increasing at an annual rate that is less than the Consumer Price Index for All Urban Consumers published by the United States Department of Labor or successor agency (CPI) for three of the last five calendar years prior to the year in which the area is designated.

If one or more of these tests are positive, it is reasonable to infer that there is a lack of private investment in the Business District as a whole, and therefore the area is economically underutilized.

The EAV of the Business District meets two of the three measurement standards, as shown in Table 1 below. The total EAV of the Business District has decreased for three of the last five calendar years. Also, the EAV of the Business District has increased at an annual rate that is less than the CPI for four of the past five years. This data indicates that the Business District is economically underutilized.

Table 1: Growth Rates of Equalized Assessed Valuation

	TAX YEAR					
	2010	2011	2012	2013	2014	2015
Total EAV of BD	13,138,910	13,350,440	12,428,080	11,882,380	12,188,740	12,188,610
Percent Change		1.68%	-6.91%	-4.31%	2.58%	-0.10%
Village Wide EAV	468,822,328	434,766,214	384,380,423	375,109,630	380,404,385	383,038,691
Balance of Village Wide EAV	455,682,018	421,415,774	381,852,423	363,217,278	368,205,565	369,852,081
Percent Change		-7.72%	-9.36%	-4.91%	1.37%	3.43%
CPI		3.20%	2.10%	1.50%	1.60%	0.10%

Data sources: DuPage County Clerk

Further, although the building on PIN 09-23-405-018 is located at a heavily traveled intersection, a desirable location for retail development, the property has remained vacant for the past three years. The site was formerly occupied by Kmart and the structure will require demolition before it can be redeveloped. The demolition and land preparation expenses, in addition to the cost of mitigating traffic issues that must be addressed on the property, will require assistance by the Village. This is evidenced by: 1) the fact that in the past three years the Village has not been able to locate a developer that can or will profitably redevelop this prominent site; and, 2) gap analysis performed by the Village's consultant indicates that some contribution by the Village would be justified to pay for a portion of these extraordinary expenses of redevelopment, as the Business District Act intends.

The findings of the eligibility factors all indicate that the area is not functioning as well as it should and demonstrates an economic underutilization of the area.

Economic underutilization of the area is present throughout the Business District as a whole (100%). As such, Exhibit E identifies all parcels with this condition.

#### E. Summary Business District Eligibility Findings

In summary, this Business District Plan concludes that the Business District in its present condition and use is eligible for Business District designation under the Business District Act as a “blighted area”, according to the definitions in the Business District Act.

The Business District is a “blighted area” as defined in the Business District Act due to the existence of the following factors:

- Defective, non-existent, or inadequate street layout
- Unsanitary or unsafe conditions
- Deterioration of site improvements
- Improper subdivision or obsolete platting
- Economic underutilization of the area

The Business District Act states that it is essential to the economic and social welfare of each municipality that business districts be developed, redeveloped, improved, maintained, and revitalized, and that if blighting conditions are present, blighting conditions be eradicated by assuring opportunities for development or redevelopment, encouraging private investment, and attracting sound and stable business and commercial growth.

The costs associated with the development and redevelopment of the properties in the Business District (including demolition of existing structures, land preparation, utilities, infrastructure, and traffic safety improvements) constitute an impediment to private investment. Due to the extensive initial investment for development incentive payments, rehabilitation, and public infrastructure that is required in order to allow development and redevelopment to occur, development and redevelopment of the area is not likely to occur solely as a result of private investment alone.

The Route 83/Plainfield Road Business District, on the whole, has not been subject to growth or development by private enterprises and would not reasonably be anticipated to be developed or redeveloped without the establishment of the Business District and the adoption of this Business District Plan.

## IV. Business District Development Plan

### A. Objectives and Policies

General objectives for the Route 83/Plainfield Road Business District include:

- Enhance the environment within the Business District to contribute more positively to the health, safety and general welfare of the Village and surrounding communities.
- Strengthen the economic well-being of the Business District and the Village by increasing business activity and improving the tax base of the Village and other local governments having overlapping jurisdiction in the Business District.
- Maintain, improve, and construct public and private infrastructure and roadway improvements to encourage and support private investment.
- Improve public and traffic safety conditions for motorists, pedestrians and bicyclists.
- Stimulate private investment in new construction and redevelopment so as to maintain a strong regional retail presence.
- Create new job opportunities and retain existing jobs for residents and non-residents of the Village.
- Improve the visual attractiveness of the Business District and the Village through attractive and high-quality design, site improvements, landscaping, and public areas.
- Reduce or eliminate the factors that qualified the Business District as a “blighted area”.

The Village proposes to undertake this Business District Plan, which consists of planned economic development and redevelopment activities, sound fiscal policies, marketable land uses, and other private and public activities. Appropriate policies have been or will be developed as required, assuring the completion of this Business District and the activities specified. The Village may employ the use of financial incentives for private investment within the Business District.

The Village also maintains the flexibility to undertake additional activities, improvements and projects authorized under the Business District Act and other applicable laws, as needs change over time, especially as market demands change and development and redevelopment occurs in the Route 83/Plainfield Road Business District.

## B. Business District Boundaries and Map

The Business District consists of six parcels and four blocks (including partial blocks). The entire area encompasses approximately 55 acres, including right-of-ways within the Business District boundaries.

The Business District is generally bounded by 69<sup>th</sup> Street on the north, 72<sup>nd</sup> Court on the south, and Illinois 83 on the west and Adams Street and Willow Way Lane on the east Willowbrook, Illinois. The boundaries include the adjoining rights-of-way and a portion of PIN 09-23-400-035 on the northern boundary for easement access but does not include PIN 09-23-405-019. Parcels that are not annexed in the Village of Willowbrook are excluded from the Business District.

The boundaries of the Route 83/Plainfield Road Business District have been drawn to include only real property directly and substantially benefited by the Business District Plan. **Exhibit A** is the map of the Route 83/Plainfield Road Business District with PINs. It illustrates that all parcels in the Business District are contiguous. **Exhibit B** is the legal description of the Route 83/Plainfield Road Business District, specifically describing the Business District boundaries.

Parcels by PIN within the Business District are listed in **Exhibit C**. Addresses of parcels within the Business District are listed in **Exhibit D**.

## C. Project Description

The Village proposes to achieve its objectives for the Route 83/Plainfield Road Business District through the use of public financing techniques authorized under the Business District Act to undertake the activities, improvements, and projects described below. The Village also maintains the flexibility to undertake additional activities, improvements, and projects authorized under the Business District Act and other applicable laws, as the needs for activities, improvements, and projects change as development and redevelopment occurs in the Business District, including:

1. Construct buildings and facilities.
2. Revitalize and upgrade buildings through site planning, façade improvements, and construction methods that include cohesive design features, provide focus to the streetscape and buildings in the Business District, and use quality building materials. (This includes the installation of automatic fire suppression systems in existing buildings where they would be required if they were to be constructed under current fire codes.)
3. Assemble land into parcels of sufficient shape and size for disposition, development, and redevelopment in accordance with this Business District Plan and contemporary development needs and standards.
4. Market sites within the Business District to private investors.

5. Improve streetscape design, pedestrian access, distinctive lighting, signage and landscaping, and other appropriate site amenities.
6. Redesign sites to improve layout and access, which may require the demolition and replacement of buildings and other facilities.
7. Provide and upgrade infrastructure to serve developments, including the construction of and improvements to utility and stormwater management infrastructure.
8. Create and improve on existing roadways and circulation patterns to improve traffic flow and safety.
9. Make access improvements to provide safe, convenient, efficient, and effective access to and circulation within and around the Business District for automobiles, trucks and delivery vehicles, public transportation, bicycles, and pedestrians, as appropriate.
10. Provide financial assistance, as permitted by the Act, to encourage private investment and private activities as outlined in this Business District Plan.

Specific sites targeted for redevelopment as of the issuance of this report include:

1. PIN 09-23-405-018, the site of a former Kmart retail store, which has been vacant for the past three years. The structure will require demolition before it can be redeveloped. A developer has approached the Village with plans to redevelop the site as a grocery store anchor with various commercial/restaurant spaces.
2. PINs 09-23-406-003 and 09-23-406-015, currently occupied by a bowling alley and a bank branch, respectively. A separate developer has approached the Village with plans to demolish existing structures and to redevelop the site with a larger restaurant anchor, a new bank building, and various ancillary commercial/restaurant spaces.

The projects, improvements, and activities presented in this Business District Plan generally conform to the land-use development policies and standards for the Village as set forth in the existing Comprehensive Plan.

#### D. Business District Name

The name of the Business District shall be the "Route 83/Plainfield Road Business District."

#### E. Business District Project Costs

A range of development and redevelopment projects, activities and improvements will be required to implement this Business District Plan. In undertaking these activities and improvements, the Village may incur and expend funds related to the projects described in this Business District Plan and in compliance with the Business District Act. The activities and improvements and their estimated costs are set forth in Table 2.

Estimated Business District Project Costs described in **Table 2** are intended to provide an upper estimate of expenditures and represent present value. Within the Development Project Costs, adjustments increasing or decreasing line items may be made without amending this Business District Plan. The costs represent estimated amounts and do not represent actual Village commitments or expenditures.

Estimated Business District Project Costs exclude any additional financing costs, including any interest expense, reasonably required reserves, issuance costs, capitalized interest and costs associated with optional redemptions. These financing costs may be substantial, are subject to prevailing market conditions, and are in addition to Estimated Business District Project Costs.

Table 2: Estimated Business District Project Costs

<u>Item Description</u>	<u>Estimated Costs</u>
1. Costs of studies, surveys, development of plans and specifications, implementation and administration of the Business District Plan, and personnel and professional service costs including architectural, engineering, legal, marketing, financial, planning, or other professional services, provided that no charges for professional services may be based on a percentage of tax revenues received by the municipality.	\$675,000
2. Property assembly costs, including but not limited to, acquisition of land and other real or personal property or rights or interests therein, and specifically including payments to developers or other nongovernmental persons as reimbursement for property assembly costs incurred by that developer or other nongovernmental person.	\$5,000,000
3. Site preparation costs, including but not limited to clearance, demolition or removal of any existing buildings, structures, fixtures, utilities, and improvements and clearing and grading of land.	\$5,000,000
4. Costs of installation, repair, construction, reconstruction, extension, or relocation of public streets, public utilities, and other public site improvements within or without the business district which are essential to the preparation of the Business District for use in accordance with the Business District Plan, and specifically including payments to developers or other nongovernmental persons as reimbursement for site preparation costs incurred by the developer or nongovernmental person.	\$12,000,000
5. Costs of renovation, rehabilitation, reconstruction, relocation, repair, or remodeling of any existing buildings, improvements, and fixtures within the Business District, and specifically including payments to developers or other nongovernmental persons as reimbursement for costs incurred by those developers or nongovernmental persons.	\$5,000,000
6. Costs of installation or construction within the Business District of buildings, structures, works, streets, improvements, equipment, utilities, or fixtures, and specifically including payments to developers or other nongovernmental persons as reimbursements for such costs incurred by such developer or nongovernmental person.	\$5,000,000
7. Financing costs, including but not limited to all necessary and incidental expenses related to the issuance of obligations, payment of any interest on any obligations issued under the Act that accrues during the estimated period of construction of any development or redevelopment project for which those obligations are issued and for not exceeding 36 months thereafter, and any reasonable reserves related to the issuance of those obligations.	\$675,000
8. Relocation costs to the extent that a municipality determines that relocation costs shall be paid or is required to make payment of relocation costs by federal or state law.	\$325,000
<b>Total Estimated Business District Project Costs</b>	<b>\$33,675,000</b>

Table 2 Notes:

1. All estimates are based on 2016 dollars and may be increased by five percent (5%) after adjusting for annual inflation reflected in the Consumer Price Index (CPI) for all Urban Consumers in U.S. Cities, published by the U.S. Department of Labor, as allowed by the Act.



2. Private redevelopment costs and investment are in addition to the above.
3. To the extent permitted by law, the Village reserves the right to adjust and transfer budgeted amounts within the Total Estimated Business District Project Costs among the categories of eligible costs set forth therein, provided any such adjustment or transfer shall not increase the Total Estimated Business District Project Costs, except as otherwise provided in these notes, unless otherwise amended.
4. Certain infrastructure work in connection with and appurtenant to the Business District can be undertaken under the Business District Act.
5. Total budgeted costs exclude any additional financing costs, including interest expense, capitalized interest, and any and all closing costs associated with any obligations issued, which shall be in addition to the Total Estimated Business District Project Costs.

#### F. Anticipated Sources of Funds to Pay Business District Project Costs

Upon designation of the Route 83/Plainfield Road Business District by Ordinance, as provided for by the Business District Act, within the Route 83/Plainfield Road Business District the Village intends to impose a retailers' occupation tax and service occupation tax (collectively the "Business District Sales Tax" or "Business District Sales Taxes"). The Business District Sales Taxes will be imposed for the term of the Business District (not to exceed twenty-three (23) years from the date of adoption of this Business District Plan) to pay for Business District Project Costs within the Route 83/Plainfield Road Business District and obligations issued to pay those costs.

Business District Sales Taxes will be the primary source of funds to pay for Business District Project Costs and secure obligations issued for such costs. In addition, other sources of funds which may be used to pay for Business District Project Costs or to secure municipal obligations are federal and state grants, investment income, private financing and other legally permissible funds the Village may deem appropriate.

An ordinance shall be adopted by the Village Board to create a separate fund entitled the "Route 83/Plainfield Road Business District Tax Allocation Fund." Pursuant to the Business District Act, the proceeds of the taxes received from the Business District Sales Taxes shall be deposited into this special fund for the purpose of paying or reimbursing Business District Project Costs and obligations incurred in the payment of those costs.

#### G. Anticipated Type and Source of Any Obligations to be Issued

The Village may issue obligations pursuant to the Business District Act and other authorities to provide for the payment or reimbursement of Business District Project Costs. The obligations may be secured by the Route 83/Plainfield Road Business District Tax Allocation Fund established for the Business District pursuant to the Business District Act and this Business District Plan, as well as other revenue sources as allowed by federal and state statutes.

One or more series of obligations may be issued from time to time in order to implement this Business District Plan. All obligations issued by the Village pursuant to this Business District Plan, the Business District Act, and other applicable federal and state statutes, shall be retired within twenty-three (23) years from the date of adoption of the ordinance.

approving this Business District Plan. However, the final maturity date of any obligations issued may not be more than twenty (20) years from their respective date of issuance.

All forms of debt may be issued on either a taxable or tax-exempt basis, with either fixed or variable interest rates; with or without capitalized interest; with or without deferred principal retirement; with or without interest rate limits except as limited by law; with or without redemption provisions, and such other terms, as the Village may determine and deem appropriate, pursuant to federal and state statutes.

#### H. The Rate and Period of Business District Taxes to be Imposed

A rate of one percent (1.0%) shall be imposed as a retailers' occupation tax and service occupation tax within the Route 83/Plainfield Road Business District. Such tax shall be imposed for up to, but no more than, twenty-three (23) years pursuant to the provisions of the Business District Act.

The Village of Willowbrook may amend the above tax rate in accordance with the Business District Act.

## V. Comparison of Business District Plan to Comprehensive Plan

The Village's Comprehensive Plan is entitled *Willowbrook Comprehensive Plan, Village of Willowbrook, October 25, 1993*. The following goals and objectives in the comprehensive plan reflect goals in this Business District Plan. (Goals and Objectives in the Comprehensive Plan that are not directly relevant to this Business District Plan are not included below):

### COMMERCIAL DEVELOPMENT AND DESIGN

#### Goal

A system of commercial development which provides local residents with needed goods and services, attracts shoppers from nearby communities, and enhances the Village tax base.

#### Objectives

1. Maintain and expand the variety of retail and commercial services offered within the Village.
2. Ensure that all retail, office and commercial activities are concentrated within or near areas of similar or compatible uses.
3. Encourage coordinated and consolidated development of additional commercial facilities.
4. Promote new regional-oriented commercial development in selected areas.
5. Provide for convenient access to and adequate parking within all shopping areas.
6. Reinforce and improve aesthetic and operational conditions in existing commercial areas.
7. Discourage strip commercial development within the Village and encourage clusters or areas for commercial uses around key major street intersections.
8. Encourage the design of new commercial development to facilitate a system of pedestrian access.
9. Encourage coordinated and shared access wherever possible.
10. Utilize fiscal impact analysis for new major commercial developments to ensure existing community services and facilities will not be negatively impacted by the manner in which the new development is to be undertaken.
11. Maintain a program that strictly and uniformly regulates signage while providing for the identification and operation of Village businesses.

## TRANSPORTATION

### Goal

A balanced transportation system which provides for safe and efficient movement of vehicles and pedestrians, reinforces surrounding land development and enhances regional transportation facilities.

### Objectives

1. Minimize congestion on all Village streets.
2. Ameliorate localized traffic operational problems.
4. Provide for safe bicycle and pedestrian circulation throughout the Village.
5. Ensure coordinated traffic circulation within proposed development areas.
6. Continue to work with DuPage County and the Illinois Department of Transportation in development of plans to widen Route 83 to ensure outcomes consistent with policies contained within this plan.
7. Provide for limited and consolidated vehicular access points along Route 83, Plainfield Road, 75th Street, and 63rd Street.
8. Ensure adequate road surface conditions to accommodate required traffic volumes.
11. Identify potential Park and Ride sites or satellite parking lots within the Village which can connect Pace bus service and commuter-rail passenger stations.
12. Improve the overall appearance of the community's arterial streets through landscaping and other aesthetic improvements.
13. Ensure that streets carry the volumes of traffic for which they are designed through effective traffic and access controls.
15. Ensure development of the collector and arterial street system through the acquisition or dedication of sufficient right-of-way within large scale development areas.
16. Continue to maintain and improve streets, curbs, gutters, and sidewalks as part of the Village's capital improvements program.

The Village's Future Land Use Map, as shown in **Exhibit G** of this report, shows properties in the Business District as being designated for commercial uses. This generally corresponds to the land uses outlined in this Business District Plan.

In summary, the above statements and objectives in the Village's Comprehensive Plan and the land uses identified in the Village's Future Land Use Map reflect the goals and land uses in this Business District Plan.

## VI. Establishment and Term of the Business District

The establishment of the Route 83/Plainfield Road Business District shall become effective upon adoption of an ordinance by the Village Board adopting this Business District Plan and designating the Village Business District. Redevelopment Agreements between the Village and any developers or other private parties shall be consistent with the provisions of the Business District Act and this Business District Plan.

The Route 83/Plainfield Road Business District Sales Taxes described in **Section IV** of this Business District Plan may not be imposed for more than twenty-three (23) years pursuant to the provisions of the Business District Act.

Upon payment of all Business District Project Costs and the retirement of all Business District obligations, but in no event more than twenty-three (23) years after the date of the Village Board's adoption of the ordinance approving this Business District Plan, the Village shall adopt an ordinance immediately rescinding the Business District Taxes imposed pursuant to the Business District Act. Any surplus funds then remaining in the Business District Tax Allocation Fund shall then be distributed to the municipal treasurer for deposit into the general corporate fund of the municipality.

## VII. Formal Findings

Based upon the information described in this Business District Plan, the Village Board of the Village of Willowbrook makes the following formal findings and determinations:

1. The Route 83/Plainfield Road Business District is a contiguous area and includes only parcels of real property directly and substantially benefitted by the Business District Plan.
2. The Business District, in its entirety, is located within the Village limits of Willowbrook, Illinois.
3. The Route 83/Plainfield Road Business District is a “blighted area” as defined in the Business District Act due to the existence of the following factors:
  - Defective, non-existent, or inadequate street layout
  - Unsanitary or unsafe conditions
  - Deterioration of site improvements
  - Improper subdivision or obsolete platting
  - Economic underutilization of the area
4. The Route 83/Plainfield Road Business District Plan conforms to the Village’s Comprehensive Plan for the development of the municipality as a whole.
5. The Route 83/Plainfield Road Business District, on the whole, has not been subject to growth or development by private enterprises and would not reasonably be anticipated to be developed or redeveloped without the establishment of the Business District and the adoption of this Business District Plan.

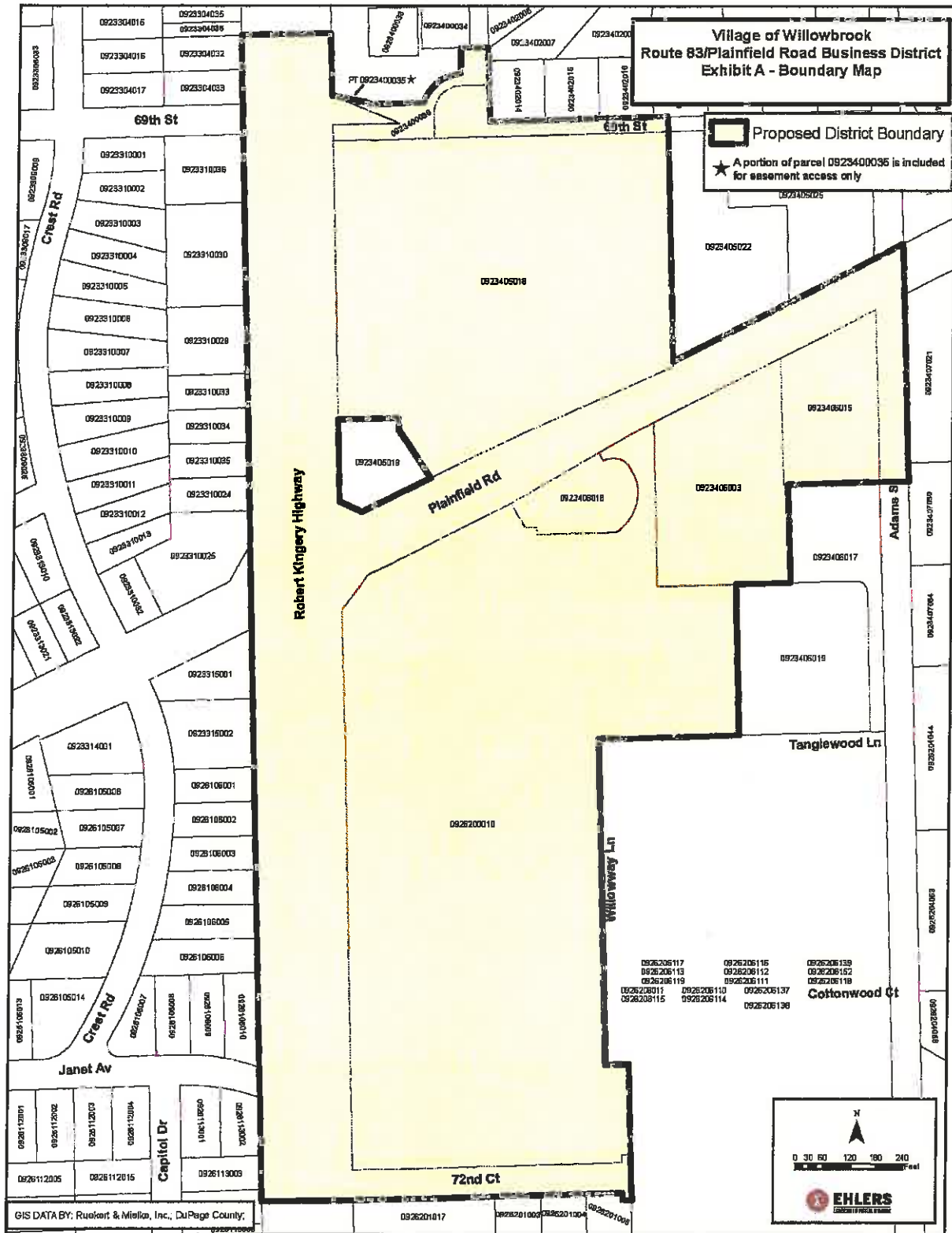
## VIII. Provisions for Amending the Business District

The Village of Willowbrook may amend this Business District Plan in accordance with the Business District Act.

## Exhibits



Exhibit A: Business District Boundary Map



## Exhibit B: Business District Legal Description

**LEGAL DESCRIPTION (ROUTE 83\PLAINFIELD ROAD BUSINESS DISTRICT):**

THAT PART OF THE SOUTH HALF OF SECTION 23 AND THE NORTH HALF OF SECTION 26 TOWNSHIP 38 NORTH, RANGE 11 EAST OF THE THIRD PRINCIPAL MERIDIAN IN DUPAGE COUNTY, ILLINOIS, BEING DESCRIBED AS FOLLOWS:

BEGINNING AT THE MOST EASTERLY SOUTHEAST CORNER OF LOT 1 IN PERSEVERANCE SUBDIVISION, BEING A SUBDIVISION IN THE SOUTHEAST QUARTER OF SAID SECTION 23 AND THE NORTHEAST QUARTER OF SAID SECTION 26, ACCORDING TO THE PLAT THEREOF RECORDED JULY 30, 2007 AS DOCUMENT NO. R2007-141528; THENCE NORTHERLY, WESTERLY, NORTHERLY, EASTERLY AND NORTHERLY ALONG THE EAST LINE OF SAID LOT 1 TO A POINT ON THE SOUTH LINE OF LOT 1 IN WILLOWBROOK CENTER UNIT NO. 1, BEING A SUBDIVISION IN THE SOUTHEAST QUARTER OF SAID SECTION 23, ACCORDING TO THE PLAT THEREOF RECORDED OCTOBER 16, 1963 AS DOCUMENT NO. R63-37895; THENCE EASTERLY ALONG SAID SOUTH LINE TO THE SOUTHEAST CORNER OF SAID LOT 1; THENCE NORTHERLY ALONG THE EAST LINE OF SAID LOT 1 TO A POINT ON THE SOUTH LINE OF LOT 2 IN LENZ'S ASSESSMENT PLAT, BEING A SUBDIVISION IN THE SOUTHEAST QUARTER OF SAID SECTION 23, ACCORDING TO THE PLAT THEREOF RECORDED JULY 5, 1955 AS DOCUMENT NO. 763597; THENCE EASTERLY ALONG SAID SOUTH LINE AND ALONG THE EASTERLY EXTENSION THEREOF TO A POINT ON THE EAST RIGHT-OF-WAY LINE OF ADAMS STREET; THENCE NORTHERLY ALONG SAID EAST RIGHT-OF-WAY LINE TO A POINT ON THE NORTHERLY RIGHT-OF-WAY LINE OF PLAINFIELD ROAD; THENCE SOUTHWESTERLY ALONG SAID NORTHERLY RIGHT-OF-WAY LINE TO THE SOUTHWESTERLY CORNER OF LOT 1 IN 1<sup>ST</sup> BURLINGTON BANK, WILLOWBROOK RESUBDIVISION, BEING A SUBDIVISION IN THE SOUTHEAST QUARTER OF SAID SECTION 23, ACCORDING TO THE PLAT THEREOF RECORDED SEPTEMBER 23, 1986 AS DOCUMENT NO. R86-115152; THENCE NORTHERLY ALONG THE WEST LINE OF SAID LOT 1 AND ALONG THE NORTHERLY EXTENSION THEREOF TO A POINT ON THE NORTH RIGHT-OF-WAY LINE OF 69<sup>TH</sup> STREET; THENCE WESTERLY ALONG SAID NORTH RIGHT-OF-WAY LINE TO THE SOUTHWEST CORNER OF LOT 14 IN SCHILLER'S ADDITION, BEING A SUBDIVISION IN THE SOUTHEAST QUARTER OF SAID SECTION 23, ACCORDING TO THE PLAT THEREOF RECORDED JUNE 14, 1950 AS DOCUMENT NO. 595530; THENCE NORTHERLY ALONG THE WEST LINE OF SAID LOT 14 TO THE SOUTHWEST CORNER OF LOT 12 IN WEST TOWN DEVELOPMENT COMPANY'S RESUBDIVISION, BEING A SUBDIVISION IN THE SOUTHEAST QUARTER OF SAID SECTION 23, ACCORDING TO THE PLAT THEREOF RECORDED JULY 22, 1955 AS DOCUMENT NO. 766039; THENCE NORTHERLY ALONG THE WEST LINE OF SAID LOT 12 AND ALONG THE WEST LINE OF LOT 13 IN SAID WEST TOWN DEVELOPMENT COMPANY'S RESUBDIVISION TO THE NORTHEAST CORNER OF PARCEL 1 IN WILLOWBROOK OFFICE PARK LOT 12 ASSESSMENT PLAT, BEING A SUBDIVISION IN THE SOUTHEAST QUARTER OF SAID SECTION 23, ACCORDING TO THE PLAT THEREOF RECORDED SEPTEMBER 8, 2005 AS DOCUMENT NO. R2005-197465; THENCE WESTERLY, SOUTHERLY, SOUTHWESTERLY AND WESTERLY ALONG THE NORTH LINE OF SAID PARCEL 1 115.50 FEET (MORE OR LESS) TO A POINT ON THE NORTHEASTERLY LINE OF A PERMANENT EASEMENT (AS SHOWN ON AN EASEMENT EXHIBIT PREPARED BY MANHARD CONSULTING, LTD AND DATED JUNE 9, 2016); THENCE NORTHWESTERLY ALONG SAID NORTHEASTERLY PERMANENT EASEMENT LINE TO A POINT ON THE EAST RIGHT-OF-WAY LINE OF ILLINOIS ROUTE 83; THENCE NORTHERLY ALONG SAID EAST RIGHT-OF-WAY LINE TO A POINT OF INTERSECTION WITH THE EASTERLY EXTENSION OF THE NORTH LINE OF LOT 15 IN BLOCK 35 IN TRI STATE VILLAGE UNIT NO. 5, BEING A SUBDIVISION IN THE SOUTHWEST QUARTER OF SAID SECTION 23 AND THE NORTHWEST QUARTER OF SAID SECTION 26, ACCORDING TO THE PLAT THEREOF RECORDED JULY 20, 1944 AS DOCUMENT NO. 465114; THENCE WESTERLY ALONG SAID EASTERLY EXTENSION TO A POINT ON THE WEST RIGHT-OF-WAY LINE OF SAID ILLINOIS ROUTE 83; THENCE SOUTHERLY ALONG SAID WEST RIGHT-OF-WAY LINE TO A POINT OF INTERSECTION WITH THE WESTERLY EXTENSION OF THE SOUTH RIGHT-OF-WAY LINE OF 72<sup>ND</sup> COURT; THENCE EASTERLY ALONG

SAID WESTERLY EXTENSION TO A POINT OF INTERSECTION WITH SAID EAST RIGHT-OF-WAY LINE OF ILLINOIS ROUTE 83; THENCE EASTERLY, SOUTHERLY AND EASTERLY ALONG SAID SOUTH RIGHT-OF-WAY LINE OF 72<sup>ND</sup> COURT TO A POINT ON THE EAST LINE OF LOT 6 IN HINSDALE HIGHLAND ESTATES, BEING A SUBDIVISION IN THE NORTHEAST QUARTER OF SAID SECTION 26, ACCORDING TO THE PLAT THEREOF RECORDED JULY 23, 1954 AS DOCUMENT NO. 720969; THENCE NORTHERLY ALONG SAID EAST LINE EXTENDED NORTHERLY TO THE POINT OF BEGINNING.

EXCEPTING THEREFROM THE FOLLOWING DESCRIBED PARCEL (P.I.N. 09-23-405-019):

THAT PART OF LOT 4 WHICH LIES EAST OF THE EAST LINE OF ILLINOIS ROUTE 83 AND NORTHERLY OF THE NORTHERLY RIGHT-OF-WAY LINE OF PLAINFIELD ROAD AS PER PLAT OF DEDICATION RECORDED JUNE 27, 1961 AS DOCUMENT NO. R61-11952 AND WHICH LIES SOUTH OF A LINE DRAWN PERPENDICULAR TO THE EAST LINE OF SAID ILLINOIS ROUTE 83 TO A POINT WHICH IS 298.40 FEET NORTH OF THE CENTER LINE OF PLAINFIELD ROAD (MEASURED ALONG THE EAST LINE OF SAID ROUTE 83), ALSO, THAT PART OF LOT 3 WHICH LIES NORTHERLY OF THE NORTHERLY RIGHT-OF-WAY LINE OF PLAINFIELD ROAD AS PER PLAT OF DEDICATION RECORDED JUNE 27, 1961 AS DOCUMENT NO. R61-11952, AND WHICH LIES SOUTHERLY OF A LINE DRAWN FROM A POINT IN THE WEST LINE OF SAID LOT 3, SAID POINT BEING 138.94 FEET NORTH OF THE NORTH LINE OF SAID PLAINFIELD ROAD (MEASURED ALONG SAID WEST LINE OF LOT 3) TO A POINT IN THE NORTHERLY LINE OF SAID PLAINFIELD ROAD, SAID LOTS 3 AND 4 BEING IN OWNER'S SUBDIVISION OF THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 23, AND THE WEST HALF OF THE NORTHEAST QUARTER OF SECTION 26, ALL IN TOWNSHIP 38 NORTH, RANGE 11 EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED APRIL 24, 1931 AS DOCUMENT NO. 311500, IN DUPAGE COUNTY, ILLINOIS.

06/09/2016

Exhibit C: Business District Parcel List

<b>Route 83/Plainfield Road Business District Parcels (PINs)</b>
09-23-400-036
09-23-405-018
09-23-406-003
09-23-406-015
09-23-406-018
09-26-200-010
09-23-400-035*

\* A portion of this parcel is included for easement access only.

Exhibit D: Business District Address List

Route 83/Plainfield Road Business District Address List						
Address	Unit	Village	State	Zip	PIN	
825 PLAINFIELD RD	H	WILLOWBROOK	IL	60527-1703	09-23-406-018	
7101 S KINGERY HWY	G2	WILLOWBROOK	IL	60527-5525	09-26-200-010	
7111 S KINGERY HWY	A1-A3	WILLOWBROOK	IL	60527-5525	09-26-200-010	
7117 S KINGERY HWY	A4	WILLOWBROOK	IL	60527-5525	09-26-200-010	
7121 S KINGERY HWY	A5	WILLOWBROOK	IL	60527-5525	09-26-200-010	
7125 S KINGERY HWY	b	WILLOWBROOK	IL	60527-5525	09-26-200-010	
7135 S KINGERY HWY	G1	WILLOWBROOK	IL	60527-5525	09-26-200-010	
7137 S KINGERY HWY	G1	WILLOWBROOK	IL	60527-5525	09-26-200-010	
7143 S KINGERY HWY	E	WILLOWBROOK	IL	60527-5525	09-26-200-010	
7145 S KINGERY HWY	C1-C3	WILLOWBROOK	IL	60527-5525	09-26-200-010	
7155 S KINGERY HWY	D	WILLOWBROOK	IL	60527-5525	09-26-200-010	
7163 S KINGERY HWY	E1	WILLOWBROOK	IL	60527-5525	09-26-200-010	
7165 S KINGERY HWY	F2	WILLOWBROOK	IL	60527-5525	09-26-200-010	
7167 S KINGERY HWY	F1	WILLOWBROOK	IL	60527-5525	09-26-200-010	
7169 S KINGERY HWY	Q1	WILLOWBROOK	IL	60527-5525	09-26-200-010	
7171 S KINGERY HWY	Q2	WILLOWBROOK	IL	60527-5525	09-26-200-010	
7173 S KINGERY HWY	Q3	WILLOWBROOK	IL	60527-5525	09-26-200-010	
7175 S KINGERY HWY	J	WILLOWBROOK	IL	60527-5525	09-26-200-010	
7181 S KINGERY HWY	L1	WILLOWBROOK	IL	60527-5525	09-26-200-010	
7183 S KINGERY HWY	L2	WILLOWBROOK	IL	60527-5525	09-26-200-010	
7185 S KINGERY HWY	L3	WILLOWBROOK	IL	60527-5525	09-26-200-010	
7187 S KINGERY HWY	L4	WILLOWBROOK	IL	60527-5525	09-26-200-010	
7189 S KINGERY HWY	L5	WILLOWBROOK	IL	60527-5525	09-26-200-010	
7191 S KINGERY HWY	L6	WILLOWBROOK	IL	60527-5525	09-26-200-010	
7195 S KINGERY HWY	P	WILLOWBROOK	IL	60527-5525	09-26-200-010	
7199 S KINGERY HWY	N	WILLOWBROOK	IL	60527-5525	09-26-200-010	
820 PLAINFIELD RD		WILLOWBROOK	IL	60527-5340	09-23-405-018	
840 PLAINFIELD RD		WILLOWBROOK	IL	60527-5340	09-23-405-018	
715 PLAINFIELD RD		WILLOWBROOK	IL	60527-5377	09-23-406-015	
735 PLAINFIELD RD		WILLOWBROOK	IL	60527-7638	09-23-406-003	

# **Exhibit E: Survey of Parcels**

The table below shows the results of field survey and other research conducted in April 2016.

	<b>PIN</b>	<b>Defective, Non-existent or Inadequate Street Layout</b>	<b>Unsanitary or Unsafe Conditions</b>	<b>Deterioration of Site Improvements</b>	<b>Improper Sub- division or Obsolete Platting</b>	<b>Economic Underutilization*</b>
1	09-23-400-036	X	X		X	X
2	09-23-405-018	X	X	X		X
3	09-23-406-003	X	X	X	X	X
4	09-23-406-015	X	X	X		X
5	09-23-406-018	X	X			X
6	09-26-200-010	X	X			X

\* Economic Underutilization is measured by the EAVs in the Business District as a whole rather than by block or individually.



**Exhibit F: Representative Photographs of Conditions in the Business District**

The photographs on the following pages are representative samples of the conditions found in the Business District and demonstrate the “blighted area” factors present at the time of this Business District Plan.















Exhibit G: Future Land Use Map





Exhibit H: Traffic Impact Study

# **Traffic Impact Study Redevelopment of Kmart Store Parcel Willowbrook, Illinois**



Submitted by



**Kenig, Lindgren, O'Hara, Aboona, Inc.**

October 22, 2014

Revised April 9, 2015

## Introduction

This memorandum summarizes the results of a traffic impact study conducted by Kenig, Lindgren, O'Hara, Aboona, Inc. (KLOA, Inc.) for the proposed redevelopment of the Kmart store parcel located in Willowbrook, Illinois. The parcel is located in the northeast quadrant of the signalized intersection of Kingery Highway (IL 83) with Plainfield Road and contains a former 114,605 square-foot Kmart store. Access to the parcel is currently provided via (1) a full access drive on Plainfield Road aligned opposite the Willowbrook Town Center access drive, (2) a full access drive on Plainfield Road approximately 410 feet northeast of IL 83 and (3) a restricted right-turn in/right-turn out access drive on IL 83.

As proposed, the existing store will be razed and redeveloped with a 128,935 square-foot commercial development that is to contain the following land-uses.

- Pete's Fresh Market grocery store (69,054 square feet)
- Commercial space (45,493 square feet)
- Restaurant space (12,443 square feet)
- Coffee/donut store with a drive-through lane (1,945 square feet)

Access to the development will be provided via (1) the existing full access drive aligned opposite the Willowbrook Town Center access drive, (2) a right-in/right-out access drive located on IL 83 just south of the existing access drive and (3) a new right-in/left-in/right-out access drive on IL 83 at the north end of the site. The second full access drive on Plainfield Road and the existing IL 83 access drive currently serving the parcel will be eliminated. As part of the development, a traffic signal is proposed at the intersection of Plainfield Road with the development access drive and the Willowbrook Town Center access drive as well as roadway improvements along Plainfield Road and IL 83.

The purpose of this study was to examine existing traffic conditions, assess the impact that the proposed development would have on traffic conditions in the area and determine what additional geometric and traffic control improvements are necessary to accommodate the projected conditions. In addition, a traffic signal warrant study was performed to determine if a traffic signal will be warranted at the Plainfield Road/development access drive/Willowbrook Town Center access drive intersection. The sections of this report present the following.

- Existing roadway conditions
- A description of the proposed development
- Directional distribution of the development generated traffic
- Vehicle trip generation for the proposed development
- Projected traffic conditions, including ambient growth and access to the development
- Traffic analyses for the weekday morning, weekday evening and Saturday midday peak hours for existing and projected traffic conditions
- Recommendations with respect to site access and the adjacent roadway network
- A traffic signal warrant study conducted at the Plainfield Road/development access drive/Willowbrook Town Center access drive intersection

## **Existing Conditions**

Existing traffic and roadway conditions were documented based on field visits and traffic counts conducted by KLOA, Inc. The following provides a detailed description of the physical characteristics of the roadways including geometry and traffic control, adjacent land uses and peak hour traffic flows along area roadways.

### **Site Location**

The site of the development is located in the northeast quadrant of the signalized intersection of IL 83 with Plainfield Road and is currently occupied by a vacant 114,605 square-foot Kmart store. Land uses in the area include the Willowbrook Town Center to the south, a Chase bank and the USA Realty office building to the east, and single-family homes to the north. A Phillips 66 gas station is located in the northeast corner of the IL 83/Plainfield Road intersection and is bounded by the subject site on its north and east sides. **Figure 1** illustrates the location of the site and **Figure 2** shows an aerial view of the site.

### **Existing Roadway System Characteristics**

The characteristics of the existing roadways that surround the proposed development are illustrated in **Figure 3** and described below.

*Kingery Highway (IL 83)* is a north-south major arterial that is under the jurisdiction of the Illinois Department of Transportation (IDOT) and has been designated as a Strategic Regional Arterial (SRA) route. The roadway generally has two-lanes in each direction separated by a grass median. A third northbound lane is provided on IL 83 between 73<sup>rd</sup> Court and Plainfield Road where it terminates as a right-turn lane serving Plainfield Road. At its signalized intersection with Plainfield Road, IL 83 provides dual left-turn lanes, two through lanes and an exclusive right-turn lane on the southbound approach. The northbound approach provides an exclusive left-turn lane, two through lanes and an exclusive right-turn lane. At its signalized intersection with 72<sup>nd</sup> Court, the southbound approach provides an exclusive left-turn lane and two through lanes. The northbound approach provides two through lanes and a shared through/right-turn lane. IL 83 has a posted speed limit of 45 mph, has an average daily traffic (ADT) volume of 47,100 vehicles and is classified as a class II truck route.



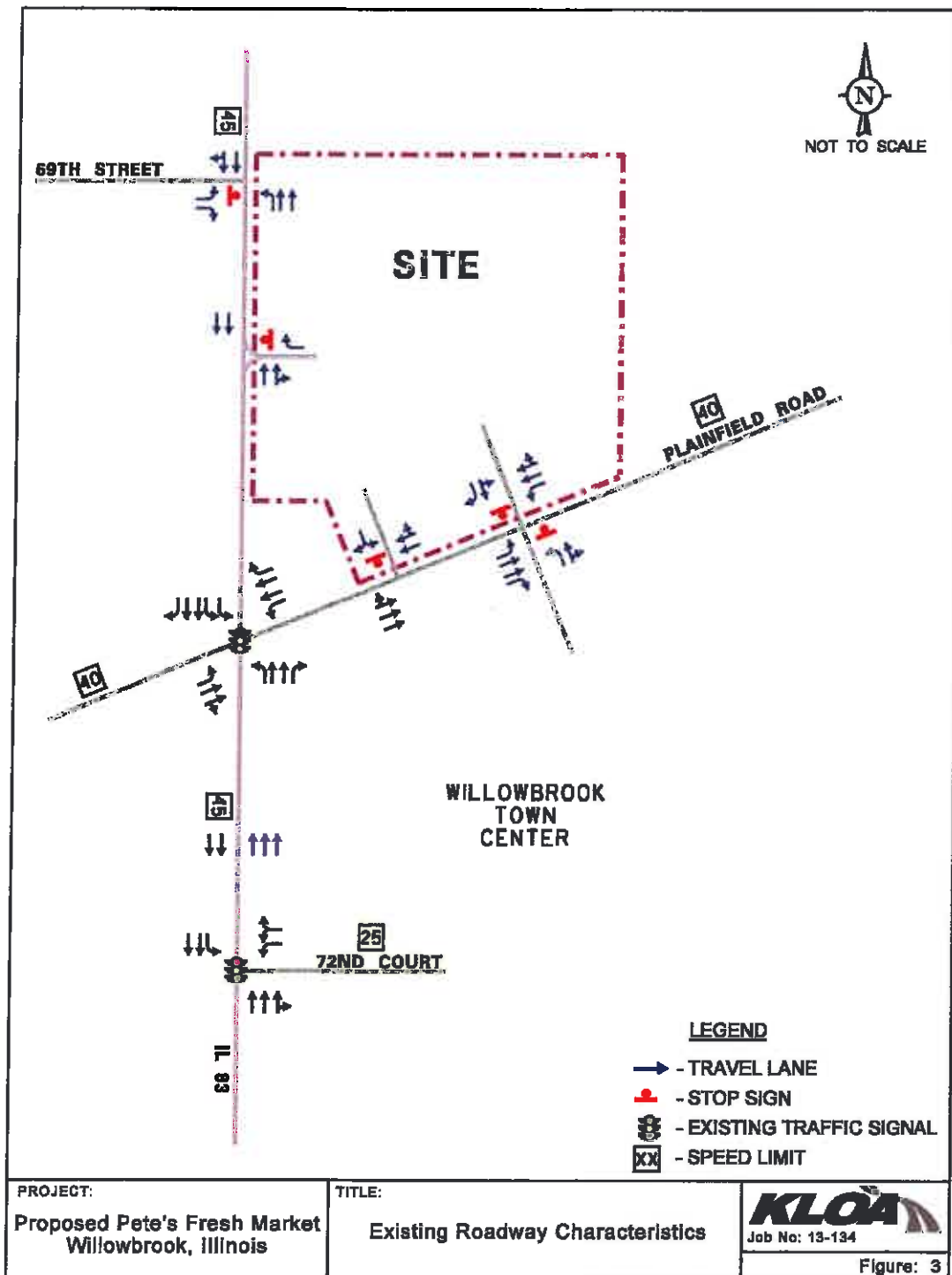
Site Location

Figure 1



Aerial View of Site

Figure 2



*Plainfield Road* is a northeast-to-southwest minor arterial roadway that is under the jurisdiction of the DuPage County Division of Transportation (DuDOT). The roadway generally has two through lanes in each direction. A third northeast bound through lane is provided on Plainfield Road between IL 83 and Willowbrook Town Center access drive where it terminates as a right-turn lane serving the Willowbrook Town Center. At its signalized intersection with IL 83, it provides an exclusive left-turn lane, two through lanes and an exclusive right-turn lane on the southwest approach. The northeast approach provides an exclusive left-turn lane, a through lane and a shared through/right-turn lane. At its unsignalized intersection with the site access drive/Willowbrook Town Center access drive intersection, it provides an exclusive left-turn lane, a through lane and a shared through/right-turn lane on the southwest approach. The northeast approach provides an exclusive left-turn lane, two through lanes and an exclusive right-turn lane. Plainfield Road has a posted speed limit of 40 mph and has an ADT volume of 21,800 vehicles.

*72<sup>nd</sup> Court* is an east-west collector road that provides access to the Lake Willow Way residential development, the Willowbrook Town Center and a specialty retail center on the south side of 72<sup>nd</sup> Court. At its signalized intersection with IL 83, 72<sup>nd</sup> Court provides an exclusive left-turn lane and a shared left/right-turn lane. 72<sup>nd</sup> Court is under the jurisdiction of the Village of Willowbrook and has a posted speed limit of 25 mph.

*The Willowbrook Town Center access drive* is located opposite the primary access drive to the site. At its intersection with Plainfield Road, the Willowbrook Town Center access drive provides an exclusive left-turn lane and a shared through/right-turn lane and the site access drive provides a shared through/left-turn lane and an exclusive right-turn lane. Both approaches are under stop sign control at its intersection with Plainfield Road.

*69<sup>th</sup> Street* is an east-west local road that has a physical barrier provided just west of IL 83 prohibiting access to the residential neighborhood. At its unsignalized intersection with IL 83, 69<sup>th</sup> Street provides a two-lane cross section that is under stop sign control.

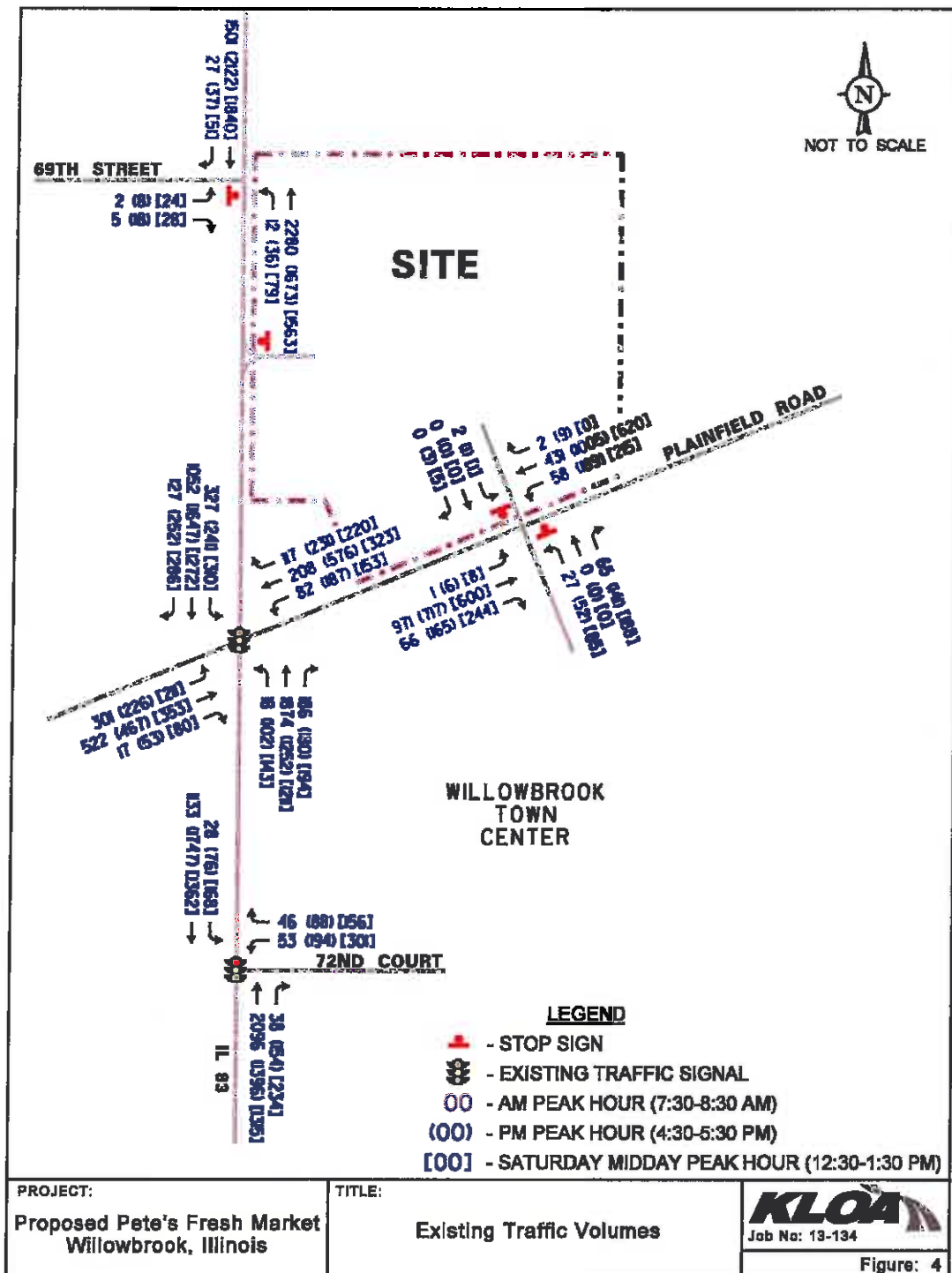
### **Existing Traffic Volumes**

KLOA, Inc. conducted manual traffic, pedestrian and bicycle counts at the following intersections within the vicinity of the site.

- IL 83 with Plainfield Road
- IL 83 with 72<sup>nd</sup> Court
- Plainfield Road with Willowbrook Town Center access drive/site's access drive
- IL 83 with 69<sup>th</sup> Street

The counts were generally conducted on Wednesday, August 14, 2013 from 7:00 A.M. to 9:00 A.M. and from 4:00 P.M. to 6:00 P.M. and on Saturday, August 10, 2013 from 12:00 P.M. to 2:00 P.M. The counts for the intersection of IL 83 with 69<sup>th</sup> Street were conducted on Tuesday March 10, 2015 and Saturday March 7, 2015 during the same periods. Summaries of the traffic counts show that the weekday morning peak hour occurred from 7:30 A.M. to 8:30 A.M., the weekday evening peak hour occurred from 4:30 P.M. to 5:30 P.M. and the Saturday peak hour occurred from 12:30 P.M. to 1:30 P.M. **Figure 4** illustrates the existing peak hour traffic and pedestrian volumes. The raw traffic counts are included in the Appendix.





## **Development Traffic Characteristics**

To evaluate the impact of the proposed commercial development on the area roadway system, it was necessary to quantify the number of vehicle trips the overall site will generate during the weekday morning, weekday evening and Saturday midday peak hours and then determine the directions from which this traffic will approach and depart the site.

### **Existing Site Conditions**

The site is currently occupied by a vacant 114,605 square-foot Kmart store. Access to the parcel is currently provided via (1) a full access drive on Plainfield Road aligned opposite the Willowbrook Town Center access drive, (2) a full access drive on Plainfield Road approximately 410 feet east of IL 83 and (3) a restricted right-turn in/right-turn out access drive on IL 83.

### **Proposed Development Plan**

As proposed, the parcel will be redeveloped with a 128,935 square-foot commercial development that will contain the following land uses.

- Pete's Fresh Market grocery store (69,054 square feet)
- Commercial space (45,493 square feet)
- Restaurant space (12,443 square feet)
- Coffee/donut store with a drive-through lane (1,945 square feet)

A copy of the site plan is provided in the Appendix.

### **Development Access**

As previously indicated, access to the existing site is currently provided via two full access drives on Plainfield Road and a restricted right-turn in/right-turn out access drive on IL 83. As proposed, the western Plainfield Road full access drive and the IL 83 access drive will be eliminated and the development will be served via the following three access drives.

1. *Plainfield Road Access Drive:* This existing access drive is located opposite the Willowbrook Town Center access drive and is proposed to be under traffic signal control allowing full ingress/egress movements to/from the proposed development. The access drive will be designed to provide two inbound lanes and two outbound lanes, with the outbound lanes striped for an exclusive left-turn lane and a shared through/right-turn lane. The Willowbrook Town Center access drive will continue to provide an exclusive left-turn lane and a shared through/right-turn lane. An exclusive left-turn lane is currently provided on Plainfield Road serving this access drive. In addition, an exclusive right-turn lane will be provided on the southwest approach of Plainfield Road serving the access drive. As part of the development, this intersection is proposed to be under traffic signal control.

2. *IL 83 Right-In/Right-Out Access Drive:* This access drive is proposed to be located just south of the existing right-in/right-out access drive or approximately 530 feet north of Plainfield Road. The access drive will provide two inbound lanes and one outbound lane with the outbound lane under stop sign control.
3. *IL 83 Right-In/Left-In/Right-Out Service Access Drive:* This access drive will be located at the north end of the site opposite 69<sup>th</sup> Street and the existing IL 83 median break. The access drive will be physically restricted to right-turn in/left-turn in/right-turn out movements only and will provide one inbound lane and one outbound lane, with the outbound lane under stop sign control. An exclusive southbound left-turn lane will be provided on IL 83 serving the access drive. In addition, the third northbound through lane to be provided along the site's frontage will terminate as a right-turn lane serving the access drive.

#### **Truck Route**

The majority of trucks and delivery vehicles will enter the site via the proposed right-in/left-in/right-out access drive on IL 83 and will exit via the full access drive on Plainfield Road opposite the Willowbrook Town Center access drive. Truck traffic will be prohibited from exiting the development via the northern IL 83 access drive.

#### **Roadway Improvements**

As part of the development, a traffic signal is proposed to be installed at the intersection of Plainfield Road/development access drive/Willowbrook Town Center access drive. A traffic signal warrant study, presented later in the report, shows that a traffic signal is warranted based on the existing traffic volumes. In order to accommodate the proposed signalized intersection and the additional traffic to be generated by the development, the following roadway improvements are proposed along Plainfield Road as part of the development.

- Dual left-turn lanes will be provided on both approaches of Plainfield Road at its intersection with IL 83.
- In addition to the dual left-turn lanes and the two-through lanes, an exclusive right-turn lane will be provided on the southwest bound approach of Plainfield Road at its intersection with IL 83. To maximize the storage along this approach, the right-turn lane and taper will extend to the development access drive.
- The third northbound through lane on IL 83 that currently terminates as a right-turn lane at its intersection with Plainfield Road will be extended to the north of the site and will terminate as a right-turn lane serving the northern access drive.
- The traffic signal at the IL 83/Plainfield Road intersection will be modified to accommodate the proposed roadway improvements.

- In addition to the traffic signal, an exclusive right-turn lane will be provided on the southwest bound approach of Plainfield Road at its intersection with the development access drive/Willowbrook Town Center access drive.

A copy of the preliminary roadway improvement plans are provided in the Appendix.

#### **Directional Distribution of Site Traffic**

The directional distribution of how traffic will approach and depart the development was estimated based on a combination of existing travel patterns, the direction/location of nearby residential neighborhoods, the location of the proposed access driveways serving the development, and the existing roadway characteristics and traffic controls. The directional distribution is illustrated in **Figure 5**.

#### **Development Traffic Generation**

The estimate of traffic to be generated by the development was based on trip rates published in the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 9<sup>th</sup> Edition. Pass-by vehicle trips, or those vehicles on the adjacent roadway network already enroute to another destination (i.e. home to work or work to home) were also considered and included in the development-generated vehicle trip estimation. A pass-by reduction of 20 percent was applied to the estimated trip generation volumes.

**Table 1** estimates the total trips to be generated by the development for the weekday morning, weekday evening and Saturday midday peak hours.

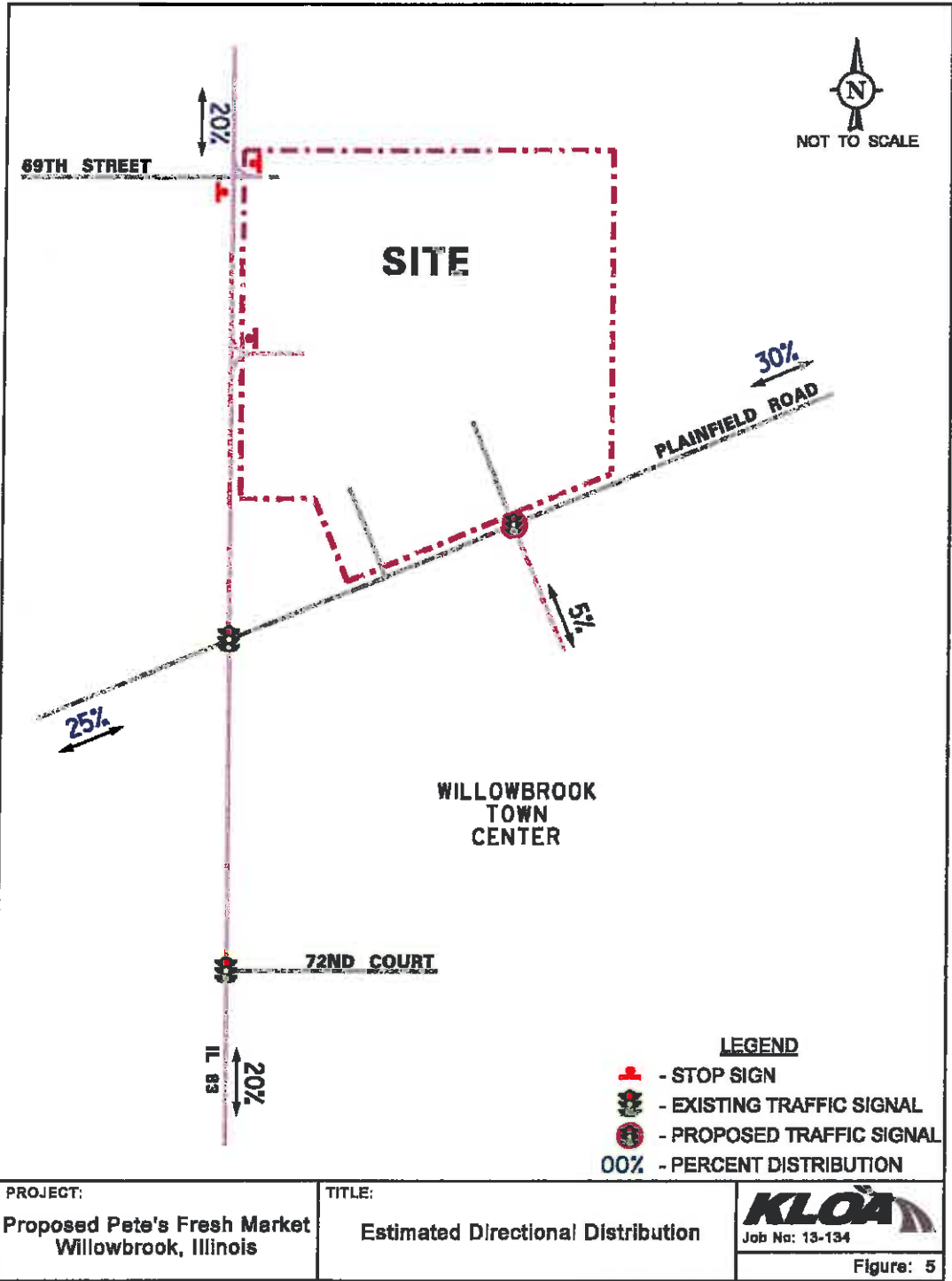


Table 1  
ESTIMATED SITE-GENERATED TRAFFIC VOLUMES

Land Use/Size	ITE Land- Use Code	Weekday Morning Peak Hour		Weekday Evening Peak Hour		Saturday Midday Peak Hour	
		In	Out	In	Out	In	Out
Grocery Store - 69,054 s.f.	850	146	89	302	290	375	360
Restaurants - 12,443 s.f.	932	30 <sup>1</sup>	25 <sup>1</sup>	74	49	93	82
Specialty Retail - 14,215 s.f. <sup>2</sup>	820	8	5	25	28	36	33
Department Store - 31,278 s.f.	875	11	7	30	28	55	49
Coffee/Donut Shop - 1,945 s.f.	937	<u>100</u>	<u>96</u>	<u>42</u>	<u>42</u>	<u>82</u>	<u>82</u>
Sub Total		295	222	473	437	641	606
Less 20% Pass-By Trips		<u>-53</u>	<u>-53</u>	<u>-93</u>	<u>-93</u>	<u>-127</u>	<u>-127</u>
Total New Trips		242	169	380	344	514	479

1 - Trip generation during the morning peak hour was only calculated for the Lume's Breakfast-Lunch restaurant (5,053 square feet - see Site Plan in the Appendix)

2 - Trip generation calculated using the average rate of land use code 820

### **Development Traffic Assignment**

The new peak hour traffic volumes projected to be generated by the proposed development (refer to Table 1) were assigned to the area roadways based on the directional distribution analysis (Figure 5) and the proposed access drive and are shown in Figure 6. Figure 7 shows the assignment of the pass-by vehicle trip volumes.

### **Regional Traffic Growth**

The existing traffic volumes (Figure 3) were increased by a regional growth factor based on Year 2040 projected average daily traffic volumes (ADTs) provided by the Chicago Metropolitan Agency for Planning (CMAP). These volumes represent an increase in regional ambient growth not attributable to any particular planned development. The traffic volumes on IL 83 were increased by 0.25 percent per year while the traffic volumes on Plainfield Road were increased by one percent per year based on DuDOT review of a previous study conducted for the subject site. Figures 8 and 9 show the Year 2020 and 2040 Background Traffic Volumes (No Build), respectively.

### **Projected Year 2020 and 2040 Traffic Volumes**

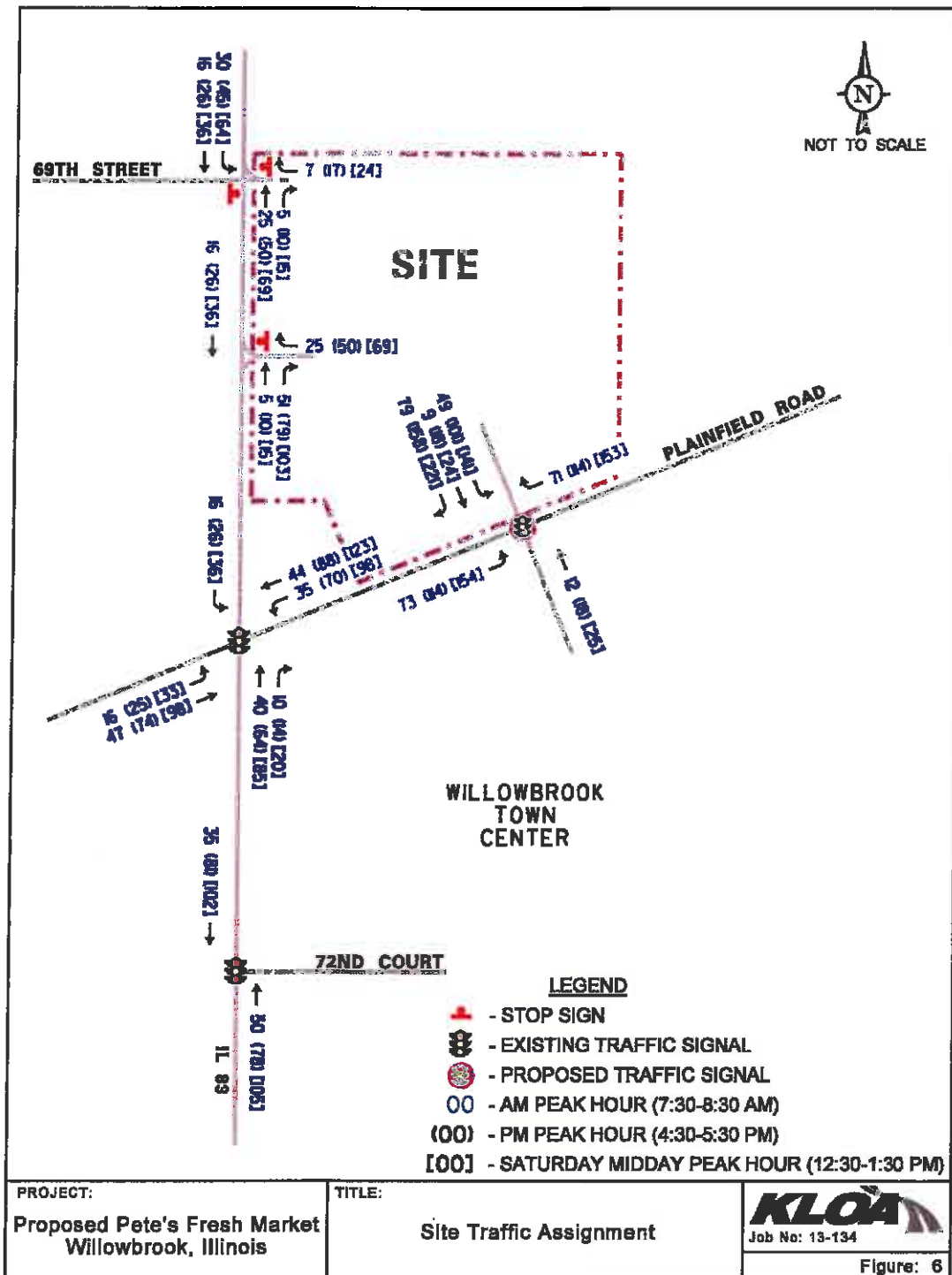
In order to obtain projected year 2020 and 2040 traffic volumes, the existing traffic volumes were added to the background traffic volumes and the development-generated traffic volumes. Figures 10 and 11 illustrate the projected year 2020 and 2040 total projected traffic volumes.

### **Traffic Evaluation**

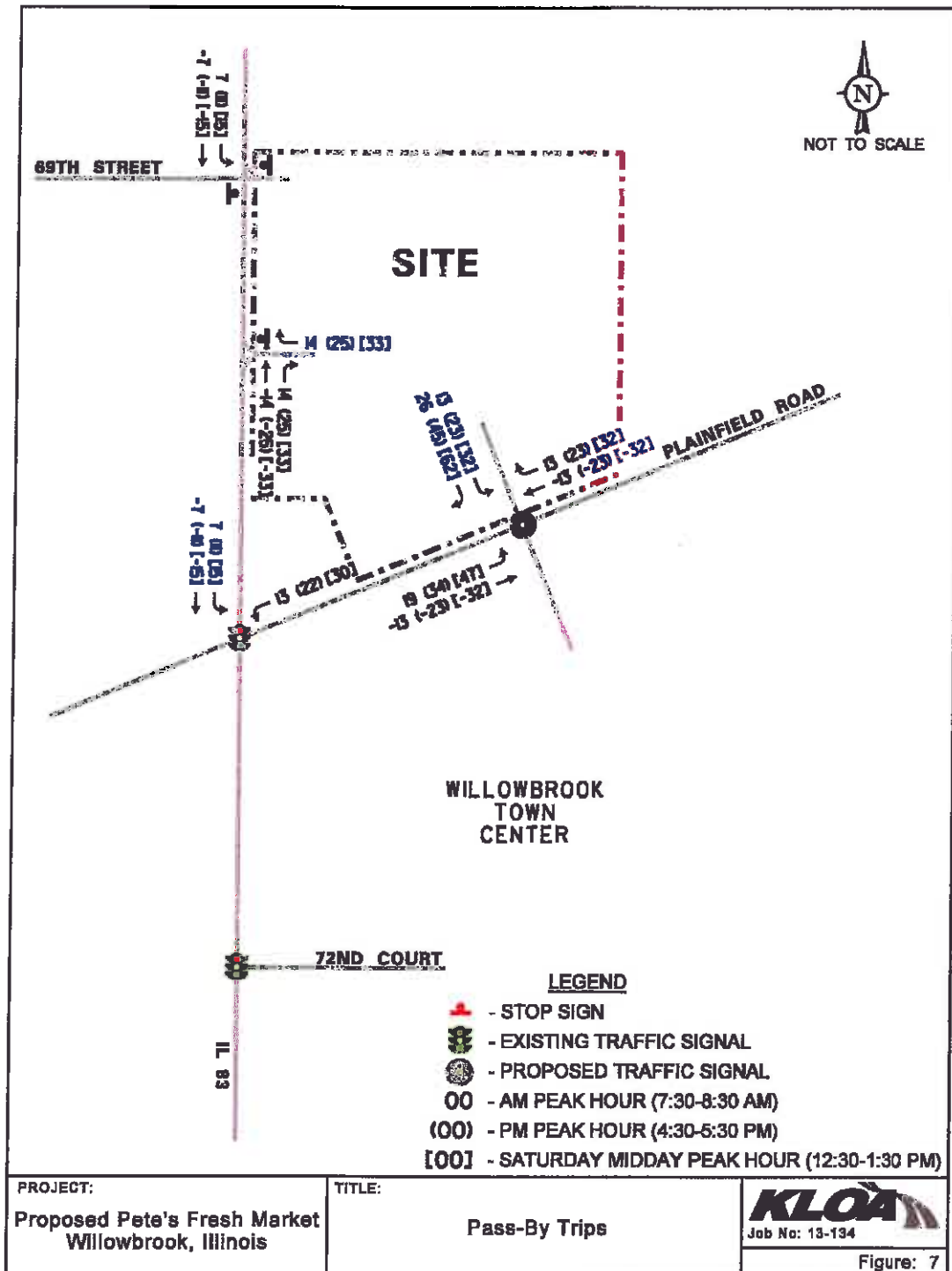
The following provides an evaluation conducted for the weekday morning, weekday evening, and Saturday midday peak hour periods. The analysis includes conducting capacity and progression analyses to ascertain how the roadway facilities will operate with the anticipated traffic demands and the proposed roadway improvements. A traffic signal warrant study was also performed at the intersection of Plainfield Road and the proposed access drive.

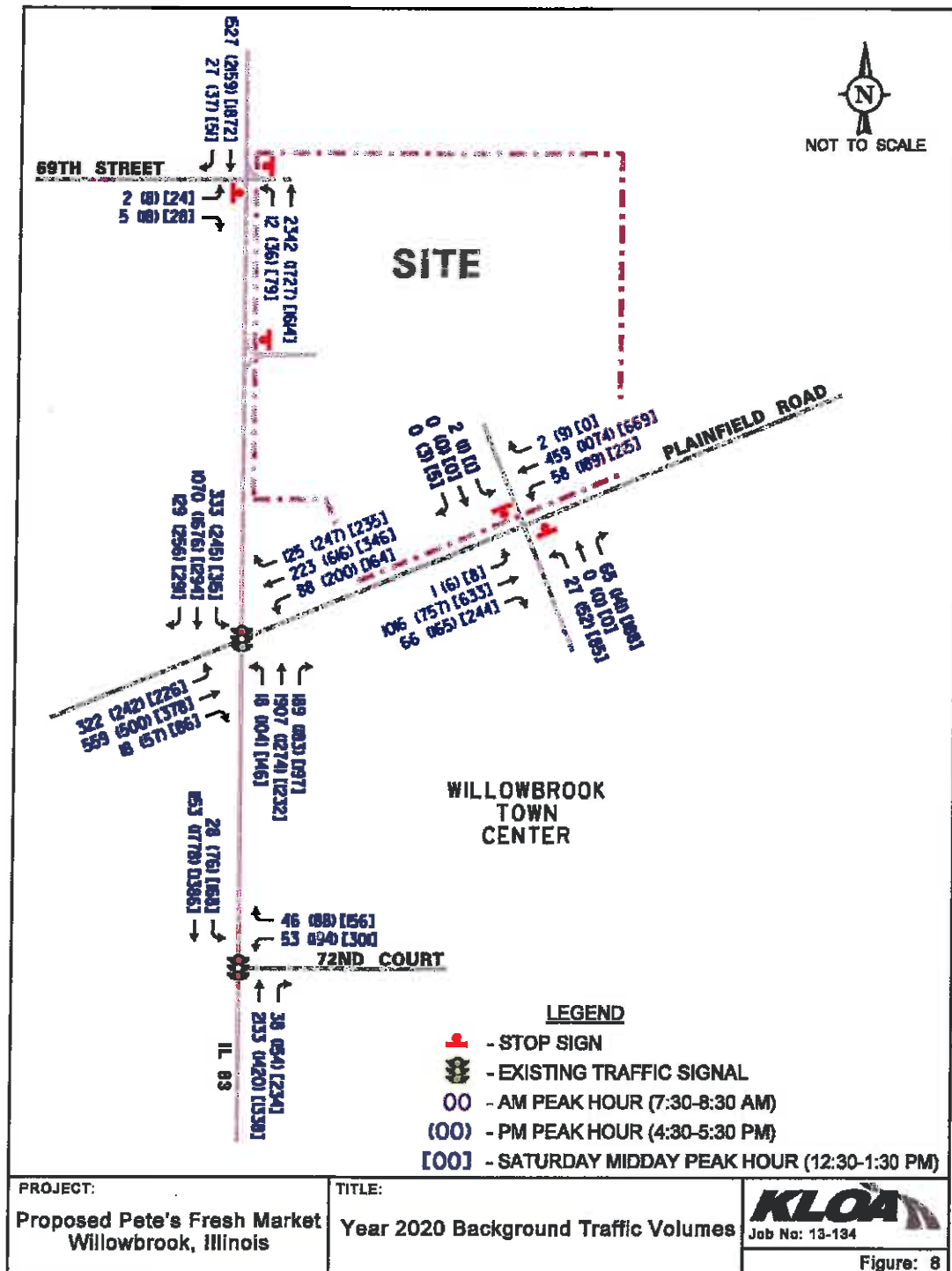
### **Traffic Analyses**

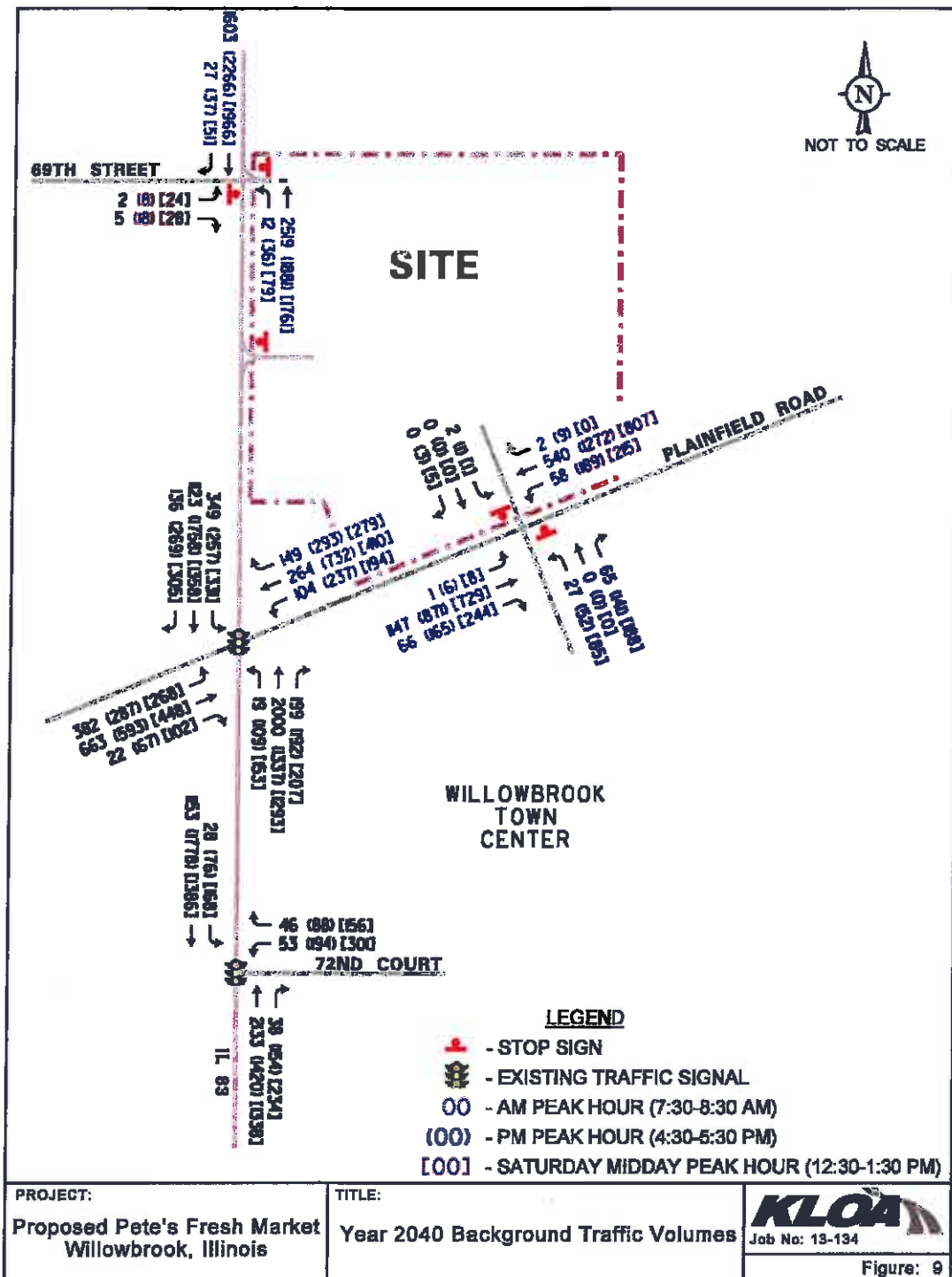
Roadway and adjacent or nearby intersection analyses were performed for the weekday morning, weekday evening, and Saturday midday peak hours for the existing, Year 2020 and 2040 background traffic (No Build) and projected total year 2020 and 2040 traffic volumes. The traffic analyses were performed using the Synchro/SimTraffic 9 capacity analysis software. The signalized intersections were generally analyzed using the existing signal cycle lengths, timings, phasings, and offsets with some minor adjustments to accommodate the proposed roadway improvements.

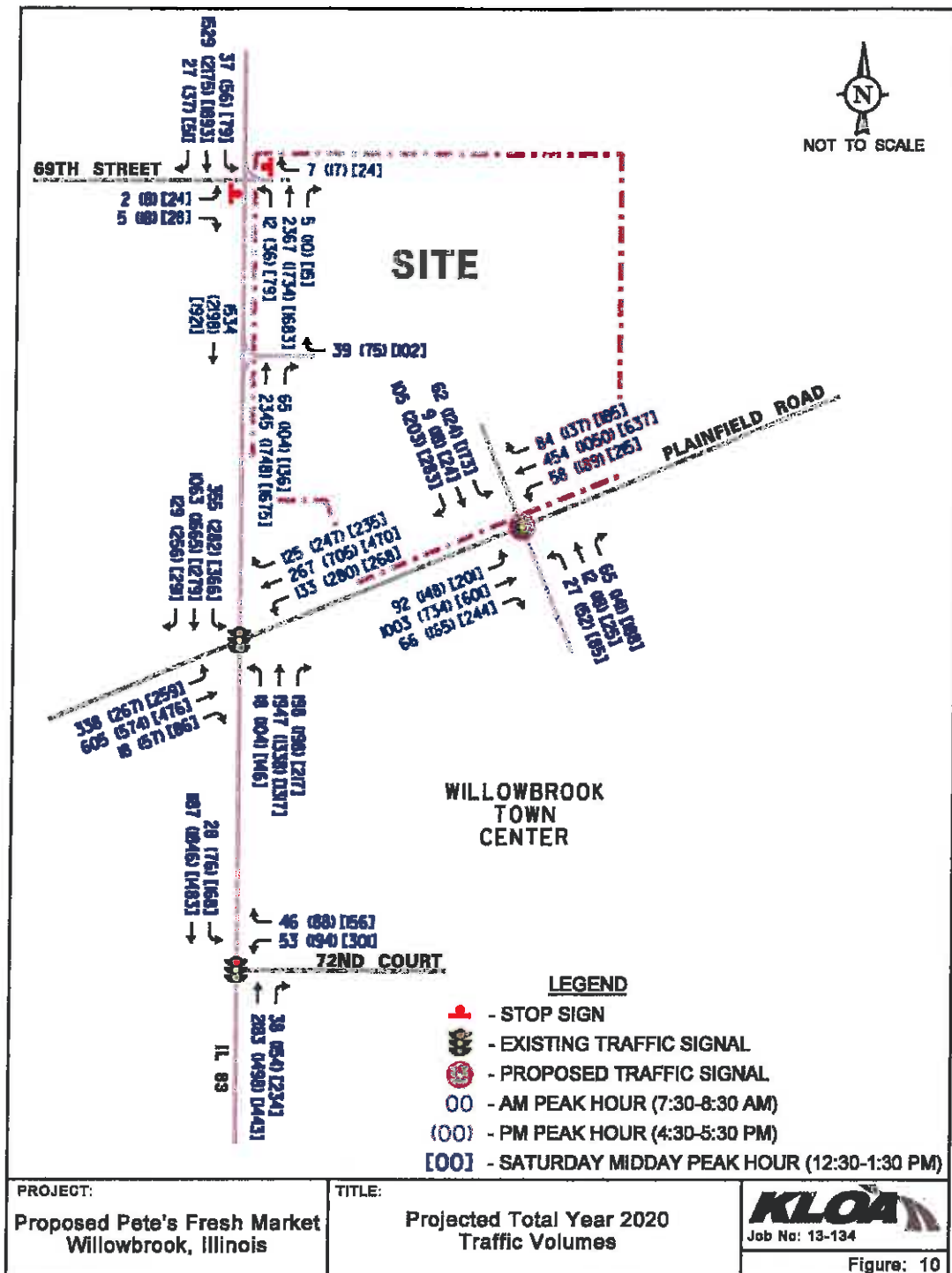














The ability of an intersection to accommodate traffic flow is expressed in terms of level of service, which is assigned a letter grade from A to F based on the average control delay experienced by vehicles passing through the intersection. Control delay is that portion of the total delay attributed to the traffic signal or stop sign control operation and includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. Level of Service A is the highest grade (best traffic flow and least delay), Level of Service E represents saturated or at-capacity conditions, and Level of Service F is the lowest grade (oversaturated conditions, extensive delays). The *Highway Capacity Manual* definitions for levels of service and the corresponding control delay for both signalized and unsignalized intersections are provided in the Appendix.

The results of the capacity analyses, expressed in terms of level of service and delays, are shown in Tables 2 through 6 for each of the studied scenarios. In addition, the projected queues along the various movements was calculated based on the red time formula and are included in the Appendix.

Table 2  
CAPACITY ANALYSIS RESULTS - EXISTING VOLUMES

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour		Saturday Midday Peak Hour	
	LOS	Delay	LOS	Delay	LOS	Delay
IL 83/Plainfield Road <sup>1</sup>	E	68.5	D	50.6	D	38.1
IL 83/72 <sup>nd</sup> Court <sup>1</sup>	A	8.1	B	13.0	C	21.8
IL 83/69 <sup>th</sup> Street <sup>2</sup>	C	21.3	E	42.7	E	43.6
Plainfield Road/ Willowbrook Town Center Access Drive <sup>2</sup>						
* North Leg	D	26.1	E	40.0	D	26.2
* South Leg	C	20.4	F	52.2	F	96.7

<sup>1</sup>Signalized Intersection  
<sup>2</sup>Unsignalized Intersection  
LOS - Level of Service  
Delay - Measured in seconds.

Table 3  
CAPACITY ANALYSIS RESULTS – YEAR 2020 BACKGROUND VOLUMES  
AND EXISTING CONDITIONS TRAFFIC (NO BUILD)

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour		Saturday Midday Peak Hour	
	LOS	Delay	LOS	Delay	LOS	Delay
IL 83/Plainfield Road <sup>1</sup>	E	73.5	D	53.4	D	38.2
IL 83/72 <sup>nd</sup> Court <sup>1</sup>	A	8.1	B	13.0	C	21.8
IL 83/69 <sup>th</sup> Street <sup>2</sup>	C	21.8	E	44.6	E	45.8
Plainfield Road/ Willowbrook Town Center Access Drive <sup>2</sup>						
• North Leg	D	28.1	E	45.9	D	28.9
• South Leg	C	22.4	F	64.9	F	118.8

<sup>1</sup>Signalized Intersection  
<sup>2</sup>Unsignalized Intersection  
LOS - Level of Service  
Delay - Measured in seconds.

Table 4  
CAPACITY ANALYSIS RESULTS – YEAR 2040 BACKGROUND VOLUMES  
AND EXISTING CONDITIONS TRAFFIC (NO BUILD)

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour		Saturday Midday Peak Hour	
	LOS	Delay	LOS	Delay	LOS	Delay
IL 83/Plainfield Road <sup>1</sup>	F	98.2	E	74.3	D	44.4
IL 83/72 <sup>nd</sup> Court <sup>1</sup>	A	8.1	B	13.0	C	21.8
IL 83/69 <sup>th</sup> Street <sup>2</sup>	C	23.2	F	51.0	F	53.1
Plainfield Road/ Willowbrook Town Center Access Drive <sup>2</sup>						
• North Leg	E	37.6	F	73.4	D	34.7
• South Leg	D	33.4	F	131.3	F	169.5

<sup>1</sup>Signalized Intersection  
<sup>2</sup>Unsignalized Intersection  
LOS - Level of Service  
Delay - Measured in seconds.

Table 5  
CAPACITY ANALYSIS RESULTS - YEAR 2020 TOTAL TRAFFIC VOLUMES

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour		Saturday Midday Peak Hour	
	LOS	Delay	LOS	Delay	LOS	Delay
IL 83/Plainfield Road <sup>1</sup>	E	65.9	E	66.5	D	51.1
IL 83/72 <sup>nd</sup> Court <sup>1</sup>	A	8.4	B	12.7	C	22.3
IL 83/69 <sup>th</sup> Street/Right- In/Right-Out/Left-in Access Drive <sup>2</sup>						
• East Leg	B	12.0	B	10.8	B	10.4
• West Leg	D	28.8	F	77.0	F	>80
IL 83/Right-In/Right- Out Access Drive <sup>2</sup>	B	11.3	A	9.9	B	10.1
Plainfield Road with Willowbrook Town Center Access Drive/Development Access Drive <sup>f</sup>	B	13.3	C	22.2	C	30.8
<sup>1</sup> Signalized Intersection						
<sup>2</sup> Unsignalized Intersection						
LOS - Level of Service						
Delay - Measured in seconds.						



Table 6  
CAPACITY ANALYSIS RESULTS -YEAR 2040 TOTAL TRAFFIC VOLUMES

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour		Saturday Midday Peak Hour	
	LOS	Delay	LOS	Delay	LOS	Delay
IL 83/Plainfield Road <sup>1</sup>	F	85.2	F	95.2	E	65.1
IL 83/72 <sup>nd</sup> Court <sup>1</sup>	A	8.5	B	12.9	C	22.5
IL 83/69 <sup>th</sup> Street/Right- In/Right-Out/Left-in Access Drive <sup>2</sup>						
• East Leg	B	11.9	B	11.4	B	10.7
• West Leg	E	35.4	F	>80	F	>80
IL 83/Right-In/Right- Out Access Drive <sup>2</sup>	B	11.9	B	10.0	B	10.2
Plainfield Road with Willowbrook Town Center Access Drive/Development Access Drive <sup>1</sup>	B	13.3	C	22.8	C	30.8
<sup>1</sup> Signalized Intersection						
<sup>2</sup> Unsignalized Intersection						
LOS - Level of Service						
Delay - Measured in seconds.						

## **Discussion and Recommendations**

The following summarizes how the intersections are projected to operate and identify any roadway and traffic control improvements necessary to accommodate the development traffic.

### ***IL 83 and Plainfield Road***

*Existing Conditions.* This intersection currently operates at an overall Level of Service E during the weekday morning peak hour and Level of Service D during the weekday evening and Saturday midday peak hours. However, the capacity analyses and field observations show that the following movements experience long delays and queues during the peak hours.

- The through movements on IL 83, particularly the southbound through movement during the weekday evening peak hour.
- The southwest bound through movement on Plainfield Road, particularly during the weekday evening peak hour.
- The northeast bound-to-northbound left-turn movement, particularly during the weekday morning peak hour.

*Background Year 2020 and 2040 (No Build) Conditions.* Under the Year 2020 Background condition, the intersection will continue operating at the same levels of service as under existing conditions with some minor increases in the overall delay. Under the Year 2040 Background condition the level of service during the morning and evening peak hours deteriorate to F and E, respectively. It is important to note that Plainfield Road left-turn movements will continue to operate with a single left-turn lane on both protected and permitted phases. The capacity analyses shows that the left-turn lanes are projected to operate at a poor level of service with long delays and queues.

*Projected Total Year 2020 and 2040 Conditions.* As part of the development, this intersection is proposed to be improved as follows.

- Dual left-turn lanes are to be provided on both approaches of Plainfield Road.
- In addition to the dual left-turn lanes and the two-through lanes, an exclusive right-turn lane will also be provided on the southwest bound approach of Plainfield Road. To maximize the storage along this approach, the right-turn lane and taper will extend to the development access drive.
- The third northbound through lane on IL 83 that currently terminates as a right-turn lane at its intersection with Plainfield Road will be extended to the north end of the site and will terminate as a right-turn lane serving the northern access drive.

Given the provision of the dual left-turn lanes, the left-turn movements at the intersection will only be permitted to operate under a protected phase.

Assuming the projected total year 2020 traffic volumes and the proposed roadway improvements, the intersection is projected to operate at a Level of Service E during the weekday morning and evening peak hour and a Level of Service D during the Saturday midday peak hour. It should be noted that the northbound through lanes are projected to operate at a good level of service (Level of Service C) without a separate northbound-to-eastbound right-turn lane. Further, the queuing analyses (red-time formula queue calculations are included in the Appendix) and the simulation runs show that the proposed traffic signal at the Plainfield Road/development access drive/Willowbrook Town Center access drive intersection can be timed so that the queues along the southwest approach of Plainfield Road will generally not extend through the Plainfield Road/development access drive/Willowbrook Town Center access drive intersection. It is important to note that the analyses were performed based on the existing green time splits provided to IL 83 and Plainfield Road.

If the projected total year 2040 traffic volumes are realized, the intersection is projected to operate at a Level of Service E/F during all of the peak periods. Although the intersection is projected to operate below acceptable levels of service, a review of the simulation runs show that the southwest bound traffic on Plainfield Road will not back up to the proposed signalized intersection of Plainfield Road with the Willowbrook Town Center/development access drive except during the weekday evening peak hour. If the projected year 2040 traffic volumes are realized, the simulation runs show that a few additional seconds of green time may be required for the Plainfield Road through movement during the weekday evening peak hour to ensure the southwest bound queue does not extend through the development access drive/Willowbrook Town Center access drive. In addition to the development-generated traffic, it is important to note that the year 2040 traffic volumes assume 27 percent growth in traffic along Plainfield Road and 6.75 percent growth in traffic along IL 83. As such, the poor operation projected at this intersection assuming the year 2040 traffic volumes is due in part to the significant projected growth in the area. Further, the roadway improvements proposed as part of the development will mitigate some of the existing capacity constraints at the intersection and enhance the intersection's operation. Finally, the northbound through lanes are projected to operate at a good level of service (Level of Service C and D) without a separate northbound-to-eastbound right-turn

***Plainfield Road and Willowbrook Town Center/Access Drive***

*Existing Conditions.* This intersection is currently under two-way stop sign control. Based on the results of the capacity analyses, the Willowbrook Town Center access drive left-turn movement operates at a Level of Service F during the weekday evening and Saturday midday peak hours. This is due to the high volume of through traffic along Plainfield Road and the limited number of gaps in the traffic stream.

*Background Year 2020 and 2040 (No Build) Conditions.* Assuming the existing stop sign control, the Willowbrook Town Center access drive left-turn movement is projected to continue to operate at a Level of Service F with long delays and queues.

*Projected Year 2020 and 2040 Conditions.* As part of the development, this intersection is proposed to be improved as follows.

- A traffic signal will be installed at this intersection. A traffic signal warrant study presented later in the report, shows that a traffic signal is warranted based on the existing traffic volumes.
- An exclusive right-turn lane will be provided on the southwest bound approach of Plainfield Road serving the access drive.

Assuming the projected total year 2020 and 2040 traffic volumes and the proposed roadway improvements, this intersection is projected to operate at a Level of Service C or better during the peak hours. Further, the queuing analyses and simulation runs have shown that the left-turn lanes along Plainfield Road are sufficient to accommodate the maximum queues. Furthermore, the northeast bound and southwest bound queues at this intersection will not extend to IL 83 or Madison Street, respectively. Lastly the provision of a traffic signal at this location will ensure that traffic from both the Willowbrook Town Center access drive and the development access drive will be able to enter and exit the developments in an efficient manner. Per the request of DuDOT, the proposed traffic signal will be interconnected to the existing traffic signals at intersections of Plainfield Road/IL 83 and Plainfield Road/Madison Street.

### ***IL 83 and 72<sup>nd</sup> Court***

*Existing Conditions.* This intersection currently operates at Level of Service A, B and C during the weekday morning, weekday evening and Saturday midday peak hours, respectively.

*Background Year 2020 and 240 (No Build) Conditions.* Assuming the background growth in the area, the intersection will continue operating at acceptable levels of service.

*Projected Total Year 2020 and 2040 Conditions.* Assuming both the projected total year 2020 and 2040 traffic volumes, this intersection will continue operating at acceptable levels of service with minimal increases in the overall delay. As such, no geometric or signal timing improvements are necessary to accommodate future traffic volumes.

### ***IL 83 and Right-In/Right-Out Access Drive***

This access drive is proposed to be located just south of the existing right-turn in/right-turn access drive or approximately 530 feet north of Plainfield Road. The access drive will provide two inbound lanes and one outbound lane with the outbound lane channelized and signed to prohibited left-turn movements. The outbound lane will be under stop sign control.

The results of the capacity analysis shows that the movements at this intersection are projected to generally operate at a good level of service with minimal queuing assuming both the projected total year 2020 and 2040 traffic volumes.

### ***IL 83 and Right-In/Left-In/Right-Out access drive***

This access drive will be located approximately 250 feet north of the proposed right-in/right-out access drive opposite 69<sup>th</sup> Street and will be physically restricted to right-in/left-in/right-out movements. This access drive will provide inbound and outbound access for customers and inbound only access to the service drive. The access drive will provide one inbound lane and one outbound lane with the outbound lane under stop sign control. An exclusive southbound left-turn lane will be provided on IL 83 serving the access drive. In addition, the third northbound through lane is proposed to terminate as a right-turn at the northern access drive. Based on the results of the capacity analyses, the right-out movement will operate at a Level of Service B during all three peak hours with queues of less than 25 feet.

The provision of a three quarter access drive at this location will have a positive impact on the area roadways for the following reasons.

- It will allow traffic approaching from the north to enter the development without increasing the traffic at the southbound-to-eastbound left-turn lane on IL 83 at its intersection with Plainfield Road.
- It will reduce the amount of traffic on Plainfield Road and on the northeast-bound-to-northbound left-turn movement on Plainfield Road at its intersection with the development access drive/Willowbrook Town Center access drive thus enhancing the operation of the intersection.

### Traffic Signal Warrant Analysis

As part of the traffic signal installation approval process of DuDOT, a traffic signal warrant study was conducted at the intersection of Plainfield Road with the Willowbrook Town Center access drive and proposed development access drive to determine whether traffic signal warrants will be met. Installation of a traffic signal requires that one or more of the nine signal warrants outlined in the *Manual on Uniform Traffic Control Devices* (MUTCD 2009) is met. Because there is limited pedestrian activity in the area and no school is nearby this intersection, only the traffic volume warrants (Warrant 1A, Warrant 1B, Combination Warrant 1A and 1B, Warrant 2 and Warrant 3) were analyzed as part of this study.

Plainfield Road has a posted speed limit of 40 mph and provides two through lane in each direction with exclusive left-turn lanes serving the Willowbrook Town Center access drive and the location of the proposed access drive. The Willowbrook Town Center access drive is located on the south side of Plainfield Road and provides one inbound lane and two outbound lanes striped to provide an exclusive left-turn lane and a shared through/right-turn lane. Primary access to the development is proposed to be provided via an access drive located on the north side of Plainfield Road opposite the Willowbrook Town Center access drive. As proposed, the access drive is to provide two inbound lanes and two outbound lanes striped to provide an exclusive left-turn lane and a shared through/right-turn lane.

The existing traffic volumes at the Plainfield Road/Willowbrook Town Center were determined based on the following traffic counts.

- Weekday morning (7:00 A.M. to 9:00 A.M.) and evening (4:00 P.M. to 6:00 P.M.) peak period traffic counts that were conducted on August 14, 2013.
- Weekday midday (11:00 A.M. to 4:00 P.M.) and evening (6:00 P.M. to 9:00 P.M.) traffic counts that were conducted on December 17, 2013.

Table 7 show the existing hourly traffic counts at the subject intersection. Table 8 summarizes the traffic signal warrant analysis that includes the existing traffic volume on Plainfield Road (major street), the traffic volume on the Willowbrook Town Center access drive (minor streets) and an analysis on the volume warrants. Per the Illinois Department of Transportation (IDOT) traffic signal warrant guidelines, the right-turn volumes from the Willowbrook Town Center access drive were reduced by 60 percent when determining the total minor roadway approach volumes.

The following summarizes the results of the warrant analysis.

- *Warrant 1B* - The existing traffic volumes at the subject intersection exceed the minimum traffic volumes for Warrant 1B for ten hours and thus meets Warrant 1B.
- *Warrant 2 - Four Hour Volume.* The projected traffic volumes at the subject intersection exceed the minimum traffic volumes for Warrant 2 for eight hours and thus meet Warrant 2.
- *Warrant 3 – Peak Hour Volume.* The projected traffic volumes at the subject intersection exceed the minimum traffic volumes for Warrant 3 for four hours and thus meet Warrant 3.

Therefore, a traffic signal will be warranted based on the existing traffic volumes. Per the direction of DuDOT, the traffic signal should be interconnected to the existing traffic signals at the intersections of Plainfield Road/IL 83 and Plainfield Road/Madison Street.

Table 7

EXISTING TRAFFIC VOLUMES

PLAINFIELD ROAD WITH WILLOWBROOK TOWN CENTER ACCESS DRIVE

Time	Plainfield Road		Access Drive			
	Through Traffic		Inbound		Outbound	
	Eastbound	Westbound	Left	Right	Left	Right
11:00 A.M.	644	713	207	185	66	156
12:00 Noon	709	694	257	245	80	238
1:00 P.M.	771	635	189	183	91	252
2:00 P.M.	732	757	153	193	86	184
3:00 P.M.	743	900	180	225	80	188
4:00 P.M.	684	1,024	188	145	56	138
5:00 P.M.	702	972	172	179	58	143
6:00 P.M.	655	836	222	314	60	172
7:00 P.M.	526	537	142	205	95	144
8:00 P.M.	367	465	91	121	63	150

Table 8  
TRAFFIC SIGNAL WARRANT SUMMARY  
PLAINFIELD ROAD WITH WILLOWBROOK TOWN CENTER ACCESS DRIVE

Time	Plainfield Road Volumes (Major Street)	Reduced Access Drive Volumes (Minor Street)	Warrants			
			Warrant 1A Minimum Vehicular Volume	Warrant 1B Interruption of Continuous Traffic	Warrant 2 Four-Hour Vehicle Volume	Warrant 3 Peak Hour
11:00 A.M.	1,749	128	No	Yes	Yes	No
12:00 Noon	1,905	175	No	Yes	Yes	Yes
1:00 P.M.	1,778	192	No	Yes	Yes	Yes
2:00 P.M.	1,835	160	No	Yes	Yes	Yes
3:00 P.M.	2,048	155	No	Yes	Yes	Yes
4:00 P.M.	2041	111	No	Yes	No	No
5:00 P.M.	2025	115	No	Yes	Yes	No
6:00 P.M.	2,027	129	No	Yes	Yes	No
7:00 P.M.	1,410	153	No	Yes	Yes	No
8:00 P.M.	1,044	123	No	Yes	No	No

Warrant 1A requires a minimum volume of 600 vehicles on the major street and 200 vehicles on the minor street.

Warrant 1B requires a minimum volume of 900 vehicles on the major street and 100 vehicles on the minor street.

Combination Warrant 1A and 1B requires a minimum volume of 720 vehicles on the major street and 80 vehicles on the minor street.

Warrant 2 requires the minor street traffic volume to exceed a threshold value which changes depending on the major street traffic volumes and the number of travel lanes.

Warrant 3 requires the minor street traffic volume to exceed a threshold value which changes depending on the major street traffic volumes and the number of travel lanes.



## Conclusion and Recommendations

Based on the proposed development plan and the preceding traffic impact study, the following conclusions and recommendations are made.

- The site of the proposed development is currently occupied by a vacant 114,605 square-foot Kmart store. Access to the parcel is currently provided via (1) a full access drive on Plainfield Road aligned opposite the Willowbrook Town Center access drive, (2) a full access drive on Plainfield Road approximately 410 feet east of IL 83 and (3) a restricted right-turn in/right-turn out access drive on IL 83.
- As proposed, the existing store will be redeveloped with 130,231 square-foot commercial development that will contain a 68,500 square-foot Pete's Fresh Market grocery store, 46,042 square feet of commercial space, 13,549 square feet of restaurant and a 2,140 square-foot coffee/donut store with a drive-through lane.
- Access to the development will be provided via (1) the existing full access drive aligned opposite the Willowbrook Town Center access drive, (2) a proposed right-in/right-out access drive on IL 83 located just south of the existing access drive and (3) a new right-in/left-in/right-out service access drive on IL 83 at the north end of the site opposite 69<sup>th</sup> Street. The second full access drive on Plainfield Road and the right-turn in/right-turn out access drive on IL 83 currently serving the parcel will be eliminated.
- Exclusive right-turn and left-turn lanes are proposed to be provided on Plainfield Road serving the access drive. In addition, a traffic signal is proposed to be provided at the intersection of Plainfield Road with the development access drive and the Willowbrook Town Center access drive.
- An exclusive left-turn lane and a right-turn lane (termination of third through lane) are proposed to be provided at the IL 83 northern access drive.
- The results of the traffic signal warrant study has shown that the existing traffic volumes at the Plainfield Road/Willowbrook Town Center access drive intersection meet Condition B of Warrant 1, Warrant 2 and Warrant 3. As such, a traffic signal is warranted at the subject intersection under existing conditions. Per the request of DuDOT, the traffic signal should be interconnected with the existing traffic signals at the intersection of Plainfield Road/IL 83 and Plainfield Road/Madison Street.

- As part of the development, the following roadway improvements are proposed to be provided at the intersection of Plainfield Road and IL 83.
  - ❖ Dual left-turn lanes will be provided on both approaches of Plainfield Road.
  - ❖ In addition to the dual left-turn lanes and the two-through lanes, an exclusive right-turn lane will also be provided on the southwest bound approach of Plainfield Road. To maximize the storage along this approach, the right-turn lane and taper will extend to the development access drive.
  - ❖ The third northbound through lane on IL 83 that currently terminates as a right-turn lane at its intersection with Plainfield Road will be extended to the north end of the site and will terminate as an exclusive right-turn lane at the northern access drive.
  - ❖ The traffic signal will be modified to accommodate the proposed roadway improvements.
- Except for the Plainfield Road/IL 83 intersection, all of the other intersections are projected to generally operate at an acceptable level of service assuming the projected total year 2020 and 2040 traffic volumes. The intersection of Plainfield Road/IL 83 currently operates at a poor level of service is projected to continue to operate at a poor level of service assuming the year 2020 and 2040 traffic volumes. However, it is important to note that the poor level of service projected at this intersection is due in large part to the significant ambient growth in traffic assumed in the traffic study. Further, the roadway improvements proposed as part of the development will mitigate some of the existing capacity constraints at the intersection and enhance the intersection's operation.
- The capacity analyses and simulation runs show that the proposed traffic signal at the development access drive/Willowbrook access drive can be properly coordinated (timed) so to limit the impact on the existing progression of traffic along Plainfield Road. Further, the traffic signals can be timed so that the queues from the study intersections will generally not extend through the downstream intersections.

## Appendix

# LEVEL OF SERVICE CRITERIA

## Signalized Intersections

Level of Service	Interpretation	Average Control Delay (seconds per vehicle)
A	Favorable progression. Most vehicles arrive during the green indication and travel through the intersection without stopping.	≤10
B	Good progression, with more vehicles stopping than for Level of Service A.	>10 - 20
C	Individual cycle failures (i.e., one or more queued vehicles are not able to depart as a result of insufficient capacity during the cycle) may begin to appear. Number of vehicles stopping is significant, although many vehicles still pass through the intersection without stopping.	>20 - 35
D	The volume-to-capacity ratio is high and either progression is ineffective or the cycle length is too long. Many vehicles stop and individual cycle failures are noticeable.	>35 - 55
E	Progression is unfavorable. The volume-to-capacity ratio is high and the cycle length is long. Individual cycle failures are frequent.	>55 - 80
F	The volume-to-capacity ratio is very high, progression is very poor and the cycle length is long. Most cycles fail to clear the queue.	>80.0

## Unsignalized Intersections

Level of Service	Average Total Delay (SEC/VEH)
A	0 - 10
B	> 10 - 15
C	> 15 - 25
D	> 25 - 35
E	> 35 - 50
F	> 50

Source: *Highway Capacity Manual*, 2010.

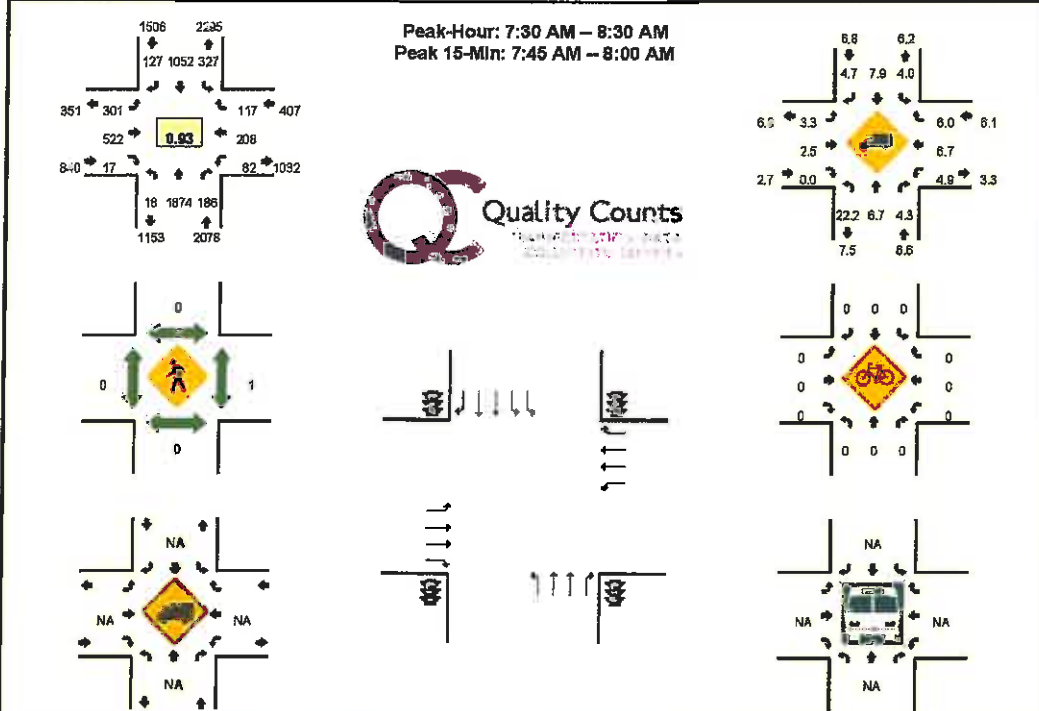
## **Traffic Count Data**

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

LOCATION: IL 83 (Kingery Hwy) -- Plainfield Rd  
CITY/STATE: Willowbrook, IL

QC JOB # 11205607  
DATE: Wed, Aug 14 2013



15-Min Count Period	IL 83 (Kingery Hwy) (Northbound)				IL 83 (Kingery Hwy) (Southbound)				Plainfield Rd (Eastbound)				Plainfield Rd (Westbound)				Total	Hourly Totals
Beginning At	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	4	558	30	0	42	233	22	0	83	96	8	0	13	22	15	0	1137	
7:15 AM	6	474	35	0	53	233	27	1	86	124	10	0	19	32	25	0	1135	
7:30 AM	2	505	35	0	75	257	38	0	81	135	2	0	28	49	24	0	1232	
7:45 AM	6	448	39	0	80	259	25	1	72	121	4	0	13	45	27	0	1143	4802
8:00 AM	4	447	49	2	74	262	31	1	66	104	6	0	27	55	35	0	1184	4831
8:15 AM	4	382	44	0	63	238	33	1	76	115	12	0	24	49	38	0	1078	4878
8:30 AM	11	428	54	1	69	252	35	0	58	98	10	0	18	49	32	0	1111	4497
8:45 AM																		
Peak 15-Min Flowrates	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Total	
All Vehicles	12	1680	240	0	380	1098	128	4	328	648	20	0	88	220	124	0	5168	
Heavy Trucks	4	118	8		16	64	8		24	12	0		0	20	12		284	
Pedestrians	0	0	0		0	0	0		0	0	0		0	0	0		0	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Railroad																		
Stopped Buses																		
Comments:																		

Report generated on 8/20/2013 10:11 AM

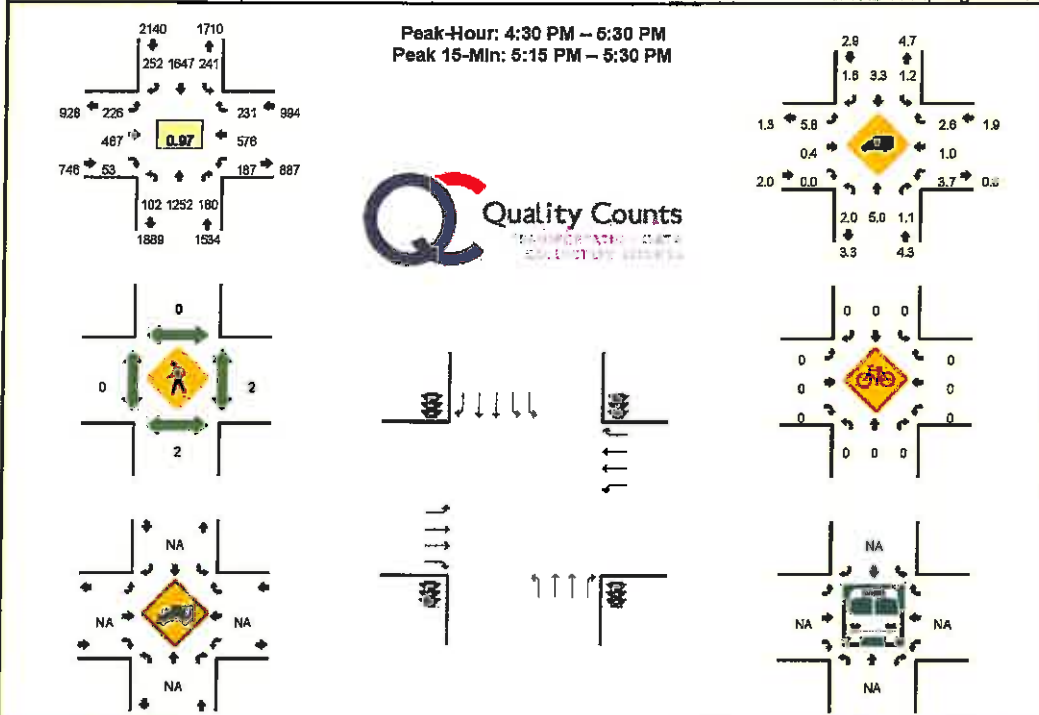
SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

LOCATION: IL 83 (Kingery Hwy) – Plainfield Rd  
CITY/STATE: Willowbrook, IL

QC JOB #: 11205608  
DATE: Wed, Aug 14 2013



15-Min Count Period Beginning At	IL 83 (Kingery Hwy) (Northbound)				IL 83 (Kingery Hwy) (Southbound)				Plainfield Rd (Eastbound)				Plainfield Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	20	276	52	3	61	402	71	2	62	108	4	0	62	126	66	0	1304	
4:15 PM	21	249	38	0	63	365	57	0	66	133	16	0	66	174	69	0	1276	
4:30 PM	26	287	42	1	66	411	60	0	46	108	8	0	62	129	72	0	1307	
4:45 PM	25	303	38	1	39	414	66	0	67	114	15	0	42	142	57	0	1324	5211
4:00 PM	24	336	49	0	62	432	54	0	53	108	13	0	47	129	59	0	1365	5292
5:15 PM	35	304	49	2	39	364	48	0	53	86	8	0	58	126	64	0	1213	5326
5:45 PM	18	255	44	0	38	380	69	0	52	122	12	0	57	147	53	0	1248	5250
Peak 15-Min Flowrates	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Total	
All Vehicles	104	1304	204	0	212	1560	289	4	240	548	68	0	184	704	172	0	5532	
Heavy Trucks	0	44	0		0	40	4		4	0	0		0	8	0		100	
Pedestrians	0	0	0		0	0	0		0	0	0		0	0	0		0	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Railroad																		
Stopped Buses																		

Comments:

Report generated on 8/20/2013 10:11 AM

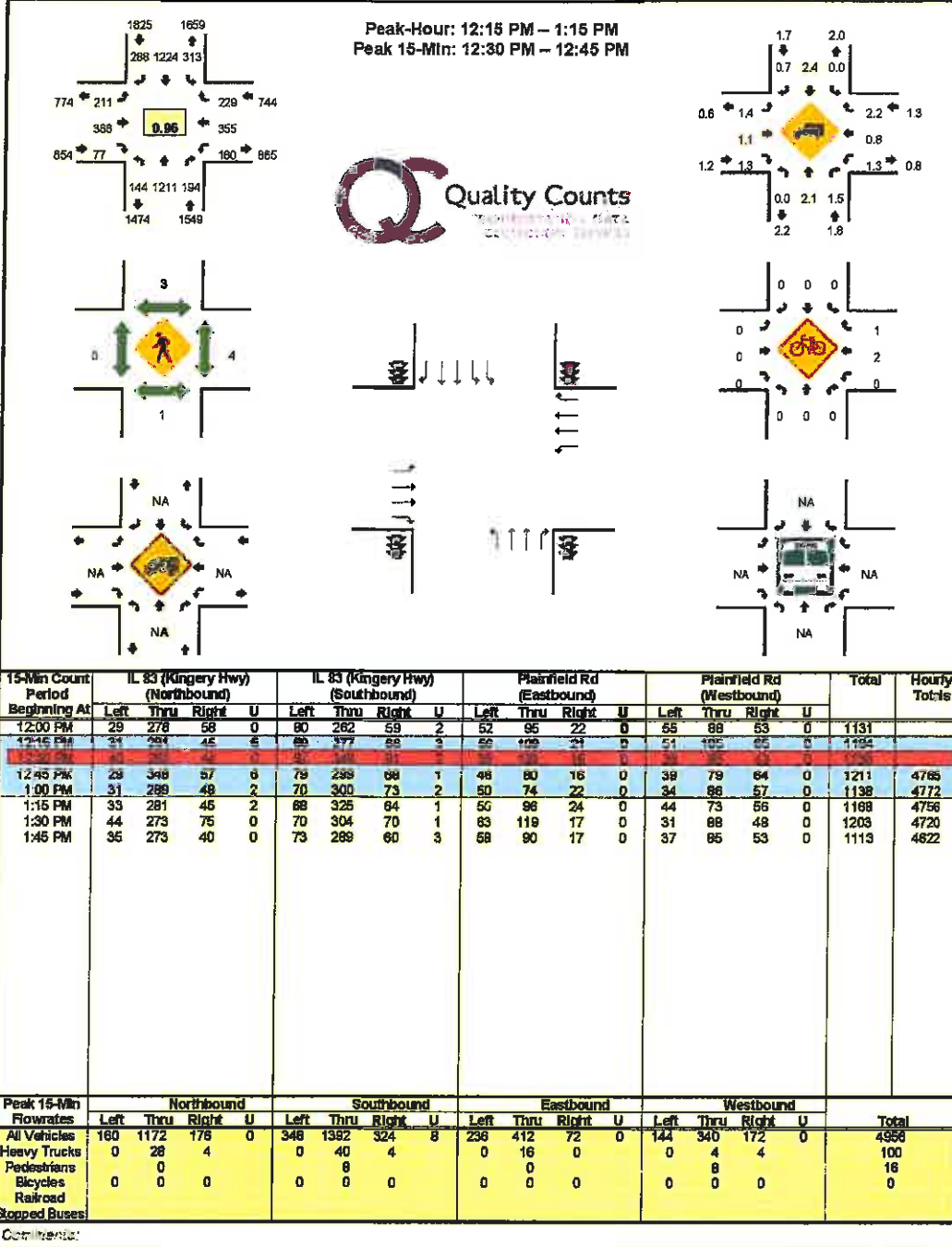
SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

LOCATION: IL 83 (Kingery Hwy) – Plainfield Rd  
CITY/STATE: Willowbrook, IL

QC JOB #: 11205609  
DATE: Sat, Aug 10 2013



Report generated on 8/20/2013 10:11 AM

SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>) 1-877-580-2212

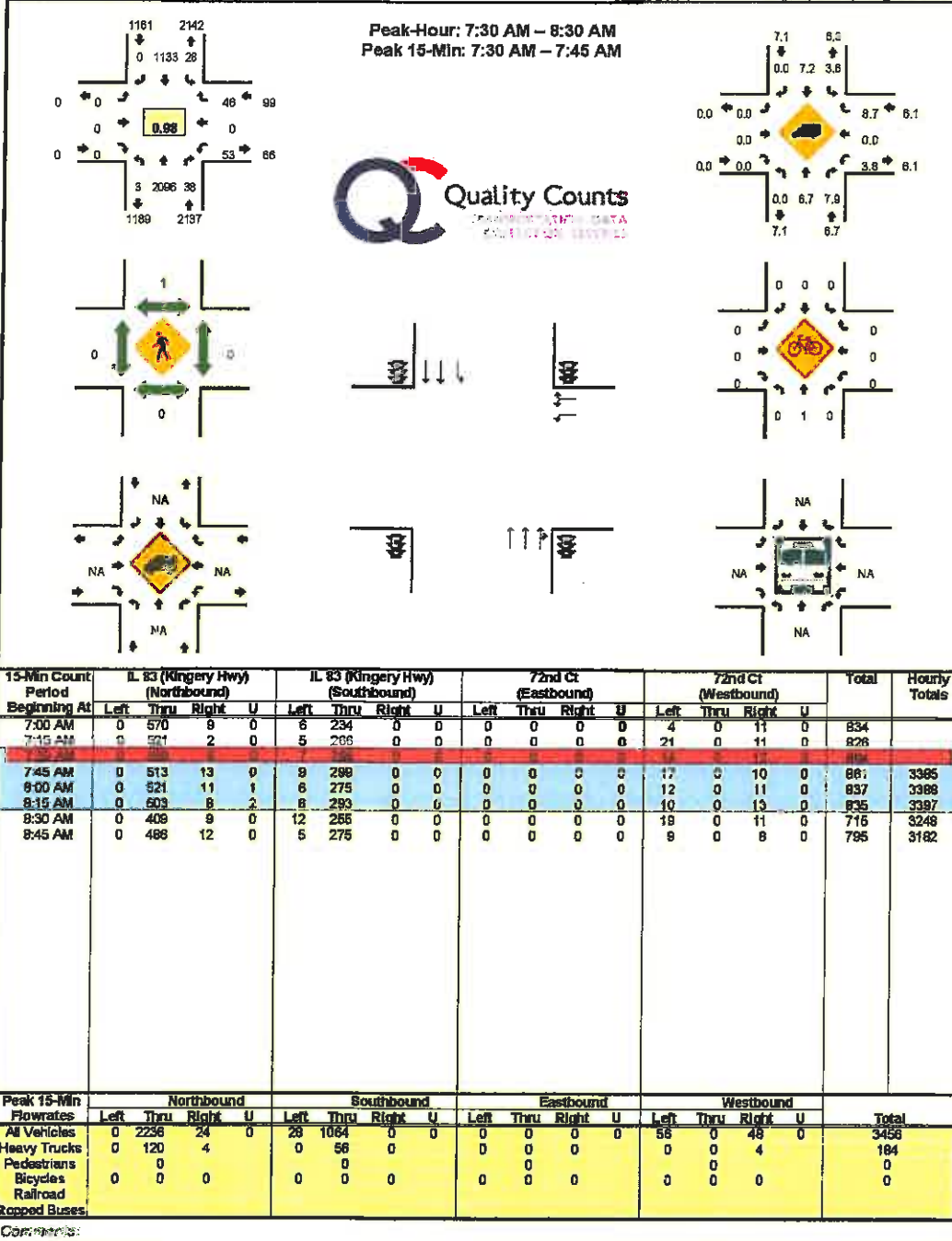


Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

LOCATION: IL 83 (Kingery Hwy) – 72nd Ct  
CITY/STATE: Willowbrook, IL

QC JOB #: 11205604  
DATE: Wed, Aug 14 2013



Report generated on 8/20/2013 10:11 AM

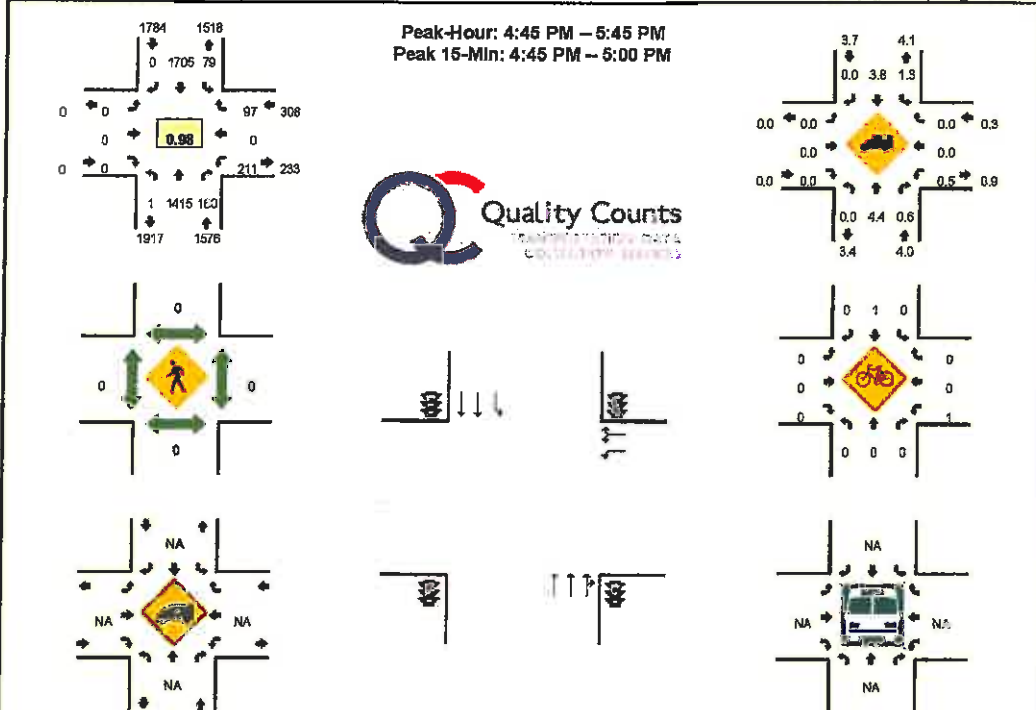
SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

LOCATION: IL 83 (Kingery Hwy) -- 72nd Ct  
CITY/STATE: Willowbrook, IL

QC JOB # 11205605  
DATE: Wed, Aug 14 2013



15-Min Count Period	IL 83 (Kingery Hwy) (Northbound)				IL 83 (Kingery Hwy) (Southbound)				72nd Ct (Eastbound)				72nd Ct (Westbound)				Total	Hourly Totals
Beginning At	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	337	24	0	19	455	0	1	0	0	0	0	46	0	19	0	901	
4:15 PM	0	289	21	0	16	426	0	0	0	0	0	0	44	0	22	0	818	
4:30 PM	0	325	38	1	14	438	0	0	0	0	0	0	48	0	17	0	857	
4:45 PM	0	334	40	0	18	444	0	2	0	0	0	0	56	0	26	0	913	3534
5:00 PM	0	334	40	0	18	444	0	2	0	0	0	0	56	0	26	0	913	3534
5:15 PM	0	405	37	0	14	420	0	0	0	0	0	0	43	0	21	0	940	3656
5:30 PM	0	324	44	1	13	384	0	4	0	0	0	0	63	0	26	0	889	3688
5:45 PM	0	309	40	0	24	437	0	0	0	0	0	0	55	0	16	0	881	3808
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	1408	158	0	112	1788	0	0	0	0	0	0	200	0	98	0	3780	
Heavy Trucks	0	100	0	0	4	56	0	0	0	0	0	0	0	0	0	0	160	
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Bicycles	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	2	
Railroad																		
Stopped Buses																		

Report generated on 8/20/2013 10:11 AM

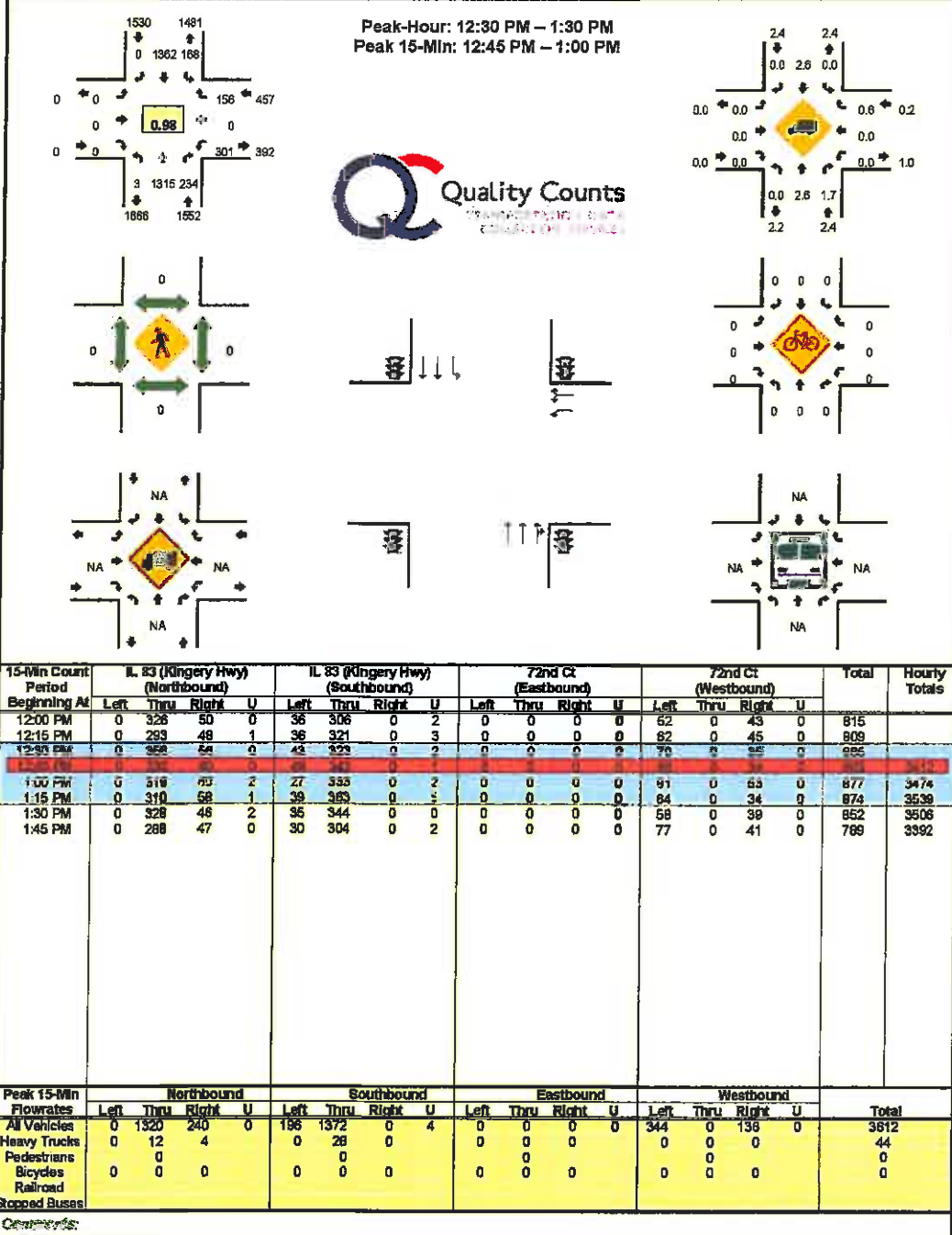
SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

LOCATION: IL 83 (Kingery Hwy) – 72nd Ct  
CITY/STATE: Willowbrook, IL

QC JOB #: 11205606  
DATE: Sat, Aug 10 2013



Report generated on 8/20/2013 10:11 AM

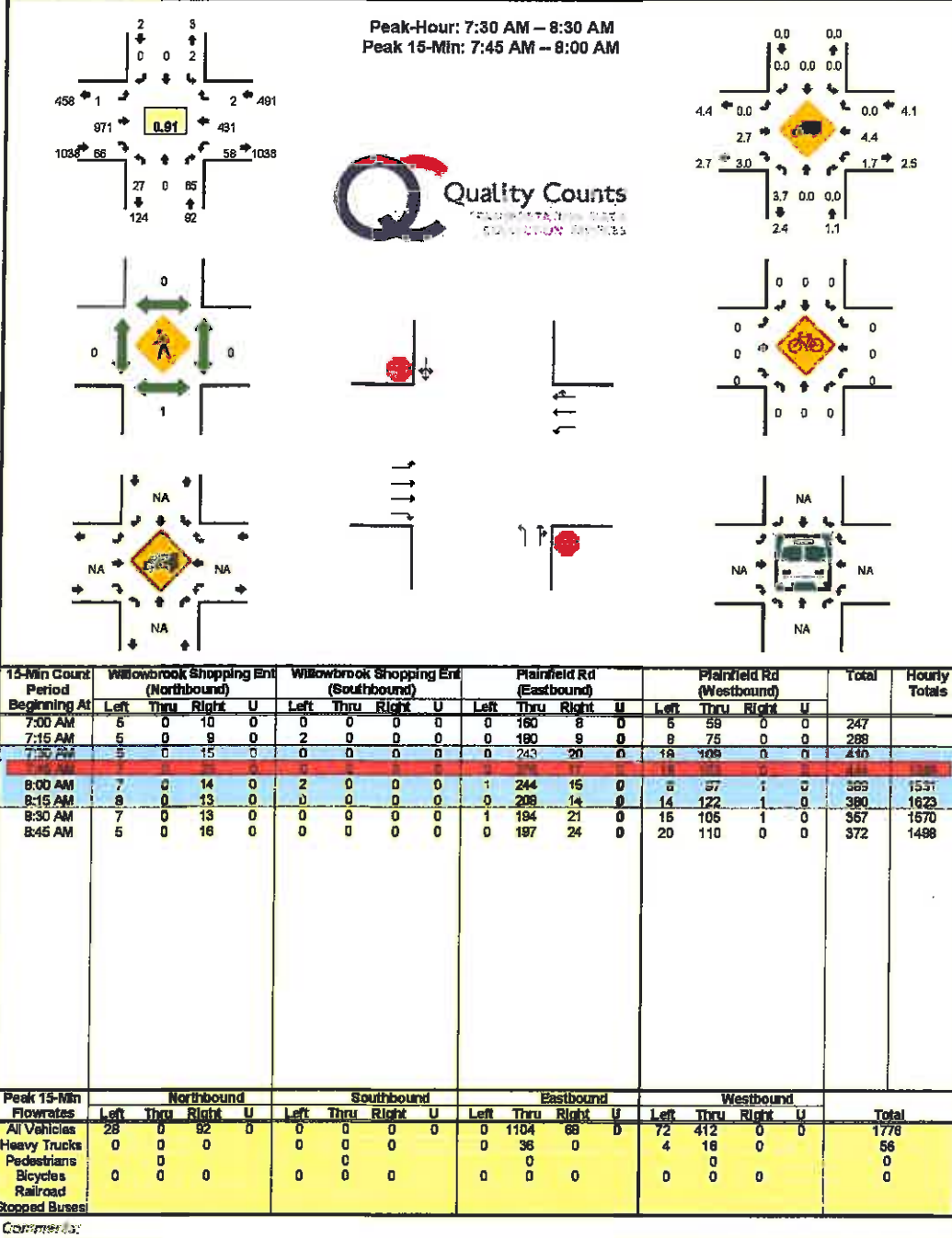
SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

LOCATION: Willowbrook Shopping Ent – Plainfield Rd  
CITY/STATE: Willowbrook, IL

QC JOB #: 11205601  
DATE: Wed, Aug 14 2013

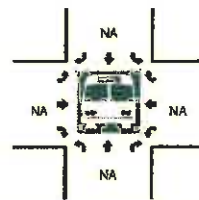
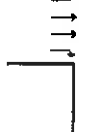
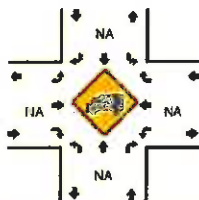
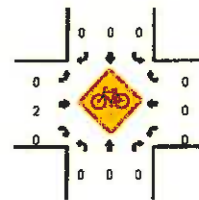
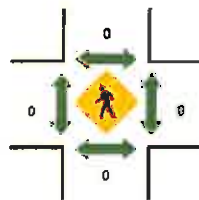
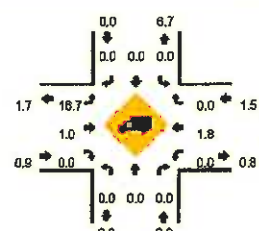


Report generated on 8/20/2013 10:11 AM

SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>) 1-877-580-2212

**Method for determining peak hour: Total Entering Volume**

CC JOE # 11205602  
DATE: Wed, Aug 14 2013



Report generated on 8/20/2013 10:11 AM

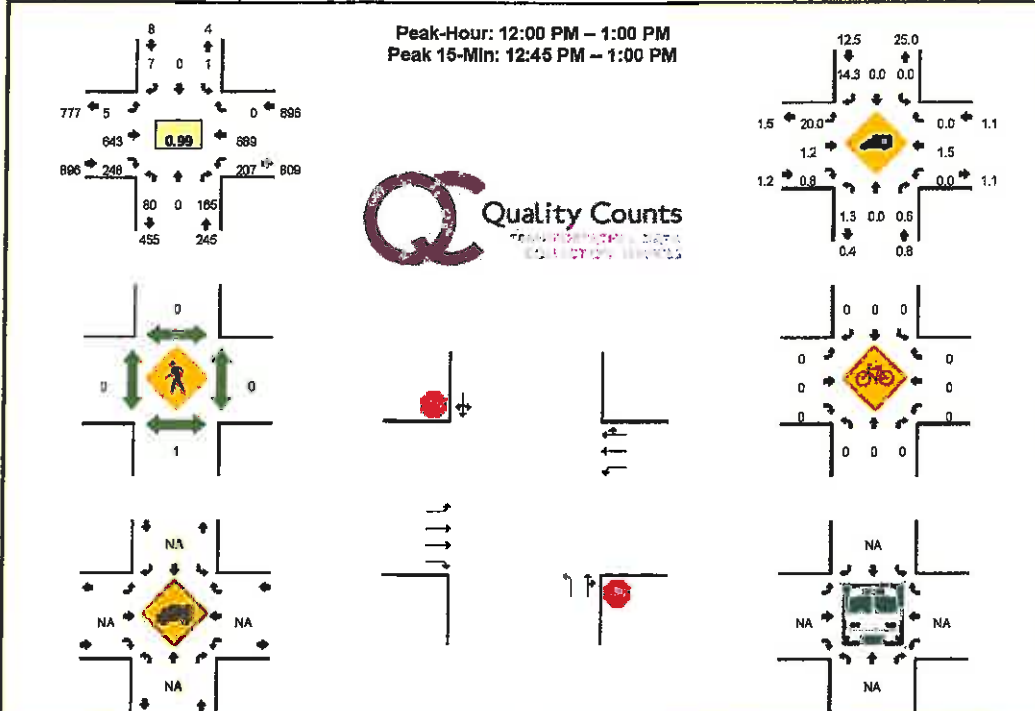
**SOURCE:** Quality Counts, LLC (<http://www.qualitycounts.net>) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

LOCATION: Willowbrook Shopping Ent – Plainfield Rd  
CITY/STATE: Willowbrook, IL

QC JOB #: 11205603  
DATE: Sat Aug 10 2013



15-Min Count Period Beginning At	Willowbrook Shopping Ent (Northbound)				Willowbrook Shopping Ent (Southbound)				Plainfield Rd (Eastbound)				Plainfield Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
12:00 PM	18	0	36	0	0	0	1	0	0	178	51	0	57	172	0	0	514	
12:15 PM	26	0	37	0	1	0	2	0	1	166	66	1	42	193	0	0	513	
12:30 PM	15	0	41	0	0	0	1	0	2	162	66	0	51	161	0	0	501	
12:45 PM	20	0	42	0	0	0	0	0	1	140	53	0	54	152	0	0	462	1993
1:00 PM	29	0	54	0	1	0	1	0	3	151	49	1	53	144	0	0	486	1968
1:15 PM	26	0	37	0	1	0	0	0	0	188	67	0	46	131	2	0	489	1954
1:45 PM	26	0	43	0	0	0	1	0	2	161	40	0	37	152	0	0	461	1898
Peak 15-Min Flowrates	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Total	
All Vehicles	64	0	204	0	0	0	12	0	4	588	296	0	228	852	0	0	2068	
Heavy Trucks	0	0	4	0	0	0	0	0	0	0	0	0	0	8	0	0	12	
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Railroad																		
Stopped Buses																		

Comments:

Report generated on 8/20/2013 10:11 AM

SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>) 1-877-580-2212



Willowbrook, IL  
IL Route 83 and 69th St  
Tuesday March 10, 2015

Weather: Cool and Dry

03/11/15  
06:38:51

URNS/TEAPAC[Ver 3.61.12] - 60-Minute Volumes: by Movement

Intersection # 2 83/69/tues

Begin Time	N-Approach			E-Approach			S-Approach			W-Approach			Int Total
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
700	20	0	0	0	0	0	0	0	3	6	0	3	32
715	26	0	0	0	0	0	0	0	9	6	0	3	44
730	27	0	0	0	0	0	0	0	12	5	0	2	46
745	26	0	0	0	0	0	0	0	14	3	0	4	47
800	26	0	0	0	0	0	0	0	23	4	0	5	58
815	20	0	0	0	0	0	0	0	17	3	0	4	44*
830	13	0	0	0	0	0	0	0	13	3	0	4	33*
845	8	0	0	0	0	0	0	0	10	2	0	2	22*
1600	36	0	0	0	0	0	0	0	24	18	0	5	83
1615	36	0	0	0	0	0	0	0	26	19	0	7	88
1630	37	0	0	0	0	0	0	0	36	18	0	8	99
1645	34	0	0	0	0	0	0	0	35	21	0	9	99
1700	39	0	0	0	0	0	0	0	43	21	0	11	114
1715	30	0	0	0	0	0	0	0	35	17	0	9	91*
1730	20	0	0	0	0	0	0	0	19	11	0	5	55*
1745	14	0	0	0	0	0	0	0	14	4	0	3	35*

URNS/TEAPAC[Ver 3.61.12] - 60-Minute Volumes: Appr/Exit Totals

Intersection # 2 83/69/tues

Begin Time	Approach Totals				Exit Totals				Int Total
	N	E	S	W	N	E	S	W	
700	20	0	3	9	3	0	6	23	32
715	26	0	9	9	3	0	6	35	44
730	27	0	12	7	2	0	5	39	46
745	26	0	14	7	4	0	3	40	47
800	26	0	23	9	5	0	4	49	58
815	20	0	17	7	4	0	3	37	44*
830	13	0	13	7	4	0	3	26	33*
845	8	0	10	4	2	0	2	18	22*
1600	36	0	24	23	5	0	18	60	83
1615	36	0	26	26	7	0	19	62	88
1630	37	0	36	26	8	0	18	73	99
1645	34	0	35	30	9	0	21	69	99
1700	39	0	43	32	11	0	21	82	114
1715	30	0	35	26	9	0	17	65	91*
1730	20	0	19	16	5	0	11	39	55*
1745	14	0	14	7	3	0	4	28	35*

Willowbrook, IL  
IL Route 83 and 69th St  
Saturday March 7, 2015

Weather: Cool and Sunny

03/08/15  
13:16:28

URNS/TEAPAC[Ver 3.61.12] - 15-Minute Flow Rates: Appr/Exit Totals

Intersection # 1 83/69/sat

Begin Time	Approach Totals				Exit Totals				Int Total
	N	E	S	W	N	E	S	W	
1200	52	0	60	32	16	0	16	112	144
1215	44	0	48	28	24	0	4	92	120
1230	60	0	68	44	24	0	20	128	172
1245	52	0	80	64	28	0	36	132	196
1300	44	0	76	56	28	0	28	120	176
1315	48	0	92	44	16	0	28	140	184
1330	40	0	76	32	12	0	20	116	148
1345	52	0	60	56	28	0	28	112	168

URNS/TEAPAC[Ver 3.61.12] - 60-Minute Volumes: by Movement

Intersection # 1 83/69/sat

Begin Time	N-Approach			E-Approach			S-Approach			W-Approach			Int Total
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
1200	52	0	0	0	0	0	0	0	64	19	0	23	158
1215	50	0	0	0	0	0	0	0	68	22	0	26	166
1230	51	0	0	0	0	0	0	0	79	28	0	24	182
1245	46	0	0	0	0	0	0	0	81	28	0	21	176
1300	46	0	0	0	0	0	0	0	76	26	0	21	169
1315	35	0	0	0	0	0	0	0	57	19	0	14	125*
1330	23	0	0	0	0	0	0	0	34	12	0	10	79*
1345	13	0	0	0	0	0	0	0	15	7	0	7	42*

URNS/TEAPAC[Ver 3.61.12] - 60-Minute Volumes: Appr/Exit Totals

Intersection # 1 83/69/sat

Begin Time	Approach Totals				Exit Totals				Int Total
	N	E	S	W	N	E	S	W	
1200	52	0	64	42	23	0	19	116	158
1215	50	0	68	48	26	0	22	118	166
1230	51	0	79	52	24	0	28	130	182
1245	46	0	81	49	21	0	28	127	176
1300	46	0	76	47	21	0	26	122	169
1315	35	0	57	33	14	0	19	92	125*
1330	23	0	34	22	10	0	12	57	79*
1345	13	0	15	14	7	0	7	28	42*



Willowbrook, IL Weather: Cold and Dry  
 Plainfield Rd and Willowbrook Town Center Acc Dr  
 Tuesday December 17, 2013

12/18/13  
 18:16:10

URNS/TEAPAC[Ver 3.61.12] - 15-Minute Counts: All Vehicles - by Mvmt

Intersection # 1 plainfield/willowtown

Begin Time	N-Approach			E-Approach			S-Approach			W-Approach			Int Total
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
1100	0	0	0	0	149	40	35	0	17	45	148	1	435
1115	0	0	0	0	163	49	27	0	13	40	148	0	440
1130	0	0	0	0	214	52	39	0	15	56	159	0	535
1145	1	0	0	1	187	66	55	0	21	44	189	2	566
1200	0	0	0	0	189	60	39	0	14	61	146	1	510
1215	3	0	1	1	181	69	66	0	25	71	194	1	612
1230	1	0	0	0	174	73	76	0	16	52	185	3	580
1245	2	0	1	1	150	55	57	1	25	61	184	2	539
1300	0	0	0	0	140	61	84	0	26	52	196	0	559
1315	2	0	1	2	166	37	64	0	26	41	182	2	523
1330	0	0	0	1	159	47	49	0	25	46	203	1	531
1345	0	0	0	1	170	44	55	0	14	44	190	0	518
1400	0	0	0	0	181	42	54	0	25	48	175	0	525
1415	1	0	0	2	196	39	46	0	17	29	166	1	497
1430	2	0	1	0	178	35	41	0	21	52	202	0	532
1445	1	0	0	0	202	37	43	0	23	64	189	2	561
1500	0	0	1	0	205	40	53	0	27	57	188	1	572
1515	1	0	0	1	234	42	47	0	18	54	186	1	584
1530	1	0	3	4	230	48	44	0	20	63	184	0	597
1545	0	0	2	1	231	50	44	0	15	51	185	0	579
1800	0	0	0	0	239	59	38	0	12	80	157	1	586
1815	0	0	0	1	224	66	50	0	15	73	164	0	593
1830	0	0	0	0	217	46	45	0	17	74	116	0	515
1845	0	0	0	0	156	51	39	0	16	87	218	0	567
1900	0	0	0	0	130	41	37	0	19	66	167	0	460
1915	1	0	2	0	152	35	27	1	20	60	143	1	442
1930	0	0	0	0	136	23	37	0	19	46	105	0	366
1945	0	0	0	0	119	43	43	0	37	33	111	0	386
2000	1	0	0	2	120	28	45	0	19	25	112	0	352
2015	1	0	1	0	128	29	45	0	15	32	96	3	350
2030	1	0	0	0	114	16	32	0	14	29	85	0	291
2045	0	0	0	0	103	18	28	0	15	35	74	1	274
Total	19	0	13	18	5537	1441	1484	2	621	1671	5147	24	15977

## **Existing Conditions**

Lanes, Volumes, Timings

3: Kingery Highway & Plainfield Road

9/26/2014

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	301	622	17	82	204	117	18	1874	196	327	1062	127
Ideal Flow (vphpl)	1900	1900	1900	1900	2000	1900	1900	2000	1900	1900	2000	1900
Storage Length (ft)	420		0	370		236	266		0	266		185
Storage Lanes	1		0	1		1	1		1	2		1
Taper Length (ft)	126			135			226			266		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Ped Bike Factor									0.99			
Fit		0.996				0.860			0.850			0.850
Fit Protected	0.960			0.960			0.960			0.960		
Satd. Flow (prot)	1762	3490	0	1719	3551	1524	1440	3551	1553	3367	3519	1533
Fit Permitted	0.447			0.242			0.360			0.960		
Satd. Flow (perm)	826	3490	0	431	3551	1524	1440	3551	1533	3367	3519	1533
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		40			40			45			45	
Link Distance (ft)		712			774			1320			974	
Travel Time (s)		12.2			12.2			20.2			14.8	
Confl. Peds. (#/hr)									1			
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	3%	3%	0%	5%	7%	6%	22%	7%	4%	4%	4%	6%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	224	579	0	88	224	126	19	2015	200	352	1121	137
Turn Type	pm+pt	NA		pm+pt	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	7	4		3	8	1	5	2	3	1	6	7
Permitted Phases	4			8		3			2			6
Detector Phase	7	4		3	8	1	5	2	3	1	6	7
Switch Phase												
Minimum Initial (s)	3.0	15.0		3.0	15.0	3.0	3.0	15.0	3.0	3.0	15.0	3.0
Minimum Split (s)	8.0	25.5		8.0	23.5	9.0	9.0	46.5	8.0	9.0	42.5	9.0
Total Split (s)	20.0	31.0		13.0	24.0	16.0	15.0	50.0	13.0	16.0	51.0	20.0
Total Split (%)	14.3%	22.1%		9.3%	17.1%	11.4%	10.7%	57.1%	9.3%	11.4%	57.9%	14.3%
Yellow Time (s)	3.5	6.0		3.5	6.0	3.5	3.5	4.5	3.5	3.5	4.5	3.5
All-Red Time (s)	1.0	2.5		1.0	2.5	1.5	1.5	2.0	1.0	1.5	2.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	7.5		4.5	7.5	5.0	5.0	6.5	4.5	5.0	6.5	4.5
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None	None	None	C-Max	None	None	C-Max	None
Act Effect Green (s)	39.5	23.8		27.7	16.5	35.0	7.4	73.5	83.7	11.0	51.4	103.4
Actuated g/C Ratio	0.28	0.17		0.20	0.12	0.25	0.05	0.52	0.60	0.08	0.58	0.74
w/C Ratio	0.97	0.98		0.54	0.54	0.33	0.24	1.08	0.22	1.33	0.55	0.12
Control Delay	57.3	59.4		62.2	63.3	45.9	67.5	72.3	6.9	220.9	20.3	6.4
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	57.3	59.4		62.2	63.3	45.9	67.5	72.3	6.9	220.9	20.3	6.4
LOS	F	F		D	E	D	F	E	A	F	C	A
Approach Delay		59.8			56.1			67.0			62.7	
Approach LOS		F			E			E			E	
Queue Length 50th (ft)	261	230		61	102	94	19	~1000	25	~213	145	36













9/29/2013 A.M. Peak Hour Existing Traffic

Synchro 5 Report

Page 1

Lanes, Volumes, Timings  
3: Kingery Highway & Plainfield Road

9/26/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 95th (ft)	#490	#406		107	147	156	m33	#1215	36	#817	431	64
Internal Link Dist (ft)		702			694			1250			994	
Turn Bay Length (ft)	420			370		236	266			266		186
Base Capacity (vph)	335	592		166	418	331	106	1364	921	264	2046	1136
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.97	0.9%		0.53	0.54	0.33	0.11	1.03	0.22	1.33	0.55	0.12

Intersection Summary

Area Type: Other  
 Cycle Length: 140  
 Actuated Cycle Length: 140  
 Offset: 27 (19%), Referenced to phase 2: NBT and 6: SBT, Start of Green  
 Natural Cycle: 160  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 1.33  
 Intersection Signal Delay: 6.5  
 Intersection Capacity Utilization: 107.3%  
 Analysis Period (min): 16  
 Intersection LOS: E  
 ICU Level of Service: G




- Volume exceeds capacity, queue is theoretically infinite.  
 Queue shown is maximum after two cycles  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles  
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Kingery Highway & Plainfield Road



Lanes, Volumes, Timings  
9: Kingery Highway & 72nd Court

9/26/2014

						
Lane Group	WBL	WBR	NB	NBP	SB	SBT
Lane Configurations	TTT		TTT		T	TT
Volume (vph)	53	46	2096	34	24	1133
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	2000
Storage Length (ft)	200	0		0	215	
Storage Lanes	1	0		0	1	
Taper Length (ft)	55				225	
Lane Util. Factor	0.97	0.95	0.91	0.91	1.00	0.95
Ped Bike Factor	0.99		1.00			
Fit	0.931		0.997			
Fit Protected	0.974				0.950	
Satd. Flow (prot)	3125	0	4131	0	1736	3551
Fit Permitted	0.974				0.950	
Satd. Flow (perm)	3125	0	4131	0	1736	3551
Right Turn on Red		No		No		
Satd. Flow (RTOR)						
Link Speed (mph)	30		45			45
Link Distance (ft)	604		356			1322
Travel Time (s)	15.5		5.4			20.2
Confl. Peds. (#/hr)		1				
Confl. Bikes (#/hr)				1		
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles (%)	4%	9%	7%	8%	4%	7%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	100	0	2155	0	24	1144
Turn Type	Prot		NA		Prot	NA
Protected Phases	3		2		1	6
Permitted Phases						
Detector Phase	3		2		1	6
Switch Phase						
Minimum Initial (s)	8.0		15.0		3.0	15.0
Minimum Split (s)	22.0		22.0		2.5	22.0
Total Split (s)	35.0		34.0		21.0	105.0
Total Split (%)	25.0%		60.0%		15.0%	75.0%
Yellow Time (s)	4.5		4.5		3.5	4.5
All-Red Time (s)	1.5		1.5		1.0	1.5
Lost Time Adjust (s)	0.0		0.0		0.0	0.0
Total Lost Time (s)	6.0		6.0		4.5	6.0
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None		C-Max		None	C-Max
Act Effect Green (s)	10.1		109.1		7.1	117.2
Actuated g/C Ratio	0.08		0.74		0.06	0.64
w/c Ratio	0.41		0.57		0.29	0.32
Control Delay	66.3		7.9		68.5	2.1
Queue Delay	0.0		0.0		0.0	0.0
Total Delay	66.3		7.9		68.5	2.1
LOS	E		A		E	A
Approach Delay	66.3		7.9			2.7
Approach LOS	E		A			A

2/29/2013 A.M. Peak Hour Existing Traffic

Synchro 8 Report  
Page 3

Lanes, Volumes, Timings  
9: Kingery Highway & 72nd Court

9/26/2014

Lane Group	WBL	WBR	NBT	NBP	SEB	SEB
Queue Length 50th (ft)	46		206		26	70
Queue Length 95th (ft)	75		323		140	172
Internal Link Dist (ft)	604		276			1253
Turn Bay Length (ft)	200				215	
Base Capacity (vph)	647		3764		204	2972
Starvation Cap Reductn	0		0		0	0
Spillback Cap Reductn	0		0		0	0
Storage Cap Reductn	0		0		0	0
Reduced v/c Ratio	0.16		0.57		0.14	0.38

Intersection Summary

Area Type: Other  
 Cycle Length: 140  
 Actuated Cycle Length: 140  
 Offset: 32 (23%), Referenced to phase 2:NBT and 6:SBT, Start of Green  
 Natural Cycle: 70  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.57  
 Intersection Signal Delay: 8.1  
 Intersection LOS: A  
 Intersection Capacity Utilization 68.0%  
 ICU Level of Service B  
 Analysis Period (min): 15  
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 9: Kingery Highway & 72nd Court



# HCM Unsignalized Intersection Capacity Analysis 6: Willowbrook Town Center & Plainfield Road

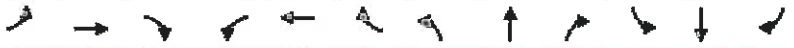
9/26/2014

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1	2	1	1	2	1	1	2	1	1	2	1
Volume (veh/h)	1	971	66	58	431	2	27	0	65	2	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Hourly flow rate (vph)	1	1067	73	64	474	2	30	0	71	2	0	0
Pedestrians								1				
Lane Width (ft)								12.0				
Walking Speed (ft/s)								4.0				
Percent Blockage								0				
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)		774										
pX, platoon unblocked				0.35			0.35	0.35	0.35	0.35	0.35	
vC, conflicting volume	476			1141			1436	1674	635	1209	1745	238
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	476			610			1157	1436	97	191	1622	238
tC, single (s)	4.1			4.1			7.6	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.6	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			91			75	100	91	99	100	100
cM capacity (veh/h)	1097			686			117	163	304	172	92	770
Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	NB 1	NB 2	SB 1	SB 2	
Volume Total	1	534	634	73	64	316	160	30	71	2	0	
Volume Left	1	0	0	0	64	0	0	30	0	2	0	
Volume Right	0	0	0	73	0	0	2	0	71	0	0	
cSH	1097	1700	1700	1700	686	1700	1700	117	104	172	1700	
Volume to Capacity	0.00	0.31	0.31	0.04	0.09	0.19	0.09	0.25	0.09	0.01	0.00	
Queue Length 95th (ft)	0	0	0	0	2	0	0	23	7	1	0	
Control Delay (s)	6.3	0.0	0.0	0.0	10.8	0.0	0.0	45.7	9.9	26.2	0.0	
Lane LOS	A				B			E	A	D	A	
Approach Delay (s)	0.0				1.3			20.4		26.2		
Approach LOS								C		D		
Intersection Summary												
Average Delay			1.6									
Intersection Capacity Utilization			43.3%							A		
Analysis Period (min)			15									

# Lanes, Volumes, Timings

## 3: Kingery Highway & Plainfield Road

9/26/2014

												
Lane Group	EBL	EBT	FSR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SRP
Lane Configurations	↰	↰↱		↰	↰↱	↰	↰	↰↱	↰	↰↱	↰↱	↰
Volume (vph)	226	467	53	187	576	231	102	1262	180	241	1647	252
Ideal Flow (vphpl)	1900	1900	1900	1900	2000	1900	1900	2000	1900	1900	2000	1900
Storage Length (ft)	420		0	370		235	265		0	265		165
Storage Lanes	1		0	1		1	1		1	2		1
Taper Length (ft)	125			135			225			265		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Ped Bike Factor		1.00							0.99			
Fit		0.905				0.950			0.950			0.950
Fit Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1700	3519	0	1736	3762	1563	1770	3619	1599	3467	3619	1563
Fit Permitted	0.170			0.130			0.950			0.950		
Satd. Flow (perm)	305	3510	0	329	3762	1563	1770	3619	1578	3407	3619	1563
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		40			40			45			45	
Link Distance (ft)		752			774			1353			974	
Travel Time (s)		13.3			13.2			20.2			14.0	
Confl. Peds. (#/hr)			2						2			
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	6%	1%	0%	4%	1%	2%	2%	5%	1%	1%	3%	2%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	233	536	0	193	594	230	105	1291	186	240	1690	260
Turn Type	pm+pt	NA		pm+pt	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	7	4		3	4	1	5	2	3	1	6	7
Permitted Phases	4			5		5			2			5
Detector Phase	7	4		3	4	1	5	2	3	1	6	7
Switch Phase												
Minimum Initial (s)	3.0	15.0		3.0	15.0	3.0	3.0	15.0	3.0	3.0	15.0	3.0
Minimum Split (s)	8.0	25.5		8.0	25.5	8.5	8.5	46.5	8.0	8.5	42.5	8.0
Total Split (s)	17.0	31.0		17.0	31.0	22.0	15.0	70.0	17.0	22.0	77.0	17.0
Total Split (%)	12.1%	22.1%		12.1%	22.1%	15.7%	10.7%	50.0%	12.1%	15.7%	55.0%	12.1%
Yellow Time (s)	3.5	5.0		3.5	5.0	3.5	3.5	4.5	3.5	3.5	4.5	3.5
All-Red Time (s)	1.0	2.5		1.0	2.5	1.0	1.0	2.0	1.0	1.0	2.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	7.5		4.5	7.5	4.5	4.5	6.5	4.5	4.5	6.5	4.5
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None	None	None	C-Max	None	None	C-Max	None
Act Effcl Green (s)	39.0	23.5		39.0	23.5	45.9	10.3	66.1	30.6	14.9	70.7	59.7
Actuated g/C Ratio	0.23	0.17		0.23	0.17	0.32	0.07	0.47	0.53	0.11	0.50	0.64
w/c Ratio	1.11	0.91		0.89	0.94	0.46	0.21	0.76	0.20	0.67	0.91	0.26
Control Delay	134.5	77.4		77.3	81.3	40.3	100.1	27.0	11.1	69.4	40.5	11.6
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	134.5	77.4		77.3	81.3	40.3	100.1	27.0	11.1	69.4	40.5	11.6
LOS	F	E		E	F	D	F	C	B	E	D	B
Approach Delay		94.7			71.1			30.0			40.3	
Approach LOS		F			E			C			D	
Queue Length 50th (ft)	~136	255		137	264	171	100	231	55	113	730	96

9/29/2013 P.M. Peak Hour Existing Traffic

Synchro 3 Report













Page 1



# Lanes, Volumes, Timings

## 3: Kingery Highway & Plainfield Road

3/26/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 95th (ft)	466	465		259	496	246	204	359	31	157	351	142
Internal Link Dist (ft)		702			694			1260			194	
Turn Bay Length (ft)	420			370		235	255			266		125
Base Capacity (vph)	203	530		217	651	543	132	1700	910	430	1063	1014
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.11	0.91		0.99	0.94	0.44	0.80	0.76	0.20	0.57	0.91	0.26

### Intersection Summary

Area Type: Other

Cycle Length: 140

Actuated Cycle Length: 140

Offset: 66 (40%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 100

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.11

Intersection Signal Delay: 50.6

Intersection Capacity Utilization 95.7%

Analysis Period (min): 15

Intersection LOS: D

ICU Level of Service F

- Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles

# 95th percentile volume exceeds capacity, queue may be longer.






Queue shown is maximum after two cycles

### Splits and Phases: 3: Kingery Highway & Plainfield Road



Lanes, Volumes, Timings  
9: Kingery Highway & 72nd Court

9/26/2014

						
Line Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	194	0	1296	154	76	1747
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	2000
Storage Length (ft)	200	0		0	215	
Storage Lanes	1	0		0	1	
Taper Length (ft)	55				225	
Lane Util. Factor	0.97	0.95	0.91	0.91	1.00	0.95
Fit	0.953		0.985			
Fit Protected	0.967				0.950	
Satd. Flow (prot)	3397	0	4259	0	1787	3699
Fit Permitted	0.907				0.950	
Satd. Flow (perm)	3397	0	4259	0	1787	3699
Right Turn on Red		No		No		
Satd. Flow (RTOR)						
Link Speed (mph)	30		45			45
Link Distance (ft)	694		356			1333
Travel Time (s)	15.5		6.4			20.2
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	0%	5%	0%	1%	0%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	291	0	1690	0	76	1101
Turn Type	Prot		NA		Prot	NA
Protected Phases	2		2		1	6
Permitted Phases						
Detector Phase			2		1	6
Switch Phase						
Minimum Initial (s)	3.0		15.0		3.0	15.0
Minimum Split (s)	22.0		22.0		3.5	22.0
Total Split (s)	35.0		77.0		26.0	105.0
Total Split (%)	25.0%		55.0%		20.0%	76.0%
Yellow Time (s)	4.5		4.5		3.5	4.5
All-Red Time (s)	1.5		1.5		1.0	1.5
Lost Time Adjust (s)	0.0		0.0		0.0	0.0
Total Lost Time (s)	6.0		6.0		4.5	6.0
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None		C-Max		None	C-Max
Act Effct Green (s)	13.2		93.8		11.5	109.5
Actuated g/C Ratio	0.13		0.27		0.08	0.75
w/C Ratio	0.66		0.49		0.53	0.62
Control Delay	65.1		12.6		6.2	1.6
Queue Delay	0.0		0.0		0.0	0.0
Total Delay	65.1		12.6		6.2	1.6
LOS	E		B		F	A
Approach Delay	65.1		12.6			5.1
Approach LOS	E		B			A
Queue Length 50th (ft)	131		242		76	60
Queue Length 95th (ft)	175		336		m#4	76
Internal Link Dist (ft)	604		276			1253

8/29/2012 P.M. Peak Hour Existing Traffic

Synchro 4 Report  
Page 3

# Lanes, Volumes, Timings

## 9: Kingery Highway & 72nd Court

9/26/2014

Lane Group	WBL	WBR	NBT	NBP	SBT	SBP
Turn Bay Length (ft)	200				215	
Base Capacity (vph)	703		3276		299	2193
Starvation Cap Reductn	0		0		0	0
Spillback Cap Reductn	0		0		0	0
Storage Cap Reductn	0		0		0	0
Reduced v/c Ratio	0.41		0.49		0.26	0.62

### Intersection Summary

Area Type: Other

Cycle Length: 140

Actuated Cycle Length: 140

Offset: #4 (60%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.66

Intersection Signal Delay: 12.9

Intersection LOS: B

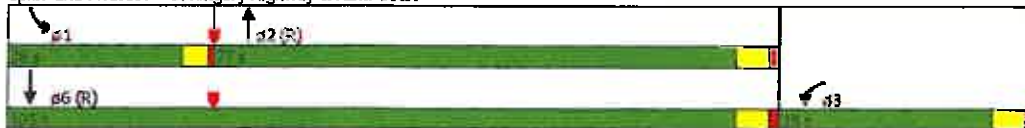
Intersection Capacity Utilization: 64.2%

ICU Level of Service: C

Analysis Period (min): 15

m: Volume for 95th percentile queue is metered by upstream signal.

### Splits and Phases: 9: Kingery Highway & 72nd Court



# HCM Unsignalized Intersection Capacity Analysis 6: Willowbrook Town Center & Plainfield Road

9/26/2014

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↱	↱	↰	↰↱		↰	↰	↱	↰	↰↱	↱
Volume (veh/h)	6	717	166	159	1005	9	52	0	141	1	0	3
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Hourly flow rate (vph)	6	732	168	163	1026	9	53	0	144	1	0	3
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)		774										
pX, platoon unblocked				0.39			0.39	0.39	0.39	0.39	0.39	
vC, conflicting volume	1035			900			1645	2164	366	1939	2328	517
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1035			631			1472	2057	21	1102	2242	517
tC, single (s)	4.4			4.1			7.6	6.5	6.9	7.6	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.4			2.2			3.6	4.0	3.3	3.6	4.0	3.3
p0 queue free %	99			77			18	100	84	97	100	99
cM capacity (veh/h)	585			852			65	38	928	31	29	508
Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	NB 1	NB 2	SB 1	SB 2	
Volume Total	6	366	366	163	193	824	351	53	144	1	3	
Volume Left	6	0	0	0	193	0	0	53	0	1	0	
Volume Right	0	0	0	163	0	0	9	0	144	0	3	
cSH	585	1700	1700	1700	852	1700	1700	65	928	31	508	
Volume to Capacity	0.01	0.22	0.22	0.10	0.23	0.40	0.21	0.82	0.16	0.03	0.01	
Queue Length 95th (ft)	1	0	0	0	22	0	0	94	14	2	0	
Control Delay (s)	11.2	0.0	0.0	0.0	10.6	0.0	0.0	167.3	9.6	123.7	12.1	
Lane LOS	B				B			F	A	F	B	
Approach Delay (s)	0.1				1.6			52.1		40.0		
Approach LOS								F		E		
Intersection Summary												
Average Delay				5.4								
Intersection Capacity Utilization				50.9%			ICU Level of Service			A		
Analysis Period (min)				15								

# Lanes, Volumes, Timings

## 3: Kingery Highway & Plainfield Road

9/26/2014

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SEB
Lane Configurations	←	←	←	←	←	←	←	←	←	←	←	←
Volume (vph)	211	353	50	153	323	220	143	1211	194	310	1272	286
Ideal Flow (vphpl)	1900	1900	1900	1900	2000	1900	1900	2000	1900	1900	2000	1900
Storage Length (ft)	420		0	370		235	265		0	265		185
Storage Lanes	1		0	1		1	1		1	2		1
Taper Length (ft)	125			135			225			265		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Ped Bike Factor						0.99			0.98			
Fit		0.972				0.950			0.950			0.950
Fit Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1777	3474	0	1770	3762	1583	1505	3725	1513	3467	3725	1599
Fit Permitted	0.401			0.349			0.950			0.950		
Satd. Flow (perm)	754	3474	0	650	3762	1561	1505	3725	1559	3467	3725	1599
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		40			40			45			45	
Link Distance (ft)		712			774			1133			974	
Travel Time (s)		13.3			13.2			20.2			14.8	
Confl. Peds. (#/hr)						2			3			
Confl. Bikes (#/hr)									3			
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	1%	1%	1%	2%	1%	2%	0%	2%	2%	1%	2%	1%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	215	442	0	156	530	224	146	1236	195	316	1298	292
Turn Type	pm+pt	NA		pm+pt	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	7	4		3	3	1	5	2	3	1	6	7
Permitted Phases	4								2			6
Detector Phase	7	4		3	3	1	5	2	3	1	6	7
Switch Phase												
Minimum Initial (s)	3.0	15.0		3.0	15.0	3.0	3.0	15.0	3.0	3.0	15.0	3.0
Minimum Split (s)	3.0	23.5		3.0	23.5	9.0	9.0	22.5	3.0	9.0	22.5	3.0
Total Split (s)	16.0	29.0		14.0	27.0	23.0	15.0	59.0	14.0	23.0	57.0	16.0
Total Split (%)	12.5%	20.2%		11.2%	21.0%	15.4%	12.0%	47.2%	11.2%	15.4%	53.6%	12.5%
Yellow Time (s)	3.5	5.0		3.5	5.0	3.5	3.5	4.5	3.5	3.5	4.5	3.5
All-Red Time (s)	1.0	2.5		1.0	2.5	1.5	1.5	2.0	1.0	1.5	2.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	7.5		4.5	7.5	5.0	5.0	6.5	4.5	5.0	6.5	4.5
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None	None	None	C-Max	None	None	C-Max	None
Act Effct Green (s)	36.0	21.5		31.0	19.4	27.0	10.1	54.7	66.1	15.9	60.5	70.5
Actuated g/C Ratio	0.29	0.17		0.25	0.16	0.30	0.08	0.44	0.63	0.12	0.48	0.63
w/c Ratio	0.69	0.74		0.63	0.67	0.47	1.00	0.76	0.24	0.71	0.72	0.29
Control Delay	47.7	57.6		46.2	53.1	36.0	123.0	29.5	12.0	61.7	24.4	11.5
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	47.7	57.6		46.2	53.1	36.0	123.0	29.5	12.0	61.7	24.4	11.5
LOS	D	E		D	D	C	F	C	B	E	C	B
Approach Delay		54.3			45.9			36.0			21.3	
Approach LOS		D			D			D			C	

8/29/2013 Saturday Midday Peak Hour Existing Traffic

Synchro Report

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# Lanes, Volumes, Timings

## 3: Kingery Highway & Plainfield Road

9/26/2014

Lane Group	EFL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SEB
Queue Length 50th (ft)	137	180		96	131	137	~123	224	48	127	425	101
Queue Length 95th (ft)	210	240		155	171	206	#266	418	69	175	510	149
Internal Link Dist (ft)		702			694			1253			694	
Turn Bay Length (ft)	420			370		235	255			265		165
Base Capacity (vph)	312	597		250	546	501	146	1629	327	494	1802	1004
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.69	0.74		0.62	0.56	0.45	1.00	0.76	0.24	0.63	0.72	0.29

### Intersection Summary

Area Type: Other

Cycle Length: 125

Actuated Cycle Length: 125

Offset: 45 (36%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.00

Intersection Signal Delay: 3.1

Intersection LOS: D

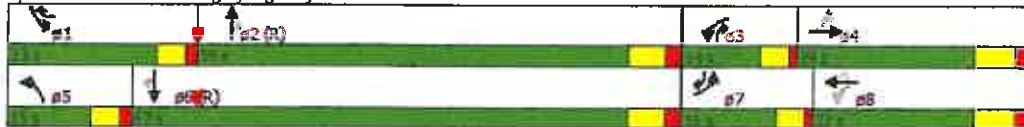
Intersection Capacity Utilization: 65.1%

ICU Level of Service: E

Analysis Period (min): 15

- Volume exceeds capacity, queue is theoretically infinite.  
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.

### Splits and Phases: 3: Kingery Highway & Plainfield Road



Lanes, Volumes, Timings  
9: Kingery Highway & 72nd Court

9/26/2014

	<div> <div>↙</div> <div>↖</div> <div>↑</div> <div>↗</div> <div>↘</div> <div>↓</div> </div>					
Lane Group	WBL	WBR	NBT	NBP	SBL	SBT
Lane Configurations	<del>TT</del>		<del>TT</del>		<del>T</del>	<del>TT</del>
Volume (vph)	301	156	1315	234	168	1362
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	2000
Storage Length (ft)	200	0		0	215	
Storage Lanes	1	0		0	1	
Taper Length (ft)	65				225	
Lane Util. Factor	0.97	0.95	0.91	0.91	1.00	0.95
Flt	0.949		0.977			
Flt Protected	0.961				0.950	
Satd. Flow (prot)	3375	0	4927	0	1805	3639
Flt Permitted	0.961				0.950	
Satd. Flow (perm)	3375	0	4927	0	1805	3639
Right Turn on Red		No		No		
Satd. Flow (RTOR)						
Link Speed (mph)	30		45			45
Link Distance (ft)	684		856			1333
Travel Time (s)	15.5		12.0			20.2
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	1%	3%	2%	0%	3%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	466	0	1611	0	171	1390
Turn Type	Prot		NA		Prot	NA
Protected Phases	3		2		1	6
Permitted Phases						
Detector Phase	3		2		1	6
Switch Phase						
Minimum Initial (s)	3.0		15.0		3.0	15.0
Minimum Split (s)	22.0		22.0		8.5	22.0
Total Split (s)	37.0		63.0		25.0	35.0
Total Split (%)	29.6%		50.4%		20.0%	70.4%
Yellow Time (s)	4.5		4.5		3.5	4.5
All-Red Time (s)	1.5		1.5		1.0	1.5
Lost Time Adjust (s)	0.0		0.0		0.0	0.0
Total Lost Time (s)	6.0		6.0		4.5	6.0
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None		C-Max		None	C-Max
Act Effct Green (s)	23.5		68.2		16.8	39.5
Actuated g/C Ratio	0.19		0.65		0.13	0.72
w/c Ratio	0.74		0.59		0.70	0.53
Control Delay	54.1		21.4		80.7	3.1
Queue Delay	0.0		0.0		0.0	0.0
Total Delay	54.1		21.4		80.7	3.1
LOS	D		C		F	A
Approach Delay	54.1		21.4			12.2
Approach LOS	D		C			B
Queue Length 50th (ft)	135		202		145	99
Queue Length 95th (ft)	228		424		207	113
Internal Link Dist (ft)	604		776			1252

9/29/2013 Saturday Midday Peak Hour Existing Traffic

Synchro 8 Report  
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# Lanes, Volumes, Timings

## 9: Kingery Highway & 72nd Court

9/26/2014

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Turn Bay Length (ft)	200				215	
Base Capacity (vph)	327		2616		301	2641
Starvation Cap Reductn	0		0		0	0
Spillback Cap Reductn	0		0		0	0
Storage Cap Reductn	0		0		0	0
Reduced v/c Ratio	0.56		0.59		0.57	0.53

### Intersection Summary

Area Type: Other

Cycle Length: 125

Actuated Cycle Length: 125

Offset: 69 (47%), Referenced to phase 2: NBT and 6: SBT, Start of Green

Natural Cycle: 65

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.74

Intersection Signal Delay: 21.7

Intersection LOS: C

Intersection Capacity Utilization: 67.2%

ICU Level of Service: C

Analysis Period (min): 15

m Volume for 95th percentile queue is metered by upstream signal.






















### Splits and Phases: 9: Kingery Highway & 72nd Court





HCM Unsignalized Intersection Capacity Analysis  
6: Willowbrook Town Center & Plainfield Road

9/26/2014

												
Movement	EBL	EBT	EBP	WB L	WB T	WBR	NBL	NBT	NBP	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	3	600	244	215	620	0	85	0	138	1	0	5
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	3	632	267	226	653	0	89	0	148	1	0	5
Pedestrians		1						1				
Lane Width (ft)		12.0						12.0				
Walking Speed (ft/s)		4.0						4.0				
Percent Blockage		0						0				
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)		774										
pX, platoon unblocked												
vC, conflicting volume	653			889			1435	1755	317	1636	2012	327
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	653			889			1435	1755	317	1636	2012	327
tC, single (s)	4.1			4.1			7.6	6.6	6.9	7.5	6.6	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.6	4.0	3.3	3.6	4.0	3.3
p0 queue free %	99			71			0	100	71	97	100	99
cM capacity (veh/h)	944			770			72	60	681	37	42	674
Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	NB 1	NB 2	SB 1	SB 2	
Volume Total	3	316	316	257	226	435	218	89	198	1	5	
Volume Left	3	0	0	0	226	0	0	39	0	1	0	
Volume Right	0	0	0	257	0	0	0	0	198	0	5	
cBH	944	1700	1700	1700	770	1700	1700	72	681	37	674	
Volume to Capacity	0.01	0.19	0.19	0.15	0.29	0.26	0.13	1.24	0.29	0.03	0.01	
Queue Length @6th (ft)	1	0	0	0	31	0	0	174	30	2	1	
Control Delay (s)	8.8	0.0	0.0	0.0	11.6	0.0	0.0	283.2	12.4	105.1	10.4	
Lane LOS	A				B			F	B	F	B	
Approach Delay (s)	0.1				3.0			96.7		26.2		
Approach LOS								F		D		
Intersection Summary												
Average Delay			14.8									
Intersection Capacity Utilization			60.1%							A		
Analysis Period (min)			15									

**Year 2020**  
**No Build**

Lanes, Volumes, Timings  
3: Kingery Highway & Plainfield Road

4/9/2015


	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NRT	NBR	SBL	SRT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NRT	NBR	SBL	SRT	SBR
Lane Configurations	←	←	←	←	←	←	←	←	←	←	←	←
Volume (vph)	322	559	15	58	223	125	12	1907	189	333	1070	129
Ideal Flow (vphpl)	1900	1900	1900	1900	2000	1900	1900	2000	1900	1900	2000	1900
Storage Length (ft)	420		0	370		235	255		0	265		195
Storage Lanes	1		0	1		1	1		1	2		1
Taper Length (ft)	125			135			225			265		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Ped Bike Factor									0.99			
Fr		0.935				0.950			0.950			0.950
Fit Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1752	3490	0	1719	3551	1524	1440	3551	1552	3367	3519	1539
Fit Permitted	0.454			0.242			0.950			0.950		
Satd. Flow (perm)	837	3490	0	438	3551	1524	1440	3551	1530	3367	3519	1539
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		40			40			45			45	
Link Distance (ft)		742			774			1333			990	
Travel Time (s)		13.3			13.2			20.2			15.0	
Confl. Peds. (#/hr)									1			
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	3%	3%	0%	5%	7%	6%	22%	7%	4%	4%	2%	5%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	346	620	0	95	240	124	19	2051	200	351	1161	139
Turn Type	pm+pt	NA		pm+pt	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	7	4		3	5	1	5	2	3	1	6	7
Permitted Phases	4			8		8			2			6
Detector Phase	7	4		3	5	1	5	2	3	1	6	7
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	23.5		8.0	23.5	9.0	9.0	22.5	9.0	9.0	22.5	8.0
Total Split (s)	20.0	31.0		12.0	24.0	16.0	15.0	30.0	13.0	16.0	31.0	20.0
Total Split (%)	14.3%	22.1%		9.3%	17.1%	11.4%	10.7%	57.1%	9.3%	11.4%	57.9%	14.3%
Yellow Time (s)	3.0	5.0		3.0	5.0	3.5	3.5	4.5	3.0	3.5	4.5	3.0
All-Red Time (s)	0.0	2.5		0.0	2.5	1.5	1.5	2.0	0.0	1.5	2.0	0.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.5		3.0	7.5	5.0	5.0	6.5	3.0	5.0	6.5	3.0
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None	None	None	C-Max	None	None	C-Max	None
Act Effect Green (s)	41.0	24.1		30.4	16.5	35.0	7.4	73.5	86.4	11.0	31.4	104.9
Actuated g/C Ratio	0.29	0.17		0.22	0.12	0.26	0.05	0.52	0.62	0.05	0.51	0.75
w/C Ratio	0.97	1.03		0.53	0.57	0.35	0.24	1.10	0.21	1.36	0.66	0.12
Control Delay	66.7	101.0		48.6	64.4	46.4	57.7	50.5	6.4	229.5	20.5	5.9
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	66.7	101.0		48.6	64.4	46.4	57.7	50.5	6.4	229.5	20.5	5.9
LOS	F	F		D	E	D	F	F	A	F	C	A
Approach Delay		95.8			56.1			74.0			64.7	
Approach LOS		F			E			E			E	
Queue Length 50th (ft)	279	~325		65	110	101	19	~1116	24	~220	354	35

12/2013 A.M. Peak Hour Year 2020 No Build Traffic

Synchro 8 Report  
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Lanes, Volumes, Timings  
3: Kingery Highway & Plainfield Road

4/9/2015

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 95th (ft)	#516	#449		112	157	166	m33	#1252	34	#823	442	62
Internal Link Dist (ft)		702			694			1253			910	
Turn Bay Length (ft)	420			370		235	255			265		185
Base Capacity (vph)	356	601		1113	418	341	105	1464	952	264	2046	1152
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.97	1.03		0.51	0.57	0.35	0.18	1.10	0.21	1.36	0.56	0.12

Intersection Summary

Area Type: Other

Cycle Length: 140

Actuated Cycle Length: 140

Offset: 27 (19%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.36

Intersection Signal Delay: 73.5

Intersection LOS: E

Intersection Capacity Utilization: 102.4%

ICU Level of Service: G

Analysis Period (min): 15

- Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Kingery Highway & Plainfield Road



Lanes, Volumes, Timings  
9: Kingery Highway & 72nd Court

4/9/2015

Lane Group	WBL	WBR	NBT	NBR	SBL	SBR
Lane Configurations	LT	TH	LT	TH	LT	TH
Volume (vph)	53	46	2133	33	28	1153
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	2000
Storage Length (ft)	200	0		0	215	
Storage Lanes	1	0		0	1	
Taper Length (ft)	56				225	
Lane Util. Factor	0.97	0.95	0.91	0.91	1.00	0.95
Ped Bike Factor	0.99		1.00			
Fit	0.931		0.997			
Fit Protected	0.974				0.950	
Satd. Flow (prot)	3123	0	4331	0	1736	3651
Fit Permitted	0.974				0.950	
Satd. Flow (perm)	3123	0	4331	0	1736	3651
Right Turn on Red		No		No		
Satd. Flow (RTOR)						
Link Speed (mph)	30		45			45
Link Distance (ft)	604		356			1300
Travel Time (s)	16.5		5.4			20.2
Confl. Peds. (#/hr)		1				
Confl. Bikes (#/hr)				1		
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles (%)	4%	9%	7%	3%	4%	7%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	100	0	2193	0	28	1165
Turn Type	Prot		NA		Prot	NA
Protected Phases	3		2		1	6
Permitted Phases						
Detector Phase	3		2		1	6
Switch Phase						
Minimum Initial (s)	4.0		4.0		4.0	4.0
Minimum Split (s)	22.0		22.0		3.5	22.0
Total Split (s)	35.0		54.0		21.0	105.0
Total Split (%)	25.0%		60.0%		15.0%	75.0%
Yellow Time (s)	4.5		4.5		3.5	4.5
All-Red Time (s)	1.5		1.5		1.0	1.5
Lost Time Adjust (s)	0.0		0.0		0.0	0.0
Total Lost Time (s)	6.0		6.0		4.5	6.0
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None		C-Max		None	C-Max
Act Effect Green (s)	9.9		110.0		7.0	110.1
Actuated g/C Ratio	0.07		0.79		0.06	0.84
v/c Ratio	0.45		0.58		0.29	0.33
Control Delay	68.7		7.6		67.2	2.0
Queue Delay	0.0		0.0		0.0	0.0
Total Delay	68.7		7.6		67.2	2.0
LOS	E		A		E	A
Approach Delay	68.7		7.6			3.5
Approach LOS	E		A			A

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# Lanes, Volumes, Timings

## 9: Kingery Highway & 72nd Court

4/9/2016

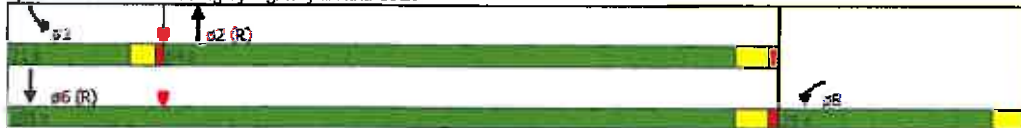
Lane Group	WBL	WBR	NBT	NBP	SBL	SRT
Queue Length 50th (ft)	45		287		26	62
Queue Length 95th (ft)	75		340		146	175
Internal Link Dist (ft)	604		276			1253
Turn Bay Length (ft)	200				215	
Base Capacity (vph)	646		3797		204	2996
Starvation Cap Reductn	0		0		0	0
Spillback Cap Reductn	0		0		0	0
Storage Cap Reductn	0		0		0	0
Reduced v/c Ratio	0.16		0.68		0.14	0.29

### Intersection Summary

Area Type: Other  
Cycle Length: 140  
Actuated Cycle Length: 140  
Offset: 32 (23%), Referenced to phase 2:NBT and 0:SBT, Start of Green  
Natural Cycle: 70  
Control Type: Actuated-Coordinated  
Maximum v/c Ratio: 0.68  
Intersection Signal Delay: 7.9  
Intersection Capacity Utilization: 55.7%  
Analysis Period (min): 15  
m Volume for 95th percentile queue is metered by upstream signal.

Intersection LOS: A  
ICU Level of Service: B

### Splits and Phases: 9: Kingery Highway & 72nd Court



HCM Unsignalized Intersection Capacity Analysis  
6: Willowbrook Town Center & Plainfield Road

4/9/2015

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SEB
Lane Configurations	1	2	1	1	2	1	1	2	1	1	2	1
Volume (veh/h)	1	1016	66	58	459	2	27	0	65	2	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Grade	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Hourly flow rate (vph)	1	1116	73	64	504	2	30	0	71	2	0	0
Pedestrians								1				
Lane Width (ft)								12.0				
Walking Speed (ft/s)								4.0				
Percent Blockage								0				
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)	774											
pX, platoon unblocked				0.34			0.34	0.34	0.34	0.34	0.34	
vC, conflicting volume	507			1190			1499	1754	559	1265	1825	250
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	507			346			1216	1517	96	905	1602	250
tC, single (s)	4.1			4.1			7.6	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			90			72	100	91	99	100	100
cM capacity (veh/h)	1069			660			106	91	796	156	91	752
Intersection Line 2	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	NB 1	NB 2	SB 1	SB 2	
Volume Total	1	558	558	73	64	336	170	30	71	2	0	
Volume Left	1	0	0	0	64	0	0	30	0	2	0	
Volume Right	0	0	0	73	0	0	2	0	71	0	0	
cBH	1009	1700	1700	1700	660	1700	1700	106	796	156	1700	
Volume to Capacity	0.09	0.33	0.33	0.04	0.10	0.20	0.10	0.28	0.09	0.01	0.00	
Queue Length 95th (ft)	0	0	0	0	2	0	0	27	7	1	0	
Control Delay (s)	8.4	0.0	0.0	0.0	11.0	0.0	0.0	52.3	10.0	28.1	0.0	
Lane LOS	A				B			F	A	D	A	
Approach Delay (s)	0.0				12			22.4		28.1		
Approach LOS								C		D		
Intersection Summary												
Average Delay				1.6								
Intersection Capacity Utilization				49.6%			ICU Level of Service			A		
Analysis Period (min)				15								

# HCM Unsignalized Intersection Capacity Analysis

11: Kingery Highway


4/9/2015

Movement	EBL	EBP	NB1	NB2	SB1	SB2
Lane Configurations	↰	↱	↰	↱	↰	↱
Volume (veh/h)	2	5	12	2342	1527	27
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	2	5	13	2546	1660	29
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	TW/LTL	
Median storage (veh)					2	
Upstream signal (ft)				990		
pX, platoon unblocked	0.46					
vC, conflicting volume	2973	345	1639			
vC1, stage 1 conf vol	1674					
vC2, stage 2 conf vol	1299					
vCu, unblocked vol	2945	345	1639			
tC, single (s)	6.3	6.9	4.1			
tC, 2 stage (s)	5.1					
IF (s)	3.5	3.3	2.2			
p0 queue free %	9%	9%	97			
cM capacity (veh/h)	127	306	374			
Direction, Lane #	EB 1	EB 2	NB 1	NB 2	SB 1	SB 2
Volume Total	2	5	13	1273	1273	1107
Volume Left	2	0	13	0	0	0
Volume Right	0	5	0	0	0	29
cSH	127	306	374	1700	1700	1700
Volume to Capacity	0.02	0.02	0.03	0.75	0.75	0.65
Queue Length 95th (ft)	1	1	0	0	0	0
Control Delay (s)	33.9	17.0	16.0	0.0	0.0	0.0
Lane LOS	D	C	B			
Approach Delay (s)	21.3		0.1		0.0	
Approach LOS	C					
Intersection Summary						
Average Delay			0.1			
Intersection Capacity Utilization			74.7%		ICU Level of Service	D
Analysis Period (min)			15			



Lanes, Volumes, Timings  
3: Kingery Highway & Plainfield Road

4/9/2015

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SEB	SEB	SEB
Lane Configurations	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT
Volume (vph)	242	500	67	200	616	247	104	1274	183	245	1676	256
Ideal Flow (vphpl)	1900	1900	1900	1900	2000	1900	1900	2000	1900	1900	2000	1900
Storage Length (ft)	420		0	370		235	255		0	265		185
Storage Lanes	1		0	1		1	1		1	2		1
Taper Length (ft)	125			135			225			265		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Ped Bike Factor		1.00							0.90			
Fit		0.905				0.850			0.850			0.850
Fit Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1703	3513	0	1703	3762	1561	1770	3619	1599	3467	3619	1593
Fit Permitted	0.170			0.170			0.950			0.950		
Satd. Flow (perm)	305	3513	0	311	3762	1561	1770	3619	1572	3467	3619	1593
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		40			40			45			45	
Link Distance (ft)		782			774			1333			990	
Travel Time (s)		13.3			13.2			20.2			15.0	
Confl. Peds. (#/hr)			2						2			
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	6%	1%	0%	4%	1%	3%	2%	5%	1%	1%	3%	2%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	249	574	0	206	635	255	107	1313	189	253	1729	264
Turn Type	pm+pt	NA		pm+pt	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	7	4		3	3	1	5	2	3	1	6	7
Permitted Phases	4			3		3			2			6
Detector Phase	7	4		3	3	1	5	2	3	1	6	7
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	23.5		8.0	23.5	8.5	8.5	22.5	8.0	8.5	22.5	8.0
Total Split (s)	17.0	31.0		17.0	31.0	22.0	16.0	70.0	17.0	22.0	77.0	17.0
Total Split (%)	12.1%	22.1%		12.1%	22.1%	15.7%	10.7%	50.0%	12.1%	15.7%	55.0%	12.1%
Yellow Time (s)	3.0	5.0		3.0	5.0	3.5	3.5	4.5	3.0	3.5	4.5	3.0
All-Red Time (s)	0.0	2.5		0.0	2.5	1.0	1.0	2.0	0.0	1.0	2.0	0.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.5		3.0	7.5	4.5	4.5	8.5	3.0	4.5	6.5	3.0
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None	None	None	C-Max	None	None	C-Max	None
Act Effect Green (s)	42.0	23.5		42.0	23.5	46.1	10.3	65.9	33.4	15.1	70.7	91.2
Actuated g/C Ratio	0.20	0.17		0.30	0.17	0.33	0.07	0.47	0.50	0.11	0.50	0.65
w/c Ratio	1.08	0.97		0.88	1.01	0.50	0.82	0.77	0.20	0.66	0.93	0.26
Control Delay	119.6	97.5		72.5	94.9	41.1	101.5	27.3	10.4	69.5	42.3	11.0
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	119.6	97.5		72.5	94.9	41.1	101.5	27.3	10.4	69.5	42.3	11.0
LOS	F	F		E	F	D	F	C	B	E	D	B
Approach Delay		97.9			73.1			30.2			41.7	
Approach LOS		F			E			C			D	
Queue Length 50th (ft)	~193	276		144	~310	185	102	296	54	115	754	95

9/29/2013 P.M. Peak Hour Year 2020 No Build

Synchro 8 Report  
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# Lanes, Volumes, Timings

## 3: Kingery Highway & Plainfield Road

4/8/2015

	↖	→	↗	↖	←	↗	↖	↑	↗	↘	↓	↖
Lane Group	EEL	EET	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 95th (ft)	#673	#699		#270	#442	267	#208	369	79	160	#632	139
Internal Link Dist (ft)		702			694			1253			910	
Turn Bay Length (ft)	420			370		235	265			265		185
Base Capacity (vph)	231	590		235	631	543	152	1704	939	433	1861	1030
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.04	0.97		0.88	1.01	0.47	0.81	0.77	0.20	0.58	0.93	0.26

### Intersection Summary

Area Type: Other

Cycle Length: 140

Actuated Cycle Length: 140

Offset: 6% (40%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 100

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.04

Intersection Signal Delay: 63.4

Intersection LOS: D

Intersection Capacity Utilization: 93.1%

ICU Level of Service: F

Analysis Period (min): 15

# Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

### Splits and Phases: 3: Kingery Highway & Plainfield Road



Lanes, Volumes, Timings  
9: Kingery Highway & 72nd Court

4/9/2015

	↙	↘	↑	↗	↘	↓
Lane Group	WBL	WBR	NBT	NBR	SBL	SBR
Lane Configurations	W	W	T	T	T	T
Volume (vph)	194	88	142	154	76	177
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	2000
Storage Length (ft)	200	0		0	215	
Storage Lanes	1	0		0	1	
Taper Length (ft)	55				225	
Lane Util. Factor	0.97	0.95	0.91	0.91	1.00	0.95
Fit	0.953		0.985			
Fit Protected	0.967				0.950	
Satd. Flow (prot)	3397	0	4889	0	1787	3689
Fit Permitted	0.967				0.950	
Satd. Flow (perm)	3397	0	4889	0	1787	3689
Right Turn on Red		No		No		
Satd. Flow (RTOR)						
Link Speed (mph)	30		45			45
Link Distance (ft)	684		356			1333
Travel Time (s)	15.5		5.4			20.2
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	0%	5%	0%	1%	3%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	291	0	1623	0	71	1833
Turn Type	Prot		NA		Prot	NA
Protected Phases	5		2		1	6
Permitted Phases						
Detector Phase	8		2		1	6
Switch Phase						
Minimum Initial (s)	4.0		4.0		4.0	4.0
Minimum Split (s)	22.0		22.0		8.5	22.0
Total Split (s)	35.0		77.0		29.0	105.0
Total Split (%)	25.0%		55.0%		20.0%	75.0%
Yellow Time (s)	4.5		4.5		3.5	4.5
All-Red Time (s)	1.5		1.5		1.0	1.5
Lost Time Adjust (s)	0.0		0.0		0.0	0.0
Total Lost Time (s)	6.0		6.0		4.5	6.0
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None		C-Max		None	C-Max
Act Effect Green (s)	17.3		94.7		11.5	110.7
Actuated g/C Ratio	0.12		0.63		0.08	0.79
w/C Ratio	0.69		0.49		0.53	0.63
Control Delay	67.5		12.3		44.5	1.7
Queue Delay	0.0		0.0		0.0	0.0
Total Delay	67.5		12.3		44.5	1.7
LOS	E		B		F	A
Approach Delay	67.5		12.3			5.1
Approach LOS	E		B			A
Queue Length 50th (ft)	132		240		75	64
Queue Length 95th (ft)	176		338		142	113
Internal Link Dist (ft)	604		276			1250

9/29/2013 P.M. Peak Hour Year 2020 No Build

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# Lanes, Volumes, Timings 9: Kingery Highway & 72nd Court

4/9/2015

Lane Group	WBL	WBR	NBT	NBR	SEL	SET
Turn Bay Length (ft)	200				215	
Base Capacity (vph)	700		3207		299	2916
Starvation Cap Reductn	0		0		0	0
Spillback Cap Reductn	0		0		0	0
Storage Cap Reductn	0		0		0	0
Reduced v/c Ratio	0.41		0.49		0.26	0.63

## Intersection Summary

Area Type: Other  
 Cycle Length: 140  
 Actuated Cycle Length: 140  
 Offset: #4 (60%), Referenced to phase 2:NBT and 6:SET, Start of Green  
 Natural Cycle: 60  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.63  
 Intersection Signal Delay: 12.9  
 Intersection Capacity Utilization: 65.0%  
 Analysis Period (min): 15  
 m Volume for 95th percentile queue is metered by upstream signal.

Intersection LOS: B

ICU Level of Service: C

Splits and Phases: 9: Kingery Highway & 72nd Court



HCM Unsignalized Intersection Capacity Analysis  
6: Willowbrook Town Center & Plainfield Road


4/9/2015

	↖	→	↗	↖	←	↗	↖	↗	↑	↘	↙	↓	↘
Movement	EBL	EBT	EBR	WBFL	WBT	WBR	NBL	NBT	NBP	SBL	SBT	SBR	
Lane Configurations	↖	↗	↗	↖	↗		↖	↗			↖	↗	
Volume (veh/h)	6	757	165	189	1074	9	52	0	141	1	0	3	
Sign Control		Free			Free			Stop			Stop		
Grade		0%			0%			0%			0%		
Peak Hour Factor	0.91	0.94	0.93	0.91	0.91	0.91	0.91	0.98	0.91	0.91	0.91	0.91	
Hourly flow rate (vph)	6	772	168	190	1096	9	53	0	144	1	0	3	
Pedestrians													
Lane Width (ft)													
Walking Speed (ft/s)													
Percent Blockage													
Right turn flare (veh)													
Median type		None			None								
Median storage (veh)													
Upstream signal (ft)		774											
pX, platoon unblocked				0.87			0.87	0.87	0.87	0.87	0.87		
vC, conflicting volume	1105			941			1721	2276	386	2029	2439	653	
vC1, stage 1 conf vol													
vC2, stage 2 conf vol													
vCu, unblocked vol	1105			641			1505	2170	6	1467	2351	653	
tC, single (s)	4.4			4.1			7.6	6.5	6.9	7.5	6.5	6.9	
tC, 2 stage (s)													
tF (s)	2.4			2.2			3.5	4.0	3.3	3.5	4.0	3.3	
p0 queue free %	99			77			7	100	86	96	100	99	
cM capacity (veh/h)	547			632			57	31	944	27	24	482	
Approach, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	NB 1	NB 2	SB 1	SB 2		
Volume Total	6	386	386	168	193	731	374	53	144	1	3		
Volume Left	6	0	0	0	190	0	0	53	0	1	0		
Volume Right	0	0	0	168	0	0	9	0	144	0	3		
cSH	547	1700	1700	1700	632	1700	1700	57	944	27	482		
Volume to Capacity	0.01	0.23	0.23	0.10	0.23	0.43	0.22	0.93	0.15	0.04	0.01		
Queue Length 95th (ft)	1	0	0	0	22	0	0	105	13	3	0		
Control Delay (s)	11.7	0.0	0.0	0.0	10.6	0.0	0.0	215.2	9.5	146.0	12.5		
Lane LOS	B				B			F	A	F	B		
Approach Delay (s)	0.1				1.6			64.9		45.9			
Approach LOS								F		E			
Intersection Summary													
Average Delay			6.2										
Intersection Capacity Utilization			52.9%										
Analysis Period (min)			15										
					ICU Level of Service				A				

# HCM Unsignalized Intersection Capacity Analysis
























11: Kingery Highway

4/8/2016

							
Movement	EBL	EBR	NBL	NBT	SBT	SEB	
Lane Configurations							
Volume (veh/h)	9	18	36	1727	2169	37	
Sign Control	Stop			Free	Free		
Grade	0%			0%	0%		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Hourly flow rate (vph)	9	20	39	1877	2347	40	
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None	T/M/LTL		
Median storage (veh)					2		
Upstream signal (ft)				990			
pX, platoon unblocked	0.69						
vC, conflicting volume	3324	1193	2337				
vC1, stage 1 conf vol	2067						
vC2, stage 2 conf vol	1017						
vCu, unblocked vol	3567	1193	2337				
tC, single (s)	6.3	6.9	4.1				
tC, 2 stage (s)	5.8						
tF (s)	3.5	3.3	2.2				
p0 queue free %	64	69	90				
cM capacity (veh/h)	55	179	199				
Direction, Lane #	EB 1	EB 2	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	9	20	39	939	939	1564	822
Volume Left	9	0	39	0	0	0	0
Volume Right	0	20	0	0	0	0	40
cSH	55	179	199	1700	1700	1700	1700
Volume to Capacity	0.16	0.11	0.20	0.55	0.55	0.92	0.48
Queue Length 95th (ft)	13	9	18	0	0	0	0
Control Delay (s)	83.1	27.5	27.5	0.0	0.0	0.0	0.0
Lane LOS	F	D	D				
Approach Delay (s)	44.6		0.6			0.0	
Approach LOS	E						
Intersection Summary							
Average Delay			0.5				
Intersection Capacity Utilization			70.9%				
Analysis Period (min)			15				
				ICU Level of Service			C

Lanes, Volumes, Timings  
3: Kingery Highway & Plainfield Road

4/9/2015

												
Lane Group	EEL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	226	378	96	164	346	235	146	1232	197	316	1294	291
Ideal Flow (vphpl)	1900	1900	1900	1900	2000	1900	1900	2000	1900	1900	2000	1900
Storage Length (ft)	420		0	370		235	255		0	265		185
Storage Lanes	1		0	1		1	1		1	2		1
Taper Length (ft)	125			135			225			265		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Ped Bike Factor						0.98			0.98			
Flt		0.972				0.160			0.350			0.160
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1717	3474	0	1770	3762	1623	1805	3725	1513	3467	3725	1599
Flt Permitted	0.355			0.292			0.950			0.950		
Satd. Flow (perm)	688	3474	0	544	3762	1657	1805	3725	1551	3467	3725	1599
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		40			40			45			45	
Link Distance (ft)		712			774			1353			900	
Travel Time (s)		13.3			13.2			20.2			14.3	
Confl. Peds. (#/hr)						2			3			
Confl. Bikes (#/hr)									3			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	1%	1%	1%	2%	1%	2%	0%	2%	2%	1%	2%	1%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	231	474	0	167	363	240	149	1257	201	321	1320	297
Turn Type	pm-pt	NA		pm-pt	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	7	4		3	3	1	5	2	3	1	6	7
Permitted Phases	4			5		2			2			6
Detector Phase	7	4		3	3	1	6	2	3	1	6	7
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	9.0	23.5		9.0	23.5	9.0	9.0	22.5	9.0	9.0	22.5	9.0
Total Split (s)	16.0	29.0		14.0	27.0	23.0	15.0	59.0	14.0	23.0	67.0	16.0
Total Split (%)	12.5%	23.2%		11.2%	21.6%	18.4%	12.0%	47.2%	11.2%	18.4%	63.6%	12.1%
Yellow Time (s)	3.0	5.0		3.0	5.0	3.5	3.5	4.5	3.0	3.5	4.5	3.0
All-Red Time (s)	0.0	2.5		0.0	2.5	1.5	1.5	2.0	0.0	1.5	2.0	0.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.5		3.0	7.5	5.0	5.0	6.5	3.0	5.0	6.5	3.0
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None	None	None	C-Max	None	None	C-Max	None
Act Effct Green (s)	37.7	20.4		33.5	18.2	36.3	11.4	55.9	70.1	18.0	60.5	79.9
Actuated g/C Ratio	0.30	0.16		0.27	0.15	0.29	0.09	0.45	0.56	0.13	0.48	0.64
w/c Ratio	0.73	0.34		0.67	0.64	0.62	0.91	0.76	0.23	0.72	0.73	0.29
Control Delay	49.2	64.6		47.1	56.0	36.8	98.7	28.0	10.2	62.0	28.2	10.9
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	49.2	64.6		47.1	56.0	36.8	98.7	28.0	10.2	62.0	28.2	10.9
LOS	D	E		D	E	D	F	C	B	E	C	B
Approach Delay		69.6			48.0			32.4			31.6	
Approach LOS		E			D			C			C	

4/29/2013 Saturday Midday Peak Hour Year 2020 No Build

Synchro 8 Report  
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Lanes, Volumes, Timings  
3: Kingery Highway & Plainfield Road

4/9/2015

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	146	196		101	141	148	131	223	45	129	427	99
Queue Length 95th (ft)	#226	#251		162	194	222	#272	407	77	177	523	147
Internal Link Dist (ft)		702			694			1253			900	
Turn Bay Length (ft)	420			370		235	255			265		185
Base Capacity (vph)	518	697		254	586	485	164	1664	376	499	1802	1023
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.73	0.79		0.66	0.69	0.49	0.91	0.76	0.23	0.64	0.73	0.29

Intersection Summary

Area Type: Other  
 Cycle Length: 125  
 Actuated Cycle Length: 126  
 Offset: 45 (36%), Referenced to phase 2:NBT and 6:SBT, Start of Green  
 Natural Cycle: 90  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.91  
 Intersection Signal Delay: 3.2  
 Intersection Capacity Utilization: 83.5%  
 Analysis Period (min): 15  
 ~ Volume exceeds capacity, queue is theoretically infinite.  
 Queue shown is maximum after two cycles.  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Splits and Phases: 3: Kingery Highway & Plainfield Road





Lanes, Volumes, Timings  
9: Kingery Highway & 72nd Court

4/9/2015

Lane Group	WSL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	TT		TTT		T	TT
Volume (vph)	301	156	1333	234	168	1386
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	2000
Storage Length (ft)	200	0		0	215	
Storage Lanes	1	0		0	1	
Taper Length (ft)	55				225	
Lane Util. Factor	0.97	0.96	0.91	0.91	1.00	0.96
Fit	0.949		0.978			
Fit Protected	0.968				0.960	
Satd. Flow (prot)	3375	0	4932	0	1806	3689
Fit Permitted	0.968				0.960	
Satd. Flow (perm)	3375	0	4932	0	1806	3689
Right Turn on Red		No		No		
Satd. Flow (RTOR)						
Link Speed (mph)	30		45			45
Link Distance (ft)	684		856			1333
Travel Time (s)	16.6		13.0			20.2
Peak Hour Factor	0.98	0.98	0.98	0.98	0.96	0.98
Heavy Vehicles (%)	0%	1%	3%	2%	0%	3%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	466	0	1604	0	171	1414
Turn Type	Prot		NA		Prot	NA
Protected Phases	8		2		1	6
Permitted Phases						
Detector Phase	8		2		1	6
Switch Phase						
Minimum Initial (s)	4.0		4.0		4.0	4.0
Minimum Split (s)	22.0		22.0		8.5	22.0
Total Split (s)	37.0		63.0		25.0	38.0
Total Split (%)	29.6%		60.4%		20.0%	70.4%
Yellow Time (s)	4.5		4.5		3.5	4.5
All-Red Time (s)	1.5		1.5		1.0	1.5
Lost Time Adjust (s)	0.0		0.0		0.0	0.0
Total Lost Time (s)	6.0		6.0		4.5	6.0
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None		C-Max		None	C-Max
Act Effect Green (s)	22.5		69.0		17.0	30.5
Actuated g/C Ratio	0.18		0.66		0.14	0.72
w/c Ratio	0.77		0.58		0.70	0.63
Control Delay	57.4		21.0		77.1	3.8
Queue Delay	0.0		0.0		0.0	0.0
Total Delay	57.4		21.0		77.1	3.8
LOS	E		C		E	A
Approach Delay	57.4		21.0			11.7
Approach LOS	E		C			B
Queue Length 60th (ft)	157		300		147	100
Queue Length 95th (ft)	234		427		205	119
Internal Link Dist (ft)	604		776			1263

3/29/2013 Saturday Midday Peak Hour Year 2020 No Build

Synchro 8 Report  
Page 3

Lanes, Volumes, Timings  
 9: Kingery Highway & 72nd Court

4/9/2015

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Turn Bay Length (ft)	200				215	
Base Capacity (vph)	137		2722		303	2671
Starvation Cap Reductn	0		0		0	0
Spillback Cap Reductn	0		0		0	0
Storage Cap Reductn	0		0		0	0
Reduced v/c Ratio	0.56		0.53		0.56	0.53

Intersection Summary

Area Type: Other  
 Cycle Length: 125  
 Actuated Cycle Length: 125  
 Offset: 5s (46%), Referenced to phase 2:NBT and 6:SBT, Start of Green  
 Natural Cycle: 65  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.77  
 Intersection Signal Delay: 21.6  
 Intersection Capacity Utilization: 67.6%  
 Analysis Period (min): 15  
 m Volume for 95th percentile queue is metered by upstream signal.

Intersection LOS: C  
 ICU Level of Service: C

Splits and Phases: 9: Kingery Highway & 72nd Court








# HCM Unsignalized Intersection Capacity Analysis 6: Willowbrook Town Center & Plainfield Road

4/9/2015

Movement	EBL	EBT	EBP	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SEB
Lane Configurations	←	←	←	←	←	←	←	←	←	←	←	←
Volume (veh/h)	0	633	244	216	669	0	26	0	198	1	0	5
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	0	666	257	226	704	0	29	0	194	1	0	5
Pedestrians		1						1				
Lane Width (ft)		12.0						12.0				
Walking Speed (ft/s)		4.0						4.0				
Percent Blockage		0						0				
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)		774										
pX, platoon unblocked												
vC, conflicting volume	704			924			1495	1941	334	1705	2098	353
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	704			924			1495	1941	334	1705	2098	353
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
pO queue free %	99			70			0	100	70	97	100	99
cM capacity (veh/h)	902			747			66	53	664	32	36	649
Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	NB 1	NB 2	SB 1	SB 2	
Volume Total	4	333	333	257	226	469	235	89	198	1	5	
Volume Left	0	0	0	0	226	0	0	39	0	1	0	
Volume Right	0	0	0	257	0	0	0	0	198	0	5	
cSH	902	1700	1700	1700	747	1700	1700	66	664	32	649	
Volume to Capacity	0.01	0.20	0.20	0.15	0.30	0.28	0.14	1.39	0.30	0.03	0.01	
Queue Length 95th (ft)	1	0	0	0	32	0	0	189	31	2	1	
Control Delay (s)	9.0	0.0	0.0	0.0	11.9	0.0	0.0	363.6	12.7	120.5	10.6	
Lane LOS	A				B			F	B	F	B	
Approach Delay (s)	0.1				2.9			118.8		28.9		
Approach LOS								F		D		
Intersection Summary												
Average Delay			17.2									
Intersection Capacity Utilization			61.1%							A		
Analysis Period (min)			15									

# HCM Unsignalized Intersection Capacity Analysis 11: Kingery Highway


4/9/2015

Movement	EBL	EBR	NBL	NBT	SBT	SBR	
Lane Configurations							
Volume (veh/h)	24	28	79	1614	1872	51	
Sign Control	Stop			Free	Free		
Grade	0%			0%	0%		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Hourly flow rate (vph)	26	30	86	1754	2035	55	
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None	TW LTL		
Median storage (veh)					2		
Upstream signal (ft)				980			
pX, platoon unblocked	0.71						
vC, conflicting volume	3111	1045	2090				
vC1, stage 1 conf vol	2062						
vC2, stage 2 conf vol	1049						
vCu, unblocked vol	3157	1045	2090				
tC, single (s)	6.8	6.9	4.1				
tC, 2 stage (s)	5.8						
IF (s)	2.5	3.3	2.2				
p0 queue free %	67	66	67				
cM capacity (veh/h)	79	225	261				
Direction, Lane #	EB 1	EB 2	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	26	30	86	877	877	1357	734
Volume Left	26	0	86	0	0	0	0
Volume Right	0	30	0	0	0	0	55
cSH	79	225	261	1700	1700	1700	1700
Volume to Capacity	0.33	0.14	0.33	0.52	0.52	0.80	0.43
Queue Length 95th (ft)	31	11	35	0	0	0	0
Control Delay (s)	71.8	28.6	25.4	0.0	0.0	0.0	0.0
Lane LOS	F	C	D				
Approach Delay (s)	45.8		1.2			0.0	
Approach LOS	E						
Intersection Summary							
Average Delay			1.2				
Intersection Capacity Utilization			71.1%		ICU Level of Service		C
Analysis Period (min)			15				

**Year 2040**  
**No Build**

Lanes, Volumes, Timings  
3: Kingery Highway & Plainfield Road

4/9/2015

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰		↰	↰↰	↰	↰	↰↰	↰	↰↰	↰↰	↰
Volume (vph)	382	663	22	104	264	149	19	2000	199	349	1123	136
Ideal Flow (vphpl)	1900	1900	1900	1900	2000	1900	1900	2000	1900	1900	2000	1900
Storage Length (ft)	420		0	370		235	255		0	265		185
Storage Lanes	1		0	1		1	1		1	2		1
Taper Length (ft)	125			135			225			265		
Lane Util. Factor	1.00	0.96	0.96	1.00	0.95	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Ped Bike Factor									0.99			
Fit		0.995				0.850			0.950			0.950
Fit Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1752	3491	0	1719	3551	1524	1480	3551	1553	3367	3519	1534
Fit Permitted	0.340			0.242			0.950			0.950		
Satd. Flow (perm)	701	3491	0	438	3551	1524	1480	3551	1530	3367	3519	1534
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		40			40			45			45	
Link Distance (ft)		782			774			1333			990	
Travel Time (s)		13.3			13.2			20.2			15.0	
Confl. Peds. (#/hr)								1				
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	3%	3%	0%	5%	7%	6%	22%	7%	4%	4%	4%	5%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	411	737	0	112	234	160	20	2151	214	375	1203	146
Turn Type	pm+pt	NA		pm+pt	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	7	4		3	5	1	5	2	3	1	6	7
Permitted Phases	4			3		2			2			5
Detector Phase	7	4		3	5	1	5	2	3	1	6	7
Switch Phase												
Minimum Initial (%)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (%)	8.0	23.5		8.0	23.5	9.0	9.0	22.5	8.0	9.0	22.5	8.0
Total Split (%)	20.0	31.0		13.0	24.0	16.0	16.0	50.0	16.0	16.0	31.0	20.0
Total Split (%)	14.3%	22.1%		9.3%	17.1%	11.4%	10.7%	57.1%	9.3%	11.4%	57.9%	14.3%
Yellow Time (s)	3.0	5.0		3.0	5.0	3.5	3.5	4.5	3.0	3.5	4.5	3.0
All-Red Time (s)	0.0	2.5		0.0	2.5	1.5	1.5	2.0	0.0	1.5	2.0	0.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.5		3.0	7.5	5.0	5.0	6.5	3.0	5.0	6.5	3.0
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None	None	None	C-Max	None	None	C-Max	None
Act Effect Green (s)	41.0	23.9		30.5	16.5	35.0	7.5	73.5	36.6	11.0	81.4	104.9
Actuated g/C Ratio	0.29	0.17		0.22	0.12	0.25	0.05	0.62	0.62	0.06	0.51	0.75
w/C Ratio	1.24	1.24		0.61	0.61	0.42	0.26	1.15	0.23	1.42	0.68	0.13
Control Delay	163.8	168.3		53.5	68.2	48.1	66.8	102.3	6.4	254.4	21.2	6.0
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	163.8	168.3		53.5	68.2	48.1	66.8	102.3	6.4	254.4	21.2	6.0
LOS	F	F		D	E	D	F	F	A	F	C	A
Approach Delay		168.5			59.4			92.5			70.5	
Approach LOS		F			E			F			E	
Queue Length 50th (ft)	-347	-441		77	132	123	20	-1210	25	-206	342	37

3/29/2013 A.M. Peak Hour Year 2040 No Build Traffic

Synchro Report  
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## 4/9/2015

### Intersection Summary

**Splits and Phases:** 3: Kingery Highway & Plainfield Road



Lanes, Volumes, Timings  
9: Kingery Highway & 72nd Court

4/8/2015

Lane Group	WBL	WBR	NB	NBR	SBL	SBR
Lane Configurations	TT		TT		T	TT
Volume (vph)	53	46	2236	38	29	1231
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	2000
Storage Length (ft)	200	0		0	215	
Storage Lanes	1	0		0	1	
Taper Length (ft)	55				225	
Lane Util. Factor	0.97	0.95	0.91	0.91	1.00	0.95
Ped Bike Factor	0.99		1.00			
Frt	0.931		0.992			
Flt Protected	0.974				0.950	
Satd. Flow (prot)	2123	0	4436	0	1736	3551
Flt Permitted	0.974				0.950	
Satd. Flow (perm)	2123	0	4436	0	1736	3551
Right Turn on Red		No		No		
Satd. Flow (RTOR)						
Link Speed (mph)	30		45			45
Link Distance (ft)	624		356			1320
Travel Time (s)	15.5		5.4			20.2
Confl. Peds. (#/hr)		1				
Confl. Bikes (#/hr)				1		
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles (%)	4%	9%	7%	8%	4%	7%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	100	0	2297	0	29	1243
Turn Type	Prot		NA		Prot	NA
Protected Phases	8		2		1	6
Permitted Phases						
Detector Phase	8		2		1	6
Switch Phase						
Minimum Initial (s)	4.0		4.0		4.0	4.0
Minimum Split (s)	22.0		22.0		5.5	22.0
Total Split (s)	35.0		34.0		21.0	105.0
Total Split (%)	25.0%		60.0%		15.0%	75.0%
Yellow Time (s)	4.5		4.5		3.5	4.5
All-Red Time (s)	1.5		1.5		1.0	1.5
Lost Time Adjust (s)	0.0		0.0		0.0	0.0
Total Lost Time (s)	6.0		6.0		4.5	6.0
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None		C-Max		None	C-Max
Act Effect Green (s)	9.9		110.0		7.5	110.1
Actuated g/C Ratio	0.07		0.79		0.06	0.84
w/c Ratio	0.45		0.60		0.29	0.41
Control Delay	65.7		3.0		65.4	2.0
Queue Delay	0.0		0.0		0.0	0.0
Total Delay	65.7		3.0		65.4	2.0
LOS	E		A		E	A
Approach Delay	65.7		3.0			3.4
Approach LOS	E		A			A

5/29/2013 A.M. Peak Hour Year 2040 No Build Traffic

Synchro 4 Report  
Page 3



Lanes, Volumes, Timings  
9: Kingery Highway & 72nd Court

4/9/2015

Lane Group	WBL	WBR	NBT	NBR	SBT	SE T
Queue Length 50th (ft)	45		312		26	65
Queue Length 95th (ft)	75		417		m44	m79
Internal Link Dist (ft)	604		276			1263
Turn Bay Length (ft)	200				215	
Base Capacity (vph)	646		3401		204	2996
Starvation Cap Reductn	0		0		0	0
Spillback Cap Reductn	0		0		0	0
Storage Cap Reductn	0		0		0	0
Reduced v/c Ratio	0.16		0.60		0.14	0.41

Intersection Summary

























Area Type: Other  
 Cycle Length: 140  
 Actuated Cycle Length: 140  
 Offset: 32 (23%), Referenced to phase 2:NBT and 6:SBT, Start of Green  
 Natural Cycle: 76  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.60  
 Intersection Signal Delay: 0.0  
 Intersection LOS: A  
 Intersection Capacity Utilization: 67.7%  
 ICU Level of Service: B  
 Analysis Period (min): 15  
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 9: Kingery Highway & 72nd Court



HCM Unsignalized Intersection Capacity Analysis  
6: Willowbrook Town Center & Plainfield Road

4/9/2016

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SEL	SBT	SEB
Lane Configurations												
Volume (veh/h)	1	1147	66	58	540	2	27	0	65	2	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Hourly flow rate (vph)	1	1260	73	64	593	2	30	0	71	2	0	0
Pedestrians								1				
Lane Width (ft)								12.0				
Walking Speed (ft/s)								4.0				
Percent Blockage								0				
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)	774											
pX, platoon unblocked				0.94			0.94	0.94	0.94	0.94	0.94	0.94
vC, conflicting volume	596			1334			1688	1987	631	1426	2058	298
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	596			1011			1423	1790	172	1120	1475	298
tC, single (s)	4.1			4.1			7.6	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			83			53	100	90	96	100	100
cM capacity (veh/h)	991			570			71	61	710	113	64	704
Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	NB 1	NB 2	SB 1	SB 2	
Volume Total	1	630	630	73	64	396	200	30	71	2	0	
Volume Left	1	0	0	0	64	0	0	30	0	2	0	
Volume Right	0	0	0	73	0	0	2	0	71	0	0	
cSH	991	1700	1700	1700	570	1700	1700	71	710	113	1700	
Volume to Capacity	0.00	0.37	0.37	0.04	0.11	0.23	0.12	0.42	0.10	0.02	0.00	
Queue Length 95th (ft)	0	0	0	0	9	0	0	41	0	1	0	
Control Delay (s)	8.6	0.0	0.0	0.0	12.1	0.0	0.0	88.3	10.6	37.6	0.0	
Lane LOS	A				B			F	B	E	A	
Approach Delay (s)	0.0				1.2			33.4		37.6		
Approach LOS								D		E		
Intersection Summary												
Average Delay	2.0											
Intersection Capacity Utilization	53.2%			ICU Level of Service			A					
Analysis Period (min)	15											

# HCM Unsignalized Intersection Capacity Analysis 11: Kingery Highway

4/9/2015

Movement	EBL	EBR	NBL	NBT	SBT	SEB	
Lane Configurations							
Volume (veh/h)	2	5	12	2619	1603	27	
Sign Control	Stop			Free	Free		
Grade	0%			0%	0%		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Hourly flow rate (vph)	2	5	13	2738	1742	29	
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None	TW/LTL		
Median storage (veh)					2		
Upstream signal (ft)				990			
pX, platoon unblocked	0.40						
vC, conflicting volume	3152	606	1772				
vC1, stage 1 conf vol	1757						
vC2, stage 2 conf vol	1395						
vCu, unblocked vol	3215	606	1772				
tC, single (s)	6.8	6.9	4.1				
tC, 2 stage (s)	5.0						
IF (s)	3.5	3.3	2.2				
p0 queue free %	98	98	96				
cM capacity (veh/h)	116	282	347				
Direction, Lane #	EB1	EB2	NB1	NB2	NB3	SB1	SB2
Volume Total	2	5	13	1369	1369	1162	610
Volume Left	2	0	13	0	0	0	0
Volume Right	0	5	0	0	0	0	29
cSH	116	282	347	1700	1700	1700	1700
Volume to Capacity	0.02	0.02	0.04	0.81	0.81	0.68	0.36
Queue Length 95th (ft)	1	1	2	0	0	0	0
Control Delay (s)	36.8	17.8	15.8	0.0	0.0	0.0	0.0
Lane LOS	E	C	C				
Approach Delay (s)	23.2		0.1			0.0	
Approach LOS	C						
Intersection Summary							
Average Delay			0.1				
Intersection Capacity Utilization			79.6%		ICU Level of Service		D
Analysis Period (min)			15				

Lanes, Volumes, Timings  
3: Kingery Highway & Plainfield Road

4/9/2016

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Volume (vph)	237	593	67	237	732	293	109	1337	192	267	1763	269
Ideal Flow (vphpl)	1900	1900	1900	1900	2000	1900	1900	2000	1900	1900	2000	1900
Storage Length (ft)	420	0	0	370	0	235	265	0	0	265	0	185
Storage Lanes	1	0	0	1	0	1	1	0	1	2	0	1
Taper Length (ft)	125	0	0	135	0	0	225	0	0	265	0	0
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Ped Bike Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fit	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
Fit Protected	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
Satd. Flow (prot)	1700	3510	0	1736	3762	1660	1770	3619	1699	3467	2609	1503
Fit Permitted	0.170	0.170	0.170	0.170	0.170	0.170	0.170	0.170	0.170	0.170	0.170	0.170
Satd. Flow (perm)	305	3510	0	311	3762	1660	1770	3619	1672	3467	3609	1503
Right Turn on Red	No	No	No	No	No	No	No	No	No	No	No	No
Satd. Flow (RTOR)	0	0	0	0	0	0	0	0	0	0	0	0
Link Speed (mph)	40	40	40	40	40	40	40	40	40	40	40	40
Link Distance (ft)	732	732	732	732	732	732	732	732	732	732	732	732
Travel Time (s)	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.3
Confl. Peds. (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	6%	1%	0%	4%	1%	3%	2%	5%	1%	1%	3%	2%
Shared Lane Traffic (%)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	236	590	0	244	755	302	112	1370	190	265	1812	277
Turn Type	pm+pt	NA	pm+pt	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot
Protected Phases	7	4	3	3	1	5	2	3	1	0	7	6
Permitted Phases	4	4	3	3	1	5	2	3	1	6	7	7
Detector Phase	7	4	3	3	1	5	2	3	1	6	7	7
Switch Phase	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	23.5	8.0	23.5	8.5	8.5	22.5	8.0	8.5	22.5	8.0	8.0
Total Split (s)	17.0	31.0	17.0	31.0	22.0	15.0	70.0	17.0	22.0	77.0	17.0	17.0
Total Split (%)	12.1%	22.1%	12.1%	22.1%	15.7%	10.7%	50.0%	12.1%	15.7%	55.0%	12.1%	12.1%
Yellow Time (s)	3.0	6.0	3.0	6.0	3.5	3.5	4.5	3.0	3.5	4.5	3.0	3.0
All-Red Time (s)	0.0	2.5	0.0	2.5	1.0	1.0	2.0	0.0	1.0	2.0	0.0	0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.5	3.0	7.5	4.5	4.5	6.5	3.0	4.5	6.5	3.0	3.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	None	C-Max	None	None
Act Effect Green (s)	42.0	23.5	42.0	23.5	46.4	16.5	65.6	33.1	15.4	70.5	91.0	91.0
Actuated g/C Ratio	0.20	0.17	0.20	0.17	0.23	0.06	0.47	0.59	0.11	0.60	0.65	0.65
w/c Ratio	1.23	1.15	1.04	1.20	0.58	0.85	0.31	0.21	0.70	0.98	0.27	0.27
Control Delay	119.5	137.4	109.2	152.1	43.7	104.7	29.0	10.6	70.1	49.3	112	112
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	119.5	137.4	109.2	152.1	43.7	104.7	29.0	10.6	70.1	49.3	112	112
LOS	F	F	F	F	D	F	C	B	E	D	B	B
Approach Delay	163.2	163.2	113.7	113.7	113.7	113.7	113.7	113.7	113.7	113.7	113.7	113.7
Approach LOS	F	F	F	F	F	F	C	C	C	C	C	C
Queue Length 50th (ft)	~211	~332	~171	~436	226	107	301	57	121	~26	100	100













4/29/2013 P.M. Peak Hour Year 2040 No Build

Synchro 5 Report

Page 1

Lanes, Volumes, Timings  
3: Kingery Highway & Plainfield Road

4/9/2015

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 95th (ft)	#875	#510		#856	#567	321	#222	330	21	168	#1015	146
Internal Link Dist (ft)		702			694			1253			900	
Turn Bay Length (ft)	420			370		236	266			266		185
Base Capacity (vph)	221	590		225	631	543	132	1636	906	433	1256	1029
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.2%	1.15		1.04	1.20	0.56	0.36	0.31	0.21	0.61	0.9%	0.27

Intersection Summary

Area Type: Other  
 Cycle Length: 140  
 Actuated Cycle Length: 140  
 Offset: 56 (40%), Referenced to phase 2: NBT and 6: SBT, Start of Green  
 Natural Cycle: 140  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 1.2%  
 Intersection Signal Delay: 74.3  
 Intersection Capacity Utilization: 106.1%  
 Analysis Period (min): 15  
 ~ Volume exceeds capacity, queue is theoretically infinite.  
 Queue shown is maximum after two cycles.  
 # 96th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Intersection LOS: E  
 ICU Level of Service G

Splits and Phases: 3: Kingery Highway & Plainfield Road



Lanes, Volumes, Timings  
9: Kingery Highway & 72nd Court

4/9/2015

	↙	↘	↑	↗	↘	↓
Lane Group	WBL	WBR	NBT	NBR	SBL	SRT
Lane Configurations	WT		WT		WT	WT
Volume (vph)	194	0	1499	154	76	1922
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	2000
Storage Length (ft)	200	0		0	215	
Storage Lanes	1	0		0	1	
Taper Length (ft)	55				225	
Lane Util. Factor	0.97	0.95	0.91	0.91	1.00	0.95
Fit	0.950		0.986			
Fit Protected	0.967				0.950	
Satd. Flow (prot)	3397	0	4393	0	1787	3689
Fit Permitted	0.967				0.950	
Satd. Flow (perm)	3397	0	4393	0	1787	3689
Right Turn on Red		No		No		
Satd. Flow (RTOR)						
Link Speed (mph)	30		45			45
Link Distance (ft)	684		356			1333
Travel Time (s)	15.5		5.4			20.2
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	0%	5%	0%	1%	3%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	291	0	1704	0	73	1981
Turn Type	Prot		NA		Prot	NA
Protected Phases	6		2		1	6
Permitted Phases						
Detector Phase	6		2		1	6
Switch Phase						
Minimum Initial (s)	4.0		4.0		4.0	4.0
Minimum Split (s)	22.0		22.0		8.5	22.0
Total Split (s)	35.0		77.0		21.0	105.0
Total Split (%)	26.0%		65.0%		20.0%	75.0%
Yellow Time (s)	4.5		4.5		3.5	4.5
All-Red Time (s)	1.5		1.5		1.0	1.5
Lost Time Adjust (s)	0.0		0.0		0.0	0.0
Total Lost Time (s)	6.0		6.0		4.6	6.0
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None		C-Max		None	C-Max
Act Effct Green (s)	17.3		94.7		11.6	110.7
Actuated g/C Ratio	0.12		0.63		0.08	0.79
w/c Ratio	0.69		0.51		0.53	0.68
Control Delay	67.5		12.6		11.4	2.2
Queue Delay	0.0		0.0		0.0	0.0
Total Delay	67.5		12.6		11.4	2.2
LOS	E		B		F	A
Approach Delay	67.5		12.6			5.2
Approach LOS	E		B			A
Queue Length 50th (ft)	132		261		75	85
Queue Length 95th (ft)	176		382		177	195
Internal Link Dist (ft)	604		276			1253

3/23/2013 P.M. Peak Hour Year 2040 No Build

Synchro 5 Report  
Page 3

Lanes, Volumes, Timings  
 9: Kingery Highway & 72nd Court

4/9/2015

Lane Group	WBL	WBR	NBT	NBR	SBT	SBT
Turn Bay Length (ft)	200				215	
Base Capacity (vph)	703		3210		299	2916
Starvation Cap Reductn	0		0		0	0
Spillback Cap Reductn	0		0		0	0
Storage Cap Reductn	0		0		0	0
Reduced v/c Ratio	0.41		0.51		0.26	0.69

Intersection Summary

Area Type: Other  
 Cycle Length: 140  
 Actuated Cycle Length: 140  
 Offset: 64 (60%), Referenced to phase 2: NBT and 6: SBT, Start of Green  
 Natural Cycle: 65  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.69  
 Intersection Signal Delay: 12.8  
 Intersection Capacity Utilization: 65.5%  
 Analysis Period (min): 15  
 m Volume for 85th percentile queue is metered by upstream signal.

Intersection LOS: B  
 ICU Level of Service: C






















Splits and Phases: 9: Kingery Highway & 72nd Court





HCM Unsignalized Intersection Capacity Analysis  
6: Willowbrook Town Center & Plainfield Road

4/9/2015

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	6	871	166	189	1272	9	52	0	141	1	0	3
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.94	0.91	0.94	0.94	0.91	0.91	0.94	0.91	0.91	0.94	0.91	0.91
Hourly flow rate (vph)	6	889	166	193	1290	9	53	0	144	1	0	3
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)		774										
pX, platoon unblocked				0.16			0.16	0.16	0.16	0.16	0.16	
vC, conflicting volume	1307			1067			1939	2594	444	2289	2756	654
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1307			717			1750	2623	0	2164	2715	654
tC, single (s)	4.4			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.4			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			76			0	100	15	93	100	99
cM capacity (veh/h)	452			760			37	18	929	16	13	414
Direction Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	NB 1	NB 2	SB 1	SB 2	
Volume Total	6	444	444	168	193	865	442	53	144	1	3	
Volume Left	6	0	0	0	193	0	0	53	0	1	0	
Volume Right	0	0	0	168	0	0	9	0	144	0	3	
cSH	452	1700	1700	1700	760	1700	1700	37	929	16	414	
Volume to Capacity	0.01	0.26	0.26	0.10	0.25	0.51	0.26	1.42	0.15	0.07	0.01	
Queue Length 95th (ft)	1	0	0	0	25	0	0	129	14	5	1	
Control Delay (s)	13.1	0.0	0.0	0.0	11.3	0.0	0.0	461.2	9.6	262.4	13.9	
Lane LOS	B				B			F	A	F	B	
Approach Delay (s)	0.1				15			131.3		73.4		
Approach LOS								F		F		
Intersection Summary												
Average Delay			10.0									
Intersection Capacity Utilization			58.3%									
Analysis Period (min)			15									



# HCM Unsignalized Intersection Capacity Analysis 11: Kingery Highway

4/9/2015

Movement	EBL	EBR	NBL	NBT	SBL	SBR	
Lane Configurations	←	→	←	→	←	→	
Volume (veh/h)	5	15	35	1981	2266	37	
Sign Control	Stop			Free	Free		
Grade	0%			0%	0%		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Hourly flow rate (vph)	9	20	39	2045	2463	40	
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None	TW/LTL		
Median storage (veh)					2		
Upstream signal (ft)				940			
pX, platoon unblocked	0.66						
vC, conflicting volume	3594	1252	2503				
vC1, stage 1 conf vol	2493						
vC2, stage 2 conf vol	1101						
vCu, unblocked vol	3593	1252	2503				
tC, single (s)	6.8	6.9	4.1				
tC, 2 stage (s)	5.8						
tF (s)	3.6	3.3	2.2				
p0 queue free %	21	26	79				
cM capacity (veh/h)	47	164	179				
Direction, Lane #	EB 1	EB 2	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	9	20	39	1022	1022	1642	361
Volume Left	9	0	39	0	0	0	0
Volume Right	0	20	0	0	0	0	40
cSH	47	164	179	1700	1700	1700	1700
Volume to Capacity	0.19	0.12	0.22	0.60	0.60	0.97	0.51
Queue Length 95th (ft)	15	10	20	0	0	0	0
Control Delay (s)	98.5	30.0	30.7	0.0	0.0	0.0	0.0
Lane LOS	F	D	D				
Approach Delay (s)	51.0		0.6			0.0	
Approach LOS	F						
Intersection Summary							
Average Delay			0.6				
Intersection Capacity Utilization			73.2%		ICU Level of Service		D
Analysis Period (min)			15				

# Lanes, Volumes, Timings

## 3: Kingery Highway & Plainfield Road

4/9/2016

	EBL	EST	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group	EBL	EST	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰	↰	↰	↰	↰	↰	↰	↰	↰	↰	↰
Volume (vph)	268	448	102	194	410	279	153	1293	207	331	1358	305
Ideal Flow (vphpl)	1900	1900	1900	1900	2000	1900	1900	2000	1900	1900	2000	1900
Storage Length (ft)	420		0	370		236	255		0	265		185
Storage Lanes	1		0	1		1	1		1	2		1
Taper Length (ft)	125			135			225			265		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Ped Bike Factor						0.98			0.98			
Fit		0.972				0.960			0.960			0.950
Fit Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1727	3474	0	1770	3762	1523	1705	3725	1532	3467	3725	1599
Fit Permitted	0.291			0.205			0.950			0.950		
Satd. Flow (perm)	547	3474	0	362	3762	1557	1705	3725	1551	3467	3725	1599
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		40			40			45			45	
Link Distance (ft)		752			774			1553			1000	
Travel Time (s)		13.3			13.2			20.2			15.2	
Confl. Peds. (#/hr)						2			3			
Confl. Bikes (#/hr)									3			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	1%	1%	1%	2%	1%	2%	0%	2%	2%	1%	2%	1%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	273	561	0	198	418	285	166	1319	211	338	1386	311
Turn Type	pm+pt	NA		pm+pt	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	7	4		3	3	1	5	2	3	1	6	7
Permitted Phases	4								2			6
Detector Phase	7	4		3	3	1	5	2	3	1	6	7
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	23.5		8.0	23.5	9.0	9.0	22.5	8.0	9.0	22.5	8.0
Total Split (s)	16.0	29.0		14.0	27.0	23.0	15.0	59.0	14.0	23.0	57.0	16.0
Total Split (%)	12.8%	23.2%		11.2%	21.6%	12.4%	12.0%	47.2%	11.2%	12.4%	52.6%	12.8%
Yellow Time (s)	3.0	5.0		3.0	5.0	3.5	3.5	4.5	3.0	3.5	4.5	3.0
All-Red Time (s)	0.0	2.5		0.0	2.5	1.5	1.5	2.0	0.0	1.5	2.0	0.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.5		3.0	7.5	5.0	5.0	6.5	3.0	5.0	6.5	3.0
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None	None	None	C-Max	None	None	C-Max	None
Act Effect Green (s)	39.0	21.5		35.0	19.5	38.4	10.0	54.1	60.6	16.4	60.5	30.0
Actuated g/C Ratio	0.31	0.17		0.28	0.16	0.31	0.08	0.43	0.55	0.13	0.48	0.64
w/c Ratio	0.91	0.94		0.86	0.71	0.59	1.08	0.82	0.26	0.75	0.77	0.90
Control Delay	70.9	75.9		68.3	57.7	38.5	143.0	30.7	10.9	62.9	30.1	11.0
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	70.9	75.9		68.3	57.7	38.5	143.0	30.7	10.9	62.9	30.1	11.0
LOS	E	E		E	E	D	F	C	B	E	C	B
Approach Delay		74.3			53.9			38.6			32.6	
Approach LOS		E			D			D			C	


02/02/2013 Saturday Midday Peak Hour Year 2040 No Build

Synchro Report

Page 1

Lanes, Volumes, Timings  
3: Kingery Highway & Plainfield Road

4/8/2015

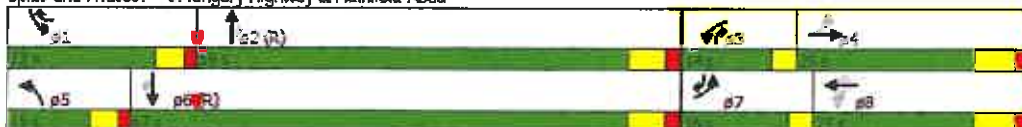
												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	177	233		122	171	180	-142	231	46	136	472	105
Queue Length 95th (ft)	#254	#343		#231	223	267	#236	435	37	137	564	164
Internal Link Dist (ft)		702			694			1253			920	
Turn Bay Length (ft)	420			370		235	265			265		135
Base Capacity (vph)	299	597		229	595	501	144	1613	354	499	1802	1023
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.91	0.94		0.96	0.71	0.67	1.08	0.82	0.25	0.68	0.77	0.30

Intersection Summary

Area Type: Other  
 Cycle Length: 125  
 Actuated Cycle Length: 125  
 Offset: 45 (36%), Referenced to phase 2:NBT and 6:SBT, Start of Green  
 Natural Cycle: 90  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 1.08  
 Intersection Signal Delay: 44.4  
 Intersection Capacity Utilization: 89.7%  
 Analysis Period (min): 15  
 - Volume exceeds capacity, queue is theoretically infinite.  
 Queue shown is maximum after two cycles.  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Intersection LOS: D  
 ICU Level of Service: E

Splits and Phases: 3: Kingery Highway & Plainfield Road



Lanes, Volumes, Timings  
9: Kingery Highway & 72nd Court

4/6/2015

Lane Group	WBL	WBP	NBT	NBR	SEL	SBT
Lane Configurations	W	W	N	N	S	S
Volume (vph)	301	166	1420	234	164	1511
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	2000
Storage Length (ft)	200	0	0	0	215	0
Storage Lanes	1	0	0	0	1	0
Taper Length (ft)	55	0	0	0	225	0
Lane Util. Factor	0.97	0.95	0.91	0.91	1.00	0.95
Fit	0.949	0.979	0.979	0.979	0.979	0.979
Flt Protected	0.96	0.96	0.96	0.96	0.96	0.96
Satd. Flow (prot)	3375	0	4937	0	1805	3649
Flt Permitted	0.96	0.96	0.96	0.96	0.96	0.96
Satd. Flow (perm)	3375	0	4937	0	1805	3649
Right Turn on Red	No	No	No	No	No	No
Satd. Flow (RTOR)	0	0	0	0	0	0
Link Speed (mph)	30	45	45	45	45	45
Link Distance (ft)	684	856	856	856	856	1333
Travel Time (s)	15.5	13.0	13.0	13.0	13.0	20.2
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	1%	3%	2%	0%	3%
Shared Lane Traffic (%)	0%	0%	0%	0%	0%	0%
Lane Group Flow (vph)	466	0	1614	0	171	1542
Turn Type	Prot	NA	NA	NA	Prot	NA
Protected Phases	2	2	2	2	1	6
Permitted Phases	2	2	2	2	1	6
Detector Phase	2	2	2	2	1	6
Switch Phase	2	2	2	2	1	6
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	22.0	22.0	22.0	22.0	22.0	22.0
Total Split (s)	27.0	63.0	63.0	63.0	26.0	43.0
Total Split (%)	29.6%	50.4%	50.4%	50.4%	20.0%	70.4%
Yellow Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lag	Lag	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	C-Max	None	C-Max
Act Effct Green (s)	22.5	69.0	69.0	69.0	17.0	90.5
Actuated g/C Ratio	0.13	0.55	0.55	0.55	0.14	0.72
w/c Ratio	0.77	0.62	0.62	0.62	0.70	0.58
Control Delay	57.4	21.6	21.6	21.6	74.3	4.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	57.4	21.6	21.6	21.6	74.3	4.1
LOS	E	C	C	C	E	A
Approach Delay	57.4	21.6	21.6	21.6	11.1	11.1
Approach LOS	E	C	C	C	B	B
Queue Length 50th (ft)	137	327	327	327	145	120
Queue Length 95th (ft)	234	469	469	469	m139	m149
Internal Link Dist (ft)	604	776	776	776	1250	1250

4/29/2013 Saturday Midday Peak Hour Year 2040 No Build

Synchro 8 Report  
Page 3

Lanes, Volumes, Timings  
 9: Kingery Highway & 72nd Court

4/9/2015

Lane Group	WBL	WBR	NBT	NBR	SBT	SBT
Turn Bay Length (ft)	200				215	
Base Capacity (vph)	137		2725		303	2671
Starvation Cap Reductn	0		0		0	0
Spillback Cap Reductn	0		0		0	0
Storage Cap Reductn	0		0		0	0
Reduced v/c Ratio	0.56		0.62		0.56	0.59

Intersection Summary

Area Type: Other  
 Cycle Length: 125  
 Actuated Cycle Length: 125  
 Offset: 6s (46%), Referenced to phase 2: NBT and 6: SBT, Start of Green  
 Natural Cycle: 65  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.77  
 Intersection Signal Delay: 21.3  
 Intersection LOS: C  
 Intersection Capacity Utilization: 69.2%  
 ICU Level of Service: C  
 Analysis Period (min): 15  
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 9: Kingery Highway & 72nd Court









HCM Unsignalized Intersection Capacity Analysis  
6: Willowbrook Town Center & Plainfield Road

4/9/2015

Movement	EBL	EBT	EBP	WBL	WBT	WBP	NBL	NBT	NBP	SBL	SBT	SBP
Lane Configurations	←	↑↑	←	←	↑↑		←	↑	←	←	↑	←
Volume (veh/h)	3	729	244	215	307	0	85	0	188	1	0	5
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	3	767	257	226	349	0	89	0	198	1	0	5
Pedestrians		1						1				
Lane Width (ft)		12.0						12.0				
Walking Speed (ft/s)		4.0						4.0				
Percent Blockage		0						0				
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)		774										
pX, platoon unblocked				0.93			0.93	0.93	0.93	0.93	0.93	
vC, conflicting volume	349			1025			1669	2087	385	1901	2344	426
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	349			383			1573	2022	197	1422	2297	426
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			69			0	100	74	96	100	99
cM capacity (veh/h)	797			722			52	37	759	26	26	632
Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	NB 1	NB 2	SB 1	SB 2	
Volume Total	8	384	384	257	226	566	283	89	198	1	5	
Volume Left	3	0	0	0	226	0	0	89	0	1	0	
Volume Right	0	0	0	257	0	0	0	0	198	0	5	
cSH	797	1700	1700	1700	722	1700	1700	52	759	26	632	
Volume to Capacity	0.01	0.23	0.23	0.15	0.31	0.33	0.17	1.72	0.26	0.04	0.01	
Queue Length 95th (ft)	1	0	0	0	34	0	0	215	26	3	1	
Control Delay (s)	9.6	0.0	0.0	0.0	12.2	0.0	0.0	619.3	11.4	151.8	11.2	
Lane LOS	A				B			F	B	F	B	
Approach Delay (s)	0.1				2.6			169.5		34.7		
Approach LOS								F		D		
Intersection Summary												
Average Delay			21.6									
Intersection Capacity Utilization			53.7%		ICU Level of Service				A			
Analysis Period (min)			15									

# HCM Unsignalized Intersection Capacity Analysis 11: Kingery Highway

4/9/2015


Movement	EBL	EBR	NBL	NBT	SBL	SBR	
Lane Configurations							
Volume (veh/h)	24	28	79	1761	1966	51	
Sign Control	Stop			Free	Free		
Grade	0%			0%	0%		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Hourly flow rate (vph)	26	30	86	1914	2137	55	
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None	TW LTL		
Median storage (veh)					2		
Upstream signal (ft)				1000			
pX, platoon unblocked	0.60						
vC, conflicting volume	3293	1096	2192				
vC1, stage 1 conf vol	2165						
vC2, stage 2 conf vol	1129						
vCu, unblocked vol	3430	1096	2192				
tC, single (s)	6.8	6.9	4.1				
tC, 2 stage (s)	5.0						
tF (s)	8.5	3.3	2.2				
p0 queue free %	62	85	64				
cM capacity (veh/h)	69	208	238				
Direction Lane #	EB 1	EB 2	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	26	30	86	957	957	1425	798
Volume Left	26	0	86	0	0	0	0
Volume Right	0	30	0	0	0	0	55
cSH	69	208	238	1700	1700	1700	1700
Volume to Capacity	0.38	0.15	0.36	0.56	0.56	0.84	0.45
Queue Length 95th (ft)	26	13	39	0	0	0	0
Control Delay (s)	85.6	25.2	28.5	0.0	0.0	0.0	0.0
Lane LOS	F	D	D				
Approach Delay (s)	53.1		1.2			0.0	
Approach LOS	F						
Intersection Summary							
Average Delay			1.0				
Intersection Capacity Utilization			73.7%		ICU Level of Service		D
Analysis Period (min)			15				

**Year 2020  
Proposed Improvements**



Lanes, Volumes, Timings  
3: Kingery Highway & Plainfield Road

4/9/2015

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBR	SR
Lane Configurations	TT	TT	TT	TT	TT	TT	TT	TT	TT	TT	TT	TT
Volume (vph)	338	606	18	133	267	125	18	1947	198	356	1063	129
Ideal Flow (vphpl)	1900	1900	1900	1900	2000	1900	1900	1900	1900	1900	2000	1900
Lane Width (ft)	11	11	12	11	11	11	12	12	12	12	12	12
Storage Length (ft)	300		0	302		405	265		0	255		150
Storage Lanes	2		0	2		1	1		0	2		1
Taper Length (ft)	170			194			225			220		
Lane Util. Factor	0.97	0.95	0.96	0.97	0.95	1.00	1.00	0.91	0.91	0.97	0.95	1.00
Ped Bike Factor								1.00				
Fit		0.996				0.950		0.986				0.950
Fit Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3286	3377	0	3224	3433	1473	1430	4767	0	3367	3519	1638
Fit Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3286	3377	0	3224	3433	1473	1430	4787	0	3367	3519	1538
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		40			40			45			45	
Link Distance (ft)		782			774			1333			660	
Travel Time (s)		13.3			13.2			20.2			10.0	
Confl. Peds (#/hr)								1				
Peak Hour Factor	0.93	0.92	0.93	0.93	0.92	0.92	0.92	0.93	0.93	0.92	0.93	0.92
Heavy Vehicles (%)	3%	3%	0%	5%	7%	6%	22%	7%	4%	4%	3%	5%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	363	670	0	143	287	134	19	2307	0	382	1143	139
Turn Type	Prot	NA		Prot	NA	pm+ov	Prot	NA		Prot	NA	pm+ov
Protected Phases	7	4		3	8	1	5	2		1	6	7
Permitted Phases												6
Detector Phase	7	4		3	8	1	5	2		1	6	7
Switch Phase												
Minimum Initial (s)	3.0	15.0		3.0	13.0	3.0	3.0	15.0		3.0	15.0	3.0
Minimum Split (s)	9.0	23.5		9.0	20.0	9.0	9.0	22.5		9.0	22.5	9.0
Total Split (s)	21.0	31.0		13.0	23.0	16.0	15.0	40.0		16.0	41.0	21.0
Total Split (%)	15.0%	22.1%		9.2%	16.4%	11.4%	10.7%	57.1%		11.4%	57.9%	15.0%
Yellow Time (s)	3.5	6.0		3.5	5.0	3.5	3.5	4.5		3.5	4.5	3.5
All-Red Time (s)	1.0	2.5		1.0	2.5	1.5	1.5	2.0		1.5	2.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.5	7.5		4.5	7.5	5.0	5.0	6.5		5.0	6.5	4.5
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max	None
Act Effect Green (s)	16.5	23.5		8.5	15.5	34.0	7.4	73.5		11.0	11.4	104.4
Actuated g/C Ratio	0.12	0.17		0.06	0.11	0.24	0.05	0.52		0.08	0.58	0.75
w/c Ratio	0.94	1.18		0.73	0.76	0.36	0.24	0.92		1.45	0.56	0.12
Control Delay	93.3	149.0		101.0	62.6	40.1	36.8	30.2		264.8	20.4	6.1
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	93.3	149.0		101.0	62.6	40.1	36.8	30.2		264.8	20.4	6.1
LOS	F	F		F	E	D	F	C		F	C	A
Approach Delay		129.4			67.0			30.7			75.3	
Approach LOS		F			E			C			E	

11/29/2010 A.M. Peak Hour Year 2020 Future Traffic with dual left turn lanes

Synchro 5 Report

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Lanes, Volumes, Timings  
3: Kingery Highway & Plainfield Road

4/9/2015

Lane Group	EBL	EST	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SPR
Queue Length 50th (ft)	171	~3#4		71	138	109	19	690		~243	350	36
Queue Length 95th (ft)	#269	#510		#121	#196	177	m22	767		#649	437	62
Internal Link Dist (ft)		702			694			1253			580	
Turn Bay Length (ft)	300			332		435	255			255		130
Base Capacity (vph)	387	566		195	380	357	106	2513		264	2045	1147
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	0
Reduced v/c Ratio	0.94	1.13		0.73	0.76	0.38	0.18	0.92		1.46	0.66	0.12

Intersection Summary:

Area Type: Other

Cycle Length: 140

Actuated Cycle Length: 140

Offset: 27 (19%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 140

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.46

Intersection Signal Delay: 65.9

Intersection LOS: E

Intersection Capacity Utilization 92.6%

ICU Level of Service F

Analysis Period (min): 15

- Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Kingery Highway & Plainfield Road



# Lanes, Volumes, Timings

## 6: Willowbrook Town Center & Plainfield Road

4/9/2015

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBR	SBR
Lane Configurations	←	↑↑	→	←	↑↑	→	←	↑	→	←	↑	→
Volume (vph)	92	1003	66	64	454	94	27	12	65	62	9	105
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		0	200		115	0		0	0		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	160			205			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.98	1.00								
Fit			0.350			0.260		0.873			0.562	
Fit Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3699	1568	1770	3654	1615	1736	1659	0	1805	1630	0
Fit Permitted	0.448			0.211			0.609			0.663		
Satd. Flow (perm)	851	3699	1535	390	3654	1615	1113	1659	0	1200	1630	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		774			326			242			202	
Travel Time (s)		13.2			5.6			5.5			4.6	
Confl. Peds. (#/hr)			1	1								
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	0%	3%	3%	2%	4%	0%	4%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	101	1102	73	64	499	92	30	24	0	65	125	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases	6	2		1	6		3	6		7	4	
Permitted Phases	2		2	6		6	8			4		
Detector Phase	5	2	2	1	6	6	3	6		7	4	
Switch Phase												
Minimum Initial (s)	3.0	15.0	15.0	3.0	15.0	15.0	3.0	15.0		3.0	15.0	
Minimum Split (s)	6.0	22.0	22.0	2.0	22.0	22.0	9.0	22.0		9.0	22.0	
Total Split (s)	10.0	29.0	29.0	12.0	31.0	31.0	10.0	29.0		10.0	29.0	
Total Split (%)	7.1%	63.6%	63.6%	6.6%	65.0%	65.0%	7.1%	26.7%		7.1%	26.7%	
Yellow Time (s)	3.5	4.0	4.0	3.5	4.0	4.0	3.5	4.0		3.5	4.0	
All-Red Time (s)	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0		1.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	6.0	6.0	4.5	6.0	6.0	4.5	6.0		4.5	6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None		None	None	
Act Effect Green (s)	100.2	92.9	92.9	99.0	90.7	90.7	23.7	17.8		24.6	19.8	
Actuated g/C Ratio	0.72	0.66	0.66	0.71	0.65	0.65	0.17	0.13		0.18	0.14	
v/c Ratio	0.15	0.45	0.07	0.19	0.21	0.09	0.14	0.40		0.28	0.64	
Control Delay	2.1	4.0	3.6	7.2	11.0	10.6	44.7	61.1		48.4	64.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	2.1	4.0	3.6	7.2	11.0	10.6	44.7	61.1		48.4	64.8	
LOS	A	A	A	A	B	B	D	E		D	E	
Approach Delay		3.7			10.6			66.8			69.0	
Approach LOS		A			B			E			E	
Queue Length 50th (ft)	8	72	8	15	95	31	22	72		62	110	

3/29/2013 A.M. Peak Hour Year 2020 Future Traffic with dual left turn lanes


Synchro 3 Report

Page 3

# Lanes, Volumes, Timings

## 6: Willowbrook Town Center & Plainfield Road

4/9/2015

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SEB	SEB	SEB
Queue Length 95th (ft)	m8	m65	m8	33	133	68	49	122		91	172	
Internal Link Dist (ft)		694			246			162			122	
Turn Bay Length (ft)	120			200		115						
Base Capacity (vph)	656	2447	1010	353	2367	1046	210	272		240	274	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.15	0.45	0.07	0.11	0.21	0.09	0.14	0.31		0.23	0.46	

### Intersection Summary

Area Type: Other

Cycle Length: 140

Actuated Cycle Length: 140

Offset: 112 (80%), Referenced to phase 2 EBTL and 6:WBTL Start of Green

Natural Cycle: 65

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.54

Intersection Signal Delay: 13.3

Intersection LOS: B

Intersection Capacity Utilization: 55.9%

ICU Level of Service: B

Analysis Period (min): 15

m: Volume for 95th percentile queue is metered by upstream signal.

### Splits and Phases: 6: Willowbrook Town Center & Plainfield Road



Lanes, Volumes, Timings  
9: Kingery Highway & 72nd Court

4/9/2015

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	63	46	2193	39	28	1187
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	2000
Storage Length (ft)	200	0		0	215	
Storage Lanes	1	0		0	1	
Taper Length (ft)	55				225	
Lane Util. Factor	0.97	0.95	0.91	0.91	1.00	0.95
Ped Bike Factor	0.99		1.00			
Fit	0.931		0.997			
Flt Protected	0.974				0.950	
Satd. Flow (prot)	3125	0	4331	0	1736	3551
Flt Permitted	0.974				0.950	
Satd. Flow (perm)	3125	0	4331	0	1736	3551
Right Turn on Red		No		No		
Satd. Flow (RTOR)						
Link Speed (mph)	30		45			45
Link Distance (ft)	634		366			1333
Travel Time (s)	15.5		5.4			20.2
Confl. Peds. (#/hr)		1				
Confl. Bikes (#/hr)				1		
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles (%)	4%	9%	7%	3%	4%	7%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	100	0	2243	0	28	1199
Turn Type	Prot		NA		Prot	NA
Protected Phases	5		2		1	6
Permitted Phases						
Detector Phase	2		2		1	6
Switch Phase						
Minimum Initial (s)	3.0		15.0		3.0	15.0
Minimum Split (s)	22.0		22.0		2.5	22.0
Total Split (s)	35.0		34.0		21.0	105.0
Total Split (%)	25.0%		60.0%		15.0%	75.0%
Yellow Time (s)	4.5		4.5		3.5	4.5
All-Red Time (s)	1.5		1.5		1.0	1.5
Lost Time Adjust (s)	0.0		0.0		0.0	0.0
Total Lost Time (s)	6.0		6.0		4.5	6.0
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None		C-Max		None	C-Max
Act Effect Green (s)	10.2		109.1		7.3	117.2
Actuated g/C Ratio	0.03		0.73		0.06	0.84
w/c Ratio	0.41		0.60		0.29	0.40
Control Delay	66.3		3.2		64.2	2.6
Queue Delay	0.0		0.0		0.0	0.0
Total Delay	66.3		3.2		64.2	2.6
LOS	E		A		E	A
Approach Delay	66.3		3.2			4.0
Approach LOS	E		A			A

12/9/2013 A.M. Peak Hour Year 2020 Future Traffic with dual left turn lanes

Synchro 8 Report  
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# Lanes, Volumes, Timings

## 9: Kingery Highway & 72nd Court

4/9/2015

	<div> <div>↙</div> <div>↖</div> <div>↑</div> <div>↗</div> <div>↘</div> <div>↓</div> </div>					
Line Group	WBL	WBP	NBT	NBP	SPL	SBT
Queue Length 50th (ft)	46		309		26	103
Queue Length 95th (ft)	76		410		m45	m121
Internal Link Dist (ft)	604		276			1253
Turn Bay Length (ft)	200				215	
Base Capacity (vph)	647		3764		204	2972
Starvation Cap Reductn	0		0		0	0
Spillback Cap Reductn	0		0		0	0
Storage Cap Reductn	0		0		0	0
Reduced v/c Ratio	0.15		0.60		0.14	0.40

### Intersection Summary

Area Type: Other

Cycle Length: 140

Actuated Cycle Length: 140

Offset: 32 (23%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 70

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.60

Intersection Signal Delay: 4.4

Intersection Capacity Utilization 59.7%

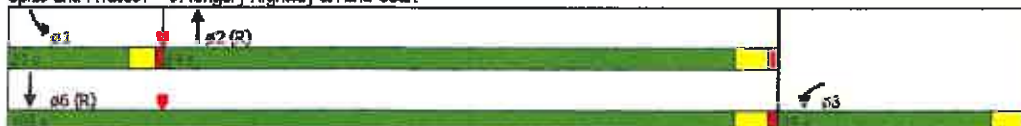
Analysis Period (min): 15

Intersection LOS: A

ICU Level of Service: B

m Volume for 95th percentile queue is metered by upstream signal.

### Splits and Phases: 9: Kingery Highway & 72nd Court



# HCM Unsignalized Intersection Capacity Analysis 12: Kingery Highway & Access Drive

4/8/2015























Movement	WBL	WBR	NBT	NBR	SBL	SBR
Lane Configurations		↑	↑↑↑			↑↑
Volume (veh/h)	0	39	2345	65	0	1534
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	0	41	2464	68	0	1615
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			660			
pX, platoon unblocked	0.57	0.57			0.57	
vC, conflicting volume	3310	857			2537	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2400	0			1036	
tC, single (s)	8.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.6	3.3			2.2	
p0 queue free %	100	93			100	
cM capacity (veh/h)	16	614			378	
Direction Lane #	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2
Volume Total	41	987	987	562	807	807
Volume Left	0	0	0	0	0	0
Volume Right	41	0	0	68	0	0
cBH	614	1700	1700	1700	1700	1700
Volume to Capacity	0.07	0.58	0.58	0.33	0.47	0.47
Queue Length 95th (ft)	5	0	0	0	0	0
Control Delay (s)	11.3	0.0	0.0	0.0	0.0	0.0
Lane LOS	B					
Approach Delay (s)	11.3	0.0			0.0	
Approach LOS	B					
Intersection Summary						
Average Delay			0.1			
Intersection Capacity Utilization			56.3%		ICU Level of Service	B
Analysis Period (min)			15			



# HCM Unsignalized Intersection Capacity Analysis

14: Kingery Highway & 69th Street/Service Drive

4/8/2015

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SEB	SEB	SEB
Lane Configurations								 			 	
Volume (veh/h)	2	0	5	0	0	7	12	2367	5	37	1523	27
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	2	0	5	0	0	7	13	2492	6	39	1609	26
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			TW/TL	
Median storage (veh)											2	
Upstream signal (ft)								1000				
pX, platoon unblocked	0.49	0.49		0.49	0.49	0.49				0.49		
vC, conflicting volume	2960	4224	819	3406	4233	1246	1638			2497		
vC1, stage 1 conf vol	1702	1702		2617	2617							
vC2, stage 2 conf vol	1278	2622		888	1716							
vCu, unblocked vol	2960	6477	819	3419	5495	0	1638			1912		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	7.1	4.1			4.1		
tC, 2 stage (s)	6.5	6.5		6.5	6.5							
tF (s)	3.5	4.0	3.3	3.5	4.0	3.4	2.2			2.2		
p0 queue free %	97	100	96	100	100	99	97			73		
cM capacity (veh/h)	68	9	323	27	40	523	401			142		
Direction Lane #	EB1	EB2	WB1	NB1	NB2	NB3	NB4	SB1	SB2	SB3		
Volume Total	2	5	7	13	1246	1246	5	39	1073	666		
Volume Left	2	0	0	13	0	0	0	39	0	0		
Volume Right	0	5	7	0	0	0	5	0	0	26		
cSH	68	323	523	401	1700	1700	1700	142	1700	1700		
Volume to Capacity	0.03	0.02	0.01	0.03	0.73	0.73	0.00	0.27	0.63	0.33		
Queue Length 95th (ft)	2	1	1	2	0	0	0	26	0	0		
Control Delay (s)	59.9	16.3	12.0	14.3	0.0	0.0	0.0	39.6	0.0	0.0		
Lane LOS	F	C	B	B				E				
Approach Delay (s)	28.5		12.0	0.1				0.9				
Approach LOS	D		B									
Intersection Summary												
Average Delay	0.5											
Intersection Capacity Utilization	2.1%											
ICU Level of Service	E											
Analysis Period (min)	15											



Lanes, Volumes, Timings  
3: Kingery Highway & Plainfield Road

4/9/2015

Lane Group	EBL	EBT	EBP	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	TT	TT		TT	TT	F	T	TTT		TT	TT	T
Volume (vph)	267	574	57	280	705	247	104	132	198	282	1665	256
Ideal Flow (vphpl)	1900	1900	1900	1900	2000	1900	1900	1900	1900	1900	2000	1900
Lane Width (ft)	11	11	12	11	11	11	12	12	12	12	12	12
Storage Length (ft)	200		0	332		495	255		0	255		100
Storage Lanes	2		0	2		1	1		0	2		1
Taper Length (ft)	170			194			225			220		
Lane Util. Factor	0.97	0.95	0.95	0.97	0.95	1.00	1.00	0.91	0.91	0.97	0.96	1.00
Ped. Bike Factor		1.00						1.00				
Fit		0.986				0.850		0.981				0.850
Fit Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3193	3405	0	3255	3637	1516	1770	4362	0	3467	3699	1583
Fit Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3193	3405	0	3255	3637	1516	1770	4362	0	3467	3699	1583
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		40			40			45			45	
Link Distance (ft)		684			773			1333			660	
Travel Time (s)		11.7			13.2			20.2			10.0	
Confl. Peds. (#/hr)			2						2			
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	6%	1%	0%	4%	1%	3%	2%	6%	1%	1%	3%	2%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	275	661	0	289	727	265	107	1683	0	291	1716	264
Turn Type	Prot	NA		Prot	NA	pm+ov	Prot	NA		Prot	NA	pm+ov
Protected Phases	7	4		3	8	1	5	2		1	6	7
Permitted Phases												
Detector Phase	7	4		3	8	1	5	2		1	6	7
Switch Phase												
Minimum Initial (s)	3.0	15.0		3.0	15.0	3.0	3.0	15.0		3.0	15.0	3.0
Minimum Split (s)	3.0	25.5		3.0	25.5	3.5	9.5	46.5		3.5	46.5	3.0
Total Split (s)	13.0	34.0		14.0	35.0	22.0	15.0	70.0		22.0	77.0	13.0
Total Split (%)	9.3%	24.3%		10.0%	25.0%	15.7%	10.7%	50.0%		15.7%	55.0%	9.3%
Yellow Time (s)	3.5	6.0		3.5	6.0	3.5	3.5	4.5		3.5	4.5	3.5
All-Red Time (s)	1.0	2.5		1.0	2.5	1.0	1.0	2.0		1.0	2.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.5	7.5		4.5	7.5	4.5	4.5	6.5		4.5	6.5	4.5
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max	None
Act. Effct Green (s)	3.5	26.5		3.5	27.5	51.0	10.3	65.0		16.0	70.7	65.7
Actuated g/C Ratio	0.06	0.19		0.07	0.20	0.36	0.07	0.46		0.11	0.50	0.61
w/c Ratio	1.42	1.01		1.21	1.02	0.40	0.82	0.70		0.74	0.82	0.27
Control Delay	263.3	93.9		225.9	79.5	20.6	100.3	26.0		71.5	41.6	13.6
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	263.3	93.9		225.9	79.5	20.6	100.3	26.0		71.5	41.6	13.6
LOS	F	F		F	E	C	F	C		E	D	B
Approach Delay		144.2			101.0			30.7			42.2	
Approach LOS		F			F			C			D	

9/23/2013 P.M. Peak Hour Year 2020 Future Traffic with dual left turn lanes (KLOA)

Synchro 8 Report  
Page 1

# Lanes, Volumes, Timings

## 3: Kingery Highway & Plainfield Road

4/9/2015

Lane Group	EBL	EBT	EBP	WBL	WBT	WBP	NBL	NBT	NBP	SBL	SBT	SBP
Queue Length 50th (ft)	-173	-320		-179	-324	59	102	247		132	745	107
Queue Length 95th (ft)	#267	#453		#275	#456	80	#203	317		140	667	167
Internal Link Dist (ft)		604			693			1253			590	
Turn Bay Length (ft)	300			332		435	255			255		130
Base Capacity (vph)	193	644		220	714	568	132	2258		433	1461	368
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	0
Reduced v/c Ratio	1.42	1.01		1.31	1.02	0.45	0.81	0.70		0.67	0.92	0.27

### Intersection Summary:

Area Type: Other

Cycle Length: 140

Actuated Cycle Length: 140

Offset: 66 (40%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 130

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.42

Intersection Signal Delay: 66.5

Intersection Capacity Utilization: 94.3%

Analysis Period (min): 15

Intersection LOS: E

ICU Level of Service: F

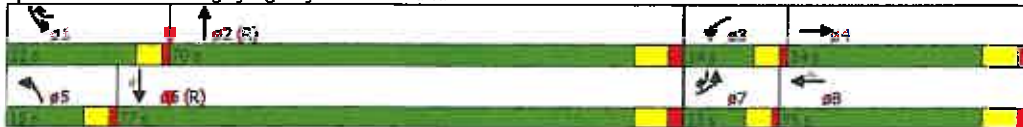
~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 3: Kingery Highway & Plainfield Road



# Lanes, Volumes, Timings

## 6: Willowbrook Town Center & Plainfield Road

4/9/2016

	↖	→	↗	↖	←	↖	↖	↑	↗	↘	↓	↙
Lane Group	EBL	EBT	EBP	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↖↖	↖	↖	↖↖	↖	↖	↖	↖	↖	↖	↖
Volume (vph)	148	724	165	129	1060	137	52	18	141	124	18	203
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		0	200		115	0		0	0		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	160			205			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.98									
Fit			0.950			0.950		0.967			0.962	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1717	3762	1615	1405	3725	1615	1405	1647	0	1405	1605	0
Flt Permitted	0.196			0.204			0.402			0.500		
Satd. Flow (perm)	269	3762	1580	678	3725	1615	764	1647	0	950	1605	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		770			569			242			202	
Travel Time (s)		13.2			8.1			5.5			4.6	
Confl. Bikes (#/hr)			2									
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	1%	1%	0%	0%	2%	0%	0%	0%	0%	0%	0%	2%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	161	749	168	193	1071	140	53	162	0	127	225	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	6		7	4	
Permitted Phases	2		2	6		6	8			4		
Detector Phase	5	2	2	1	6	6	3	6		7	4	
Switch Phase												
Minimum Initial (s)	3.0	15.0	15.0	3.0	15.0	15.0	3.0	25.0		3.0	25.0	
Minimum Split (s)	8.0	22.0	22.0	8.0	22.0	22.0	8.0	31.0		8.0	31.0	
Total Split (s)	15.0	79.0	79.0	20.0	84.0	84.0	10.0	31.0		10.0	31.0	
Total Split (%)	10.7%	56.4%	56.4%	14.3%	60.0%	60.0%	7.1%	22.1%		7.1%	22.1%	
Yellow Time (s)	3.5	4.0	4.0	3.5	4.0	4.0	3.5	4.0		3.5	4.0	
All-Red Time (s)	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0		1.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	6.0	6.0	4.5	6.0	6.0	4.5	6.0		4.5	6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None		None	None	
Act Effect Green (s)	88.3	77.5	77.5	91.7	79.2	79.2	32.0	26.0		32.9	27.0	
Actuated g/C Ratio	0.65	0.55	0.55	0.66	0.57	0.57	0.23	0.13		0.24	0.19	
w/c Ratio	0.46	0.36	0.19	0.41	0.51	0.15	0.25	0.65		0.60	0.73	
Control Delay	13.5	6.3	6.6	11.0	19.7	15.2	42.9	60.4		50.7	61.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	13.5	6.3	6.6	11.0	19.7	15.2	42.9	60.4		50.7	61.3	
LOS	B	A	A	B	B	B	D	E		D	E	
Approach Delay		7.7			18.1			56.1			62.0	
Approach LOS		A			B			E			E	
Queue Length 60th (ft)	20	69	29	59	302	59	37	136		93	198	

3/29/2013 P.M. Peak Hour Year 2020 Future Traffic with dual left turn lanes (KLOA)

Synchro 8 Report

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# Lanes, Volumes, Timings

## 6: Willowbrook Town Center & Plainfield Road

4/9/2015

	↖	→	↗	↖	←	↖	↗	↑	↗	↖	↓	↖
Lane Group	EBL	EBT	EBP	WBL	WBT	WBR	NBL	NBT	NBP	SBL	SBT	SBR
Queue Length 95th (ft)	m24	m74	m34	90	367	97	74	214		152	m24	
Internal Link Dist (ft)		693			279			162			122	
Turn Bay Length (ft)	120			200		115						
Base Capacity (vph)	342	2092	174	525	2106	913	215	234		256	310	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced w/c Ratio	0.44	0.36	0.19	0.37	0.51	0.15	0.25	0.55		0.50	0.73	

### Intersection Summary

Area Type: Other

Cycle Length: 140

Actuated Cycle Length: 140

Offset: 133 (96%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum w/c Ratio: 0.73

Intersection Signal Delay: 22.2

Intersection LOS: C

Intersection Capacity Utilization: 1.0%

ICU Level of Service D

Analysis Period (min): 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles







m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: Willowbrook Town Center & Plainfield Road



Lanes, Volumes, Timings  
9: Kingery Highway & 72nd Court

4/9/2016

	<div>       </div>					
Lane Group	WBL	WBR	NBT	NBP	SBL	SBT
Lane Configurations	<del>TT</del>		<del>TTT</del>		<del>T</del>	<del>TT</del>
Volume (vph)	194	<del>88</del>	149 <del>8</del>	154	76	1446
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	2000
Storage Length (ft)	200	0		0	215	
Storage Lanes	1	0		0	1	
Taper Length (ft)	66				225	
Lane Util. Factor	0.97	0.96	0.91	0.91	1.00	0.95
Fit	0.963		0.986			
Fit Protected	0.967				0.960	
Satd. Flow (prot)	3397	0	4893	0	1787	3689
Fit Permitted	0.967				0.960	
Satd. Flow (perm)	3397	0	4893	0	1787	3689
Right Turn on Red		No		No		
Satd. Flow (RTOR)						
Link Speed (mph)	30		45			45
Link Distance (ft)	604		356			1333
Travel Time (s)	15.6		5.4			20.2
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	0%	5%	0%	1%	3%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	291	0	1703	0	70	1903
Turn Type	Prot		NA		Prot	NA
Protected Phases	8		2		1	6
Permitted Phases						
Detector Phase	8		2		1	6
Switch Phase						
Minimum Initial (s)	3.0		15.0		3.0	15.0
Minimum Split (s)	22.0		22.0		5.5	22.0
Total Split (s)	35.0		77.0		21.0	105.0
Total Split (%)	25.0%		55.0%		20.0%	75.0%
Yellow Time (s)	4.5		4.5		3.5	4.5
All-Red Time (s)	1.5		1.5		1.0	1.5
Lost Time Adjust (s)	0.0		0.0		0.0	0.0
Total Lost Time (s)	6.0		6.0		4.5	6.0
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None		C-Max		None	C-Max
Act Effct Green (s)	18.2		93.8		11.5	109.8
Actuated g/C Ratio	0.13		0.67		0.08	0.73
w/C Ratio	0.66		0.52		0.53	0.66
Control Delay	65.1		13.1		33.3	1.5
Queue Delay	0.0		0.0		0.0	0.0
Total Delay	65.1		13.1		33.3	1.5
LOS	E		B		F	A
Approach Delay	65.1		13.1			4.7
Approach LOS	E		B			A
Queue Length 50th (ft)	101		267		76	41
Queue Length 95th (ft)	175		368		178	150
Internal Link Dist (ft)	604		276			1263

3/29/2013 P.M. Peak Hour Year 2020 Future Traffic with dual left turn lanes (KLOA)

Synchro 8 Report  
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Lanes, Volumes, Timings  
 9: Kingery Highway & 72nd Court

4/9/2015

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Turn Bay Length (ft)	200				215	
Base Capacity (vph)	700		3279		290	2190
Starvation Cap Reductn	0		0		0	0
Spillback Cap Reductn	0		0		0	0
Storage Cap Reductn	0		0		0	0
Reduced v/c Ratio	0.41		0.52		0.26	0.66

Intersection Summary

Area Type: Other  
 Cycle Length: 140  
 Actuated Cycle Length: 140  
 Offset: #4 (60%), Referenced to phase 2:NBT and 6:SBT, Start of Green  
 Natural Cycle: 60  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.66  
 Intersection Signal Delay: 12.7  
 Intersection Capacity Utilization 66.3%  
 Analysis Period (min): 15  
 m Volume for 95th percentile queue is metered by upstream signal.

Intersection LOS: B


ICU Level of Service C

Splits and Phases: 9: Kingery Highway & 72nd Court



# HCM Unsignalized Intersection Capacity Analysis 12: Kingery Highway & Access Drive

4/8/2015

























						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		<b>F</b>	<b>↑↑↑</b>			<b>↑↑</b>
Volume (veh/h)	0	75	1745	104	0	2195
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	0	79	1840	109	0	2308
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			660			
pC, platoon unblocked	0.76	0.76			0.76	
vC, conflicting volume	3049	665			1949	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2500	0			1126	
tC, single (s)	6.0	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.6	3.3			2.2	
p0 queue free %	100	50			100	
cM capacity (veh/h)	16	820			465	
Direction, Lane #	WBR	NBT	NBS	NBR	SBL	SBT
Volume Total	79	736	736	477	1164	1164
Volume Left	0	0	0	0	0	0
Volume Right	79	0	0	109	0	0
cSH	820	1700	1700	1700	1700	1700
Volume to Capacity	0.10	0.43	0.43	0.25	0.68	0.68
Queue Length 95th (ft)	9	0	0	0	0	0
Control Delay (s)	9.9	0.0	0.0	0.0	0.0	0.0
Lane LOS	A					
Approach Delay (s)	9.9	0.0			0.0	
Approach LOS	A					
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			64.0%		ICU Level of Service	B
Analysis Period (min)			15			



# HCM Unsignalized Intersection Capacity Analysis

14: Kingery Highway & 69th Street/Service Drive


4/9/2015

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								  			  	
Volume (veh/h)	8	0	19	0	0	17	36	1772	10	56	2176	37
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.92
Hourly flow rate (vph)	8	0	19	0	0	18	36	1865	11	59	2289	40
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			TWLT	
Median storage (veh)											2	
Upstream signal (ft)								901				
pX, platoon unblocked	0.72	0.72		0.72	0.72	0.72				0.72		
vC, conflicting volume	3454	4379	1166	3223	4389	933	2330			1876		
vC1, stage 1 conf vol	2427	2427		1941	1941							
vC2, stage 2 conf vol	1026	1952		1282	2448							
vCu, unblocked vol	3626	4904	1166	3307	4917	146	2330			1443		
tC, single (s)	7.6	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)	6.5	5.5		6.5	5.5							
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	69	100	90	100	100	97	92			82		
cM capacity (veh/h)	27	32	190	63	12	634	216			336		
Direction Lane #	EB 1	EB 2	WB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3		
Volume Total	8	19	19	36	933	933	11	59	1626	803		
Volume Left	8	0	0	0	0	0	0	59	0	0		
Volume Right	0	19	19	0	0	0	11	0	0	40		
cSH	27	190	634	216	1700	1700	1700	336	1700	1700		
Volume to Capacity	0.31	0.10	0.03	0.18	0.55	0.55	0.01	0.18	0.90	0.47		
Queue Length 95th (ft)	24	0	2	16	0	0	0	16	0	0		
Control Delay (s)	191.8	26.0	10.8	25.2	0.0	0.0	0.0	19.0	0.0	0.0		
Lane LOS	F	D	B	D				C				
Approach Delay (s)	77.0		10.8	0.5				0.4				
Approach LOS	F		B									
Intersection Summary												
Average Delay	1.0											
Intersection Capacity Utilization	71.3%											
Analysis Period (min)	15											
	ICU Level of Service C											



Lanes, Volumes, Timings  
3: Kingery Highway & Plainfield Road

4/9/2015

												
Lane Group	EEL	EBT	EBR	WBL	WBT	WBH	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	TT	TT		TT	TT	T	T	TTT		TT	TT	T
Volume (vph)	259	476	36	268	470	236	146	1317	217	366	1279	291
Ideal Flow (vphpl)	1300	1900	1900	1900	2000	1900	1900	1900	1900	1900	2000	1900
Lane Width (ft)	11	11	12	11	11	11	12	12	12	12	12	12
Storage Length (ft)	300		0	302		436	255		0	255		110
Storage Lanes	2		0	2		1	1		0	2		1
Taper Length (ft)	170			194			225			220		
Lane Util. Factor	0.97	0.96	0.96	0.97	0.96	1.00	1.00	0.91	0.91	0.97	0.96	1.00
Ped Bike Factor						0.99		1.00				
Fit		0.977				0.950		0.979				0.950
Fit Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3361	3376	0	3319	3637	1631	1305	4967	0	3467	3726	1699
Fit Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3361	3376	0	3319	3637	1509	1305	4967	0	3467	3726	1699
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		40			40			45			45	
Link Distance (ft)		792			774			1333			660	
Travel Time (s)		13.2			13.2			20.2			10.0	
Confl. Peds (#/hr)						2			3			
Confl. Bikes (#/hr)									0			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	1%	1%	1%	2%	1%	2%	0%	2%	2%	1%	2%	1%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	264	574	0	273	440	240	149	1565	0	373	1305	297
Turn Type	Prot	NA		Prot	NA	pm+ov	Prot	NA		Prot	NA	pm+ov
Protected Phases	7	4		3	8	1	6	2		1	6	7
Permitted Phases						5						6
Detector Phase	7	4		3	8	1	6	2		1	6	7
Switch Phase												
Minimum Initial (s)	3.0	15.0		3.0	15.0	3.0	3.0	15.0		3.0	15.0	3.0
Minimum Split (s)	8.0	25.5		8.0	25.5	9.0	9.0	24.5		9.0	24.5	8.0
Total Split (s)	16.0	27.0		16.0	27.0	23.0	19.0	59.0		23.0	63.0	16.0
Total Split (%)	12.8%	21.6%		12.8%	21.6%	18.4%	16.2%	47.2%		18.4%	60.4%	12.8%
Yellow Time (s)	3.5	5.0		3.5	5.0	3.5	3.5	4.5		3.5	4.5	3.5
All-Red Time (s)	1.0	2.5		1.0	2.5	1.5	1.5	2.0		1.5	2.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.5	7.5		4.5	7.5	5.0	5.0	6.5		6.0	6.5	4.5
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max	None
Act Effct Green (s)	11.6	19.5		11.6	19.5	39.0	13.2	53.6		17.0	57.3	76.3
Actuated g/C Ratio	0.09	0.16		0.09	0.16	0.31	0.11	0.43		0.14	0.46	0.60
w/c Ratio	0.98	1.09		0.90	0.85	0.61	0.78	0.74		0.79	0.76	0.81
Control Delay	31.3	116.2		30.8	79.0	25.9	74.1	29.9		65.3	32.2	13.4
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	31.3	116.2		30.8	79.0	25.9	74.1	29.9		65.3	32.2	13.4
LOS	F	F		F	E	C	E	C		E	C	B
Approach Delay		104.6			66.6			33.8			36.6	

2/29/2013 Saturday Midday Peak Hour Year 2020 Future Traffic with dual left turns(KLOA)

Synchro 5 Report  
Page 1

# Lanes, Volumes, Timings

## 3: Kingery Highway & Plainfield Road

4/9/2015

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SEB
Approach LOS	F			E			C			D		
Queue Length 50th (ft)	110	~274		109	217	117	123	200		151	462	113
Queue Length 95th (ft)	#183	#392		m#163	m256	m150	#220	371		205	549	167
Internal Link Dist (ft)		702			694			1253			500	
Turn Bay Length (ft)	300			332		485	255			255		180
Base Capacity (vph)	301	626		305	667	436	202	2127		499	1706	963
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	0
Reduced v/c Ratio	0.86	1.09		0.90	0.85	0.49	0.74	0.74		0.75	0.76	0.21

### Intersection Summary

Area Type: Other

Cycle Length: 125

Actuated Cycle Length: 125

Offset: 45 (36%), Referenced to phase 2: NBT and 6: SBT, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.09

Intersection Signal Delay: 51.1

Intersection LOS: D

Intersection Capacity Utilization: 84.5%

ICU Level of Service: E

Analysis Period (min): 15

- Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.


### Splits and Phases: 3: Kingery Highway & Plainfield Road



# Lanes, Volumes, Timings

## 6: Willowbrook Town Center & Plainfield Road

4/9/2015

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBP	SBL	SBT	SBP
Lane Configurations	↰	↰	↰	↰	↰	↰	↰	↰	↰	↰	↰	↰
Volume (vph)	211	601	244	215	637	145	25	25	133	173	24	223
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		0	200		115	0		0	0		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	160			205			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.93								0.93	
Fit			0.350			0.350		0.367			0.362	
Fit Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1105	3725	1615	1105	3762	1615	1747	1633	0	1105	1610	0
Fit Permitted	0.353			0.347			0.186			0.403		
Satd. Flow (perm)	671	3725	1511	659	3762	1615	350	1633	0	706	1610	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		774			344			242			202	
Travel Time (s)		13.2			5.9			5.5			4.6	
Confl. Peds. (#/hr)			1									1
Confl. Bikes (#/hr)												4
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	2%	0%	0%	1%	0%	1%	0%	1%	0%	0%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	212	633	257	226	671	195	29	224	0	182	323	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	3		7	4	
Permitted Phases	2		2	6		6	3			4		
Detector Phase	5	2	2	1	6	6	3	3		7	4	
Switch Phase												
Minimum Initial (s)	3.0	15.0	15.0	3.0	15.0	15.0	3.0	15.0		3.0	15.0	
Minimum Split (s)	8.0	22.0	22.0	8.0	22.0	22.0	8.0	22.0		8.0	22.0	
Total Split (s)	15.0	65.0	65.0	20.0	70.0	70.0	10.0	30.0		10.0	30.0	
Total Split (%)	12.0%	52.0%	52.0%	16.0%	56.0%	56.0%	10.0%	24.0%		10.0%	24.0%	
Yellow Time (s)	3.5	4.0	4.0	3.5	4.0	4.0	3.5	4.0		3.5	4.0	
All-Red Time (s)	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0		1.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	6.0	6.0	4.5	6.0	6.0	4.5	6.0		4.5	6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	Max		None	Max	
Act Effct Green (s)	74.1	62.6	62.6	77.1	64.5	64.5	31.0	24.0		31.0	24.0	
Actuated g/C Ratio	0.59	0.50	0.50	0.62	0.52	0.52	0.25	0.19		0.25	0.19	
w/c Ratio	0.43	0.34	0.32	0.44	0.35	0.23	0.59	0.72		0.77	1.05	
Control Delay	5.9	7.6	8.0	11.9	13.5	17.7	52.2	61.2		62.4	112.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	5.9	7.6	8.0	11.9	13.5	17.7	52.2	61.2		62.4	112.3	
LOS	A	A	A	B	B	B	D	E		E	F	
Approach Delay		7.4			17.0			54.6			94.3	
Approach LOS		A			B			E			F	

12/29/2013 Saturday Midday Peak Hour Year 2020 Future Traffic with dual left turns(KLOA)

Synchro 8 Report

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# Lanes, Volumes, Timings

## 6: Willowbrook Town Center & Plainfield Road

4/9/2015

	↖	→	↗	↖	←	↖	↗	↑	↖	↗	↓	↘
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SEB
Queue Length 50th (ft)	2*	51	39	89	164	85	54	171		117	~2*3	
Queue Length 95th (ft)	m34	m56	m47	105	207	133	#103	#274		#219	#170	
Internal Link Dist (ft)		694			264			162			122	
Turn Bay Length (ft)	120			200		115						
Base Capacity (vph)	495	1864	791	586	1941	833	150	313		235	309	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.43	0.34	0.32	0.40	0.35	0.23	0.59	0.72		0.77	1.05	

### Intersection Summary

Area Type: Other

Cycle Length: 125

Actuated Cycle Length: 125

Offset: 6 (5%), Referenced to phase 2:EBTL and 6:W BTL, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.05

Intersection Signal Delay: 30.0

Intersection LOS: C

Intersection Capacity Utilization 64.9%

ICU Level of Service C

Analysis Period (min): 15

- Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: Willowbrook Town Center & Plainfield Road



Lanes, Volumes, Timings  
9: Kingery Highway & 72nd Court

4/9/2015

Lane Group	WBL	WBR	NBT	NBR	SBT	SBR
Lane Configurations	←←		↑↑↑		↑	↑↑
Volume (vph)	301	168	1443	234	163	1482
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	2000
Storage Length (ft)	200	0		0	215	
Storage Lanes	1	0		0	1	
Taper Length (ft)	65				225	
Lane Util. Factor	0.97	0.95	0.91	0.91	1.00	0.95
Fit	0.949		0.979			
Fit Protected	0.968				0.950	
Satd. Flow (prot)	3375	0	4937	0	1805	3629
Fit Permitted	0.968				0.950	
Satd. Flow (perm)	3375	0	4937	0	1805	3629
Right Turn on Red		No		No		
Satd. Flow (RTOR)						
Link Speed (mph)	30		45			45
Link Distance (ft)	684		856			1333
Travel Time (s)	15.5		13.0			20.2
Peak Hour Factor	0.98	0.95	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	1%	3%	2%	0%	3%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	466	0	1711	0	171	1513
Turn Type	Prot		NA		Prot	NA
Protected Phases			2		1	6
Permitted Phases						
Detector Phase			2		1	6
Switch Phase						
Minimum Initial (s)	3.0		15.0		3.0	15.0
Minimum Split (s)	22.0		22.0		8.5	22.0
Total Split (s)	27.0		67.0		25.0	67.0
Total Split (%)	29.6%		50.4%		20.0%	70.4%
Yellow Time (s)	4.5		4.5		3.5	4.5
All-Red Time (s)	1.5		1.5		1.0	1.5
Lost Time Adjust (s)	0.0		0.0		0.0	0.0
Total Lost Time (s)	6.0		6.0		4.5	6.0
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None		C-Max		None	C-Max
Act Effct Green (s)	23.7		68.0		16.8	39.3
Actuated g/C Ratio	0.19		0.54		0.13	0.71
w/c Ratio	0.73		0.84		0.70	0.57
Control Delay	54.4		22.6		74.0	6.2
Queue Delay	0.0		0.0		0.0	0.0
Total Delay	54.4		22.6		74.0	6.2
LOS	D		C		E	A
Approach Delay	54.4		22.6			13.1
Approach LOS	D		C			B
Queue Length 50th (ft)	145		339		148	162
Queue Length 95th (ft)	229		473		1188	1173
Internal Link Dist (ft)	604		776			1250

4/29/2013 Saturday Midday Peak Hour Year 2020 Future Traffic with dual left turns(KLOA)

Synchro 4 Report  
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Lanes, Volumes, Timings  
 9: Kingery Highway & 72nd Court

4/8/2015

Lane Group	WBL	WBR	NBT	NBP	SBL	SBT
Turn Bay Length (ft)	200				215	
Base Capacity (vph)	137		2634		101	2636
Starvation Cap Reductn	0		0		0	0
Spillback Cap Reductn	0		0		0	0
Storage Cap Reductn	0		0		0	0
Reduced v/c Ratio	0.56		0.64		0.57	0.57

Intersection Summary





















Area Type: Other  
 Cycle Length: 125  
 Actuated Cycle Length: 125  
 Offset: 69 (47%), Referenced to phase 2:NBT and 6:SBT, Start of Green  
 Natural Cycle: 65  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.70  
 Intersection Signal Delay: 22.3  
 Intersection Capacity Utilization: 69.7%  
 Analysis Period (min): 15  
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 9: Kingery Highway & 72nd Court



# HCM Unsignalized Intersection Capacity Analysis 11: Kingery Highway & Service Drive

4/9/2015

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SEB
Lane Configurations												
Volume (veh/h)	24	0	29	0	0	24	79	1683	15	79	1993	51
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	25	0	29	0	0	25	83	1772	16	83	1993	54
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			TWLT	2
Median storage (veh)												
Upstream signal (ft)								969				
pX, platoon unblocked	0.72	0.72		0.72	0.72	0.72				0.72		
vC, conflicting volume	3263	4139	1023	3130	4151	336	2046			1737		
vC1, stage 1 conf vol	2146	2146		1932	1932							
vC2, stage 2 conf vol	1077	1964		1192	2213							
vQu, unblocked vol	3363	4573	1023	3130	4589	51	2046			1326		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)	6.5	6.5		6.5	6.5							
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	29	100	100	100	100	36	70			70		
cM capacity (veh/h)	36	6	237	39	0	697	279			374		
Direction, Lane #	EB 1	EB 2	NB 1	NB 1	NB 2	NB 2	NB 4	SB 1	SB 2	SB 3		
Volume Total	25	29	25	83	386	386	16	83	1328	718		
Volume Left	25	0	0	0	0	0	0	83	0	0		
Volume Right	0	29	25	0	0	0	16	0	0	54		
cSH	36	237	697	279	1700	1700	1700	374	1700	1700		
Volume to Capacity	0.71	0.12	0.04	0.30	0.52	0.52	0.01	0.22	0.78	0.42		
Queue Length 95th (ft)	62	11	2	30	0	0	0	21	0	0		
Control Delay (s)	230.3	22.4	19.4	23.3	0.0	0.0	0.0	17.3	0.0	0.0		
Lane LOS	F	C	B	C				C				
Approach Delay (s)	118.6		10.4	1.0				0.7				
Approach LOS	F		B									
Intersection Summary												
Average Delay	2.5											
Intersection Capacity Utilization	71.7%											
Analysis Period (min)	15											
ICU Level of Service	C											



HCM Unsignalized Intersection Capacity Analysis  
13: Kingery Highway & Access Drive

4/9/2015

Movement	WBL	WBR	NBT	NBR	SBL	SBR
Lane Configurations		P	↑↑↑			↑↑
Volume (veh/h)	0	102	1675	136	0	1921
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	0	107	1763	143	0	2022
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			660			
pX, platoon unblocked	0.75	0.75			0.75	
vC, conflicting volume	2846	659			1906	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2502	0			1054	
tC, single (s)	6.3	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	97			100	
cM capacity (veh/h)	24	816			494	
Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	107	705	705	496	1011	1011
Volume Left	0	0	0	0	0	0
Volume Right	107	0	0	143	0	0
cSH	915	1700	1700	1700	1700	1700
Volume to Capacity	0.13	0.41	0.41	0.29	0.59	0.59
Queue Length 95th (ft)	11	0	0	0	0	0
Control Delay (s)	10.1	0.0	0.0	0.0	0.0	0.0
Lane LOS	B					
Approach Delay (s)	10.1	0.0			0.0	
Approach LOS	B					
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		56.4%		ICU Level of Service		B
Analysis Period (min)		15				



**Year 2040**  
**Proposed Improvements**

# Lanes, Volumes, Timings

## 3: Kingery Highway & Plainfield Road

4/9/2016

	<div> <div>↖</div> <div>→</div> <div>↘</div> <div>↙</div> <div>←</div> <div>↖</div> <div>↙</div> <div>↑</div> <div>↘</div> <div>↙</div> <div>↓</div> <div>↘</div> </div>											
Lane Group	EBL	EBT	EBP	WBL	WBT	WBR	NBL	NBT	NBP	SBL	SBT	SBR
Lane Configurations	TH	TH		TH	TH	F	F	TH		TH	TH	F
Volume (vph)	395	710	22	154	309	148	19	2040	209	372	1116	136
Ideal Flow (vphpl)	1900	1900	1900	1900	2000	1900	1900	1900	1900	1900	2000	1900
Lane Width (ft)	11	11	12	11	11	11	12	12	12	12	12	12
Storage Length (ft)	300		0	332		415	255		0	255		110
Storage Lanes	2		0	2		1	1		0	2		1
Taper Length (ft)	170			194			225			220		
Lane Util. Factor	0.97	0.95	0.95	0.97	0.96	1.00	1.00	0.91	0.91	0.97	0.96	1.00
Ped Bike Factor								1.00				
Flt		0.996				0.960		0.986				0.960
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3286	3374	0	3224	3433	1473	1480	4787	0	3367	3519	1538
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3286	3374	0	3224	3433	1473	1480	4787	0	3367	3519	1538
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		40			40			45			45	
Link Distance (ft)		782			774			1333			660	
Travel Time (s)		13.3			13.2			20.2			10.0	
Confl. Peds (#/hr)								1				
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.92	0.93	0.93	0.93
Heavy Vehicles (%)	3%	3%	0%	5%	7%	6%	22%	7%	4%	4%	9%	6%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	428	797	0	166	332	169	20	2419	0	400	1200	146
Turn Type	Prot	NA		Prot	NA	pm+ov	Prot	NA		Prot	NA	pm+ov
Protected Phases	7	4		3	5	1	5	2		1	8	7
Permitted Phases												6
Detector Phase	7	4		3	5	1	5	2		1	6	7
Switch Phase												
Minimum Initial (s)	3.0	15.0		3.0	13.0	3.0	3.0	15.0		3.0	15.0	3.0
Minimum Split (s)	3.0	23.5		8.0	23.0	9.0	9.0	22.5		9.0	22.5	8.0
Total Split (s)	21.0	31.0		13.0	23.0	16.0	16.0	80.0		16.0	31.0	21.0
Total Split (%)	15.0%	22.1%		9.2%	16.4%	11.4%	10.7%	57.1%		11.4%	57.9%	15.0%
Yellow Time (s)	3.5	6.0		3.5	6.0	3.5	3.5	4.5		3.5	4.5	3.5
All-Red Time (s)	1.0	2.5		1.0	2.5	1.5	1.5	2.0		1.5	2.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.5	7.5		4.5	7.5	6.0	6.0	6.5		6.0	6.5	4.5
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max	None
Act Effect Green (s)	16.5	23.5		8.5	15.5	24.0	7.5	73.5		11.0	11.4	104.4
Actuated g/C Ratio	0.12	0.17		0.06	0.11	0.24	0.06	0.62		0.08	0.58	0.76
w/c Ratio	1.11	1.39		0.35	0.37	0.45	0.25	0.96		1.62	0.59	0.13
Control Delay	132.1	228.6		114.6	73.4	41.5	36.2	35.1		291.9	21.1	6.2
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	132.1	228.6		114.6	73.4	41.5	36.2	35.1		291.9	21.1	6.2
LOS	F	F		F	E	D	F	D		F	C	A
Approach Delay		194.9			76.1			35.5			91.9	
Approach LOS		F			E			D			F	

2/29/2013 A.M. Peak Hour Year 2040 Future Traffic with dual left turn lanes (KLOA)

Synchro 8 Report  
Page 1

# Lanes, Volumes, Timings

## 3: Kingery Highway & Plainfield Road

4/9/2015

	↖	→	↗	↖	←	↖	↗	↑	↖	↗	↓	↖
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SEB
Queue Length 50th (ft)	~228	~501		82	161	131	20	767		~260	377	38
Queue Length 95th (ft)	#631	#632		#145	#246	205	m32	#865		#868	471	66
Internal Link Dist (ft)		702			694			1263			590	
Turn Bay Length (ft)	300			332		416	265			265		180
Base Capacity (vph)	347	666		195	380	367	106	2513		264	2044	1146
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	0
Reduced v/c Ratio	1.11	1.39		0.85	0.87	0.45	0.19	0.96		1.62	0.69	0.13

### Intersection Summary

Area Type: Other

Cycle Length: 140

Actuated Cycle Length: 140

Offset: 27 (19%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 140

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.62

Intersection Signal Delay: 35.2

Intersection LOS: F

Intersection Capacity Utilization 99.0%

ICU Level of Service F

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Kingery Highway & Plainfield Road



Lanes, Volumes, Timings

6: Willowbrook Town Center & Plainfield Road

4/9/2015

	↖	→	↗	↖	←	↗	↖	↑	↗	↖	↓	↖
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↖↖	↖	↖	↖↖	↖	↖	↖		↖	↖	
Volume (vph)	92	1134	66	58	525	34	27	12	65	62	9	106
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		0	200		115	0		0	0		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	160			205			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.95	1.00								
Fit			0.350			0.350		0.373			0.362	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1905	3639	1563	1770	3654	1616	1706	1659	0	1905	1633	0
Flt Permitted	0.407			0.171			0.609			0.663		
Satd. Flow (perm)	772	3639	1535	314	3654	1616	1113	1659	0	1260	1633	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		774			226			242			202	
Travel Time (s)		13.2			5.6			5.5			4.6	
Confl. Peds. (#/hr)			1	1								
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	0%	3%	3%	2%	4%	0%	4%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	101	1246	73	64	577	92	30	34	0	63	125	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		2	2		7	4	
Permitted Phases	2		2	6		6	2			4		
Detector Phase	5	2	2	1	6	6	3	2		7	4	
Switch Phase												
Minimum Initial (s)	3.0	15.0	15.0	3.0	15.0	15.0	3.0	15.0		3.0	15.0	
Minimum Split (s)	3.0	22.0	22.0	3.0	22.0	22.0	3.0	22.0		3.0	22.0	
Total Split (s)	10.0	29.0	29.0	12.0	31.0	31.0	10.0	29.0		10.0	29.0	
Total Split (%)	7.1%	63.6%	63.6%	8.6%	65.0%	65.0%	7.1%	20.7%		7.1%	20.7%	
Yellow Time (s)	3.5	4.0	4.0	3.5	4.0	4.0	3.5	4.0		3.5	4.0	
All-Red Time (s)	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0		1.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	6.0	6.0	4.5	6.0	6.0	4.5	6.0		4.5	6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None		None	None	
Act Effect Green (s)	100.2	92.9	92.9	99.0	90.7	90.7	23.7	17.3		24.6	19.3	
Actuated g/C Ratio	0.72	0.66	0.66	0.71	0.65	0.65	0.17	0.13		0.16	0.14	
w/c Ratio	0.17	0.51	0.07	0.22	0.24	0.09	0.14	0.40		0.28	0.54	
Control Delay	2.0	4.5	3.3	7.7	11.3	10.6	44.7	61.1		43.4	64.3	
Queue Delay	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	2.0	5.0	3.3	7.7	11.3	10.6	44.7	61.1		43.4	64.3	
LOS	A	A	A	A	B	B	D	E		D	E	
Approach Delay		4.7			10.9			56.3			59.0	
Approach LOS		A			B			E			E	
Queue Length 50th (ft)	3	76	3	15	113	31	22	72		62	110	

3/29/2013 A.M. Peak Hour Year 2040 Future Traffic with dual left turn lanes (KLOA)













Synchro 5 Report

Page 3

# Lanes, Volumes, Timings

## 6: Willowbrook Town Center & Plainfield Road

4/9/2015

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 95th (ft)	117	162	16	32	154	5*	49	122		91	172	
Internal Link Dist (ft)		694			246			162			122	
Turn Bay Length (ft)	120			200		115						
Base Capacity (vph)	604	2447	1013	304	2367	1046	213	272		243	274	
Starvation Cap Reductn	0	646	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.17	0.09	0.07	0.21	0.24	0.09	0.14	0.31		0.23	0.46	

### Intersection Summary

Area Type: Other

Cycle Length: 140

Actuated Cycle Length: 140

Offset: 112 (80%), Referenced to phase 2:EBTL and 6:WBT, Start of Green

Natural Cycle: 65

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.54

Intersection Signal Delay: 13.2

Intersection LOS: B

Intersection Capacity Utilization: 59.4%

ICU Level of Service: B

Analysis Period (min): 15

m Volume for 95th percentile queue is metered by upstream signal.

### Splits and Phases: 6: Willowbrook Town Center & Plainfield Road



Lanes, Volumes, Timings  
9: Kingery Highway & 72nd Court

4/9/2015

	<div> <div>↙</div> <div>↖</div> <div>↑</div> <div>↗</div> <div>↘</div> <div>↓</div> </div>					
Lane Group	WBL	WBR	NBT	NBR	SBL	SRT
Lane Configurations	TTT		TTT		T	TT
Volume (vph)	53	46	2286	3%	2%	1266
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	2000
Storage Length (ft)	200	0		0	215	
Storage Lanes	1	0		0	1	
Taper Length (ft)	55				225	
Lane Util. Factor	0.97	0.95	0.91	0.91	1.00	0.95
Ped Bike Factor	0.99		1.00			
Fit	0.931		0.99			
Fit Protected	0.974				0.950	
Satd. Flow (prot)	2125	0	4136	0	1736	3551
Fit Permitted	0.974				0.950	
Satd. Flow (perm)	2125	0	4136	0	1736	3551
Right Turn on Red		No		No		
Satd. Flow (RTOR)						
Link Speed (mph)	30		45			45
Link Distance (ft)	684		366			1333
Travel Time (s)	15.5		5.4			20.2
Confl. Peds. (#/hr)		1				
Confl. Bikes (#/hr)				1		
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles (%)	4%	9%	7%	8%	4%	7%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	100	0	2347	0	28	1278
Turn Type	Prot		NA		Prot	NA
Protected Phases	8		2		1	6
Permitted Phases						
Detector Phase	8		2		1	6
Switch Phase						
Minimum Initial (s)	8.0		15.0		3.0	15.0
Minimum Split (s)	22.0		22.0		3.5	22.0
Total Split (s)	35.0		34.0		21.0	105.0
Total Split (%)	25.0%		60.0%		15.0%	75.0%
Yellow Time (s)	4.5		4.5		3.5	4.5
All-Red Time (s)	1.5		1.5		1.0	1.5
Lost Time Adjust (s)	0.0		0.0		0.0	0.0
Total Lost Time (s)	6.0		6.0		4.5	6.0
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None		C-Max		None	C-Max
Act Effect Green (s)	10.2		109.1		7.1	117.2
Actuated g/C Ratio	0.04		0.78		0.06	0.84
w/c Ratio	0.41		0.62		0.29	0.43
Control Delay	66.3		8.6		63.5	2.7
Queue Delay	0.0		0.0		0.0	0.0
Total Delay	66.3		8.6		63.5	2.7
LOS	E		A		E	A
Approach Delay	66.2		8.6			4.0
Approach LOS	E		A			A

3/29/2013 A.M. Peak Hour Year 2040 Future Traffic with dual left turn lanes (KLOA)

Synchro 8 Report  
Page 5

Lanes, Volumes, Timings  
9: Kingery Highway & 72nd Court

4/9/2015

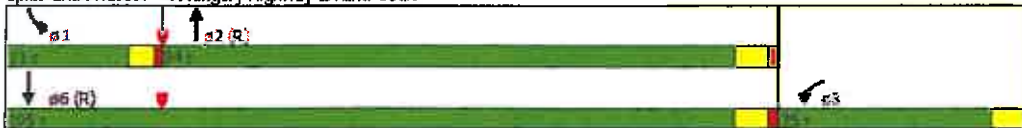
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Queue Length 50th (ft)	45		336		25	121
Queue Length 95th (ft)	76		446		m42	m133
Internal Link Dist (ft)	604		276			1253
Turn Bay Length (ft)	200				215	
Base Capacity (vph)	647		276		204	2972
Starvation Cap Reductn	0		0		0	0
Spillback Cap Reductn	0		0		0	0
Storage Cap Reductn	0		0		0	0
Reduced v/c Ratio	0.15		0.62		0.14	0.43

Intersection Summary

Area Type: Other  
 Cycle Length: 140  
 Actuated Cycle Length: 140  
 Offset: 32 (23%), Referenced to phase 2:NBT and 6:SBT, Start of Green  
 Natural Cycle: 75  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.62  
 Intersection Signal Delay: 2.5  
 Intersection Capacity Utilization: 61.7%  
 Analysis Period (min): 15  
 m Volume for 95th percentile queue is metered by upstream signal.







Intersection LOS: A  
 ICU Level of Service: B

Splits and Phases: 9: Kingery Highway & 72nd Court



HCM Unsignalized Intersection Capacity Analysis  
12: Kingery Highway & Access Drive

4/9/2016

						
Movement	WBL	WBP	NBT	NBP	SBL	SBT
Lane Configurations		<b>F</b>	<b>↑↑↑</b>			<b>↑↑</b>
Volume (veh/h)	0	39	2621	65	0	1614
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	0	41	2664	68	0	1639
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			660			
pC, platoon unblocked	0.62	0.62			0.62	
vC, conflicting volume	3537	919			2722	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2650	0			1094	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.6	3.3			2.2	
p0 queue free %	100	93			100	
cM capacity (veh/h)	10	566			331	
Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	41	1061	1061	599	849	849
Volume Left	0	0	0	0	0	0
Volume Right	41	0	0	68	0	0
cSH	566	1700	1700	1700	1700	1700
Volume to Capacity	0.07	0.62	0.62	0.36	0.50	0.60
Queue Length 95th (ft)	6	0	0	0	0	0
Control Delay (s)	11.9	0.0	0.0	0.0	0.0	0.0
Lane LOS	B					
Approach Delay (s)	11.9	0.0			0.0	
Approach LOS	B					
Intersection Summary						
Average Delay			0.1			
Intersection Capacity Utilization			60.2%		ICU Level of Service	B
Analysis Period (min)			15			



HCM Unsignalized Intersection Capacity Analysis  
14: Kingery Highway & 69th Street/Service Drive

4/9/2015

Movement	EBL	EBT	EBP	WBL	WBT	WBP	NBL	NBT	NBR	SEB	SEB	SEB
Lane Configurations	↰		↰			↰	↰	↱	↰	↰	↱	
Volume (veh/h)	2	0	5	0	0	7	12	2543	5	37	1609	27
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.95	0.92	0.95	0.92	0.95	0.95	0.95	0.95	0.92
Hourly flow rate (vph)	2	0	5	0	0	7	13	2677	5	39	1694	29
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			TWLT	
Median storage (veh)											2	
Upstream signal (ft)								993				
pX, platoon unblocked	0.49	0.49		0.49	0.49	0.49				0.49		
vC, conflicting volume	3156	4494	362	3633	4504	1338	1723			2692		
vC1, stage 1 conf vol	1786	1716		2700	2703							
vC2, stage 2 conf vol	1372	2704		930	1801							
vCu, unblocked vol	3525	6061	362	4500	6017	0	1723			2347		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)	6.5	5.5		6.5	5.5							
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	96	100	91	100	100	90	96			61		
cM capacity (veh/h)	50	0	299	16	26	628	363			101		
Direction, Lane #	EB 1	EB 2	WB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3		
Volume Total	2	5	7	13	1338	1338	5	39	1129	594		
Volume Left	2	0	0	13	0	0	0	39	0	0		
Volume Right	0	5	7	0	0	0	5	0	0	29		
cSH	50	299	523	363	1700	1700	1700	101	1700	1700		
Volume to Capacity	0.04	0.02	0.01	0.04	0.79	0.79	0.00	0.39	0.66	0.35		
Queue Length 95th (ft)	3	1	1	3	0	0	0	39	0	0		
Control Delay (s)	30.5	17.3	11.9	15.3	0.0	0.0	0.0	61.9	0.0	0.0		
Lane LOS	F	C	B	C				F				
Approach Delay (s)	35.4		11.9	0.1				1.4				
Approach LOS	E		B									
Intersection Summary												
Average Delay				0.7								
Intersection Capacity Utilization				87.0%	ICU Level of Service			E				
Analysis Period (min)				15								

11/29/2013 A.M. Peak Hour Year 2040 Future Traffic with dual left turn lanes (KLOA)

Synchro 8 Report  
Page 2

Lanes, Volumes, Timings  
3: Kingery Highway & Plainfield Road

4/9/2015

Lane Group	EBB	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SEB	SEB	SBR
Lane Configurations	↔↔	↔↔	↔	↔↔	↔↔	↔	↔	↔↔	↔	↔↔	↔↔	↔
Volume (vph)	322	667	67	339	320	293	109	1400	207	294	1747	269
Ideal Flow (vphpl)	1900	1900	1900	1900	2000	1900	1900	1900	1900	1900	2000	1900
Lane Width (ft)	11	11	12	11	11	11	12	12	12	12	12	12
Storage Length (ft)	300		0	332		416	255		0	255		130
Storage Lanes	2		0	2		1	1		0	2		1
Taper Length (ft)	170			194			225			220		
Lane Util. Factor	0.97	0.96	0.96	0.97	0.96	1.00	1.00	0.91	0.91	0.97	0.95	1.00
Ped. Bike Factor		1.00						1.00				
Fit		0.986				0.850		0.981				0.850
Fit Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3193	3405	0	3255	3637	1516	1770	4862	0	3467	3689	1583
Fit Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3193	3405	0	3255	3637	1516	1770	4862	0	3467	3689	1583
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		40			40			45			45	
Link Distance (ft)		684			773			1333			680	
Travel Time (s)		11.7			13.2			20.2			10.0	
Confl. Peds. (#/hr)			2						2			
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	6%	1%	0%	4%	1%	3%	2%	5%	1%	1%	3%	2%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	332	767	0	349	345	302	112	1666	0	303	1501	277
Turn Type	Prot	NA		Prot	NA	pm+ov	Prot	NA		Prot	NA	pm+ov
Protected Phases	7	4		3	6	1	5	2		1	6	7
Permitted Phases												
Detector Phase	7	4		3	6	1	5	2		1	6	7
Switch Phase												
Minimum Initial (s)	3.0	15.0		3.0	15.0	3.0	3.0	15.0		3.0	15.0	3.0
Minimum Split (s)	9.0	25.5		9.0	25.5	3.5	3.5	46.5		3.5	46.5	9.0
Total Split (s)	13.0	34.0		14.0	35.0	22.0	15.0	70.0		22.0	77.0	13.0
Total Split (%)	9.3%	24.3%		10.0%	25.0%	15.7%	10.7%	50.0%		15.7%	55.0%	9.3%
Yellow Time (s)	3.5	5.0		3.5	5.0	3.5	3.5	4.5		3.5	4.5	3.5
All-Red Time (s)	1.0	2.5		1.0	2.5	1.0	1.0	2.0		1.0	2.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.5	7.5		4.5	7.5	4.5	4.5	6.5		4.5	6.5	4.5
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max	None
Act Effect Green (s)	3.5	26.5		9.5	27.5	51.2	10.5	64.8		16.2	70.5	35.5
Actuated g/C Ratio	0.06	0.19		0.07	0.20	0.37	0.08	0.46		0.12	0.50	0.61
w/c Ratio	1.72	1.13		1.59	1.18	0.55	0.85	0.74		0.76	0.57	0.29
Control Delay	381 s	143.1		328.9	136.1	21.2	103.2	27.1		72.5	48.6	13.8
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	381 s	143.1		328.9	136.1	21.2	103.2	27.1		72.5	48.6	13.8
LOS	F	F		F	F	C	F	C		E	D	B
Approach Delay		215.9			157.9			31.9			47.6	
Approach LOS		F			F			C			D	

3/29/2013 P.M. Peak Hour Year 2040 Future Traffic with dual left turn lanes (KLOA)

Synchro Report

Page 1

# Lanes, Volumes, Timings

## 3: Kingery Highway & Plainfield Road

4/8/2015

	↖	→	↗	↖	←	↗	↖	↑	↗	↖	↓	↗
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	MBL	NET	MBR	SBL	SBT	SEB
Queue Length 50th (ft)	-224	-432		-239	-472	69	107	267		134	417	113
Queue Length 95th (ft)	#600	#662		#646	#609	91	#219	342		190	#1005	165
Internal Link Dist (ft)		604			693			1253			690	
Turn Bay Length (ft)	300			332		445	265			255		140
Base Capacity (vph)	193	644		220	714	569	132	2260		432	1850	967
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	0
Reduced v/c Ratio	1.72	1.14		1.59	1.14	0.63	0.85	0.74		0.70	0.97	0.29

### Intersection Summary

Area Type: Other

Cycle Length: 140

Actuated Cycle Length: 140

Offset: 66 (40%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 160

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.72

Intersection Signal Delay: 95.2

Intersection LOS: F

Intersection Capacity Utilization 101.8%

ICU Level of Service G

Analysis Period (min): 15

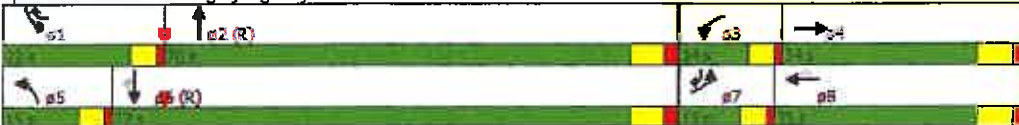
- Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.


Splits and Phases: 3: Kingery Highway & Plainfield Road



Lanes, Volumes, Timings

6: Willowbrook Town Center & Plainfield Road

4/9/2015

												
Lane Group	EBL	EBT	EBP	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	←	←	←	←	←	←	←	←	←	←	←	←
Volume (vph)	143	842	165	189	1243	137	52	12	141	124	12	203
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		0	200		115	0		0	0		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	160			205			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.98									
Fit			0.160			0.250		0.267			0.262	
Fit Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1757	3762	1015	1105	3725	1615	1105	1647	0	1105	1600	0
Fit Permitted	0.135			0.256			0.402			0.500		
Satd. Flow (perm)	250	3762	1500	406	3725	1615	764	1647	0	950	1600	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		773			359			242			202	
Travel Time (s)		13.2			6.1			5.5			4.6	
Confl. Bikes (#/hr)			2									
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	1%	1%	0%	0%	2%	0%	0%	0%	0%	0%	0%	2%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	151	165	168	190	1273	140	53	162	0	127	225	0
Turn Type	pm-pt	NA	Perm	pm-pt	NA	Perm	pm-pt	NA		pm-pt	NA	
Protected Phases	5	2		1	6		3	3		7	4	
Permitted Phases	2		2	6		6	8			4		
Detector Phase	5	2	2	1	6	6	3	3		7	4	
Switch Phase												
Minimum Initial (s)	3.0	15.0	15.0	3.0	15.0	15.0	3.0	25.0		3.0	25.0	
Minimum Split (s)	3.0	22.0	22.0	3.0	22.0	22.0	3.0	31.0		3.0	31.0	
Total Split (s)	15.0	79.0	79.0	20.0	34.0	34.0	10.0	31.0		10.0	31.0	
Total Split (%)	10.7%	56.4%	56.4%	14.3%	60.0%	60.0%	7.1%	22.1%		7.1%	22.1%	
Yellow Time (s)	3.5	4.0	4.0	3.5	4.0	4.0	3.5	4.0		3.5	4.0	
All-Red Time (s)	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0		1.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	6.0	6.0	4.5	6.0	6.0	4.5	6.0		4.5	6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None		None	None	
Act Effect Green (s)	34.3	77.5	77.5	91.7	79.2	79.2	32.0	25.0		32.9	27.0	
Actuated g/C Ratio	0.63	0.55	0.55	0.66	0.57	0.57	0.23	0.15		0.24	0.19	
w/c Ratio	0.57	0.42	0.19	0.46	0.60	0.15	0.25	0.56		0.50	0.73	
Control Delay	27.1	6.3	6.0	12.0	21.5	15.2	42.5	60.4		50.7	63.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	27.1	6.3	6.0	12.0	21.5	15.2	42.5	60.4		50.7	63.3	
LOS	C	A	A	B	C	B	D	E		D	E	
Approach Delay		5.9			20.0			56.1			62.0	
Approach LOS		A			C			E			E	
Queue Length 50th (ft)	40	75	27	59	309	59	37	136		90	190	


4/29/2015 P.M. Peak Hour Year 2040 Future Traffic with dual left turn lanes (KLOA)

Synchro 8 Report  
Page 3

# Lanes, Volumes, Timings

## 6: Willowbrook Town Center & Plainfield Road

4/8/2015

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 95th (ft)	m53	m74	m29	90	466	97	74	214		152	#824	
Internal Link Dist (ft)		693			279			162			122	
Turn Bay Length (ft)	120			200		115						
Base Capacity (vph)	271	2012	174	474	2106	113	215	294		266	110	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.54	0.42	0.19	0.41	0.60	0.15	0.25	0.55		0.50	0.73	

### Intersection Summary

Area Type: Other

Cycle Length: 140

Actuated Cycle Length: 140

Offset: 133 (95%), Referenced to phase 2 EBT and 6 WBT, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.73

Intersection Signal Delay: 22 s

Intersection LOS: C

Intersection Capacity Utilization: 6.2%

ICU Level of Service: E

Analysis Period (min): 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: Willowbrook Town Center & Plainfield Road



Lanes, Volumes, Timings  
9: Kingery Highway & 72nd Court

4/9/2015

Lane Group	WBL	WBR	NBT	NBR	SBL	SRT
Lane Configurations	WT		TTT		T	TT
Volume (vph)	194	38	1577	154	76	1990
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	2000
Storage Length (ft)	200	0		0	215	
Storage Lanes	1	0		0	1	
Taper Length (ft)	55				225	
Lane Util. Factor	0.97	0.95	0.91	0.91	1.00	0.95
Fit	0.963		0.947			
Fit Protected	0.967				0.950	
Satd. Flow (prot)	3397	0	4397	0	1787	3609
Fit Permitted	0.967				0.950	
Satd. Flow (perm)	3397	0	4397	0	1787	3609
Right Turn on Red		No		No		
Satd. Flow (RTOR)						
Link Speed (mph)	30		45			45
Link Distance (ft)	834		356			1333
Travel Time (s)	15.5		5.4			20.2
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	0%	5%	0%	1%	3%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	291	0	1715	0	76	2052
Turn Type	Prot		NA		Prot	NA
Protected Phases	5		2		1	6
Permitted Phases						
Detector Phase	5		2		1	6
Switch Phase						
Minimum Initial (s)	3.0		15.0		3.0	15.0
Minimum Split (s)	22.0		22.0		8.5	22.0
Total Split (s)	35.0		77.0		21.0	105.0
Total Split (%)	25.0%		55.0%		20.0%	75.0%
Yellow Time (s)	4.5		4.5		3.5	4.5
All-Red Time (s)	1.5		1.5		1.0	1.5
Lost Time Adjust (s)	0.0		0.0		0.0	0.0
Total Lost Time (s)	6.0		6.0		4.5	6.0
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None		C-Max		None	C-Max
Act Effect Green (s)	13.2		93.3		11.5	109.3
Actuated g/C Ratio	0.13		0.67		0.05	0.73
w/c Ratio	0.66		0.54		0.53	0.71
Control Delay	65.1		13.5		79.1	2.5
Queue Delay	0.0		0.0		0.0	0.0
Total Delay	65.1		13.5		79.1	2.5
LOS	E		B		E	A
Approach Delay	65.1		13.5			5.0
Approach LOS	E		B			A
Queue Length 50th (ft)	131		217		76	77
Queue Length 95th (ft)	175		395		m72	m72
Internal Link Dist (ft)	604		276			1250

3/29/2013 P.M. Peak Hour Year 2040 Future Traffic with dual left turn lanes (KLOA)

Synchro 5 Report  
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Lanes, Volumes, Timings  
 9: Kingery Highway & 72nd Court

4/9/2015

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Turn Bay Length (ft)	200				215	
Base Capacity (vph)	700		321		299	293
Starvation Cap Reductn	0		0		0	0
Spillback Cap Reductn	0		0		0	0
Storage Cap Reductn	0		0		0	0
Reduced v/c Ratio	0.41		0.64		0.26	0.71

Intersection Summary

Area Type: Other  
 Cycle Length: 140  
 Actuated Cycle Length: 140  
 Offset: 84 (60%), Referenced to phase 2: NBT and 6: SBT, Start of Green  
 Natural Cycle: 65  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.71  
 Intersection Signal Delay: 12.9  
 Intersection Capacity Utilization: 70.6%  
 Analysis Period (min): 15  
 m Volume for 95th percentile queue is metered by upstream signal.

Intersection LOS: B

ICU Level of Service: C

Spills and Phases: 9: Kingery Highway & 72nd Court





# HCM Unsignalized Intersection Capacity Analysis

## 12: Kingery Highway & Access Drive
























4/8/2015

Movement	WBL	WBR	NBT	NBR	SBL	SBR
Lane Configurations		<b>F</b>	<b>↑↑↑</b>			<b>↑↑</b>
Volume (veh/h)	0	75	1911	104	0	2343
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	0	79	2012	109	0	2508
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			660			
pX, platoon unblocked	0.74	0.74			0.74	
vC, conflicting volume	3321	726			2121	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2339	0			1271	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.6	3.3			2.2	
p0 queue free %	100	90			100	
cM capacity (veh/h)	9	799			400	
Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	79	805	805	512	1254	1254
Volume Left	0	0	0	0	0	0
Volume Right	79	0	0	109	0	0
cSH	790	1700	1700	1700	1700	1700
Volume to Capacity	0.10	0.47	0.47	0.30	0.74	0.74
Queue Length 95th (ft)	0	0	0	0	0	0
Control Delay (s)	10.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	B					
Approach Delay (s)	10.0	0.0			0.0	
Approach LOS	B					
Intersection Summary						
Average Delay		0.2				
Intersection Capacity Utilization		69.2%		ICU Level of Service		C
Analysis Period (min)		15				



# HCM Unsignalized Intersection Capacity Analysis 14: Kingery Highway & Service Drive

4/9/2015

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								 			 	
Volume (veh/h)	0	0	18	0	0	17	38	1940	10	58	2365	37
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	0	0	19	0	0	18	38	2042	11	60	2489	39
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			TWLT	
Median storage (veh)											2	
Upstream signal (ft)								930				
pC, platoon unblocked	0.70	0.70		0.70	0.70	0.70				0.70		
vC, conflicting volume	3742	4755	1264	3499	4764	1021	2628			2063		
vC1, stage 1 conf vol	2627	2627		2113	2113							
vC2, stage 2 conf vol	1115	2128		1382	2646							
vCu, unblocked vol	4054	6485	1264	3710	5602	197	2522			1653		
tC, single (s)	7.6	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)	6.5	5.5		6.5	5.5							
tF (s)	3.6	4.0	2.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	55	100	68	100	100	97	79			73		
cM capacity (veh/h)	19	16	162	38	0	679	180			272		
Direction, Lane #	EB 1	EB 2	WB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3		
Volume Total	2	19	18	38	1021	1021	11	59	1660	269		
Volume Left	2	0	0	38	0	0	0	59	0	0		
Volume Right	0	19	18	0	0	0	11	0	0	39		
cSH	19	160	679	100	1700	1700	1700	272	1700	1700		
Volume to Capacity	0.45	0.12	0.03	0.21	0.60	0.60	0.01	0.22	0.98	0.61		
Queue Length 95th (ft)	31	10	2	19	0	0	0	20	0	0		
Control Delay (s)	302.5	29.9	11.4	30.2	0.0	0.0	0.0	21.9	0.0	0.0		
Lane LOS	F	D	B	D				C				
Approach Delay (s)	113.8		11.4	0.5				0.5				
Approach LOS	F		B									
Intersection Summary												
Average Delay	1.2											
Intersection Capacity Utilization	76.6%											
ICU Level of Service	D											
Analysis Period (min)	15											
























2/29/2013 P.M. Peak Hour Year 2040 Future Traffic with dual left turn lanes (KLOA)

Synchro 8 Report  
Page 2

Lanes, Volumes, Timings

3: Kingery Highway & Plainfield Road

4/9/2015

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	309	546	102	325	534	279	153	1378	227	382	1542	305
Ideal Flow (vphpl)	1900	1900	1900	1900	2000	1900	1900	1900	1900	1900	2000	1900
Lane Width (ft)	11	11	12	11	11	11	12	12	12	12	12	12
Storage Length (ft)	300		0	202		445	255		0	255		100
Storage Lanes	2		0	2		1	1		0	2		1
Taper Length (ft)	170			194			225			220		
Lane Util. Factor	0.97	0.95	0.95	0.97	0.95	1.00	1.00	0.91	0.91	0.97	0.95	1.00
Ped Bike Factor						0.99		1.00				
Fit		0.976				0.850		0.979				0.850
Fit Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3351	3372	0	3319	3637	1531	1805	4967	0	3467	3725	1699
Fit Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3351	3372	0	3319	3637	1531	1805	4967	0	3467	3725	1699
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		40			40			45			45	
Link Distance (ft)		752			774			1333			660	
Travel Time (s)		13.3			13.2			20.2			10.0	
Confl. Peds (#/hr)						2			3			
Confl. Bikes (#/hr)									3			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	1%	1%	1%	2%	1%	2%	0%	2%	2%	1%	2%	1%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	315	661	0	330	545	285	156	1631	0	390	1370	311
Turn Type	Prot	NA		Prot	NA	pm+ov	Prot	NA		Prot	NA	pm+ov
Protected Phases	7	4		3	8	1	5	2		1	6	7
Permitted Phases						6						6
Detector Phase	7	4		3	8	1	5	2		1	6	7
Switch Phase												
Minimum Initial (s)	3.0	15.0		3.0	15.0	3.0	3.0	15.0		3.0	15.0	3.0
Minimum Split (s)	8.0	25.5		8.0	25.5	9.0	9.0	24.5		9.0	24.5	3.0
Total Split (s)	16.0	27.0		16.0	27.0	23.0	19.0	59.0		23.0	63.0	16.0
Total Split (%)	12.8%	21.6%		12.8%	21.6%	18.4%	15.2%	47.2%		18.4%	60.4%	12.8%
Yellow Time (s)	3.5	5.0		3.5	5.0	3.5	3.5	4.5		3.5	4.5	3.5
All-Red Time (s)	1.0	2.5		1.0	2.5	1.5	1.5	2.0		1.5	2.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.5	7.5		4.5	7.5	5.0	5.0	6.5		5.0	6.5	4.5
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max	None
Act Effect Green (s)	11.5	19.5		11.5	19.5	39.2	13.4	53.3		17.2	57.1	75.1
Actuated g/C Ratio	0.09	0.16		0.09	0.16	0.31	0.11	0.43		0.14	0.46	0.60
w/c Ratio	1.02	1.26		1.08	0.96	0.60	0.21	0.77		0.82	0.80	0.32
Control Delay	112.7	173.5		122.1	95.1	27.2	75.4	31.5		66.7	33.9	13.6
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	112.7	173.5		122.1	95.1	27.2	75.4	31.5		66.7	33.9	13.6
LOS	F	F		F	F	C	E	C		E	C	B
Approach Delay		153.3			95.1			35.6			37.0	

3/29/2013 Saturday Midday Peak Hour Year 2040 Future Traffic with dual left turns(KLOA)

Synchro Report

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# Lanes, Volumes, Timings

## 3: Kingery Highway & Plainfield Road

4/20/2015

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach LOS		F			F			D			D	
Queue Length 50th (ft)	~139	~352		~152	247	131	130	225		151	495	119
Queue Length 95th (ft)	#234	#474		m#221	m#119	m196	m#223	394		#219	591	176
Internal Link Dist (ft)		702			694			1253			510	
Turn Bay Length (ft)	300			332		485	255			255		180
Base Capacity (vph)	204	526		305	567	486	202	2110		499	1700	961
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	0
Reduced v/c Ratio	1.02	1.26		1.01	0.96	0.69	0.77	0.77		0.76	0.80	0.32

### Intersection Summary

Area Type: Other

Cycle Length: 125

Actuated Cycle Length: 125

Offset: 45 (36%), Referenced to phase 2: NBT and 6: SBT, Start of Green

Natural Cycle: 100

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.26

Intersection Signal Delay: 65.1

Intersection LOS: E

Intersection Capacity Utilization: 90.9%

ICU Level of Service: E

Analysis Period (min): 15

- Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.


m Volume for 95th percentile queue is metered by upstream signal.

### Splits and Phases: 2: Kingery Highway & Plainfield Road



Lanes, Volumes, Timings  
6: Willowbrook Town Center & Plainfield Road

4/9/2015

												
Lane Group	EBL	EBT	ESP	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰	↰	↰	↰↰	↰	↰	↰	↰	↰	↰	↰
Volume (vph)	201	697	244	215	775	195	95	25	188	173	24	263
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		0	200		115	0		0	0		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	160			205			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.98								0.98	
Fit			0.350			0.350		0.363			0.362	
Fit Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1505	3725	1615	1505	3762	1615	1747	1621	0	1505	1610	0
Fit Permitted	0.230			0.294			0.178			0.396		
Satd. Flow (perm)	532	3725	1541	553	3762	1615	305	1621	0	752	1610	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		774			344			242			202	
Travel Time (s)		13.2			5.9			5.6			4.6	
Confl. Peds. (#/hr)			1									1
Confl. Bikes (#/hr)												4
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	2%	0%	0%	1%	0%	1%	0%	2%	0%	0%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	214	741	260	229	924	197	90	227	0	184	327	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2		2	6		6	6			4		
Detector Phase	6	2	2	1	6	6	3	8		7	4	
Switch Phase												
Minimum Initial (s)	3.0	15.0	15.0	3.0	15.0	15.0	3.0	15.0		3.0	15.0	
Minimum Split (s)	8.0	22.0	22.0	8.0	22.0	22.0	8.0	22.0		8.0	22.0	
Total Split (s)	15.0	65.0	65.0	20.0	70.0	70.0	10.0	30.0		10.0	30.0	
Total Split (%)	12.0%	62.0%	62.0%	10.0%	56.0%	56.0%	2.0%	24.0%		2.0%	24.0%	
Yellow Time (s)	3.5	4.0	4.0	3.5	4.0	4.0	3.5	4.0		3.5	4.0	
All-Red Time (s)	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0		1.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	6.0	6.0	4.5	6.0	6.0	4.5	6.0		4.5	6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	Max		None	Max	
Act Effect Green (s)	74.0	62.5	62.5	77.9	64.5	64.5	31.0	24.0		31.0	24.0	
Actuated g/C Ratio	0.69	0.60	0.60	0.62	0.62	0.62	0.25	0.19		0.26	0.19	
w/c Ratio	0.61	0.40	0.30	0.49	0.42	0.24	0.62	0.73		0.79	1.06	
Control Delay	8.9	7.7	7.8	12.9	19.7	17.8	54.2	62.3		64.6	115.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	8.9	7.7	7.8	12.9	19.7	17.8	54.2	62.3		64.6	115.7	
LOS	A	A	A	B	B	B	D	E		E	F	
Approach Delay		7.9			18.1			60.0			97.3	
Approach LOS		A			B			E			F	

9/29/2013 Saturday Midday Peak Hour Year 2040 Future Traffic with dual left turns(KLOA)

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# Lanes, Volumes, Timings

## 6: Willowbrook Town Center & Plainfield Road

4/8/2015

	↖	→	↗	↖	←	↗	↖	↑	↗	↖	↓	↖
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	28	58	39	70	212	86	55	174		119	~290	
Queue Length 95th (ft)	m31	m61	m45	107	262	134	#109	#233		#227	#177	
Internal Link Dist (ft)		694			264			162			122	
Turn Bay Length (ft)	120			200		115						
Base Capacity (vph)	422	1861	790	514	1940	832	146	311		232	309	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.51	0.40	0.33	0.45	0.42	0.24	0.62	0.73		0.79	1.06	

### Intersection Summary

Area Type: Other  
 Cycle Length: 125  
 Actuated Cycle Length: 126  
 Offset: 6 (5%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green  
 Natural Cycle: 60  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 1.06  
 Intersection Signal Delay: 20.7  
 Intersection Capacity Utilization: 72.5%  
 Analysis Period (min): 15  
 ~ Volume exceeds capacity, queue is theoretically infinite.  
 Queue shown is maximum after two cycles.  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.  
 m Volume for 95th percentile queue is metered by upstream signal.

### Splits and Phases: 6: Willowbrook Town Center & Plainfield Road



Lanes, Volumes, Timings  
9: Kingery Highway & 72nd Court

4/8/2015

Lane Group	WBL	WBT	NBT	NBP	SBL	SBR
Lane Configurations	TT		TTT		T	TT
Volume (vph)	301	166	1626	234	163	1603
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	2000
Storage Length (ft)	200	0		0	215	
Storage Lanes	1	0		0	1	
Taper Length (ft)	55				225	
Lane Util. Factor	0.97	0.95	0.91	0.91	1.00	0.95
Fit	0.949		0.980			
Fit Protected	0.963				0.950	
Satd. Flow (prot)	3375	0	4942	0	1805	3689
Fit Permitted	0.963				0.950	
Satd. Flow (perm)	3375	0	4942	0	1805	3689
Right Turn on Red		No		No		
Satd. Flow (RTOR)						
Link Speed (mph)	30		45			45
Link Distance (ft)	684		856			1333
Travel Time (s)	15.5		13.0			20.2
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	1%	3%	2%	0%	3%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	471	0	1813	0	173	1651
Turn Type	Prot		NA		Prot	NA
Protected Phases	5		2		1	6
Permitted Phases						
Detector Phase			2		1	6
Switch Phase						
Minimum Initial (s)	3.0		15.0		3.0	15.0
Minimum Split (s)	22.0		22.0		8.5	22.0
Total Split (s)	37.0		63.0		25.0	37.0
Total Split (%)	29.6%		60.4%		20.0%	70.4%
Yellow Time (s)	4.5		4.5		3.5	4.5
All-Red Time (s)	1.5		1.5		1.0	1.5
Lost Time Adjust (s)	0.0		0.0		0.0	0.0
Total Lost Time (s)	6.0		6.0		4.5	6.0
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None		C-Max		None	C-Max
Act Effect Green (s)	23.3		67.3		16.9	39.2
Actuated g/C Ratio	0.19		0.64		0.14	0.71
w/c Ratio	0.72		0.63		0.71	0.63
Control Delay	54.4		23.7		70.5	7.0
Queue Delay	0.0		0.0		0.0	0.0
Total Delay	54.4		23.7		70.5	7.0
LOS	D		C		E	A
Approach Delay	54.4		23.7			13.0
Approach LOS	D		C			B
Queue Length 50th (ft)	127		375		149	131
Queue Length 95th (ft)	231		516		m175	m201
Internal Link Dist (ft)	604		776			1263

3/29/2013 Saturday Midday Peak Hour Year 2040 Future Traffic with dual left turns(KLOA)

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Lanes, Volumes, Timings  
 9: Kingery Highway & 72nd Court

4/9/2015

	←		↑	↗	↘	↓
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Turn Bay Length (ft)	200				215	
Base Capacity (vph)	837		2679		200	2632
Starvation Cap Reductn	0		0		0	0
Spillback Cap Reductn	0		0		0	0
Storage Cap Reductn	0		0		0	0
Reduced v/c Ratio	0.66		0.61		0.53	0.63

Intersection Summary

Area Type: Other  
 Cycle Length: 125  
 Actuated Cycle Length: 125  
 Offset: 59 (47%), Referenced to phase 2:NBT and 6:SBT, Start of Green  
 Natural Cycle: 70  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.73  
 Intersection Signal Delay: 22.6  
 Intersection Capacity Utilization: 71.2%  
 Analysis Period (min): 15  
 m Volume for 95th percentile queue is metered by upstream signal.

Intersection LOS: C  
 ICU Level of Service C

Spills and Phases: 9: Kingery Highway & 72nd Court





# HCM Unsignalized Intersection Capacity Analysis

## 11: Kingery Highway & Service Drive

4/8/2015

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	24	0	28	0	0	24	79	1036	15	79	1992	51
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.92
Hourly flow rate (vph)	25	0	29	0	0	25	83	1036	16	83	2097	55
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			TWLT	
Median storage (veh)											2	
Upstream signal (ft)								1004				
pX, platoon unblocked	0.70	0.70		0.70	0.70	0.70				0.70		
vC, conflicting volume	3450	4408	1076	3345	4420	967	2152			1961		
vC1, stage 1 conf vol	2291	2291		2101	2101							
vC2, stage 2 conf vol	1159	2117		1244	2319							
vCu, unblocked vol	3641	5006	1076	3492	5023	103	2152			1504		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)	6.5	5.5		6.5	5.5							
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	10	100	96	100	100	96	66			73		
cM capacity (veh/h)	28	0	216	26	0	654	246			310		
Direction, Lane #	EB1	EB2	WB1	NB1	NB2	NB3	NB4	SB1	SB2	SB3		
Volume Total	25	29	25	83	967	967	16	83	1398	754		
Volume Left	25	0	0	83	0	0	0	83	0	0		
Volume Right	0	29	25	0	0	0	16	0	0	65		
cSH	28	216	654	246	1700	1700	1700	310	1700	1700		
Volume to Capacity	0.90	0.14	0.04	0.34	0.57	0.57	0.01	0.27	0.92	0.44		
Queue Length 95th (ft)	73	12	0	36	0	0	0	27	0	0		
Control Delay (s)	341.2	24.4	10.7	26.9	0.0	0.0	0.0	20.8	0.0	0.0		
Lane LOS	F	C	B	D				C				
Approach Delay (s)	170.6		10.7	1.1				0.3				
Approach LOS	F		B									
Intersection Summary												
Average Delay				3.1								
Intersection Capacity Utilization				74.4%			ICU Level of Service			D		
Analysis Period (min)				15								



# HCM Unsignalized Intersection Capacity Analysis

## 13: Kingery Highway & Access Drive

4/9/2016

Movement	WBL	WBR	NBT	NBP	SBL	SBT
Lane Configurations		↑↑	↑↑↑			↑↑
Volume (veh/h)	0	102	1330	136	0	2020
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	0	107	1326	143	0	2126
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			660			
pX, platoon unblocked	0.73	0.73			0.73	
vC, conflicting volume	3061	714			2069	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2530	0			1165	
tC, single (s)	6.4	6.9			4.1	
tC, 2 stage (s)						
IF (s)	3.6	3.3			2.2	
p0 queue free %	100	16			100	
cM capacity (veh/h)	16	796			429	
Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	107	771	771	528	1063	1063
Volume Left	0	0	0	0	0	0
Volume Right	107	0	0	143	0	0
cSH	796	1700	1700	1700	1700	1700
Volume to Capacity	0.14	0.46	0.46	0.31	0.63	0.63
Queue Length 95th (ft)	12	0	0	0	0	0
Control Delay (s)	10.2	0.0	0.0	0.0	0.0	0.0
Lane LOS	B					
Approach Delay (s)	10.2	0.0			0.0	
Approach LOS	B					
Intersection Summary						
Average Delay		0.3				
Intersection Capacity Utilization		59.2%		ICU Level of Service		B
Analysis Period (min)		16				

## **CMAQ Traffic Projections**



## Chicago Metropolitan Agency for Planning

233 South Wacker Drive  
Suite 800  
Chicago, Illinois 60606  
312 454 0400  
[www.cmap.illinois.gov](http://www.cmap.illinois.gov)

September 9, 2013

Javier Millan  
Senior Consultant  
Kenig, Lindgren, O'Hare, Aboona, Inc.  
9575 West Higgins Road  
Suite 400  
Rosemont, IL 60018

**Subject: IL 83 @ Plainfield Road**  
IDOT

Dear Mr. Millan:

In response to a request made on your behalf and dated September 3, 2013, we have developed year 2040 average daily traffic (ADT) projections for the subject location.

INTERSECTION	West Leg	North Leg	East Leg	South Leg
IL 83 @ Plainfield Rd	25,000	52,000	30,000	50,000

Please be aware that the Illinois Department of Transportation has prepared a Strategic Regional Arterial (SRA) report for IL 83. Reports include right-of-way, geometric, access, and transit recommendations. The executive summaries can be found at <http://www.cmap.illinois.gov/traffic/sra-resources> with other information about the SRA system.

Traffic projections are developed using existing ADT data provided in the request letter and the results from the April 2013 CMAP Travel Demand Analysis. The regional travel model uses CMAP 2040 socioeconomic projections and assumes the implementation of the GO TO 2040 Comprehensive Regional Plan for the Northeastern Illinois area.

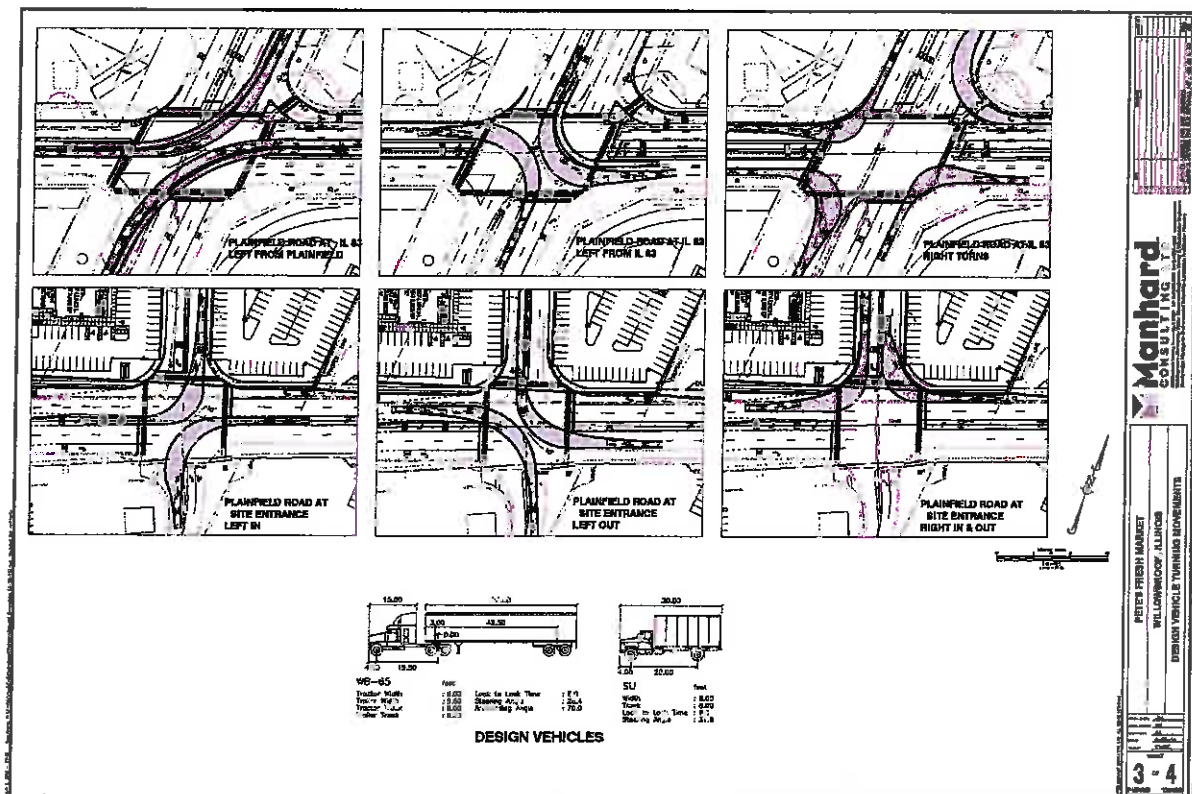
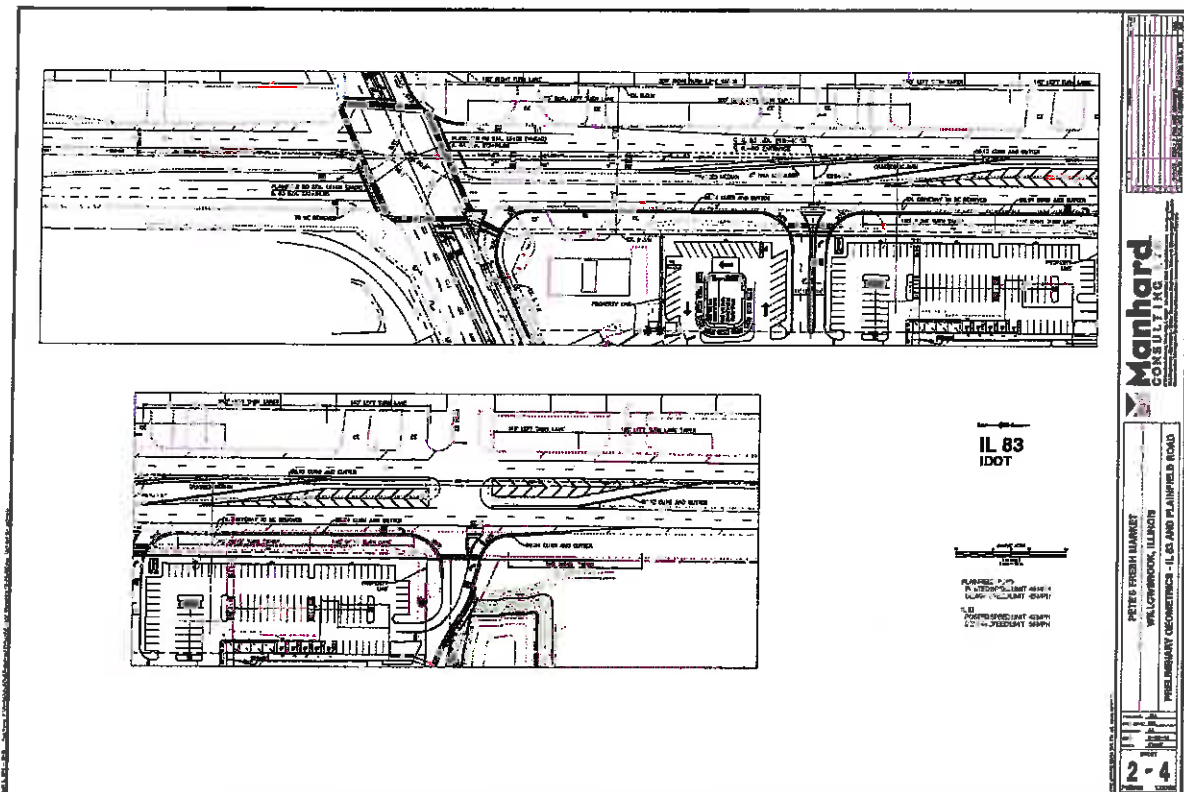
If you have any questions, please call Jose Rodriguez at (312) 386-8806.

Sincerely,

Donald P. Kopec  
Deputy Director for Planning and Programming

cc: Saffley (IDOT)  
S:\Projects\CMPSATF\_Temp\_July2013\2013 Response\du-22-13.docx





**EXHIBIT E**  
**Notice of Public Hearing**

VILLAGE OF WILLOWBROOK, DUPAGE COUNTY, ILLINOIS  
ROUTE 83/PLAINFIELD ROAD BUSINESS DISTRICT

Notice is hereby given that on July 11, 2016 at 6:30 p.m. at the Burr Ridge Police Department Training Room, 7700 County Line Road, Burr Ridge, Illinois, a public hearing will be held to consider the proposal to approve a business district plan (the "Business District Plan") and the designation of a business district to be known as the Route 83/Plainfield Road Business District (the "Business District"). The Business District consists of the territory legally described as follows:

THAT PART OF THE SOUTH HALF OF SECTION 23 AND THE NORTH HALF OF SECTION 26 TOWNSHIP 38 NORTH, RANGE 11 EAST OF THE THIRD PRINCIPAL MERIDIAN IN DUPAGE COUNTY, ILLINOIS, BEING DESCRIBED AS FOLLOWS:

BEGINNING AT THE MOST EASTERLY SOUTHEAST CORNER OF LOT 1 IN PERSEVERANCE SUBDIVISION, BEING A SUBDIVISION IN THE SOUTHEAST QUARTER OF SAID SECTION 23 AND THE NORTHEAST QUARTER OF SAID SECTION 26, ACCORDING TO THE PLAT THEREOF RECORDED JULY 30, 2007 AS DOCUMENT NO. R2007-141528; THENCE NORTHERLY, WESTERLY, NORTHERLY, EASTERLY AND NORTHERLY ALONG THE EAST LINE OF SAID LOT 1 TO A POINT ON THE SOUTH LINE OF LOT 1 IN WILLOWBROOK CENTER UNIT NO. 1, BEING A SUBDIVISION IN THE SOUTHEAST QUARTER OF SAID SECTION 23, ACCORDING TO THE PLAT THEREOF RECORDED OCTOBER 16, 1963 AS DOCUMENT NO. R63-37895; THENCE EASTERLY ALONG SAID SOUTH LINE TO THE SOUTHEAST CORNER OF SAID LOT 1; THENCE NORTHERLY ALONG THE EAST LINE OF SAID LOT 1 TO A POINT ON THE SOUTH LINE OF LOT 2 IN LENZ'S ASSESSMENT PLAT, BEING A SUBDIVISION IN THE SOUTHEAST QUARTER OF SAID SECTION 23, ACCORDING TO THE PLAT THEREOF RECORDED JULY 5, 1955 AS DOCUMENT NO. 763597; THENCE EASTERLY ALONG SAID SOUTH LINE AND ALONG THE EASTERLY EXTENSION THEREOF TO A POINT ON THE EAST RIGHT-OF-WAY LINE OF ADAMS STREET; THENCE NORTHERLY ALONG SAID EAST RIGHT-OF-WAY LINE TO A POINT ON THE NORTHERLY RIGHT-OF-WAY LINE OF PLAINFIELD ROAD; THENCE SOUTHWESTERLY ALONG SAID NORTHERLY RIGHT-OF-WAY LINE TO THE SOUTHWESTERLY CORNER OF LOT 1 IN 1<sup>ST</sup> BURLINGTON BANK, WILLOWBROOK RESUBDIVISION, BEING A SUBDIVISION IN THE SOUTHEAST QUARTER OF SAID SECTION 23, ACCORDING TO THE PLAT THEREOF RECORDED SEPTEMBER 23, 1986 AS DOCUMENT NO. R86-115152; THENCE NORTHERLY ALONG THE WEST LINE OF SAID LOT 1 AND

ALONG THE NORTHERLY EXTENSION THEREOF TO A POINT ON THE NORTH RIGHT-OF-WAY LINE OF 69<sup>TH</sup> STREET; THENCE WESTERLY ALONG SAID NORTH RIGHT-OF-WAY LINE TO THE SOUTHWEST CORNER OF LOT 14 IN SCHILLER'S ADDITION, BEING A SUBDIVISION IN THE SOUTHEAST QUARTER OF SAID SECTION 23, ACCORDING TO THE PLAT THEREOF RECORDED JUNE 14, 1950 AS DOCUMENT NO. 595530; THENCE NORTHERLY ALONG THE WEST LINE OF SAID LOT 14 TO THE SOUTHWEST CORNER OF LOT 12 IN WEST TOWN DEVELOPMENT COMPANY'S RESUBDIVISION, BEING A SUBDIVISION IN THE SOUTHEAST QUARTER OF SAID SECTION 23, ACCORDING TO THE PLAT THEREOF RECORDED JULY 22, 1955 AS DOCUMENT NO. 766039; THENCE NORTHERLY ALONG THE WEST LINE OF SAID LOT 12 AND ALONG THE WEST LINE OF LOT 13 IN SAID WEST TOWN DEVELOPMENT COMPANY'S RESUBDIVISION TO THE NORTHEAST CORNER OF PARCEL 1 IN WILLOWBROOK OFFICE PARK LOT 12 ASSESSMENT PLAT, BEING A SUBDIVISION IN THE SOUTHEAST QUARTER OF SAID SECTION 23, ACCORDING TO THE PLAT THEREOF RECORDED SEPTEMBER 8, 2005 AS DOCUMENT NO. R2005-197465; THENCE WESTERLY, SOUTHERLY, SOUTHWESTERLY AND WESTERLY ALONG THE NORTH LINE OF SAID PARCEL 1 115.50 FEET (MORE OR LESS) TO A POINT ON THE NORTHEASTERLY LINE OF A PERMANENT EASEMENT (AS SHOWN ON AN EASEMENT EXHIBIT PREPARED BY MANHARD CONSULTING, LTD AND DATED JUNE 9, 2016); THENCE NORTHWESTERLY ALONG SAID NORTHEASTERLY PERMANENT EASEMENT LINE TO A POINT ON THE EAST RIGHT-OF-WAY LINE OF ILLINOIS ROUTE 83; THENCE NORTHERLY ALONG SAID EAST RIGHT-OF-WAY LINE TO A POINT OF INTERSECTION WITH THE EASTERLY EXTENSION OF THE NORTH LINE OF LOT 15 IN BLOCK 35 IN TRI STATE VILLAGE UNIT NO. 5, BEING A SUBDIVISION IN THE SOUTHWEST QUARTER OF SAID SECTION 23 AND THE NORTHWEST QUARTER OF SAID SECTION 26, ACCORDING TO THE PLAT THEREOF RECORDED JULY 20, 1944 AS DOCUMENT NO. 465114; THENCE WESTERLY ALONG SAID EASTERLY EXTENSION TO A POINT ON THE WEST RIGHT-OF-WAY LINE OF SAID ILLINOIS ROUTE 83; THENCE SOUTHERLY ALONG SAID WEST RIGHT-OF-WAY LINE TO A POINT OF INTERSECTION WITH THE WESTERLY EXTENSION OF THE SOUTH RIGHT-OF-WAY LINE OF 72<sup>ND</sup> COURT; THENCE EASTERLY ALONG SAID WESTERLY EXTENSION TO A POINT OF INTERSECTION WITH SAID EAST RIGHT-OF-WAY LINE OF ILLINOIS ROUTE 83; THENCE EASTERLY, SOUTHERLY AND EASTERLY ALONG SAID SOUTH RIGHT-OF-WAY LINE OF 72<sup>ND</sup> COURT TO A POINT ON THE EAST LINE OF LOT 6 IN HINSDALE HIGHLAND ESTATES, BEING A SUBDIVISION IN THE NORTHEAST QUARTER OF SAID SECTION 26, ACCORDING TO THE PLAT THEREOF RECORDED JULY 23, 1954 AS DOCUMENT NO. 720969; THENCE NORTHERLY ALONG SAID EAST LINE EXTENDED NORTHERLY TO THE POINT OF BEGINNING.

EXCEPTING THEREFROM THE FOLLOWING DESCRIBED PARCEL (P.I.N. 09-23-405-019):

THAT PART OF LOT 4 WHICH LIES EAST OF THE EAST LINE OF ILLINOIS ROUTE 83 AND NORTHERLY OF THE NORTHERLY RIGHT-OF-WAY LINE OF PLAINFIELD ROAD AS PER PLAT OF DEDICATION RECORDED JUNE 27, 1961 AS DOCUMENT NO. R61-11952 AND WHICH LIES SOUTH OF A LINE DRAWN PERPENDICULAR TO THE EAST LINE OF SAID ILLINOIS ROUTE 83 TO A POINT WHICH IS 298.40 FEET NORTH OF THE CENTER LINE OF PLAINFIELD ROAD (MEASURED ALONG THE EAST LINE OF SAID ROUTE 83), ALSO, THAT PART OF LOT 3 WHICH LIES NORTHERLY OF THE NORTHERLY RIGHT-OF-WAY LINE OF PLAINFIELD ROAD AS PER PLAT OF DEDICATION RECORDED JUNE 27, 1961 AS DOCUMENT NO. R61-11952, AND WHICH LIES SOUTHERLY OF A LINE DRAWN FROM A POINT IN THE WEST LINE OF SAID LOT 3, SAID POINT BEING 138.94 FEET NORTH OF THE NORTH LINE OF SAID PLAINFIELD ROAD (MEASURED ALONG SAID WEST LINE OF LOT 3) TO A POINT IN THE NORTHERLY LINE OF SAID PLAINFIELD ROAD, SAID LOTS 3 AND 4 BEING IN OWNER'S SUBDIVISION OF THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 23, AND THE WEST HALF OF THE NORTHEAST QUARTER OF SECTION 26, ALL IN TOWNSHIP 38 NORTH, RANGE 11 EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED APRIL 24, 1931 AS DOCUMENT NO. 311500, IN DUPAGE COUNTY, ILLINOIS.

The boundaries of the Business District are generally described as a contiguous area generally bounded by 69<sup>th</sup> Street on the north, 72<sup>nd</sup> Court on the south, Illinois Route 83 on the west and Adams Street and Willow Way Lane on the east and includes the adjoining rights of way.

There will be considered at the public hearing the Business District Plan and the designation of the Business District. The Business District Plan as proposed is on file and available for public inspection at the office of the Village Clerk, 835 Midway Drive, Willowbrook, Illinois. The proposed Business District Plan includes the following Village goals: to provide for the economic development of Village properties; to continue to maintain a strong regional retail presence; to maintain Village competitiveness in the marketplace; to strengthen the property tax base and sales tax base of the Village; and to create new jobs and retain existing jobs for the Village and area residents. The proposed Business District Plan includes the following Village objectives: to enhance the environment within the Business District to contribute more positively to the health, safety and general welfare of the Village and surrounding communities; strengthen the economic well-being of the Business District and the Village by increasing business activity and improving the tax base of the Village and other local governments having overlapping jurisdiction in the



Business District; maintain, improve, and construct public and private infrastructure and roadway improvements to encourage and support private investment; improve public and traffic safety conditions for motorists, pedestrians and bicyclists; stimulate private investment in new construction and redevelopment so as to maintain a strong regional retail presence; create new job opportunities and retain existing jobs for residents and non-residents of the Village; improve the visual attractiveness of the Business District and the Village through attractive and high-quality design, site improvements, landscaping, and public areas; and reduce or eliminate the factors that qualified the Business District as a "blighted area". The proposed Business District Plan provides the Village with certain powers including, but not limited to, to enter into all contracts necessary or incidental to the implementation and furtherance of the Business District Plan; within the Business District, to acquire by purchase, donation, lease or eminent domain, and to own, convey, lease, mortgage, or dispose of land; to clear any area within the Business District by demolition or removal of existing buildings and structures; to install, repair, construct, reconstruct or relocate public streets, public utilities, and other public site improvements within or without the Business District; to renovate, rehabilitate, relocate, repair or remodel any existing buildings or structures within the Business District; to construct public improvements; to fix, charge and collect fees and rents and charges for the use of any building, facility or property owned or leased by the Village within the Business District; to pay or cause to be paid business district project costs as set forth in the Business District Development and Redevelopment Law [65 ILCS 5/11-74.3-1 et seq. (2014 State Bar Ed.)] (the "Act"); to apply for and accept grants, guarantees, donations of property or labor in connection with a Business District project; to impose a retailers' occupation tax and a service occupation tax within the Business District; and to impose a hotel operators' occupation tax within the Business District. The proposed Business District Plan includes a budget as set forth therein. Pursuant to the Business District Plan, the Village may impose a retailers' occupation tax at a rate of up to one percent (1%) on gross sales within the Business District and impose a service occupation tax at a rate of up to one percent (1%) on gross sales within the Business District, said taxes to be imposed for the term of the Business District.

Any person may submit alternate proposals or bids for any proposed conveyance, lease, mortgage, or other disposition by

the Village of land or rights in land owned by the Village and located within the Business District.

Prior to the date of the public hearing, any interested person may submit written comments to the Village, to the attention of the Village Clerk, 835 Midway Drive, Willowbrook, Illinois, 60527 regarding the approval of the Business District Plan, the designation of the Business District, or any other matter embodied in this notice.

At the public hearing, all interested persons may file written objections with the Village Clerk and will be given an opportunity to be heard orally with respect to any issues regarding the approval of the Business District Plan, the designation of the Business District and any other matter embodied in this notice. The hearing may be adjourned to another date by the Village Mayor and Board of Trustees without further notice other than a motion to be entered upon the minutes fixing the time and place of the adjourned hearing.

Dated this \_\_\_\_\_, 2016

/s/ Leroy Hansen  
Village Clerk  
Village of Willowbrook

EXHIBIT F  
TO  
ORDINANCE NO. 16-O-\_\_\_\_\_

PUBLISHER'S AFFIDAVIT

State of Illinois                    )  
                                      ) ss  
County of DuPage                    )

SHAW MEDIA  
PO BOX 250  
CRYSTAL LAKE IL 60039-0250  
(815)459-4040

ORDER CONFIRMATION

Salesperson: LORI PLESE

Printed at 07/07/16 15:45 by lples

Acct #: 10074604

Ad #: 1203086

Status: A

VILLAGE OF WILLOWBROOK  
835 MIDWAY  
WILLOWBROOK IL 60527

Start: 07/01/2016 Stop: 07/08/2016  
Times Ord: 2 Times Run: \*\*\*  
LEG 5.00 X 90.00 Words: 1867  
Total LEG 450.00  
Class: 8100 PUBLIC NOTICES  
Rate: LEGAL Cost: 1218.00  
# Affidavits: 1

Contact: JANET KUFRIN  
Phone: (630)323-8215  
Fax#:   
Email: jkufrin@willowbrook.il.us  
Agency:

Ad Descrpt: HEARING ROUTE 83/PLAINFIE  
Given by: \*  
Created: lples 06/29/16 15:30  
Last Changed: lples 06/29/16 15:48

Source: \_\_\_\_\_  
Camera Ready: N  
Misc: \_\_\_\_\_  
Proof: \_\_\_\_\_  
Delivery Instr: \_\_\_\_\_  
Changes: None \_\_\_ Copy \_\_\_ Art \_\_\_  
Coupon: \_\_\_\_\_  
Special Instr: \_\_\_\_\_

Section: \_\_\_\_\_ Page: \_\_\_\_\_  
Group: LEGALS AdType: \_\_\_\_\_  
Color: \_\_\_\_\_  
Pickup Date: \_\_\_\_\_ Ad#: \_\_\_\_\_  
Gang Ad #: \_\_\_\_\_

COMMENTS:

COPIED from AD 1200797

PUB	ZONE	EDT	TP	START	INS	STOP	SMTWTFSS
SLM	HSL	97	S	07/01,08			
WES	CL	99	S	07/01,08			
APNW	CL	97	S	07/01,08			

(CONTINUED ON NEXT PAGE)

SHAW MEDIA  
PO BOX 250  
CRYSTAL LAKE IL 60039-0250  
(815) 459-4040

ORDER CONFIRMATION (CONTINUED)

Salesperson: LORI PLESE

Printed at 07/07/16 15:45 by lples

Acct #: 10074604

Ad #: 1203086

Status: A

**PUBLIC NOTICE**

Notice of Public Hearing

**VILLAGE OF WILLOWBROOK, DUPAGE COUNTY, ILLINOIS ROUTE 83/PLAINFIELD ROAD BUSINESS DISTRICT**

Notice is hereby given that on July 11, 2016 at 6:30 p.m. at the Burr Ridge Police Department Training Room, 7700 County Line Road, Burr Ridge, Illinois, a public hearing will be held to consider the proposal to approve a business district plan (the "Business District Plan") and the designation of a business district to be known as the Route 83/Plainfield Road Business District (the "Business District"). The Business District consists of the territory legally described as follows:

THAT PART OF THE SOUTH HALF OF SECTION 23 AND THE NORTH HALF OF SECTION 26 TOWNSHIP 38 NORTH, RANGE 11 EAST OF THE THIRD PRINCIPAL MERIDIAN IN DUPAGE COUNTY, ILLINOIS, BEING DESCRIBED AS FOLLOWS:

BEGINNING AT THE MOST EASTERLY SOUTHEAST CORNER OF LOT 1 IN PERSEVERANCE SUBDIVISION, BEING A SUBDIVISION IN THE SOUTHEAST QUARTER OF SAID SECTION 23 AND THE NORTHEAST QUARTER OF SAID SECTION 26, ACCORDING TO THE PLAT THEREOF RECORDED JULY 30, 2007 AS DOCUMENT NO. R2007-141528; THENCE NORTHERLY, WESTERLY, NORTHERLY, EASTERLY AND NORTHERLY ALONG THE EAST LINE OF SAID LOT 1 TO A POINT ON THE SOUTH LINE OF LOT 1 IN WILLOWBROOK CENTER UNIT NO. 1, BEING A SUBDIVISION IN THE SOUTHEAST QUARTER OF SAID SECTION 23, ACCORDING TO THE PLAT THEREOF RECORDED OCTOBER 16, 1963 AS DOCUMENT NO. R63-37895; THENCE EASTERLY ALONG SAID SOUTH LINE TO THE SOUTHEAST CORNER OF SAID LOT 1; THENCE NORTHERLY ALONG THE EAST LINE OF SAID LOT 1 TO A POINT ON THE SOUTH LINE OF LOT 2 IN LENZ'S ASSESSMENT PLAT, BEING A SUBDIVISION IN THE SOUTHEAST QUARTER OF SAID SECTION 23, ACCORDING TO THE PLAT THEREOF RECORDED JULY 5, 1955 AS DOCUMENT NO. 763597; THENCE EASTERLY ALONG SAID SOUTH LINE AND ALONG THE EASTERLY EXTENSION THEREOF TO A POINT ON THE EAST RIGHT-OF-WAY LINE OF ADAMS STREET; THENCE NORTHERLY ALONG SAID EAST RIGHT-OF-WAY LINE TO A POINT ON THE NORTHERLY RIGHT-OF-WAY LINE OF PLAINFIELD ROAD; THENCE SOUTHWESTERLY ALONG SAID NORTHERLY RIGHT-OF-WAY LINE TO THE SOUTHWESTERLY CORNER OF LOT 1 IN 1ST BURLINGTON BANK, WILLOWBROOK RESUBDIVISION, BEING A SUBDIVISION IN THE SOUTHEAST QUARTER OF SAID SECTION 23, ACCORDING TO THE PLAT THEREOF RECORDED SEPTEMBER 23, 1986 AS DOCUMENT NO. R86-115152; THENCE NORTHERLY ALONG THE WEST LINE OF SAID LOT 1 AND ALONG THE NORTHERLY EXTENSION THEREOF TO A POINT ON THE NORTH RIGHT-OF-WAY LINE OF 69TH STREET; THENCE WESTERLY ALONG SAID NORTH RIGHT-OF-WAY LINE TO THE SOUTHWEST CORNER OF LOT 14 IN SCHILLER'S ADDITION, BEING A SUBDIVISION IN THE SOUTHEAST QUARTER OF SAID SECTION 23, ACCORDING TO THE PLAT THEREOF RECORDED JUNE 14, 1950 AS DOCUMENT NO. 595530; THENCE NORTHERLY ALONG THE WEST LINE OF SAID LOT 14 TO THE SOUTHWEST CORNER OF LOT 12 IN WEST TOWN DEVELOPMENT COMPANY'S RESUBDIVISION, BEING A SUBDIVISION IN THE SOUTHEAST QUARTER OF SAID SECTION 23, ACCORDING TO THE PLAT THEREOF RECORDED JULY 22, 1955 AS DOCUMENT NO. 768039; THENCE NORTHERLY ALONG THE WEST LINE OF SAID LOT 12 AND ALONG THE WEST LINE OF LOT 13 IN SAID WEST TOWN DEVELOPMENT COMPANY'S RESUBDIVISION TO THE NORTHEAST CORNER OF PARCEL 1 IN WILLOWBROOK OFFICE PARK LOT 12 ASSESSMENT PLAT, BEING A SUBDIVISION IN THE SOUTHEAST QUARTER OF SAID SECTION 23, ACCORDING TO THE PLAT THEREOF RECORDED SEPTEMBER 8, 2005 AS DOCUMENT NO. R2005-197465; THENCE WESTERLY, SOUTHERLY, SOUTHWESTERLY AND WESTERLY ALONG THE NORTH LINE OF SAID PARCEL 1 115.60 FEET (MORE OR LESS) TO A POINT ON THE NORTHEASTERLY LINE OF A PERMANENT EASEMENT (AS SHOWN ON AN EASEMENT EXHIBIT PREPARED BY MANHARD CONSULTING, LTD AND DATED JUNE 9, 2016); THENCE NORTHWESTERLY ALONG SAID NORTHEASTERLY PERMANENT EASEMENT LINE TO A POINT ON THE EAST RIGHT-OF-WAY LINE OF ILLINOIS ROUTE 83; THENCE NORTHERLY ALONG SAID EAST RIGHT-OF-WAY LINE TO A POINT OF INTERSECTION WITH THE EASTERLY EXTENSION OF THE NORTH LINE OF LOT 15 IN BLOCK 35 IN TRI STATE VILLAGE UNIT NO. 5, BEING A SUBDIVISION IN THE SOUTHWEST QUARTER OF SAID SECTION 23 AND THE NORTHWEST QUARTER OF SAID SECTION 26, ACCORDING TO THE PLAT THEREOF RECORDED JULY 20, 1944 AS DOCUMENT NO. 465114; THENCE WESTERLY ALONG SAID EASTERLY EXTENSION TO A POINT ON THE WEST RIGHT-OF-WAY LINE OF SAID ILLINOIS ROUTE 83; THENCE SOUTHERLY ALONG SAID WEST RIGHT-OF-WAY LINE TO A POINT OF INTERSECTION WITH THE WESTERLY EXTENSION OF THE SOUTH RIGHT-OF-WAY LINE OF 72ND COURT; THENCE EASTERLY ALONG SAID WESTERLY EXTENSION TO A POINT OF INTERSECTION WITH SAID EAST RIGHT-OF-WAY LINE OF ILLINOIS ROUTE 83; THENCE EASTERLY, SOUTHERLY AND EASTERLY ALONG SAID SOUTH RIGHT-OF-WAY LINE OF 72ND COURT TO A POINT ON THE EAST LINE OF LOT 6 IN HINSDALE HIGHLAND ESTATES, BEING A SUBDIVISION IN THE NORTHEAST QUARTER OF SAID SECTION 26, ACCORDING TO THE PLAT THEREOF RECORDED JULY 23, 1954 AS DOCUMENT NO. 720969; THENCE NORTHERLY ALONG SAID EAST LINE EXTENDED NORTHERLY TO THE POINT OF BEGINNING.

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The boundaries of the Business District are generally described as a contiguous area generally bounded by 69th Street on the north, 72nd Court on the south, Illinois Route 83 on the west and Adams Street and Willowway Lane on the east and includes the adjoining rights of way.

There will be considered at the public hearing the Business District Plan and the designation of the Business District. The Business District Plan as proposed is on file and available for public inspection at the office of the Village Clerk, 835 Midway Drive, Willowbrook, Illinois. The proposed Business District Plan includes the following Village goals: to provide for the economic development of Village properties; to continue to maintain a strong regional retail presence; to maintain Village competitiveness in the marketplace; to strengthen the property tax base and sales tax base of the Village; and to create new jobs and retain existing jobs for the Village and area residents. The proposed Business District Plan includes the following Village objectives: to enhance the environment within the Business District to contribute more positively to the health, safety and general welfare of the Village and surrounding communities; strengthen the economic well-being of the Business District and the Village by increasing business activity and improving the tax base of the Village and other local governments having overlapping jurisdiction; in the Business District; maintain, improve, and construct public and private infrastructure and roadway improvements to encourage and support private investment; improve public and traffic safety conditions for motorists, pedestrians and bicyclists; stimulate private investment in new construction and redevelopment so as to maintain a strong regional retail presence; create new job opportunities and retain existing jobs for residents and non-residents of the Village; improve the visual attractiveness of the Business District and the Village through attractive and high-quality design, site improvements, landscaping, and public areas; and reduce or eliminate the factors that qualified the Business District as a "blighted area". The proposed Business District Plan provides the Village with certain powers including, but not limited to, to enter into all contracts necessary or incidental to the implementation and furtherance of the Business District Plan; within the Business District, to acquire by purchase, donation, lease or eminent domain, and to own, convey, lease, mortgage, or dispose of land; to clear any area within the Business District by demolition or removal of existing buildings and structures; to install, repair, construct, reconstruct or relocate public streets, public utilities, and other public site improvements within or without the Business District; to renovate, rehabilitate, relocate, repair or remodel any existing buildings or structures within the Business District; to construct public improvements; to fix, charge and collect fees and rents and charges for the use of any building, facility or property owned or leased by the Village within the Business District; to pay or cause to be paid business district project costs as set forth in the Business District Development and Redevelopment Law [65 ILCS 5/11-74.3-1 et seq. (2014 State Bar Ed.)] (the "Act"); to apply for and accept grants, guarantees, donations of property or labor in connection with a Business District project; to impose a retailers' occupation tax and a service occupation tax within the Business District; and to impose a hotel operators' occupation tax within the Business District. The proposed Business District Plan includes a budget as set forth therein. Pursuant to the Business District Plan, the Village may impose a retailers' occupation tax at a rate of up to one percent (1%) on gross sales within the Business District and impose a service occupation tax at a rate of up to one percent (1%) on gross sales within the Business District, said taxes to be imposed for the term of the Business District.

Any person may submit alternate proposals or bids for any proposed conveyance, lease, mortgage, or other disposition by the Village of land or rights in land owned by the Village and located within the Business District.

Prior to the date of the public hearing, any interested person may submit written comments to the Village, to the attention of the Village Clerk, 835 Midway Drive, Willowbrook, Illinois, 60527 regarding the approval of the Business District Plan, the designation of the Business District, or any other matter embodied in this notice.

At the public hearing, all interested persons may file written objections with the Village Clerk and will be given an opportunity to be heard orally with respect to any issues regarding the approval of the Business District Plan, the designation of the Business District and any other matter embodied in this notice. The hearing may be adjourned to another date by the Village Mayor and Board of Trustees without further notice other than a motion to be entered upon the minutes fixing the time and place of the adjourned hearing.

Dated this June 27, 2016

/s/ Leroy Hansen  
Village Clerk  
Village of Willowbrook

Hinsdale Suburban Life  
July 1, 2016 1203086

### **CERTIFICATION OF ORDINANCE**

I, the undersigned, certify that I am the duly qualified and acting Village Clerk of the Village of Willowbrook, DuPage County, Illinois (the "Village"), and that as such official I am the keeper of the records and files of the Mayor and Board of Trustees of the Village ("Village Board").

I further certify that the foregoing is a full, true and complete copy of Ordinance No.16-0-\_\_\_\_\_ (the "Ordinance") adopted at the regular meeting of the Village Board held on July 11, 2016 entitled:

**AN ORDINANCE OF THE VILLAGE OF WILLOWBROOK, DUPAGE COUNTY,  
ILLINOIS, APPROVING A BUSINESS DISTRICT PLAN  
FOR THE VILLAGE OF WILLOWBROOK  
ROUTE 83/PLAINFIELD ROAD BUSINESS DISTRICT**

which was duly adopted at the meeting by a roll call vote of \_\_\_\_\_ in favor and \_\_\_\_\_ against, with \_\_\_\_\_ abstentions and \_\_\_\_\_ absent. At the meeting a quorum was present and acting throughout the meeting. The Ordinance has not been amended or repealed and remains in full force and effect.

I further certify that the deliberations of the Village Board on the adoption of the Ordinance were conducted openly, that the vote on the adoption of the Ordinance was taken openly, that the meeting was held at a specified time and place convenient to the public, that notice of the meeting was duly

given to all of the news media requesting such notice, that a copy of the agenda for the meeting was posted at least 72 hours prior to the convening of the meeting at the meeting place and at my offices at Village Hall, that the meeting was called and held in strict compliance with the provisions of the Illinois Municipal Code, as amended, and that in holding the meeting and adopting the Ordinance the Village Board complied with all of the provisions of the Open Meetings Act and the Municipal Code and with all of the procedural rules of the Village Board.

IN WITNESS WHEREOF, I hereunto affix my official signature and the seal of the Village as of this \_\_\_\_ day of July, 2016.

---

Village Clerk

[SEAL]

# VILLAGE OF WILLOWBROOK

## BOARD MEETING AGENDA ITEM - HISTORY/COMMENTARY

### ITEM TITLE:

AN ORDINANCE OF THE VILLAGE OF WILLOWBROOK, DUPAGE COUNTY, ILLINOIS, DESIGNATING THE VILLAGE OF WILLOWBROOK, ILLINOIS ROUTE 83/PLAINFIELD ROAD BUSINESS DISTRICT

AGENDA NO.

8

AGENDA DATE: 7/11/16

STAFF REVIEW: T. Halik, Vill. Admin. / C. Dittman, Dir. Of Finance

SIGNATURE:

T. Halik / C. Dittman

LEGAL REVIEW: Thomas Bastian, Village Attorney

SIGNATURE:

THOMAS BASTIAN

RECOMMENDED BY: Tim Halik, Village Administrator

SIGNATURE:

T. Halik

REVIEWED BY FINANCE & ADMINISTRATION COMMITTEE: YES ☒ on June 13, 2016 NO ☐ N/A ☐

### ITEM HISTORY (PREVIOUS VILLAGE BOARD REVIEWS, ACTIONS RELATED TO THIS ITEM, OTHER HISTORY)

As members of the Board are aware, owners of commercial properties located near Kingery Highway and Plainfield Road have faced challenges finalizing their proposed re-development projects plans given the high cost of required off-site improvements, including necessary traffic improvements. The Village has received requests for the consideration of public subsidies in order to make these projects financially viable. The public finance consultant Ehlers Associates was hired to review the financial data, including project pro formas and gap analysis reports, to assist in determining whether a public subsidy is warranted, and if so, what amount. The final report concluded that a public subsidy is warranted. After continued discussions with the commercial property owners, it was agreed that the creation of a new Business District Sales Tax was the preferred method to raise funding to provide the subsidies. If approved as proposed, the sales tax rate within the boundaries of the new Business District would be 1% higher (i.e., 8% versus 7% elsewhere in town). This 1% sales tax increment would be collected from the state, forwarded to the Village, and deposited into a separate Village fund. Eligible project expenses could be reimbursed to the developers from this fund to offset extraordinary development costs. In accordance with state law, the maximum term of a Business District is 23 years.

One of the benefits of this approach is that the sales tax rate in Willowbrook is already comparatively low as compared to other surrounding jurisdictions (please see attached sales tax comparison). After discussions, Ehlers was then asked to draft a Business District Plan for consideration (see attached draft copy of Plan).

### ITEM COMMENTARY (BACKGROUND, DISCUSSION, RECOMMENDATIONS, ETC.)

In accordance with the Illinois Business District Development and Redevelopment Law (65 ILCS 5/11-74.3-1 et seq.), attached is a proposed Business District Adoption Schedule as prepared by Ehlers Associates. Below are the general steps required to create this new Business District:

- June 27, 2016 – Adopt ord. proposing business district plan, setting time/place for a public hearing.
- July 1, 2016 – First public notice appears in Hinsdale Suburban Life.
- July 8, 2016 – Second public notice appears in Hinsdale Suburban Life.
- July 11, 2016 – Public hearing held before the Village Board to receive public comments.
- July 11, 2016 – Consideration of ord. to approve bus. district plan and designating the bus. district.
- October 1, 2016 – Deadline to file business district documents with the IDOR.

**ACTION PROPOSED:** Pass Ordinance. This is the second of three (3) ordinances to be considered by the Village Board this evening in order to establish the Illinois Route 83/Plainfield Road Business District. This particular ordinance will serve to designate the Village of Willowbrook, Illinois Route 83/Plainfield Road Business District, after receiving public comments.



ORDINANCE NO. 16-O-\_\_\_\_\_

AN ORDINANCE OF THE VILLAGE OF WILLOWBROOK,  
DUPAGE COUNTY, ILLINOIS, DESIGNATING THE VILLAGE OF  
WILLOWBROOK, ILLINOIS ROUTE 83/PLAINFIELD ROAD BUSINESS DISTRICT

NOW, THEREFORE, BE IT ORDAINED by the Mayor and Board of Trustees of the Village of Willowbrook, DuPage County, Illinois, as follows:

Section 1.      Authority.      This Ordinance is adopted pursuant to the Business District Development and Redevelopment Law, 65 ILCS 5/11-74.3-1 et seq., as amended (the "Act").

Section 2.      Recitals.

- a) The Village of Willowbrook, DuPage County, Illinois (the "Village"), is a duly constituted, organized and validly existing municipality within the State of Illinois, and is operating under the Illinois Municipal Code, 65 ILCS 5/1-1-1, et seq., as amended.
- b) The Mayor and Village Board of Trustees (the "Village Board") of the Village previously adopted Ordinance No. 16-O-\_\_\_ approving a Business District Plan for the Village of Willowbrook, Illinois Route 83/Plainfield Road Business District with respect to which a public hearing was held on July 11, 2016 (the "Business District Plan").
- c) The Village Board, pursuant to Ordinance No. 16-O-\_\_\_, made findings of the existence of conditions which

cause the area legally described in Exhibit A, attached hereto, and made a part of this Ordinance to be classified as a "blighted area" and a "business district" pursuant to the Act.

d) The Village Board finds that the Business District Plan conforms to the comprehensive plan for the development of the Village as a whole.

e) The area referred to in the Business District Plan as the "business district" includes only parcels of real property directly and substantially benefited by the Business District Plan.

f) It is now necessary and desirable to designate the area referred to in the Business District Plan as a "business district" pursuant to the Act.

Section 3.      Incorporation of Recitals.      The factual recitals in Section 2 are incorporated into this Section 3 as findings of fact.

Section 4.      Designation of Business District.      The area legally described in Exhibit A, attached hereto, and made a part of this Ordinance is hereby designated as the "Village of Willowbrook, Illinois Route 83/Plainfield Road Business District," (the "Business District") pursuant to Section 11-74.3-2 and Section 11-74.3-5 of the Act.

The boundaries of the Business District are generally described as a contiguous area bounded by 69<sup>th</sup> Street on the north, 72<sup>nd</sup> Court on the south, Illinois Route 83 on the west, and Adams Street and Willow Way Lane on the east, and includes adjacent rights of way. A map of the boundaries of the Business District is attached as Exhibit B. A list of the parcel identification numbers ("PINS") for each property within the Business District is attached hereto, and made a part hereof, as Exhibit C.

Section 5.      Filing With County Clerk.      The Village Clerk is directed to file a certified copy of this Ordinance with the DuPage County Clerk after the adoption and approval of this Ordinance.

Section 6.      Invalid Portions are Severable.      If any section, paragraph or provision of this Ordinance shall be held to be invalid or unenforceable for any reason, the invalidity or unenforceability of such section, paragraph or provision shall not affect the validity or enforceability of any of the remaining provisions of this Ordinance.

Section 7.      Superceder.      All ordinances, resolutions, motions and orders in conflict with this Ordinance are repealed to the extent of such conflict.

Section 8.      Effective Date.      This Ordinance shall be in full force and effect immediately upon its passage and approval, as provided by law.

**PASSED and APPROVED** this 11<sup>th</sup> day of July, 2016, by a roll call vote as follows:

ROLL CALL VOTE:	AYES:	_____
	NAYS:	_____
	ABSTENTIONS:	_____
	ABSENT:	_____

APPROVED:

\_\_\_\_\_  
Mayor

ATTEST:

\_\_\_\_\_  
Village Clerk

**EXHIBIT A**  
**TO**  
**ORDINANCE NO. 16-O-\_\_\_\_\_**

**LEGAL DESCRIPTION OF VILLAGE OF WILLOWBROOK,  
ILLINOIS ROUTE 83/PLAINFIELD ROAD BUSINESS DISTRICT**

THAT PART OF THE SOUTH HALF OF SECTION 23 AND THE NORTH HALF OF SECTION 26 TOWNSHIP 38 NORTH, RANGE 11 EAST OF THE THIRD PRINCIPAL MERIDIAN IN DUPAGE COUNTY, ILLINOIS, BEING DESCRIBED AS FOLLOWS:

BEGINNING AT THE MOST EASTERLY SOUTHEAST CORNER OF LOT 1 IN PERSEVERANCE SUBDIVISION, BEING A SUBDIVISION IN THE SOUTHEAST QUARTER OF SAID SECTION 23 AND THE NORTHEAST QUARTER OF SAID SECTION 26, ACCORDING TO THE PLAT THEREOF RECORDED JULY 30, 2007 AS DOCUMENT NO. R2007-141528; THENCE NORTHERLY, WESTERLY, NORTHERLY, EASTERLY AND NORTHERLY ALONG THE EAST LINE OF SAID LOT 1 TO A POINT ON THE SOUTH LINE OF LOT 1 IN WILLOWBROOK CENTER UNIT NO. 1, BEING A SUBDIVISION IN THE SOUTHEAST QUARTER OF SAID SECTION 23, ACCORDING TO THE PLAT THEREOF RECORDED OCTOBER 16, 1963 AS DOCUMENT NO. R63-37895; THENCE EASTERLY ALONG SAID SOUTH LINE TO THE SOUTHEAST CORNER OF SAID LOT 1; THENCE NORTHERLY ALONG THE EAST LINE OF SAID LOT 1 TO A POINT ON THE SOUTH LINE OF LOT 2 IN LENZ'S ASSESSMENT PLAT, BEING A SUBDIVISION IN THE SOUTHEAST QUARTER OF SAID SECTION 23, ACCORDING TO THE PLAT THEREOF RECORDED JULY 5, 1955 AS DOCUMENT NO. 763597; THENCE EASTERLY ALONG SAID SOUTH LINE AND ALONG THE EASTERLY EXTENSION THEREOF TO A POINT ON THE EAST RIGHT-OF-WAY LINE OF ADAMS STREET; THENCE NORTHERLY ALONG SAID EAST RIGHT-OF-WAY LINE TO A POINT ON THE NORTHERLY RIGHT-OF-WAY LINE OF PLAINFIELD ROAD; THENCE SOUTHWESTERLY ALONG SAID NORTHERLY RIGHT-OF-WAY LINE TO THE SOUTHWESTERLY CORNER OF LOT 1 IN 1<sup>ST</sup> BURLINGTON BANK, WILLOWBROOK RESUBDIVISION, BEING A SUBDIVISION IN THE SOUTHEAST QUARTER OF SAID SECTION 23, ACCORDING TO THE PLAT THEREOF RECORDED SEPTEMBER 23, 1986 AS DOCUMENT NO. R86-115152; THENCE NORTHERLY ALONG THE WEST LINE OF SAID LOT 1 AND ALONG THE NORTHERLY EXTENSION THEREOF TO A POINT ON THE NORTH RIGHT-OF-WAY LINE OF 69<sup>TH</sup> STREET; THENCE WESTERLY ALONG SAID NORTH RIGHT-OF-WAY LINE TO THE SOUTHWEST CORNER OF LOT 14 IN SCHILLER'S ADDITION, BEING A SUBDIVISION IN THE SOUTHEAST QUARTER OF SAID SECTION 23, ACCORDING TO THE PLAT THEREOF RECORDED JUNE 14, 1950 AS DOCUMENT NO. 595530; THENCE NORTHERLY ALONG THE WEST LINE OF SAID LOT 14 TO THE SOUTHWEST CORNER OF LOT 12 IN WEST TOWN DEVELOPMENT COMPANY'S RESUBDIVISION, BEING A

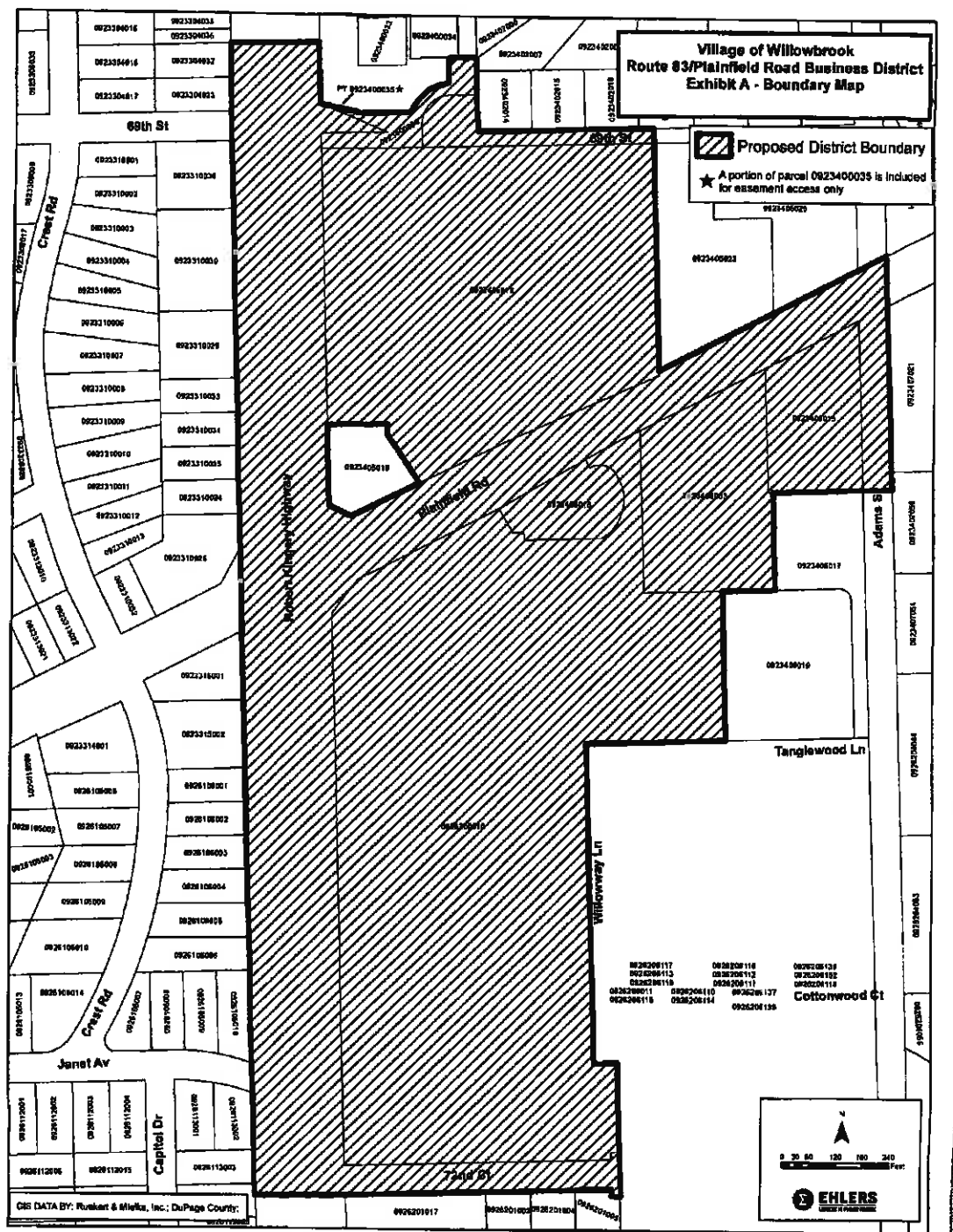
SUBDIVISION IN THE SOUTHEAST QUARTER OF SAID SECTION 23, ACCORDING TO THE PLAT THEREOF RECORDED JULY 22, 1955 AS DOCUMENT NO. 766039; THENCE NORTHERLY ALONG THE WEST LINE OF SAID LOT 12 AND ALONG THE WEST LINE OF LOT 13 IN SAID WEST TOWN DEVELOPMENT COMPANY'S RESUBDIVISION TO THE NORTHEAST CORNER OF PARCEL 1 IN WILLOWBROOK OFFICE PARK LOT 12 ASSESSMENT PLAT, BEING A SUBDIVISION IN THE SOUTHEAST QUARTER OF SAID SECTION 23, ACCORDING TO THE PLAT THEREOF RECORDED SEPTEMBER 8, 2005 AS DOCUMENT NO. R2005-197465; THENCE WESTERLY, SOUTHERLY, SOUTHWESTERLY AND WESTERLY ALONG THE NORTH LINE OF SAID PARCEL 1 115.50 FEET (MORE OR LESS) TO A POINT ON THE NORTHEASTERLY LINE OF A PERMANENT EASEMENT (AS SHOWN ON AN EASEMENT EXHIBIT PREPARED BY MANHARD CONSULTING, LTD AND DATED JUNE 9, 2016); THENCE NORTHWESTERLY ALONG SAID NORTHEASTERLY PERMANENT EASEMENT LINE TO A POINT ON THE EAST RIGHT-OF-WAY LINE OF ILLINOIS ROUTE 83; THENCE NORTHERLY ALONG SAID EAST RIGHT-OF-WAY LINE TO A POINT OF INTERSECTION WITH THE EASTERLY EXTENSION OF THE NORTH LINE OF LOT 15 IN BLOCK 35 IN TRI STATE VILLAGE UNIT NO. 5, BEING A SUBDIVISION IN THE SOUTHWEST QUARTER OF SAID SECTION 23 AND THE NORTHWEST QUARTER OF SAID SECTION 26, ACCORDING TO THE PLAT THEREOF RECORDED JULY 20, 1944 AS DOCUMENT NO. 465114; THENCE WESTERLY ALONG SAID EASTERLY EXTENSION TO A POINT ON THE WEST RIGHT-OF-WAY LINE OF SAID ILLINOIS ROUTE 83; THENCE SOUTHERLY ALONG SAID WEST RIGHT-OF-WAY LINE TO A POINT OF INTERSECTION WITH THE WESTERLY EXTENSION OF THE SOUTH RIGHT-OF-WAY LINE OF 72<sup>ND</sup> COURT; THENCE EASTERLY ALONG SAID WESTERLY EXTENSION TO A POINT OF INTERSECTION WITH SAID EAST RIGHT-OF-WAY LINE OF ILLINOIS ROUTE 83; THENCE EASTERLY, SOUTHERLY AND EASTERLY ALONG SAID SOUTH RIGHT-OF-WAY LINE OF 72<sup>ND</sup> COURT TO A POINT ON THE EAST LINE OF LOT 6 IN HINSDALE HIGHLAND ESTATES, BEING A SUBDIVISION IN THE NORTHEAST QUARTER OF SAID SECTION 26, ACCORDING TO THE PLAT THEREOF RECORDED JULY 23, 1954 AS DOCUMENT NO. 720969; THENCE NORTHERLY ALONG SAID EAST LINE EXTENDED NORTHERLY TO THE POINT OF BEGINNING.

EXCEPTING THEREFROM THE FOLLOWING DESCRIBED PARCEL (P.I.N. 09-23-405-019):

THAT PART OF LOT 4 WHICH LIES EAST OF THE EAST LINE OF ILLINOIS ROUTE 83 AND NORTHERLY OF THE NORTHERLY RIGHT-OF-WAY LINE OF PLAINFIELD ROAD AS PER PLAT OF DEDICATION RECORDED JUNE 27, 1961 AS DOCUMENT NO. R61-11952 AND WHICH LIES SOUTH OF A LINE DRAWN PERPENDICULAR TO THE EAST LINE OF SAID ILLINOIS ROUTE 83 TO A POINT WHICH IS 298.40 FEET NORTH OF THE CENTER LINE OF PLAINFIELD ROAD (MEASURED ALONG THE EAST LINE OF SAID ROUTE 83), ALSO, THAT PART OF LOT 3 WHICH LIES NORTHERLY OF THE NORTHERLY RIGHT-OF-WAY LINE OF PLAINFIELD ROAD AS PER PLAT OF DEDICATION

RECORDED JUNE 27, 1961 AS DOCUMENT NO. R61-11952, AND WHICH LIES SOUTHERLY OF A LINE DRAWN FROM A POINT IN THE WEST LINE OF SAID LOT 3, SAID POINT BEING 138.94 FEET NORTH OF THE NORTH LINE OF SAID PLAINFIELD ROAD (MEASURED ALONG SAID WEST LINE OF LOT 3) TO A POINT IN THE NORTHERLY LINE OF SAID PLAINFIELD ROAD, SAID LOTS 3 AND 4 BEING IN OWNER'S SUBDIVISION OF THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 23, AND THE WEST HALF OF THE NORTHEAST QUARTER OF SECTION 26, ALL IN TOWNSHIP 38 NORTH, RANGE 11 EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED APRIL 24, 1931 AS DOCUMENT NO. 311500, IN DUPAGE COUNTY, ILLINOIS.

## MAP OF VILLAGE OF WILLOWBROOK BUSINESS DISTRICT BOUNDARIES





**EXHIBIT C  
TO  
ORDINANCE NO. 16-O-\_\_\_\_\_**

<b>PINs</b>
09-23-400-036
09-23-405-018
09-23-406-003
09-23-406-015
09-23-406-018
09-26-200-010
09-23-400-035*

**\*A portion of this parcel is included for easement access only.**

**CERTIFICATION OF ORDINANCE**

I, the undersigned, certify that I am the duly qualified and acting Village Clerk of the Village of Willowbrook, DuPage County, Illinois (the "Village"), and that as such official I am the keeper of the records and files of the Mayor and Board of Trustees of the Village ("Village Board").

I further certify that the foregoing is a full, true and complete copy of Ordinance No. 16-O-\_\_\_\_\_ (the "Ordinance") adopted at the regular meeting of the Village Board held on July 11, 2016 entitled:

**AN ORDINANCE OF THE VILLAGE OF WILLOWBROOK,  
DUPAGE COUNTY, ILLINOIS, DESIGNATING THE VILLAGE OF  
WILLOWBROOK, ILLINOIS ROUTE 83/PLAINFIELD ROAD BUSINESS DISTRICT**

which was duly adopted at the meeting by a roll call vote of \_\_\_\_\_ in favor and \_\_\_\_\_ against, with \_\_\_\_\_ abstentions and \_\_\_\_\_ absent. At the meeting a quorum was present and acting throughout the meeting. The Ordinance has not been amended or repealed and remains in full force and effect.

I further certify that the deliberations of the Village Board on the adoption of the Ordinance were conducted openly, that the vote on the adoption of the Ordinance was taken openly, that the meeting was held at a specified time and place convenient to the public, that notice of the meeting was duly given to all of the news media requesting such notice, that a

copy of the agenda for the meeting was posted at least 72 hours prior to the convening of the meeting at the meeting place and at my offices at Village Hall, that the meeting was called and held in strict compliance with the provisions of the Illinois Municipal Code, as amended, and that in holding the meeting and adopting the Ordinance the Village Board complied with all of the provisions of the Open Meetings Act and the Municipal Code and with all of the procedural rules of the Village Board.

IN WITNESS WHEREOF, I hereunto affix my official signature and the seal of the Village as of this \_\_\_\_ day of July, 2016.

---

Village Clerk

[SEAL]

# VILLAGE OF WILLOWBROOK

## BOARD MEETING AGENDA ITEM - HISTORY/COMMENTARY

### ITEM TITLE:

AN ORDINANCE OF THE VILLAGE OF WILLOWBROOK, DUPAGE COUNTY, ILLINOIS, IMPOSING A BUSINESS DISTRICT RETAILERS' OCCUPATION TAX AND A BUSINESS DISTRICT SERVICE OCCUPATION TAX WITHIN THE VILLAGE OF WILLOWBROOK, ILLINOIS ROUTE 83/PLAINFIELD ROAD BUSINESS DISTRICT

AGENDA NO.

9

AGENDA DATE: 7/11/16

STAFF REVIEW: T. Halik, Vill. Admin. / C. Dittman, Dir. Of Finance

SIGNATURE: T. Halik / C. Dittman

LEGAL REVIEW: Thomas Bastian, Village Attorney

SIGNATURE: THOMAS BASTIAN TH.

RECOMMENDED BY: Tim Halik, Village Administrator

SIGNATURE: T. Halik

REVIEWED BY FINANCE & ADMINISTRATION COMMITTEE: YES ☒ on June 13, 2016 NO ☐ N/A ☐

### ITEM HISTORY (PREVIOUS VILLAGE BOARD REVIEWS, ACTIONS RELATED TO THIS ITEM, OTHER HISTORY)

As members of the Board are aware, owners of commercial properties located near Kingery Highway and Plainfield Road have faced challenges finalizing their proposed re-development projects plans given the high cost of required off-site improvements, including necessary traffic improvements. The Village has received requests for the consideration of public subsidies in order to make these projects financially viable. The public finance consultant Ehlers Associates was hired to review the financial data, including project pro formas and gap analysis reports, to assist in determining whether a public subsidy is warranted, and if so, what amount. The final report concluded that a public subsidy is warranted. After continued discussions with the commercial property owners, it was agreed that the creation of a new Business District Sales Tax was the preferred method to raise funding to provide the subsidies. If approved as proposed, the sales tax rate within the boundaries of the new Business District would be 1% higher (i.e., 8% versus 7% elsewhere in town). This 1% sales tax increment would be collected from the state, forwarded to the Village, and deposited into a separate Village fund. Eligible project expenses could be reimbursed to the developers from this fund to offset extraordinary development costs. In accordance with state law, the maximum term of a Business District is 23 years.

One of the benefits of this approach is that the sales tax rate in Willowbrook is already comparatively low as compared to other surrounding jurisdictions (please see attached sales tax comparison). After discussions, Ehlers was then asked to draft a Business District Plan for consideration (see attached draft copy of Plan).

### ITEM COMMENTARY (BACKGROUND, DISCUSSION, RECOMMENDATIONS, ETC.)

In accordance with the Illinois Business District Development and Redevelopment Law (65 ILCS 5/11-74.3-1 et seq.), attached is a proposed Business District Adoption Schedule as prepared by Ehlers Associates. Below are the general steps required to create this new Business District:

- June 27, 2016 – Adopt ord. proposing business district plan, setting time/place for a public hearing.
- July 1, 2016 – First public notice appears in Hinsdale Suburban Life.
- July 8, 2016 – Second public notice appears in Hinsdale Suburban Life.
- July 11, 2016 – Public hearing held before the Village Board to receive public comments.
- July 11, 2016 – Consideration of ord. to approve bus. district plan and designating the bus. district.
- October 1, 2016 – Deadline to file business district documents with the IDOR.

**ACTION PROPOSED:** Pass Ordinance. This is the third of three (3) ordinances to be considered by the Village Board this evening in order to establish the Illinois Route 83/Plainfield Road Business District. This particular ordinance will serve to impose a retailers' and service tax within the Village of Willowbrook, Illinois Route 83/Plainfield Road Business District, after receiving public comments.

ORDINANCE NO. 16-O-\_\_\_\_\_

AN ORDINANCE OF THE VILLAGE OF WILLOWBROOK,  
DUPAGE COUNTY, ILLINOIS, IMPOSING A BUSINESS DISTRICT  
RETAILERS' OCCUPATION TAX AND A BUSINESS DISTRICT SERVICE  
OCCUPATION TAX WITHIN THE VILLAGE OF WILLOWBROOK,  
ILLINOIS ROUTE 83/PLAINFIELD ROAD BUSINESS DISTRICT

NOW, THEREFORE, BE IT ORDAINED by the Mayor and Board of Trustees of the Village of Willowbrook, DuPage County, Illinois, as follows:

Section 1.      Authority.      This Ordinance is adopted pursuant to the Business District Development and Redevelopment Law, 65 ILCS 5/11-74.3-1 et seq., as amended (the "Act").

Section 2.      Recitals.

(A) The Village of Willowbrook, DuPage County, Illinois (the "Village"), is a duly constituted, organized and validly existing municipality within the State of Illinois, and is operating under the Illinois Municipal Code, 65 ILCS 5/1-1-1 et seq., as amended.

(B) The Mayor and the Village Board of Trustees (the "Village Board") of the Village previously adopted Ordinance No. 16-O-\_\_\_\_\_ and Ordinance No. 16-O-\_\_\_\_\_ approving a "business district plan" and designating a "business district," respectively, pursuant to the provisions of the Act with respect to the Village of Willowbrook, Illinois Route 83/Plainfield Road

Business District and has otherwise complied with all other conditions precedent required by the Act.

Section 3. Imposition of Business District Retailers' Occupation Tax and Business District Service Occupation Tax.

(A) A Business District Retailers' Occupation Tax and a Business District Service Occupation Tax, as those concepts are defined and set out in the Act, are hereby imposed with respect to the Village of Willowbrook, Illinois Route 83/Plainfield Road Business District adopted and approved pursuant to Ordinance No. 16-O-\_\_\_\_ (the "Business District Plan") with respect to the Village of Willowbrook, Illinois Route 83/Plainfield Road Business District legally described in Exhibit A attached hereto and made a part hereof, which was designated pursuant to Ordinance No. 16-O-\_\_\_\_ (the "Business District"), for the purposes of (i) paying for the planning, execution and implementation of the Business District and Business District Plan and to pay for "business district project costs" as set forth in the Business District Plan approved by the Village and (ii) paying debt service on obligations of the Village issued under the Act for the purpose of paying such business district project costs.

The boundaries of the Business District are generally described as a contiguous area bounded by 69<sup>th</sup> Street on the north, 72<sup>nd</sup> Court on the south, Illinois Route 83 on the west, and Adams Street and Willow Way Lane on the east, and includes adjacent rights of way. A map of the boundaries of the Business District is attached hereto and made a part hereof as Exhibit B. A list of the parcel identification numbers ("PINS") for each property within the Business District is attached hereto and made a part hereof as Exhibit C.

(B) The Business District Retailers Occupation Tax is imposed upon all persons, within the Business District, engaged in the business selling tangible personal property, other than an item of tangible personal property titled or registered with an agency of the State of Illinois' government, at retail. This tax shall not be imposed on food for human consumption that is to be consumed off the premises where it is sold (other than alcoholic beverages, soft drinks and food that has been prepared for immediate consumption), prescription and nonprescription medicines, drugs, medical appliances, modifications to a motor vehicle for the purposes of rendering it

usable by a disabled person, and insulin, urine testing materials, syringes, and needles used by diabetics, for human use.

(C) The Business District Service Occupation Tax is imposed upon all persons, within the Business District, engaged in the business of making sales of service, who, as an incident to making those sales of service, transfer tangible personal property within the Business District, either in the form of tangible personal property or in the form of real estate as an incident to a sale of service. This tax shall not be imposed on food for human consumption that is to be consumed off the premises where it is sold (other than alcoholic beverages, soft drinks and food that has been prepared for immediate consumption), prescription and nonprescription medicines, drugs, medical appliances, modifications to a motor vehicle for the purposes of rendering it usable by a disabled person, and insulin, urine testing materials, syringes, and needles used by diabetics, for human use.

Section 4. Rate of Business District Retailers' Occupation Tax and Business District Service Occupation Tax.

The rate of the Business District Retailers' Occupation Tax shall be one percent (1%) of the gross receipts from the sales



made in the course of such business. The rate of the Business District Service Occupation Tax shall also be one percent (1%) and shall not exceed one percent (1%) of the selling price of the tangible personal property so transferred within Business District. These taxes and all civil penalties that may be assessed as an incident thereof shall be collected, disbursed and enforced by the Illinois Department of Revenue. The Illinois Department of Revenue shall have the full power to administer and enforce the provisions of this Ordinance.

The imposition of the Business District Retailers' Occupation Tax and the Business District Service Occupation Tax is and shall be in accordance with the provisions of subsections (b) and (c), respectively, of Section 11-74.3-6 of the Illinois Municipal Code (65 ILCS 5/11-74.3-6).

Section 5. Establishment of Business District Tax Allocation Fund. Pursuant to the provisions of Section 11-74.3-6 of the Act, there is established a special fund of the Village called the "Village of Willowbrook, Illinois Route 83/Plainfield Road Business District Tax Allocation Fund."

Section 6. Filing of Ordinance. A certified copy of this Ordinance shall be filed with the DuPage County Clerk after the adoption and approval of this Ordinance. Further the Village Clerk, or his authorized designee, shall file a

certified copy of this Ordinance with the Illinois Department of Revenue on or before the first day of October 1, 2016.

Section 7.      Invalid Portions are Severable.      If any section, paragraph or provision of this Ordinance shall be held to be invalid or unenforceable for any reason, the invalidity or unenforceability of such section, paragraph or provision shall not affect any of the remaining provisions of this Ordinance.

Section 8.      Superceder.      All ordinances, resolutions, motions and orders in conflict with this Ordinance are repealed to the extent of such conflict.

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Section 9.      Effective Date.    This Ordinance shall be in full force and effect upon its passage and approval in the manner provided by law; provided, however, that the taxes imposed by Sections 3 and 4 of this Ordinance shall take effect on January 1, 2017.

**PASSED and APPROVED** this 11<sup>th</sup> day of July, 2016, by a roll call vote as follows:

ROLL CALL VOTE:	AYES:	_____
	NAYS:	_____
	ABSTENTIONS:	_____
	ABSENT:	_____

APPROVED:

\_\_\_\_\_  
Mayor

ATTEST:

\_\_\_\_\_  
Village Clerk

EXHIBIT A  
TO  
ORDINANCE NO. 16-O-\_\_\_\_\_

LEGAL DESCRIPTION OF  
VILLAGE OF WILLOWBROOK ROUTE 83/PLAINFIELD ROAD  
BUSINESS DISTRICT

THAT PART OF THE SOUTH HALF OF SECTION 23 AND THE NORTH HALF OF SECTION 26 TOWNSHIP 38 NORTH, RANGE 11 EAST OF THE THIRD PRINCIPAL MERIDIAN IN DUPAGE COUNTY, ILLINOIS, BEING DESCRIBED AS FOLLOWS:

BEGINNING AT THE MOST EASTERLY SOUTHEAST CORNER OF LOT 1 IN PERSEVERANCE SUBDIVISION, BEING A SUBDIVISION IN THE SOUTHEAST QUARTER OF SAID SECTION 23 AND THE NORTHEAST QUARTER OF SAID SECTION 26, ACCORDING TO THE PLAT THEREOF RECORDED JULY 30, 2007 AS DOCUMENT NO. R2007-141528; THENCE NORTHERLY, WESTERLY, NORTHERLY, EASTERLY AND NORTHERLY ALONG THE EAST LINE OF SAID LOT 1 TO A POINT ON THE SOUTH LINE OF LOT 1 IN WILLOWBROOK CENTER UNIT NO. 1, BEING A SUBDIVISION IN THE SOUTHEAST QUARTER OF SAID SECTION 23, ACCORDING TO THE PLAT THEREOF RECORDED OCTOBER 16, 1963 AS DOCUMENT NO. R63-37895; THENCE EASTERLY ALONG SAID SOUTH LINE TO THE SOUTHEAST CORNER OF SAID LOT 1; THENCE NORTHERLY ALONG THE EAST LINE OF SAID LOT 1 TO A POINT ON THE SOUTH LINE OF LOT 2 IN LENZ'S ASSESSMENT PLAT, BEING A SUBDIVISION IN THE SOUTHEAST QUARTER OF SAID SECTION 23, ACCORDING TO THE PLAT THEREOF RECORDED JULY 5, 1955 AS DOCUMENT NO. 763597; THENCE EASTERLY ALONG SAID SOUTH LINE AND ALONG THE EASTERLY EXTENSION THEREOF TO A POINT ON THE EAST RIGHT-OF-WAY LINE OF ADAMS STREET; THENCE NORTHERLY ALONG SAID EAST RIGHT-OF-WAY LINE TO A POINT ON THE NORTHERLY RIGHT-OF-WAY LINE OF PLAINFIELD ROAD; THENCE SOUTHWESTERLY ALONG SAID NORTHERLY RIGHT-OF-WAY LINE TO THE SOUTHWESTERLY CORNER OF LOT 1 IN 1<sup>ST</sup> BURLINGTON BANK, WILLOWBROOK RESUBDIVISION, BEING A SUBDIVISION IN THE SOUTHEAST QUARTER OF SAID SECTION 23, ACCORDING TO THE PLAT THEREOF RECORDED SEPTEMBER 23, 1986 AS DOCUMENT NO. R86-115152; THENCE NORTHERLY ALONG THE WEST LINE OF SAID LOT 1 AND ALONG THE NORTHERLY EXTENSION THEREOF TO A POINT ON THE NORTH RIGHT-OF-WAY LINE OF 69<sup>TH</sup> STREET; THENCE WESTERLY ALONG SAID NORTH RIGHT-OF-WAY LINE TO THE SOUTHWEST CORNER OF LOT 14 IN SCHILLER'S ADDITION, BEING A SUBDIVISION IN THE SOUTHEAST QUARTER OF SAID SECTION 23, ACCORDING TO THE PLAT THEREOF RECORDED JUNE 14, 1950 AS DOCUMENT NO. 595530; THENCE NORTHERLY

ALONG THE WEST LINE OF SAID LOT 14 TO THE SOUTHWEST CORNER OF LOT 12 IN WEST TOWN DEVELOPMENT COMPANY'S RESUBDIVISION, BEING A SUBDIVISION IN THE SOUTHEAST QUARTER OF SAID SECTION 23, ACCORDING TO THE PLAT THEREOF RECORDED JULY 22, 1955 AS DOCUMENT NO. 766039; THENCE NORTHERLY ALONG THE WEST LINE OF SAID LOT 12 AND ALONG THE WEST LINE OF LOT 13 IN SAID WEST TOWN DEVELOPMENT COMPANY'S RESUBDIVISION TO THE NORTHEAST CORNER OF PARCEL 1 IN WILLOWBROOK OFFICE PARK LOT 12 ASSESSMENT PLAT, BEING A SUBDIVISION IN THE SOUTHEAST QUARTER OF SAID SECTION 23, ACCORDING TO THE PLAT THEREOF RECORDED SEPTEMBER 8, 2005 AS DOCUMENT NO. R2005-197465; THENCE WESTERLY, SOUTHERLY, SOUTHWESTERLY AND WESTERLY ALONG THE NORTH LINE OF SAID PARCEL 1 115.50 FEET (MORE OR LESS) TO A POINT ON THE NORTHEASTERLY LINE OF A PERMANENT EASEMENT (AS SHOWN ON AN EASEMENT EXHIBIT PREPARED BY MANHARD CONSULTING, LTD AND DATED JUNE 9, 2016); THENCE NORTHWESTERLY ALONG SAID NORTHEASTERLY PERMANENT EASEMENT LINE TO A POINT ON THE EAST RIGHT-OF-WAY LINE OF ILLINOIS ROUTE 83; THENCE NORTHERLY ALONG SAID EAST RIGHT-OF-WAY LINE TO A POINT OF INTERSECTION WITH THE EASTERLY EXTENSION OF THE NORTH LINE OF LOT 15 IN BLOCK 35 IN TRI STATE VILLAGE UNIT NO. 5, BEING A SUBDIVISION IN THE SOUTHWEST QUARTER OF SAID SECTION 23 AND THE NORTHWEST QUARTER OF SAID SECTION 26, ACCORDING TO THE PLAT THEREOF RECORDED JULY 20, 1944 AS DOCUMENT NO. 465114; THENCE WESTERLY ALONG SAID EASTERLY EXTENSION TO A POINT ON THE WEST RIGHT-OF-WAY LINE OF SAID ILLINOIS ROUTE 83; THENCE SOUTHERLY ALONG SAID WEST RIGHT-OF-WAY LINE TO A POINT OF INTERSECTION WITH THE WESTERLY EXTENSION OF THE SOUTH RIGHT-OF-WAY LINE OF 72<sup>ND</sup> COURT; THENCE EASTERLY ALONG SAID WESTERLY EXTENSION TO A POINT OF INTERSECTION WITH SAID EAST RIGHT-OF-WAY LINE OF ILLINOIS ROUTE 83; THENCE EASTERLY, SOUTHERLY AND EASTERLY ALONG SAID SOUTH RIGHT-OF-WAY LINE OF 72<sup>ND</sup> COURT TO A POINT ON THE EAST LINE OF LOT 6 IN HINSDALE HIGHLAND ESTATES, BEING A SUBDIVISION IN THE NORTHEAST QUARTER OF SAID SECTION 26, ACCORDING TO THE PLAT THEREOF RECORDED JULY 23, 1954 AS DOCUMENT NO. 720969; THENCE NORTHERLY ALONG SAID EAST LINE EXTENDED NORTHERLY TO THE POINT OF BEGINNING.

EXCEPTING THEREFROM THE FOLLOWING DESCRIBED PARCEL (P.I.N. 09-23-405-019):

THAT PART OF LOT 4 WHICH LIES EAST OF THE EAST LINE OF ILLINOIS ROUTE 83 AND NORTHERLY OF THE NORTHERLY RIGHT-OF-WAY LINE OF PLAINFIELD ROAD AS PER PLAT OF DEDICATION RECORDED JUNE 27, 1961 AS DOCUMENT NO. R61-11952 AND WHICH LIES SOUTH OF A LINE DRAWN PERPENDICULAR TO THE EAST LINE OF SAID ILLINOIS ROUTE 83 TO A POINT WHICH IS 298.40 FEET NORTH OF THE CENTER LINE OF

PLAINFIELD ROAD (MEASURED ALONG THE EAST LINE OF SAID ROUTE 83), ALSO, THAT PART OF LOT 3 WHICH LIES NORTHERLY OF THE NORTHERLY RIGHT-OF-WAY LINE OF PLAINFIELD ROAD AS PER PLAT OF DEDICATION RECORDED JUNE 27, 1961 AS DOCUMENT NO. R61-11952, AND WHICH LIES SOUTHERLY OF A LINE DRAWN FROM A POINT IN THE WEST LINE OF SAID LOT 3, SAID POINT BEING 138.94 FEET NORTH OF THE NORTH LINE OF SAID PLAINFIELD ROAD (MEASURED ALONG SAID WEST LINE OF LOT 3) TO A POINT IN THE NORTHERLY LINE OF SAID PLAINFIELD ROAD, SAID LOTS 3 AND 4 BEING IN OWNER'S SUBDIVISION OF THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 23, AND THE WEST HALF OF THE NORTHEAST QUARTER OF SECTION 26, ALL IN TOWNSHIP 38 NORTH, RANGE 11 EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED APRIL 24, 1931 AS DOCUMENT NO. 311500, IN DUPAGE COUNTY, ILLINOIS.

EXHIBIT B  
TO  
ORDINANCE NO. 16-O-

MAP OF  
VILLAGE OF WILLOWBROOK ROUTE 83/PLAINFIELD ROAD  
BUSINESS DISTRICT BOUNDARIES

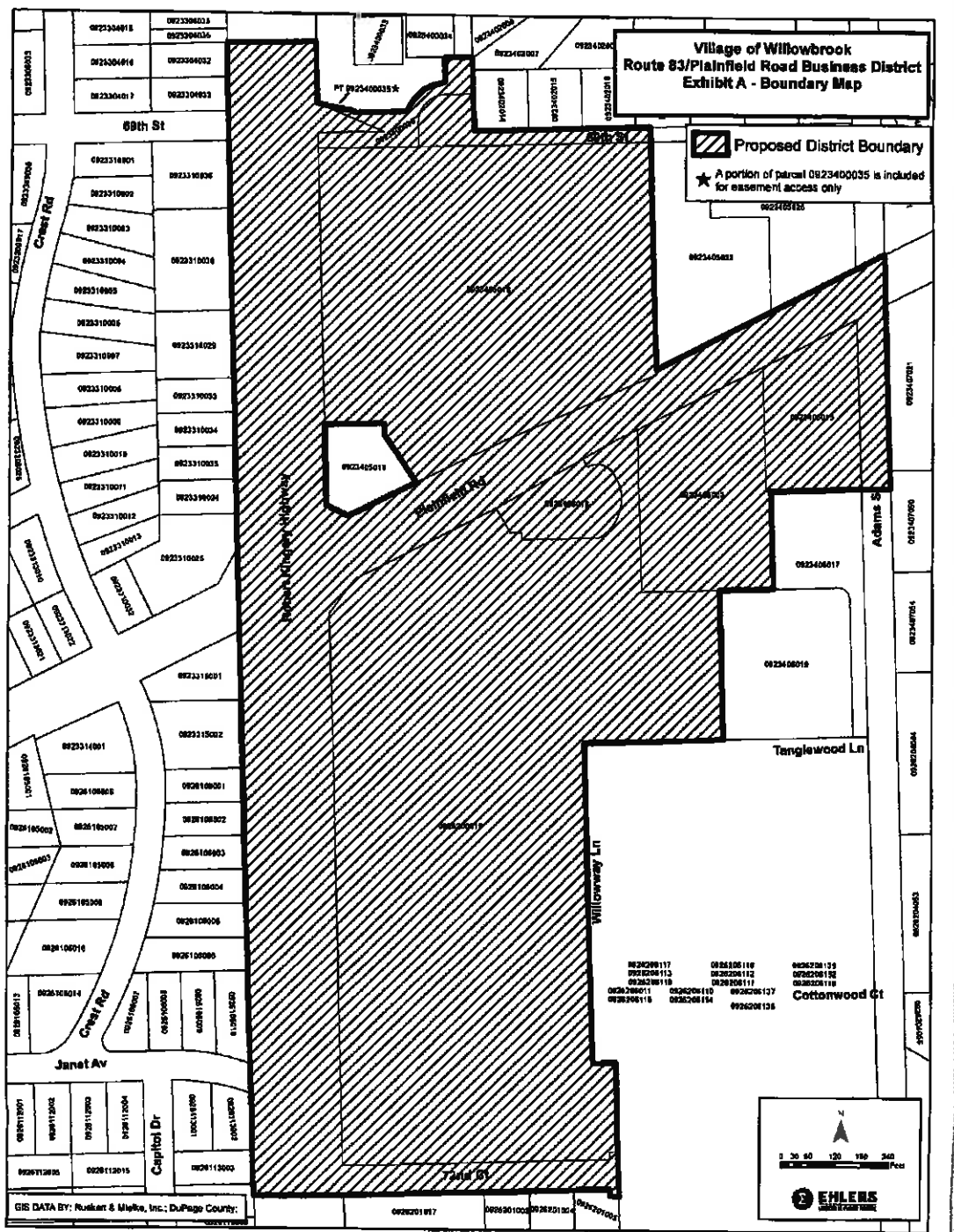


EXHIBIT C  
TO  
ORDINANCE NO. 16-O-\_\_\_\_\_

PINs
09-23-400-036
09-23-405-018
09-23-406-003
09-23-406-015
09-23-406-018
09-26-200-010
09-23-400-035*

\*A portion of this parcel is included for easement access only.



# CERTIFICATION OF ORDINANCE

I, the undersigned, certify that I am the duly qualified and acting Village Clerk of the Village of Willowbrook, DuPage County, Illinois (the "Village"), and that as such official I am the keeper of the records and files of the Mayor and Board of Trustees of the Village ("Village Board").

I further certify that the foregoing is a full, true and complete copy of Ordinance No.16-O-\_\_\_\_\_ (the "Ordinance") adopted at the regular meeting of the Village Board held on July 11, 2016 entitled:

**AN ORDINANCE OF THE VILLAGE OF WILLOWBROOK,  
DUPAGE COUNTY, ILLINOIS, IMPOSING A BUSINESS DISTRICT  
RETAILERS' OCCUPATION TAX AND A BUSINESS DISTRICT SERVICE  
OCCUPATION TAX WITHIN THE VILLAGE OF WILLOWBROOK,  
ILLINOIS ROUTE 83/PLAINFIELD ROAD BUSINESS DISTRICT**

which was duly adopted at the meeting by a roll call vote of \_\_\_\_\_ in favor and \_\_\_\_\_ against, with \_\_\_\_\_ abstentions and \_\_\_\_\_ absent. At the meeting a quorum was present and acting throughout the meeting. The Ordinance has not been amended or repealed and remains in full force and effect.

I further certify that the deliberations of the Village Board on the adoption of the Ordinance were conducted openly, that the vote on the adoption of the Ordinance was taken openly, that the meeting was held at a specified time and place

convenient to the public, that notice of the meeting was duly given to all of the news media requesting such notice, that a copy of the agenda for the meeting was posted at least 72 hours prior to the convening of the meeting at the meeting place and at my offices at Village Hall, that the meeting was called and held in strict compliance with the provisions of the Illinois Municipal Code, as amended, and that in holding the meeting and adopting the Ordinance the Village Board complied with all of the provisions of the Open Meetings Act and the Municipal Code and with all of the procedural rules of the Village Board.

IN WITNESS WHEREOF, I hereunto affix my official signature and the seal of the Village as of this \_\_\_\_ day of July, 2016.

---

Village Clerk

[SEAL]

# VILLAGE OF WILLOWBROOK

## BOARD MEETING AGENDA ITEM - HISTORY/COMMENTARY

### ITEM TITLE:

A RESOLUTION AWARDING THE FISCAL YEAR 2016/17 MOTOR FUEL TAX ROADWAY MAINTENANCE PROGRAM CONTRACT TO CROWLEY-SHEPPARD ASPHALT, INC. IN THE AMOUNT OF \$263,720.81

AGENDA NO. **10**

AGENDA DATE: 7/11/16

**STAFF REVIEW:** Tim Halik,  
Village Administrator

SIGNATURE: \_\_\_\_\_

**LEGAL REVIEW:** Tom Bastian, Village Attorney

SIGNATURE: \_\_\_\_\_

**RECOMMENDED BY:** Tim Halik,  
Village Administrator

SIGNATURE: \_\_\_\_\_

**REVIEWED & APPROVED BY COMMITTEE:** YES ☐ NO ☒ N/A ☐

### ITEM HISTORY (PREVIOUS VILLAGE BOARD REVIEWS, ACTIONS RELATED TO THIS ITEM, PERTINENT HISTORY)

This year's Motor Fuel Tax (MFT) Roadway Maintenance Program will include the resurfacing of 1.47 miles of roadways within the southwest quadrant of the Village, crack sealing in various areas, full-depth patching on various streets throughout the Village, and replacement of worn pavement markings. The public bid opening for this year's program was held at the Village Hall on Monday, June 20, 2016 at 10:00 AM. A total of three (3) sealed bids were received prior to the deadline:

<u>VENDOR</u>	<u>BID AMOUNT</u> <u>Base Bid</u>	<u>BID AMOUNT</u> <u>Base + Alternate Bid</u>
<i>(Engineer's Estimate)</i>	<i>(\$273,791.34)</i>	<i>(\$348,410.46)</i>
<b>Crowley-Sheppard Asphalt, Inc.</b>	<b>\$202,183.49</b>	<b>\$263,720.81</b>
Brothers Asphalt Paving, Inc.	\$217,872.47	\$273,264.18
K-Five Construction Corp.	\$239,741.00	\$293,235.00

Crowley-Sheppard Asphalt, Inc. is an IDOT pre-qualified bidder, and they have performed work in the Village in the past, including annual roadway maintenance programs. The company is well qualified to complete our roadway maintenance program this year.

The base bid + alternate bid amount of \$263,720.81 is \$84,689.65 below the engineer's estimate of probable cost for the project. The Village had allocated a total of \$286,878.92 to be spent in this year's road maintenance program. Therefore, this bid amount is \$23,158.11 below the set project budget. This will help offset any added expenses from the Clarendon Hills Road STP project currently underway.

### STAFF RECOMMENDATION:

Staff would recommend that the attached resolution authorizing the Mayor and Village Clerk to award the contract for the 2016 MFT Roadway Maintenance Program to Crowley-Sheppard Asphalt, Inc. in the amount of \$263,720.81 be adopted. Once the Village Board awards the contract, staff will schedule a preconstruction meeting with the contractor. After which, the Village will issue the Notice to Proceed, and the work will begin. Staff anticipates that the work would start this month.



**CHRISTOPHER B. BURKE ENGINEERING, LTD.**

9575 West Higgins Road Suite 600 Rosemont, Illinois 60018 TEL (847) 823-0500 FAX (847) 823-0520

June 22, 2016

Village of Willowbrook  
835 Midway Drive  
Willowbrook, IL 60527

Attention: Tim Halik, Village Administrator

Subject: 2016 MFT Road Program  
MFT Section No. 16-00000-01-GM  
(CBBEL Project No. 90144-H181)

Dear Tim:

Christopher B. Burke Engineering, Ltd. solicited public bids for the construction of the 2016 MFT Road Program at the direction of the Village. Three (3) bidders obtained bidding documents and three (3) submitted bids which were opened publicly on June 20, 2016 at the Village Hall and the results were as follows:

BIDDER NAME	BASE BID AMOUNT	ALTERNATE BID AMOUNT
Crowley-Sheppard Asphalt Inc.	\$202,183.49	\$263,720.81
Brothers Asphalt Paving, Inc.	\$217,872.47	\$273,264.18
K-Five Construction Corporation	\$239,741.00	\$293,235.00
ENGINEER'S ESTIMATE	\$273,791.34	\$348,410.46

All bids were less than the engineer's estimate. The project bid tabulation is attached for your use.

The lowest responsive bidder, Crowley-Sheppard Asphalt Inc. were awarded contracts with the Village in the past and have performed the paving work satisfactorily. We recommend the Village Board award the alternate bid (includes Midway Dr. resurfacing) construction contract for the 2016 MFT Road Program to Crowley-Sheppard Asphalt Inc. in the amount of \$263,720.81.

If you should have any questions, please feel free to contact me.

Sincerely,

  
Martin Bojovic, PE, CFM  
Municipal Engineer

2016 MFT Program  
Village of Willowbrook  
Bid Opening at Village Hall  
June 20, 2016 at 10:00 AM  
**BASE BID**  
CBBEL Job No. 90-144H181  
Prepared June 21, 2016

Base Bid		Engineer's Estimate of Probable Cost				Crowley-Sheppard Asphalt Inc.		Brothers Asphalt Paving, Inc.		K-Five Construction Corp.	
Item No.	Item	Unit	Quantity	Unit Price	Total	Unit Price	Total	Unit Price	Total	Unit Price	Total
40300100	Bituminous Materials (Tack Coat)	LB	7,599	\$0.66	\$5,015.34	\$0.01	\$75.99	\$0.38	\$2,887.62	\$0.01	\$75.99
40603335	Hot-Mix Asphalt Surface Course, Mix "D", N50	TON	1,520	\$81.00	\$123,120.00	\$72.00	\$109,440.00	\$70.00	\$106,400.00	\$76.00	\$115,520.00
*60300305	Frames and Lids to be Adjusted	EACH	3	\$750.00	\$2,250.00	\$300.00	\$900.00	\$500.00	\$1,500.00	\$700.00	\$2,100.00
78000650	Thermoplastic Pavement Marking - Line 24" (Stop Bar)	FOOT	106	\$8.00	\$848.00	\$25.00	\$2,650.00	\$12.10	\$1,282.60	\$6.00	\$636.00
70102620	Traffic Control And Protection, Standard 701501	LSUM	1	\$20,000.00	\$20,000.00	\$2,500.00	\$2,500.00	\$8,000.00	\$8,000.00	\$25,576.01	\$25,576.01
78000200	Thermoplastic Pavement Marking - Line 4" (White)	FOOT	2,500	\$0.85	\$2,125.00	\$0.60	\$1,500.00	\$1.65	\$4,125.00	\$1.00	\$2,500.00
*N/A	Hot-Mix Asphalt Surface Removal, 1 1/2" (Special)	SQ YD	9,061	\$3.00	\$27,183.00	\$2.50	\$22,652.50	\$2.25	\$20,387.25	\$3.00	\$27,183.00
*N/A	Class D Patch, 6" (Special)	SQ YD	350	\$75.00	\$26,250.00	\$55.00	\$19,250.00	\$62.00	\$21,700.00	\$55.00	\$19,250.00
*N/A	Crack Filling (Special)	LB	33,500	\$2.00	\$67,000.00	\$1.29	\$43,215.00	\$1.54	\$51,590.00	\$1.40	\$46,900.00
Grand Total					\$273,791.34	\$202,183.49		\$217,872.47		\$239,741.00	



Alternate Bid		Engineer's Estimate of Probable Cost				Crowley-Sheppard Asphalt Inc.		Brothers Asphalt Paving, Inc.		K-Five Construction Corp.	
Item No.	Item	Unit	Quantity	Unit Price	Total	Unit Price	Total	Unit Price	Total	Unit Price	Total
40300100	Bituminous Materials (Tack Coat)	LB	10,681	\$0.66	\$7,049.46	\$0.01	\$106.81	\$0.38	\$4,058.78	\$0.01	\$106.81
40603335	Hot-Mix Asphalt Surface Course, Mix "D", N50	TON	2,136	\$81.00	\$173,016.00	\$72.00	\$153,792.00	\$68.00	\$145,248.00	\$76.00	\$162,336.00
*60300305	Frames and Lids to be Adjusted	EACH	4	\$750.00	\$3,000.00	\$300.00	\$1,200.00	\$500.00	\$2,000.00	\$700.00	\$2,800.00
78000650	Thermoplastic Pavement Marking - Line 24" (Stop Bar)	FOOT	134	\$8.00	\$1,072.00	\$5.50	\$737.00	\$6.60	\$884.40	\$4.00	\$536.00
70102620	Traffic Control And Protection, Standard 701501	LSUM	1	\$20,000.00	\$20,000.00	\$3,000.00	\$3,000.00	\$8,000.00	\$8,000.00	\$25,575.83	\$25,575.83
78000200	Thermoplastic Pavement Marking - Line 4" (White)	FOOT	7,100	\$0.85	\$6,035.00	\$0.80	\$5,680.00	\$0.77	\$5,467.00	\$0.65	\$4,615.00
*N/A	Hot-Mix Asphalt Surface Removal, 1 1/2" (Special)	SQ YD	12,496	\$3.00	\$37,488.00	\$2.50	\$31,240.00	\$2.25	\$28,116.00	\$2.41	\$30,115.36
*N/A	Class D Patch, 6" (Special)	SQ YD	450	\$75.00	\$33,750.00	\$55.00	\$24,750.00	\$62.00	\$27,900.00	\$45.00	\$20,250.00
*N/A	Crack Filling (Special)	LB	33,500	\$2.00	\$67,000.00	\$1.29	\$43,215.00	\$1.54	\$51,590.00	\$1.40	\$46,900.00
Grand Total					\$348,410.46		\$263,720.81		\$273,264.18		\$293,235.00



RETURN WITH BID

PROPOSAL

County Du Page  
Local Public Agency Willowbrook  
Section Number 16-00000-01-GM  
Route Various Streets

1. Proposal of Crowley-Sheppard Asphalt Inc

for the improvement of the above section by the construction of 2016 MFT Road Program - Various Streets  
HMA Surface Removal, HMA Surface Overlay, Class D Patching (Special), Crack Filling, Thermoplastic Pavement Marking  
Striping, and Adjust Frames and Lids

a total distance of 7800.00 feet, of which a distance of 7800.00 feet, ( 1.47 miles) are to be improved.

2. The plans for the proposed work are those prepared by Christopher B. Burke Engineering, LTD  
and approved by the Department of Transportation on \_\_\_\_\_
3. The specifications referred to herein are those prepared by the Department of Transportation and designated as  
"Standard Specifications for Road and Bridge Construction" and the "Supplemental Specifications and Recurring Special  
Provisions" thereto, adopted and in effect on the date of invitation for bids.
4. The undersigned agrees to accept, as part of the contract, the applicable Special Provisions indicated on the "Check  
Sheet for Recurring Special Provisions" contained in this proposal.
5. The undersigned agrees to complete the work within 25 working days or by \_\_\_\_\_  
unless additional time is granted in accordance with the specifications.
6. A proposal guaranty in the proper amount, as specified in BLRS Special Provision for Bidding Requirements and  
Conditions for Contract Proposals, will be required. Bid Bonds will be allowed as a proposal guaranty. Accompanying this  
proposal is either a bid bond if allowed, on Department form BLR 12230 or a proposal guaranty check, complying with the  
specifications, made payable to:

The Village of Willowbrook Treasurer of \_\_\_\_\_

The amount of the check is 5% BID BOND ( \_\_\_\_\_ ).

7. In the event that one proposal guaranty check is intended to cover two or more proposals, the amount must be equal to  
the sum of the proposal guaranties, which would be required for each individual proposal. If the proposal guaranty check  
is placed in another proposal, it will be found in the proposal for: Section Number \_\_\_\_\_.
8. The successful bidder at the time of execution of the contract will be required to deposit a contract bond for the full  
amount of the award. When a contract bond is not required, the proposal guaranty check will be held in lieu thereof. If this  
proposal is accepted and the undersigned fails to execute a contract and contract bond as required, it is hereby agreed  
that the Bid Bond or check shall be forfeited to the Awarding Authority.
9. Each pay item should have a unit price and a total price. If no total price is shown or if there is a discrepancy between the  
product of the unit price multiplied by the quantity, the unit price shall govern. If a unit price is omitted, the total price will  
be divided by the quantity in order to establish a unit price.
10. A bid will be declared unacceptable if neither a unit price nor a total price is shown.
11. The undersigned submits herewith the schedule of prices on BLR 12200a covering the work to be performed under this  
contract.
12. The undersigned further agrees that if awarded the contract for the sections contained in the combinations on  
BLR 12200a, the work shall be in accordance with the requirements of each individual proposal for the multiple bid  
specified in the Schedule for Multiple Bids below.

## SCHEDULE OF PRICES

### **Schedule for Multiple Bids**

### Schedule for Single Bid

**Bidder's Proposal for making Entire Improvements** **202183.49**

[illegible]



## RETURN WITH BID

**Bidder's Proposal for making Entire Improvements**

202 183.49

**BASE BID ONLY**

[illegible]

## RETURN WITH BID

Bidder's Proposal for making Entire Improvements	202,183.49
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**BASE BID ONLY**

[illegible]

## SCHEDULE OF PRICES

### **Schedule for Multiple Bids**

4

263 720.81

## BLR 12200a (01/08/14)

## RETURN WITH BID

**Bidder's Proposal for making Entire Improvements** 263 720.81

**ALTERNATE BID ONLY**

[illegible]

## RETURN WITH BID

### Bidder's Proposal for making Entire Improvements

263 720.81

**ALTERNATE BID ONLY**

[illegible]

## **BID SUMMARY**

### **BASE BID**

BASE BID	\$ 202,183.49 (FIGURES)
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BIDDER'S PROPOSAL FOR **BASE BID** – VILLAGE OF WILLOWBROOK 2016 MFT PROGRAM

Two hundred two thousand one hundred eighty three dollars forty nine cents  
(WORDS)

### **ALTERNATE BID**

ALTERNATE BID (BASE BID PLUS RESURFACING OF MIDWAY DR)	\$ 263,720.81 (FIGURES)
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BIDDER'S PROPOSAL FOR **ALTERNATE BID** – VILLAGE OF WILLOWBROOK 2016 MFT PROGRAM

Two hundred sixty three thousand seven hundred twenty dollars eighty one cents  
(WORDS)

The Village of Willowbrook reserves the right to award the contract to the lowest responsible Bidder for the BASE BID or for the ALTERNATE BID, based upon the Village's best financial interest. Each Bidder must submit bids for the BASE BID and the ALTERNATE BID to be eligible for the award of the contract. Failure to do so will result in rejection of the CONTRACTOR'S bid.

RESOLUTION NO. 16-R-\_\_\_\_\_

A RESOLUTION AWARDDING THE FISCAL YEAR 2016/17 MOTOR FUEL  
TAX ROADWAY MAINTENANCE PROGRAM CONTRACT TO CROWLEY-  
SHEPPARD ASPHALT, INC. IN THE AMOUNT OF \$263,720.81

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BE IT RESOLVED by the Mayor and Board of Trustees of the Village of Willowbrook,  
DuPage County, Illinois, to accept the low bid received from Crowley-Sheppard Asphalt, Inc. in the  
amount of \$263,720.81 for the Village of Willowbrook's Fiscal Year 2016/17 Motor Fuel Tax  
Roadway Maintenance Program and that the Mayor and Village Clerk be authorized to sign the  
appropriate documents authorizing this work in the amount of \$263,720.81

ADOPTED and APPROVED this 11<sup>th</sup> day of July, 2016

APPROVED:

\_\_\_\_\_  
Mayor

ATTEST:

\_\_\_\_\_  
Village Clerk

ROLL CALL VOTE:

AYES: \_\_\_\_\_

NAYS: \_\_\_\_\_

ABSTENTIONS: \_\_\_\_\_

ABSENT: \_\_\_\_\_