

Engineering / Traffic Operations Center (TOC)

Paul P. Holzen, Director

ENGINEERING

The Engineering Department plans for the future infrastructure needs of the City of Franklin and consists of three divisions. The divisions include Engineering, Traffic Operations and Stormwater. The department works with other City Departments, elected officials, and the public to ensure that our infrastructure is designed and installed properly and that it meets all Local, State and Federal standards and guidelines. Both City-funded and private infrastructure projects are managed and reviewed by the Engineering Department.

The Traffic Operations Division manages the transportation network within the City of Franklin and is responsible for signal timing. A goal of the Traffic Operations Division is to perform timing optimizations for signal systems. Currently there are three major systems in the City - Cool Springs, SR 96 E (Murfreesboro Rd.), and Downtown (Main St, Fifth Ave, Columbia Ave). An optimization is like a tune-up for a car engine. Everyone that uses those optimized systems saves time and fuel over the previous conditions they may have experienced.

The Stormwater Division helps the City maintain compliance with mandates set by the Federal (EPA) and State (TDEC) Governments to minimize stormwater runoff pollution. Under the Clean Water Act of 1972, the Environmental Protection Agency (EPA) requires municipalities like Franklin to manage stormwater. The City has received a Phase II Municipal Separate Storm Sewer System (MS4) Permit from the Tennessee Department of Environment and Conservation (TDEC) to allow Franklin to discharge stormwater into nearby rivers and streams.

TRANSPORTATION OPERATIONS CENTER (TOC)

The Traffic Operations Center (TOC) provides traffic management services to the City of Franklin. The center currently manages 103 traffic signals and 22 Closed Circuit Television (CCTV) cameras. In past years the TOC has worked towards providing better traffic flow throughout the City through the Congestion Management Program. That program requires data collection at each of those intersections every 3 years and optimizing the signal timing in each of the City's main corridors.

That work continues as we work towards providing a communications network that allows us to manage and monitor traffic conditions better. FY 2012-2013 provided a major increase in the infrastructure necessary to provide this service when we increased our CCTV cameras from 12 to 22 and the number of traffic signals we communicate directly with from 52 to 66.

The TOC will be addressing new challenges as we move into the future. First will be the Comprehensive Transportation Network Plan which will study the transportation network with attention to the roadway network, bike and pedestrian facilities and transit. This study will replace the traditional Major Thoroughfare Plan Update and will provide a more complete planning document for use by the city in applying for Federal Highway Administration or Federal Transit Administration funding. The second challenge is to deploy an Adaptive Traffic

Signal Control System in the Cool Springs Area. This action will provide the benefits of constant signal optimization.

Traffic Data Collection Program:

Traffic Counts or Data Collection have been and continue to be the most basic building blocks of any traffic management system. With the rapid growth and development of the City of Franklin in the recent past, traffic volumes have also grown and developed. This program was designed to perform “turning movement counts” for each peak hour at each of our nearly 103 signalized intersections every three years.

1. SR 96 E, Mack Hatcher and Hillsboro Rd Corridors.
2. Cool Springs Blvd, Carothers Parkway and Mallory Lane Corridors.
3. Downtown Franklin, SR 96 W and Franklin Road Corridors.

The data collected is used to develop traffic signal timing plans that will best move traffic with highest degree of safety and minimal delay. By utilizing traffic modeling software, we develop intersection timing plans that best manage those rush hour flows.

Traffic Signal Timing Optimization Program:

Traffic Signal Optimization is the primary activity utilizing the data collected by the Annual Traffic Data Collection Program. A 2005 Institute of Transportation Engineers White Paper on *Benefits of Retiming Traffic Signals* states, “An operating agency with a budget to retime traffic signals every 3 years, especially in developing areas and/or areas with sustained growth, will maintain a high quality of traffic operations.”

STORMWATER

One of the Stormwater Division’s goals is to reduce and eliminate non-stormwater flows (called illicit discharges) from the City of Franklin Municipal Separate Storm Sewer System (MS4) to improve water quality in the Harpeth River Watershed. MS4s discharge directly to rivers and streams without being treated at a treatment plant. This means whatever washes into the city’s storm sewer system ends up in our rivers and streams. By monitoring each outfall point, the City is able to identify and eliminate sources of water pollution. The City will inform public employees, businesses, and the general public of the hazards associated with illegal discharges and improper disposal of waste. The public can report suspected illicit discharges via the City website or the Stormwater Pollution Hotline (615-791-3218). Documented illicit discharges will be eliminated as soon as possible.

RIGHT-OF-WAY

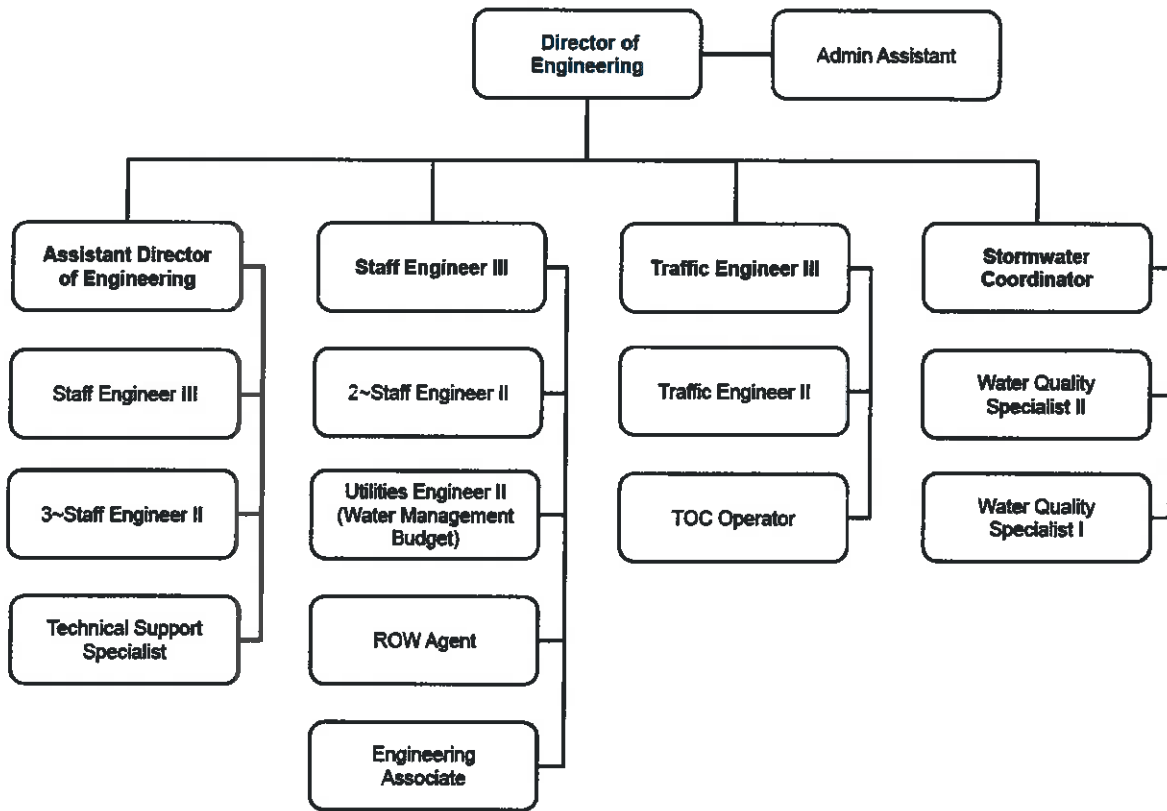
When meeting with property owners to acquire right-of-way and easements we strive to give the property owner all the information about the upcoming project. We also work extremely hard to meet with affected property owners on more than one occasion (even before or after normal working hours). Although it is our goal to get all documents signed without using condemnation, it is not always possible. Some property owners are unwilling to work with the city, others will not respond to certified mail or phone messages. When this situation persists, we have no choice but to enter into condemnation proceedings. This performance measurement

is comparing how many properties were to be acquired, how many were successfully acquired without condemnation and how many times the city entered into condemnation. In the future we will also be keeping up with the number of times we made contact or met with property owners. We hope this information will be helpful in the future for budgeting, staffing and scheduling needs.

The Right-of-Way Goal for the Engineering Department is to successfully acquire 80% of the properties through negotiations (without having to go into condemnation proceedings). See the chart below for the most recent property acquisition data:

PROJECT NAME	TOTAL NUMBER OF PROPERTIES	NUMBER OF OFFERS	SIGNED, AGREED OR CLOSED	CONDEMNATIONS
Hillsboro Road (SR96-Independence Square)	43	43	36	7
I-65 Water and Sewer	9	9	6	3
McEwen Drive Connector	4	4	3	1
Hillsboro Road (Independence Square to Mack Hatcher)	17	0	0	0
Century Beasley Connector	1	1	0	0
Mack Hatcher Water and Sewer	4	0	0	0
McEwen Drive at Wilson Pike	5	5	3	2
Southwinds Drive	1	1	1	0
TOTAL	84	63	49	13
			79%	21%

Organizational Chart



Note 1: Stormwater Management Coordinator & Water Quality Specialist included in Stormwater Personnel.

Note 2: Traffic/Transportation Engineer, ITS Project Manager, and ITS Specialist included in TOC Personnel.

Note 3: Utilities Project Manager funded through Water Management Department

Staffing by Position

City of Franklin
2013-2014 Fiscal Year Budget
Personnel by Position

Engineering Department

Position	Pay Grade	FY 2014			FY 2015		
		Full-Time	Part-Time	Not Funded	Full-Time	Part-Time	Not Funded
Director of Engineering	L	1	0	0	1	0	0
Assistant Director of Engineering	J	1	0	0	1	0	0
Staff Engineer III	I	2	0	0	2	0	0
Staff Engineer II	H	4	0	0	4	0	0
Staff Engineer I	G	0	0	0	0	0	0
Right of Way Agent	G	1	0	0	1	0	0
Technical Support Specialist	E	1	0	0	1	0	0
Engineering Associate	TBD	0	0	0	1	0	0
Administrative Asst.	D	1	0	0	1	0	0
TOTALS		11	0	0	12	0	0

Narrative of Personnel Changes	New Position		Reclassification		
	Title	Pay Grade (Actual if known or Anticipated)	From Job Title	To Job Title	Pay Grade (if reclassification creates new job title)
Add Engineering Associate	Engineering Associate	TBD			

Departmental Career Development Path	Pay Grade	Requirements		
		Degree	Experience	Certifications

Traffic Operations Center (TOC)

Position	Pay Grade	FY 2014		FY 2015	
		Full-Time	Part-Time	Full-Time	Part-Time
Traffic/Transportation Engineer	I	0	0	0	0
Traffic Engineer III	I	1	0	1	0
TOC Supervisor I	G	0	0	0	0
Traffic Engineer II	TBD	1	0	1	0
TOC Operator	E	1	0	1	0
		3	0	3	0

Narrative of Personnel Changes	New Position		Reclassification	
	Pay Grade	From Job Title	To Job Title	Pay Grade (if reclassification creates new job title)

Departmental Career Development Path	Pay Grade	Requirements		
		Degree	Experience	Certifications

Budget Notes/Objectives

Engineering

- The Engineering Department is requesting 1 additional position. This would include an Engineering Associate to help with the management of capital projects to included permits, invoices, budget management and contract management.



Account	Label	Actual 2012	Actual 2013	Budget 2014	Estd 2014	Budget 2015	Forecast 2016	Forecast 2017	Forecast 2018
12									
*	Amount missing from detail	727	1,611						
82360	PUBLIC RELATIONS & EDUCATION (CITY SPONSORED)								
82390	PUBLICATIONS, NON-TRAINING	406	147	500	300	400	400	400	400
=	XNSP	5,917	2,316	3,802	3,190	3,620	4,377	3,220	3,245
82435	SOLID WASTE SERVICE		161	200	200	200	200	200	200
82450	TELEPHONE SERVICE	846	819	850	1,145	1,200	1,300	1,400	1,500
82451	800 MHZ ACCESS LINE SERVICE	47	56	50	88	90	100	110	120
+ 82455	CELLULAR TELEPHONE SERVICE	2,075	2,447	3,300	3,000	3,000	3,100	3,200	3,300
1	Various	1,064							
2	Director of Engineering (Service)								
3	Paul Holzen (Service)								
4	Dan Allen (Service)								
5	Ben Worley (Service)								
6	Cell phone service for (Paul, Katie, Jonathan, & Ben)								
*	Amount missing from detail	1,011	2,447	3,300	3,000	3,000	3,100	3,200	3,300
82470	INTERNET & RELATED SERVICES	554	571	550	810	820	830	840	850
=	XUTIL	3,522	4,054	4,950	5,243	5,310	5,530	5,760	5,970
82510	COMPUTER SERVICES		300						
82520	LEGAL SERVICES								
+ 82560	CONSULTANT SERVICES		22,207	40,000	38,900	122,500	92,500	72,500	72,500
01	Various Consultant Services			25,000	23,900	50,000	50,000	50,000	50,000
02	Misc. Surveying Services			15,000	15,000	20,000	20,000	20,000	20,000
03	GIS AS-Built Integration					50,000	20,000	20,000	20,000
04	Aerial Innovations (Fly over)					2,500	2,500	2,500	2,500
05	Various								
*	Amount missing from detail	22,297							
=	XCTS	22,297	22,297	40,000	38,900	122,500	92,500	72,500	72,500
82610	VEHICLE REPAIR & MAINTENANCE SERVICES	1,488	214	1,000	1,000	1,100	1,200	1,300	1,400
+ 82620	EQUIPMENT REPAIR & MAINTENANCE SERVICES	1,786	1,366	1,200	1,200	1,300	1,350	1,400	1,450
1	Various								
2	NovaCopy			1,200	1,200	1,300	1,350	1,400	1,450
*	Amount missing from detail	1,786	1,366						
82640	PAVING & REPAIR SERVICES	630							
82660	BUILDING REPAIR & MAINTENANCE SERVICES	3,904	1,602	2,200	3,496	2,400	2,550	2,700	2,850
=	XRMSV	3,904	1,602	2,200	3,496	2,400	2,550	2,700	2,850
82750	EMPLOYEE RECOGNITION/RECEPTIONS	109	227	500	500	600	700	800	900
+ 82780	TRAINING, OUTSIDE	760	345	3,950	3,210	2,510	2,510	2,510	2,510
01	PMP Certification (Dan & William)			1,300	650	650	650	650	650
02	RWA Certification (Ben)			1,650	1,660	1,660	1,660	1,660	1,660
03	Appraisal Institute Certification (Ben)			500	900	200	200	200	200
04	Various								
05	Various								
*	Amount missing from detail	769	349						
=	XEPG	878	573	4,360	3,710	3,110	3,210	3,210	3,410
82810	REGISTRATIONS	2,445	7,205	5,000	5,000	6,100	6,000	6,000	6,000
+ 1	Various	817							

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Account	Label	Actual 2012	Actual 2013	Budget 2014	Estid 2014	Budget 2015	Forecast 2016	Forecast 2017	Forecast 2018
3	Continuing Education			5,000	5,000	5,000	6,000	6,000	6,000
4	INFOR Conference (Amanda)					1,100			
*	Amount missing from detail	1,628	7,208						
+ 82820	GROUND TRANSPORTATION (OUTSIDE WILLIAMSON COUNTY)					600	700	700	700
1	Various	312	993	1,000	1,000				
3	Continuing Education			1,000	1,000	600	700	700	700
*	Amount missing from detail	637	963						
+ 82830	AIR TRAVEL			3,000	3,000	3,000	3,000	3,000	3,000
1	Various	1,122	1,034						
2	Continuing Education			3,000	3,000	2,750	3,000	3,000	3,000
3	INFOR Conference (Amanda)					250			
*	Amount missing from detail	1,122	1,034						
+ 82840	LODGING			6,000	6,000	5,800	5,000	5,000	5,000
1	Various	2,932							
2	Continuing Education			6,000	6,000	5,000	5,000	5,000	5,000
3	INFOR Conference (Amanda)					800			
*	Amount missing from detail	1,180	6,650						
+ 82850	MEALS (OUTSIDE WILLIAMSON COUNTY)			3,000	3,000	3,000	3,000	3,000	3,000
1	Various	1,183	1,304						
2	Continuing Education	804		3,000	3,000	3,000	3,000	3,000	3,000
3	INFOR Conference (Amanda)					60			
*	Amount missing from detail	365	1,304						
+ 82890	OTHER TRAVEL EXPENSES			300	200	200	300	300	300
1	Various	732							
2	Local PDH Meetings	94		500	200	200	300	300	300
*	Amount missing from detail	638							
= XPOF	TOTAL PROFESSIONAL DEVELOPMENT:TRAVEL	10,528	17,159	19,000	18,200	18,760	18,000	18,000	18,000
+ 83110	OFFICE SUPPLIES			3,100	3,100	3,000	3,100	3,200	3,300
1	Black leather portfolios with COF (logo embossed (20 @\$30 each)	1,824	2,147						
2	Various			600	600				
*	Amount missing from detail	1,894	2,147	2,500	2,500	3,000	3,100	3,200	3,300
+ 83120	OFFICE DÉCOR ITEMS (OTHER THAN FURNITURE)					525	525	525	525
1	Aerial Innovations (Pictures of Projects)					525	525	525	525
*	Amount missing from detail								
83130	EMPLOYEE BENEVOLENCE ITEMS			150	150	150	160	170	180
83140	MEALS & FOOD (INSIDE WILLIAMSON COUNTY)	1,273	1,855	1,300	1,500	1,600	1,700	1,800	1,900
= XOFFS	TOTAL OFFICE SUPPLIES	3,167	3,906	4,550	4,750	5,275	5,485	5,695	5,905
+ 83290	SAFETY SUPPLIES			500	500	3,000	1,000	1,000	1,000
01	High Visibility Construction Jackets								
02	wig wag lights for engineering vehicles					2,000			
03	Various			500	500	1,000	1,000	1,000	1,000
*	Amount missing from detail	589	816						
+ 83280	UNIFORMS PURCHASED			900	915	1,005	1,015	1,025	1,035
1	Boots	562	1,523			255	255	255	255
2	Uniforms			660	660	750	760	770	780
3	Various	245							
4									
*	Amount missing from detail	317	1,025						
83299	OTHER OPERATING SUPPLIES			200					
= XOPS	TOTAL OPERATING SUPPLIES	1,151	1,841	1,600	1,415	4,005	2,015	2,025	2,035

Account	Label	Actual 2012	Actual 2013	Budget 2014	Esid 2014	Budget 2015	Forecast 2016	Forecast 2017	Forecast 2018
83310	GASOLINE & DIESEL FOR FLEET (INSIDE WILLIAMSON COUNTY)	1,990	1,343	3,000	2,000	2,500	2,600	2,700	2,800
83320	MILEAGE (INSIDE WILLIAMSON COUNTY)		60						
= XFUEL	TOTAL FUEL & MILEAGE	1,990	1,403	3,000	2,000	2,500	2,600	2,700	2,800
+ 83510	FURNITURE, FIXTURES (~\$25,000)		1,881	2,500	2,500	300	1,000	1,000	1,000
01	Desk Chair (7/12/13) (7/13/14)			2,000	2,000		1,000	1,000	1,000
02	Reception Seating for front office			500	500				
03	Various					300			
*	Amount missing from detail		1,881						
+ 83520	VEHICLES (~\$25,000)					25,000	25,000		
1	Replace 1998 FORD- F-150					25,000			
2	Replace 2003 FORD Explorer						25,000		
*	Amount missing from detail								
+ 83530	MACHINERY & EQUIPMENT (~\$25,000)	64	287	250		250	1,000	1,000	1,000
1	New Cell Phone Paul			250					
2	Upgrade Cell Phone for Ben			250			250	250	250
3	Upgrade Cell Phone Katie						250	250	250
4	Upgrade Cell Phone for Jonathan						250	250	250
5	New Copy Machine (2006) (Max Life 7 Years)(\$16,000 to lease)						250	250	250
6	Various	64				250			
*	Amount missing from detail		287						
+ 83540	COMPUTER HARDWARE (~\$25,000)	8,529	11,880	1,400	1,399	4,650	1,550	3,100	1,550
01	***Jonathan, Sarah, William**					4,650	1,550	3,100	1,550
02	laptop with docking station (Katie 1 @ \$1400)			1,400	1,399				
03	HP- res large size monitor								
04	Various	4,684							
*	Amount missing from detail	1,845							
+ 83550	COMPUTER SOFTWARE (~\$25,000)	10,293	4,091	2,550	2,017	17,100	2,000	2,000	19,200
01	CADD Software					17,100	2,000	2,000	17,200
02	Various	10,293					2,000	2,000	2,000
03	Microsoft Project License								
04	Adobe Acrobat Professional			250					
05	Scan License for OnBase (SR)			2,000					
06	Dragon Software (dictation of meeting minutes)			300					
*	Amount missing from detail		4,091						
= XMEU	TOTAL MACHINERY & EQUIPMENT (~\$25,000)	15,888	18,023	6,700	5,916	47,300	30,550	7,100	22,750
83620	EQUIPMENT PARTS & SUPPLIES	75	323						
= XRMS	TOTAL REPAIR & MAINTENANCE SUPPLIES	75	323						
85110	PROPERTY INSURANCE	3,041	714	776	746	783	790	795	800
85111	FRAUD INSURANCE		22						
85112	INLAND MARINE INSURANCE		318	117	20	21	25	26	27
85113	AUTO PHYSICAL DAMAGE		124	62	52	55	58	59	60
85115	LIABILITY INSURANCE		504	509	1,149	1,206	1,220	1,230	1,240
85116	E&O LIABILITY INSURANCE		469	679	679	713	720	740	750
85117	VEHICLE LIABILITY INSURANCE		754	985	963	1,011	1,150	1,160	1,170
85119	UMBRELLA LIABILITY		225	3,293					
85120	PROPERTY DAMAGE COSTS								

Account	Label	Actual 2012	Actual 2013	Budget 2014	Est'd 2014	Budget 2015	Forecast 2016	Forecast 2017	Forecast 2018
+ 85140	SURETY/NOTARY BONDS	50		50	50	100	50	100	100
1	Various			50			50	100	100
2	Ben Worley (Budget for May 2014)			50					
3	Sarah Roop (Budget for June 2015)					50			
4	Amanda Ray					50			
*	Amount missing from detail								
= XPLC	TOTAL PROPERTY & LIABILITY COSTS	3,091	3,250	5,742	3,250	9,853	4,013	4,110	4,147
+ 85320	STATE FEES	2,005	2,420	2,905	2,280	3,210	3,085	2,400	2,400
01	State Privilege Tax (\$400)			2,400	2,000	2,400	2,400	2,400	2,400
02	Engineering License (\$140)			280	280	280	420		
03	PE Exam					530	255		
04	Appraisal Trainee Application Fee (Bon)			125					
05	Various	405							
06									
*	Amount missing from detail	1,600	2,420						
85340	RECORDING & FILING FEES	37	39	100	100	100	100	100	100
= XPERM	TOTAL PERMITS	2,102	2,459	2,905	2,380	3,310	3,185	2,500	2,500
85990	MISCELLANEOUS								
= XOBE	TOTAL OTHER BUSINESS EXPENSES								
+ 86600	LEASE/LOAN PRINCIPAL			5,333		5,280	5,337	5,384	
1	2014 - New Copier			5,333		5,280	5,337	5,384	
*	Amount missing from detail								
+ 86700	LEASE/LOAN INTEREST			192	87	145	89	30	
1	2014 - New Copier			192	87	145	89	30	
*	Amount missing from detail								
= XDSV	TOTAL DEBT SERVICE			5,525	87	5,425	5,426	5,414	
87510	REIMB OF INTERFUND SERVICES		(172,521)	(175,269)	(175,269)	(227,665)	(222,435)	(219,098)	(227,009)
= XAPP	TOTAL APPROPRIATIONS		(172,521)	(175,269)	(175,269)	(227,665)	(222,435)	(219,098)	(227,009)
= XOP	TOTAL OPERATIONS	55,214	(84,895)	(63,235)	(74,823)	11,769	(35,964)	(76,924)	(73,727)
	Capital								
= XTOT	TOTAL EXPENDITURES	761,838	631,300	701,078	686,518	910,660	889,738	876,394	908,034

Budget Notes/Objectives

Traffic Operations Center

- TOC is requesting \$635,000 in Consultant services as part of the operations budget. This funding is part of the Traffic Signal Timing Optimization and Testing Program for the Cool Springs Area.
- TOC is requesting \$3,115,000 in Capital. Of this amount \$1,432,000 will be reimbursed to the City through grants.

2015 Budget - 11041610 TRAFFIC OPERATIONS CENTER (TOC)
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Account	Label	Actual 2012	Actual 2013	Budget 2014	Est'd 2014	Budget 2015	Forecast 2016	Forecast 2017	Forecast 2018
	Personnel								
=	81110 REGULAR PAY	177,154	178,858	166,048	166,000	222,032	228,693	235,554	242,620
	81120 OVERTIME PAY	105	83	200	1,000	1,000	1,100	1,200	1,300
	81188 VACANCY ADJUSTMENT			(5,812)		(7,771)	(8,004)	(8,244)	(8,492)
=	XWAGE TOTAL WAGES	177,259	178,941	160,436	167,000	215,261	221,789	228,510	235,428
=	81410 FICA (EMPLOYER'S SHARE)	13,072	13,019	12,703	12,500	16,985	17,495	18,019	18,560
	81420 MEDICAL PREMIUMS	27,870	35,248	36,886	36,500	33,124	34,118	35,141	36,195
=	81430 GROUP INSURANCE PREMIUMS	2,275	3,151	3,124	3,100	3,209	3,305	3,404	3,507
=	81440 EMPLOYEE INSURANCE CONTRIBUTIONS	(4,673)	(6,874)	(8,442)	(8,400)	(6,531)	(6,727)	(6,928)	(7,137)
	81450 RETIREMENT CONTRIBUTIONS	18,376	17,008	23,658	23,656	31,632	32,591	33,558	34,565
	81470 WORKERS COMPENSATION PREMIUMS	30	188	144	151	151	156	160	165
	81475 WORKERS COMPENSATION CLAIMS								
=	XBEN TOTAL BENEFITS	57,450	61,741	67,871	67,507	78,570	80,928	83,853	85,855
=	XPER TOTAL PERSONNEL	234,709	240,682	228,307	234,507	293,831	302,717	311,863	321,283
	Operations								
	82110 MAILING & OUTBOUND SHIPPING SERVICES	41	105	150	515	520	530	540	550
	82120 FREIGHT FOR INBOUND PURCHASED ITEMS	52							
=	XTRC TOTAL TRANSPORTATION CHARGES	93	105	150	515	520	530	540	550
	82210 PRINTING & COPYING SERVICES, OUTSOURCED			150	118	150	150	150	150
+	82250 TESTING & PHYSICALS			200	200	200	400	200	200
1	New Employees								
2	Random Drug Screening			200			200		
3	Various				200	200	200	200	200
*	Amount missing from detail								
=	XOPSV TOTAL OPERATING SERVICES			350	318	350	550	350	350
	82310 LEGAL NOTICES	258	100	400	500	500	500	500	500
+	82350 DUES FOR MEMBERSHIPS	1,983	3,370	1,048	1,330	1,070	1,110	1,150	1,190
01	Various	806			810	500	500	500	500
02	IMSA - (Abby & New Employee)			140	140	150	160	170	180
03	ITE - (Car)			570	280	300	320	340	360
04	ITSA - City Membership			100	100	120	130	140	150
10									
11									
12									
13	APA - (Kevin) NO LONGER NEEDED			230					
14									
15									
*	Amount missing from detail								
+	82390 PUBLICATIONS, NON-TRAINING	1,097	3,370		300	800	300	800	300
1	ITE Trip Generation Manual 9th Edition	245	158	370		500	500	500	500
3	Various			970	300	300	300	300	300
*	Amount missing from detail	246	106						
=	XNSP TOTAL NOTICES, SUBSCRIPTIONS, PUBLICITY	2,407	3,516	1,740	2,130	2,370	1,910	2,430	1,980
	82450 TELEPHONE SERVICE	1,247	617	600	820	830	840	850	860
+	82451 800 MH ACCESS LINE SERVICE	40	40	50	80	90	100	110	120
	82455 CELLULAR TELEPHONE SERVICE	855	381	650	400	600	610	620	630
1	Cell Phone for New Traffic Engineer Position	170	600	600	400	600	610	620	630
*	Amount missing from detail	465	581						

2015 Budget - 11041610 TRAFFIC OPERATIONS CENTER (TOC)
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Account	Label	Actual 2012	Actual 2013	Budget 2014	Est'd 2014	Budget 2015	Forecast 2016	Forecast 2017	Forecast 2018
82470	INTERNET & RELATED SERVICES	554	571	600	807	810	820	830	840
=	XUTIL	2,876	1,818	1,850	2,107	2,330	2,370	2,410	2,450
+ 82510	COMPUTER SERVICES	1,453	1,330	1,243	1,200	2,850	2,960	3,070	3,180
1	Various	1,200				1,550	1,500	1,570	1,580
2	Galver Corporation (Trans CAD Support)			1,250	1,200	1,300	1,400	1,500	1,600
*	Amount missing from detail								
82540	ENGINEERING SERVICES	250	1,200						
+ 82560	CONSULTANT SERVICES	53,583	118,754	200,000	180,000	635,000	455,000	455,000	740,000
01	Various	30,305	6,351						
02	City of Franklin Traffic Impact Studies (99% Developer and 10% City)								
03	Traffic Data Collection - Annual Program			38,650	30,000	200,000	300,000	300,000	300,000
04	Traffic Signal Timing Optimization and Testing - Cool Springs					55,000	55,000	55,000	55,000
05	Traffic Signal Timing Optimization and Testing - Downtown								
06	Traffic Signal Timing Optimization and Testing - 98 East								
07	Traffic Signal Timing Optimization and Testing - Columbia Ave								
08	Traffic Signal Timing Optimization and Testing			60,000	30,000	30,000		100,000	90,000
09	Traffic Signal Timing Optimization and Testing - Hillsboro Road								
10	Comprehensive Transportation Network Study			200,000	100,000	250,000			
11									
12									
*	Amount missing from detail	6,556	9,651						
82599	OTHER CONTRACTUAL SERVICES	55							
=	XCTS	38,372	116,605	291,200	161,200	637,850	457,960	458,070	743,180
82610	VEHICLE REPAIR & MAINTENANCE SERVICES	950	1,011	500	500	500	500	500	500
82620	EQUIPMENT REPAIR & MAINTENANCE SERVICES	4,003	250	320	500	500	510	520	530
1	NovoCopy								
3	Various	2,779		500	500	500	510	520	530
4	Emergency Fiber Optic Repair for TOC Fiber								
*	Amount missing from detail	2,126	250						
82640	PAVING & REPAIR SERVICES				75,670				
=	XRMSV	5,855	1,261	1,000	76,670	1,000	1,010	1,020	1,030
82750	EMPLOYEE RECOGNITION/RECEPTIONS			190	160	200	250	260	270
82780	TRAINING, OUTSIDE		94						
=	XEPG		94	150	150	200	250	260	270
+ 82810	REGISTRATIONS	1,550	1,337	2,523	2,200	2,620	2,850	3,080	3,310
1	Various	555							
2	ASCE (Car)			50	50	60	70	80	90
3	ASHE (Car)			50	50	60	70	80	90
7	ITSA Conference (Car & New Employee)			900	800	900	1,000	1,100	1,200
8	PE - Registrations			800	800	800	900	900	1,100
9	Non PE - Registrations			900	500	800	810	820	830
*	Amount missing from detail	1,395	113						
+ 82820	GROUND TRANSPORTATION (OUTSIDE WILLIAMSON COUNTY)	308	195	1,120	1,000	1,160	1,180	1,200	1,220
1	Various	308			1,000				
3	PE - Ground Transportation			750		760	770	780	790
4	Non PE - Ground Transportation			400		400	410	420	430
*	Amount missing from detail								
+ 82830	AIR TRAVEL		788						
3	PE - Air Travel			300		900	920	940	960
4	Non PE - Air Travel			450		450	460	470	480
5	Various			450		450	460	470	480
*	Amount missing from detail								
+ 82840	LODGING	307	524	2,420	1,200	1,600	1,800	2,000	2,200
01	PE - Lodging			837		1,000	1,100	1,200	1,300
02	Non PE - Lodging		1,683			600	700	800	900

2015 Budget - 11041610 TRAFFIC OPERATIONS CENTER (TOC)
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Account	Label	Actual 2012	Actual 2013	Budget 2014	Est'd 2014	Budget 2015	Forecast 2016	Forecast 2017	Forecast 2018
03	Various	307			1,200				
04	Amount missing from detail								
*	Amount missing from detail		984						
+ 82850	MEALS (OUTSIDE WILLIAMSON COUNTY)	127	114	1,853	1,000	1,500	1,700	1,800	2,100
01	PE - Meals			500		500	500	700	800
02	Non PE - Meals			1,353		1,000	1,100	1,100	1,300
03	Various	107			1,000				
04	Amount missing from detail		114						
82890	OTHER TRAVEL EXPENSES	32	22	100	100	150	160	170	180
= XPDT	TOTAL PROFESSIONAL DEVELOPMENT/TRAVEL	2,702	3,245	8,850	5,500	7,830	8,610	9,290	9,970
83110	OFFICE SUPPLIES	28	35	200	200	200	250	260	270
83130	EMPLOYEE BENEVOLENCE ITEMS			100	100	100	110	120	130
83140	MEALS & FOOD (INSIDE WILLIAMSON COUNTY)			110	100	120	130	140	150
= XOPS	TOTAL OFFICE SUPPLIES	26	36	410	400	420	490	520	550
83210	TRAINING SUPPLIES								
+ 83250	SAFETY SUPPLIES		873	240	240	1,240	240	240	240
1	Wig-Wag Lights for Truck					1,000			
2	Various				240	240	240	240	240
*	Amount missing from detail		816						
83260	UNIFORMS PURCHASED	75	224	160	160	200	250	260	270
83298	OTHER OPERATING SUPPLIES								
= XOPS	TOTAL OPERATING SUPPLIES	75	1,040	400	400	1,440	490	500	510
83310	GASOLINE & DIESEL FOR FLEET (INSIDE WILLIAMSON COUNTY)	1,268	872	1,200	1,228	1,400	1,500	1,600	1,700
= XFUEL	TOTAL FUEL & MILEAGE	1,268	872	1,200	1,228	1,400	1,500	1,600	1,700
83530	MACHINERY & EQUIPMENT (<\$25,000)	6,117	34,652	11,200	11,200	11,200	11,200	11,200	11,200
1	Various	6,750				11,200	11,200	11,200	11,200
2	499 - Treethaven AXIS Video Field Box (4X \$1,600)			6,400	6,400				
3	4 IE 3000 switches (4x \$1,200)			4,800	4,800				
*	Amount missing from detail		34,802						
+ 83540	COMPUTER HARDWARE (<\$25,000)	1,829	4,544	15,000		1,000	1,000	1,000	1,000
01	Various	1,879		18,000		1,000	1,000	1,000	1,000
02	Cisco Video Matrix - Lease Payment (moved to Lease 86600)								
03									
04									
05	Amount missing from detail		3,344						
+ 83550	COMPUTER SOFTWARE (<\$25,000)	71	3,821	700	700	8,650	2,810	6,320	2,830
1	HCS2010			400	400	3,900			
2	Synchro 8								
3	TransCAD (moved to 82510)								
4	Tri Generation			300	300	300	310	320	330
5	Adobe								
6	Various					1,000	1,000	1,000	1,000
7	Talics					3,750	1,500	1,500	1,500
*	Amount missing from detail		3,921						
= XMEU	TOTAL MACHINERY & EQUIPMENT (<\$25,000)	68,267	43,887	26,000	11,200	20,750	15,010	19,520	15,030
83620	EQUIPMENT PARTS & SUPPLIES	961	561	200	200	250	260	270	280
+ 83641	TRAFFIC SIGNAL PARTS & SUPPLIES		255	1,000	1,000	1,000	1,000	1,000	1,000
01	Various			1,500	1,000	1,000	1,000	1,000	1,000
02									
03									
*	Amount missing from detail		255						

2015 Budget - 11041610 TRAFFIC OPERATIONS CENTER (TOC)
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Account	Label	Actual 2012	Actual 2013	Budget 2014	Est'd 2014	Budget 2015	Forecast 2016	Forecast 2017	Forecast 2018
=	XRMS	951	816	1,200	1,200	1,250	1,260	1,270	1,280
	TOTAL REPAIR & MAINTENANCE SUPPLIES								
84310	TRAFFIC OPERATIONS CENTER	3,106							
84955	FRANKLIN ITS - ARRA # 5	291,789							
=	XOPU	294,894							
	TOTAL OPERATIONAL UNITS								
85110	PROPERTY INSURANCE	1,195	273	776	1,491	1,500	1,600	1,700	1,800
85111	FRAUD INSURANCE		9						
85112	INLAND MARINE INSURANCE		122	88	1,000	1,000	1,000	1,000	1,000
85113	AUTO PHYSICAL DAMAGE		47	2	50	50	50	50	50
85115	LIABILITY INSURANCE		231		2,524	2,550	2,600	2,700	2,800
85116	E&O LIABILITY INSURANCE		179	3,161	1,490	1,500	1,600	1,700	1,800
85117	VEHICLE LIABILITY INSURANCE		288	248	300	350	360	370	380
85119	UMBRELLA LIABILITY		86	5,966	6,000	6,000	6,000	6,000	6,000
=	XPLC	1,195	1,235	9,869	12,955	12,950	13,210	13,520	13,830
	TOTAL PROPERTY & LIABILITY COSTS								
86310	PERMITS	1,250			1,250	1,250	1,250	1,250	1,250
86320	STATE FEES	540	670		1,080	1,080	1,080	1,080	1,080
86340	RECORDING & FILING FEES		68						
=	XPERM	1,790	466		2,330	2,330	2,330	2,330	2,330
	TOTAL PERMITS								
+ 86600	LEASE/LOAN PRINCIPAL		36,923	32,652	13,750	14,334			
1	SunTrust - Cisco Video Surveillance			22,932	10,750	14,334			
*	Amount missing from detail		38,923						
+ 86700	LEASE/LOAN INTEREST		6,559	1,844	956	488			
1	SunTrust - Cisco Video Surveillance			1,544	956	488			
*	Amount missing from detail		5,356						
=	XDSV		44,459	23,333	14,703	14,820			
	TOTAL DEBT SERVICE								
=	XOP	420,571	218,635	372,195	293,609	707,910	507,480	512,650	795,020
	TOTAL OPERATIONS								
	Capital								
89470	TRAFFIC SIGNALS	16,283							
=	XINFR	16,268							
	TOTAL INFRASTRUCTURE								
+ 89530	MACHINERY & EQUIPMENT (>\$25,000)	(4,377)	19,320	3,113,300	515,726	1,875,000	2,500,000	700,000	700,000
01	Malloy Station Road @ Malloy Lane and South Springs			210,200	110,000				
02	Garthers @ SR96 Turn Lane Extension			120,000	75,670				
03	Columbia @ Southeast Pkwy/Shadow Green Dr. (\$195,000 from developer)			285,000	278,627				
04	Cool Springs Adaptive Signal Control (80/20 Match MPFO)			50,000	50,000	500,000	1,250,000		
05	Aspen Grove Roundabout					150,000			
06	Signal Upgrade Program					250,000	500,000	700,000	
07	Franklin ITS Extension (80/20 Match)			1,250,000	1,429	750,000	750,000		
08	Various	155,620							
09									
10									
11									
12	Somehow got entered in twice last year???								
13				1,260,000					
14									

2015 Budget - 11041610 TRAFFIC OPERATIONS CENTER (TOC)
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Account	Label	Actual 2012	Actual 2013	Budget 2014	Estd 2014	Budget 2015	Forecast 2016	Forecast 2017	Forecast 2018
15									
16									
17									
*	Amount missing from detail								
89531	MACHINERY & EQUIPMENT (>25,000) NON-GRANT	159,927	19,323						
		155,930							
89532	MACHINERY & EQUIPMENT (>25,000) GRANT	105,633	510,888						
=	XMEMO TOTAL MACHINERY & EQUIPMENT (>25,000)	287,262	530,311	3,115,000	515,726	1,875,000	2,800,000	700,000	700,000
=	XCAP TOTAL CAPITAL	287,262	546,579	3,115,000	519,244	1,875,000	2,500,000	700,000	700,000
=	XTOT TOTAL EXPENDITURES	942,542	1,005,896	3,715,502	1,047,360	2,876,741	3,310,197	1,524,513	1,816,303



HISTORIC
FRANKLIN
TENNESSEE

City of Franklin Engineering Department Budget Presentation

Budget & Finance Committee
2014-2015

Engineering Personnel Recommendation for 2013-2014

Engineering Division:

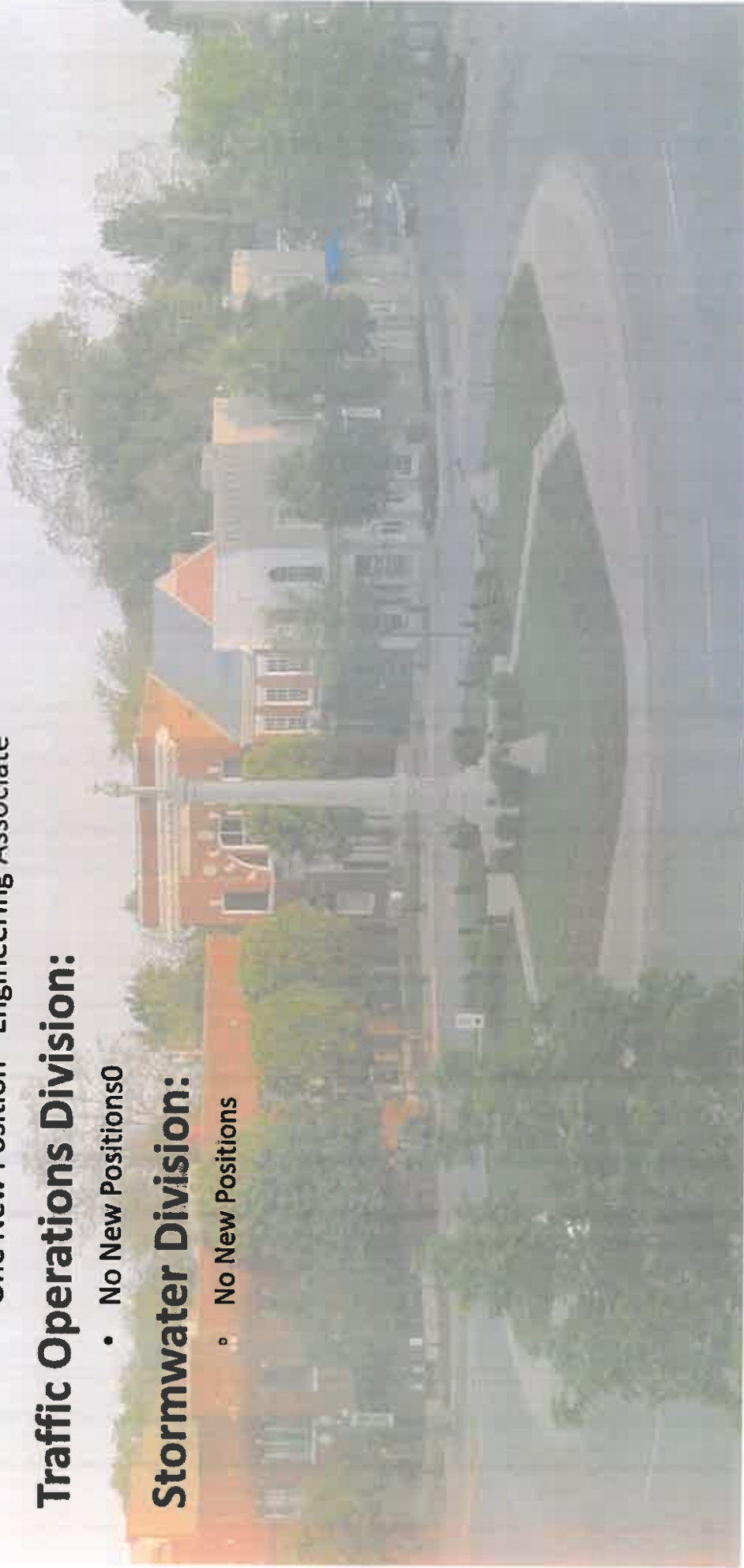
- One New Position - Engineering Associate

Traffic Operations Division:

- No New Positions

Stormwater Division:

- No New Positions



Engineering Operations

2013-2014 Approved Budget – \$112,034

2013-2014 Estimated Actual – \$100,446

2014-2015 Proposed Budget – \$239,434

Operating Services:

\$4,380 Net Increase for various Operating Services

- Printing & Copying Services, Outsourced (Scan Plans for Onbase and GIS)

Contractual Services:

\$82,500 Net Increase for various Consultant and Surveying Services

- \$82,500 Net Increase for Consultant Services
 - \$50,000 Various Consultant Services (CIP and Development)
 - \$20,000 Misc. Surveying Services (CIP)
 - \$50,000 GIS As-Built Integration for Construction Drawings
 - \$2,500 Aerial Innovations

Operating Supplies

\$2,405 Net Increase for Job Site Safety Supplies

Total Machinery & Equipment (<\$25,000):

\$40,600 Net Increase for various Machinery & Equipment

- Machinery & Equipment (<\$25,000) (Replace a 1997 Ford F-150)
- Computer Software – Computer Aided Design Software
- Computer Hardware – New Computers

Miscellaneous Items:

(\$2,485) Net Decrease in miscellaneous

Engineering Capital

2012-2013 Approved Budget – \$0.00

2012-2013 Estimated Actual – \$0.00

2013-2014 Proposed Budget – \$0.00



Traffic (TOC) Operations

2013-2014 Approved Budget – \$372,195
2013-2014 Estimated Actual – \$293,609
2014-2015 Proposed Budget – \$707,910

Contractual Services

\$346,650 Net Increase for various Contractual Services

- \$176,200 Net Increase for Consultant Services
 - \$250,000 – Comprehensive Transportation Network Study
 - \$300,000 – City of Franklin Traffic Impact Studies for Development
 - \$55,000 – Traffic Data Collection – Annual Program
 - \$30,000 – Traffic Signal Timing Optimization and Testing
- \$1,650 Net Increase Computer Services

Machinery & Equipment (<\$25,000)

(\$9,150) Net Decrease for various Machinery & Equipment (<\$25,000)

Total Debt Service

(\$9,116) Net Decrease for Lease/Loan Interest (Cisco video Surveillance)

Miscellaneous Items:

(\$7,331) Net Decrease in miscellaneous items

Traffic (TOC) Capital

2013-2014 Approved Budget – \$3,115,000

2013-2014 Estimated Actual – \$519,243

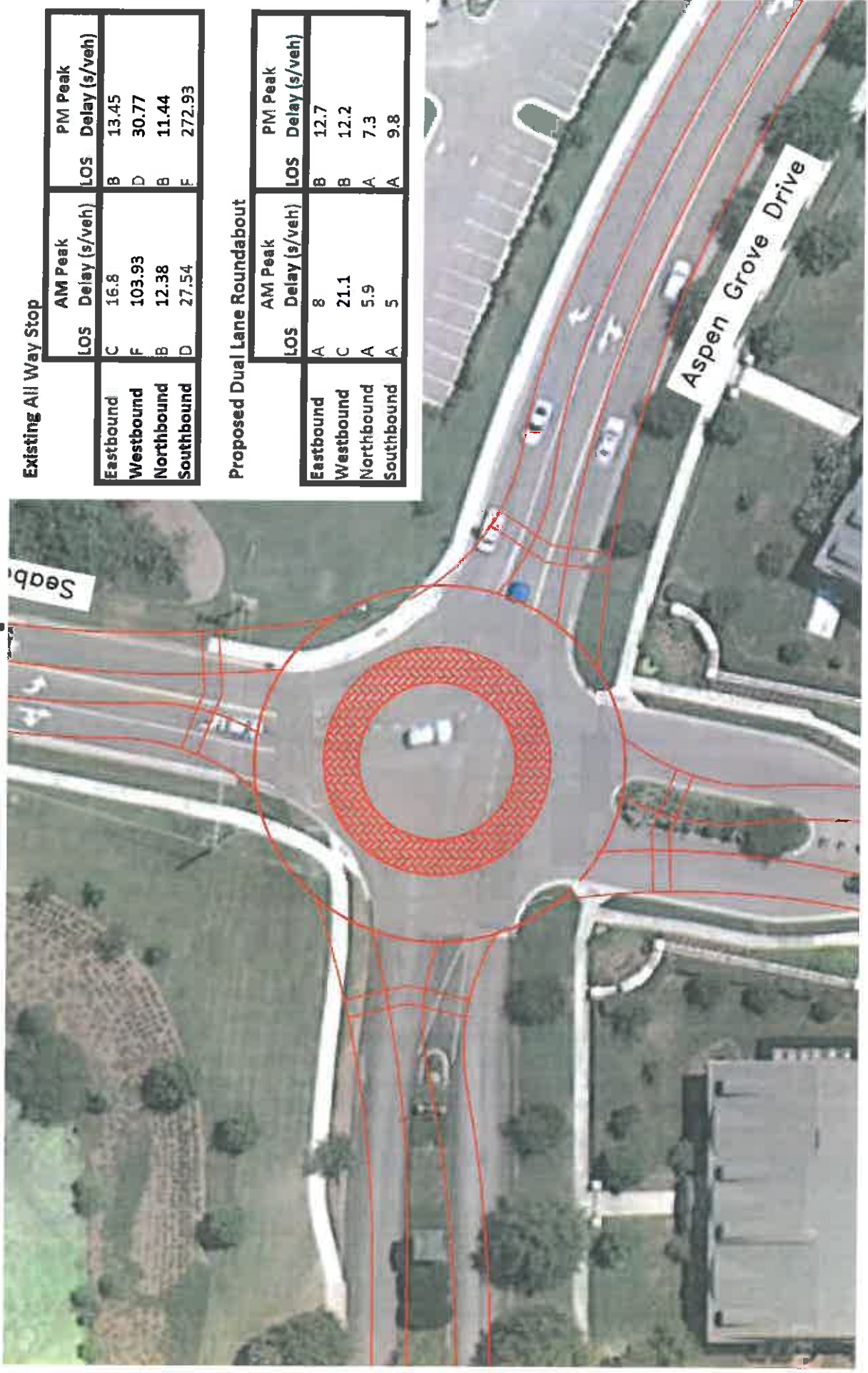
2014-2015 Proposed Budget – \$1,875,000

Machinery & Equipment (>\$25,000)

(\$1,240,000) Net Decrease for various Machinery & Equipment (>\$25,000)

- \$225,000 – Mallory Station Road @ Mallory Lane and South Springs
- \$500,000 - ITS Extension (80/20 match from MPO)
- \$150,000 – Aspen Grove Roundabout (Design and Right-of-Way)
- \$250,000 – Signal Upgrade Program
- \$750,000 – Franklin ITS Extension (80/20 match from MPO)

Aspen Grove Drive and Seaboard Intersection Improvements



Existing All Way Stop

	LOS	AM Peak Delay (s/veh)	PM Peak Delay (s/veh)
Eastbound	C	16.8	13.45
Westbound	F	103.93	30.77
Northbound	B	12.38	11.44
Southbound	D	27.54	272.93

Proposed Dual Lane Roundabout

	LOS	AM Peak Delay (s/veh)	PM Peak Delay (s/veh)
Eastbound	A	8	12.7
Westbound	C	21.1	12.2
Northbound	A	5.9	7.3
Southbound	A	5	9.8

Stormwater Operations (Engineering Only)

2013-2014 Approved Budget – \$459,300

2013-2014 Estimated Actual – \$507,382

2014-2015 Proposed Budget – \$167,793

Consultant Services

(\$265,000) Net Decrease for Consultant Services

- \$12,000 – TMDL Sampling
- \$15,000 – USGS Stream Gauging Stations
- \$100,000 – Stormwater Management Master Plan Modeling (Jordan Branch)

Total Machinery & Equipment (<\$25,000)

(\$27,890) Net Decrease for Machinery & Equipment (<\$25,000)

Miscellaneous Items:

\$1,383 Net Increase in miscellaneous items

Stormwater Capital (Engineering Only)

2013-2014 Approved Budget - \$1,901,000

2013-2014 Estimated Actual - \$446,523

2014-2015 Proposed Budget - \$2,611,000

Infrastructure

(\$710,000) Net Increase for various Machinery & Equipment (>\$25,000)

- \$600,000 – 100 Block Battle Avenue Drainage Improvements
- \$1,100,000 – Figures Drive Area Drainage Improvements
- \$800,000 – Jordan Branch & Cheswick Farm Stream Restoration
- \$36,000 – Stream & Rainfall Gauging Stations
- \$75,000 – Regional Retention/Detention Basins

Jordan Branch Stream Restoration Project
Cool Springs East Subdivision

Total Drainage
Area = 148 AC

Total Drainage
Area = 50 AC

