



MEMORANDUM

March 15, 2010

TO: Board of Mayor and Aldermen

FROM: Eric J. Gardner, P.E., Director of Engineering
Eric S. Stuckey, City Administrator *[Signature]*
David Parker, P.E., CIP Project Executive

SUBJECT: Major Thoroughfare Plan Proposed Projects

Purpose

The purpose of this memorandum is to introduce to the Board of Mayor and Aldermen (BOMA) the recommended projects from the update to the Major Thoroughfare Plan (MTP).

Background

The Professional Services Agreement with Wilbur Smith Associates (WSA) for updating the MTP was approved by BOMA on February 24, 2009. Since that time, two public meetings have taken place, including a joint BOMA and Planning Commission Workshop. After the workshop, Board members and Planning Commissioners submitted comments and recommendations to the progress of the plan.

At this time WSA has completed their modeling and has compiled a list of proposed improvement projects. The prioritization of these projects was based on the modeling and impacts that they would have on congestion and connectivity. The prioritization, in no way, commits the City to funding any particular project nor does it force the projects to be completed in a certain order. BOMA will still have an opportunity in the future to prioritize how the projects are funded.

Financial Impact

None at this time.

Recommendation

Staff recommends approval of the proposed projects as listed. This will allow WSA to proceed with completion of a draft MTP. Once completed, the draft MTP will come back to BOMA for a vote to recommend the MTP to the Planning Commission. It is estimated that the draft MTP could be brought back to BOMA a month after approval of the proposed project list.

Franklin Major Thoroughfare Plan Short Range Projects (2015 Horizon Year)

Project No.	State Route #	Functional Class	Roadway	From	To	Length (miles)	Project Description	City Limits	Cost Estimate	2008 Volume	2008 Peak V/C Ratio	2008 Peak LOS	2035 Volume (E+C)	2035 Peak V/C Ratio (E+C)	2035 LOS (E+C)	2035 Volume (E+C+I)	2035 Peak V/C Ratio (E+C+I)	2035 LOS (E+C+I)
1	SR 106	Arterial	Hillsboro Road	SR 96 West	Mack Hatcher Parkway	1.1	Widen to 3 or 4 Lanes	Y	\$26,028,000	18,900	1.02	F	27,500	1.14	F	28,100	0.97	E
2		Arterial	McEwen Drive	Carothers Parkway	Cool Springs Boulevard	1.0	Widen From 2 to 4 Lanes	Y	\$14,247,000	12,900	0.69	C	21,200	1.06	F	27,100	0.85	D
3		Collector	South Carothers Road	Exst. 90-Degree Curve	Peytonsville Road extension	2.9	New 4 Lane Road	Y	\$30,732,000	N/A	N/A	N/A	9,900	0.81	D	7,400	0.51	B
4	SR 96	Collector	3rd Avenue North	5th Avenue North	North Margin Street	0.2	New 2 Lane Road	Y	\$3,980,000	N/A	N/A	N/A	N/A	N/A	N/A	1,800	0.29	A
5		Collector	McEwan Drive	Cool Springs Boulevard	Wilson Pike	2.6	Widen From 2 to 4 Lanes	Y	\$17,792,000	10,500	0.78	D	26,300	0.57	C	31,300	0.72	G
*6		Interstate	I-65	N/A	N/A	N/A	Reconstruct Peytonsville Road Interchange	Y	\$25,108,000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7		Interstate	I-65	SR 840	SR 98	6.0	Widen From 4 to 8 Lanes	Both	\$94,560,000	66,200	0.92	E	130,900	0.98	E	131,400	0.83	E
8	SR 397	Arterial	Mack Hatcher Parkway	SR 96 West	Hillsboro Road	3.0	New 4 Lane Road	Y	\$92,000,000	N/A	N/A	N/A	45,200	0.74	C	44,000	0.67	C
9	SR 397	Arterial	Mack Hatcher Parkway	Columbia Pike	SR 96	3.0	Widen From 2 to 4 Lanes	Y	\$24,958,000	29,000	0.77	C	44,600	1.25	F	62,400	0.77	D
10	SR 397	Arterial	Mack Hatcher Parkway	Franklin Road	SR 98	2.7	Widen From 2 to 4 Lanes	Y	\$27,603,000	26,900	0.77	D	48,800	0.71	C	49,300	0.69	C
11		Collector	South Carothers Road	Franklin Commons	Exst. 90-Degree Curve	0.9	Widen From 2 and 3 Lanes to 4 Lanes	Y	\$7,345,000	7,900	0.35	A	13,100	0.92	E	11,000	0.71	C
12	SR 6	Arterial	Franklin Road	Mack Hatcher Parkway	Moore's Lane	2.1	Widen From 2 to 4 Lanes	Y	\$19,300,000	21,400	0.96	E	47,100	1.42	F	46,100	1.08	F
13	SR 106	Arterial	Lewisburg Pike	Holly Hill Drive	Mack Hatcher Parkway	1.8	Widen From 2 to 4 Lanes	Y	\$18,402,000	14,000	1.08	F	34,500	1.03	F	32,600	0.89	E
14	SR 6	Arterial	Columbia Avenue (US 31)	Mack Hatcher Parkway	Downs Boulevard	1.4	Widen From 3 to 5 Lanes	Y	\$15,043,000	14,800	0.85	D	29,800	0.96	E	21,500	0.48	B
15		Arterial	Cool Springs Boulevard	Mack Hatcher Parkway	Carothers Parkway	2.0	Widen From 4 to 6 Lanes	Y	\$22,776,000	27,900	0.94	E	45,400	1.48	F	62,800	1.21	F
16	SR 6	Arterial	Franklin Road	Harpeth River Bridge	Harpeth Industrial Court	0.7	Widen From 2 to 3 Lanes	Y	\$3,472,000	18,900	0.94	E	20,400	1.07	F	21,900	1.08	F
17	SR 106	Arterial	Lewisburg Pike	Old Peytonsville Road	Holly Hill Drive	1.0	Widen From 2 to 4 Lanes	N	\$10,223,000	12,800	0.88	E	34,500	0.91	E	27,600	0.78	D
18	SR 106	Arterial	Lewisburg Pike	Goose Creek Bypass	Old Peytonsville Road	0.5	Widen From 2 to 4 Lanes	Y	\$7,192,000	8,800	0.72	C	26,000	0.66	C	21,900	0.56	C
19	SR 96	Arterial	SR 98	Eddy Lane	Mack Hatcher Parkway	0.8	Widen From 2 to 4 Lanes	Y	\$6,655,000	23,900	0.80	D	41,400	0.92	E	40,200	0.89	E
20	SR 96	Arterial	SR 98	East of Arno Road	Wilson Pike	6.0	Widen From 2 to 4 Lanes	N	\$57,255,000	12,500	0.84	D	24,700	1.24	F	29,000	0.85	D
21		Collector	Boyd Mill Avenue	Franklin Green Parkway	Downs Boulevard	0.3	Improve Existing Lanes	Y	\$1,465,000	6,700	0.53	B	7,000	0.53	B	9,100	0.64	C
22		Collector	I-65 Underpass	Long Lane	Old Peytonsville Road	1.0	New 2 Lane Road	Y	\$3,200,000	N/A	N/A	N/A	N/A	N/A	N/A	3,500	0.52	B
Total									\$529,314,000									

*Interchanges are not modeled for v/c ratio or LOS

**Y=Within City Limits, N=Within Urban Growth Boundary but not City Limits, Both=Partially within City Limits and partially with Urban Growth Boundary but not City Limits

Franklin Major Thoroughfare Plan Mid Range Projects (2025 Horizon Year)

Project No.	State Route #	Functional Class	Roadway	From	To	Length (miles)	Project Description	City Limits	Cost Estimate	2008 Volume	2008 Peak V/C Ratio	2008 Peak LOS	2035 Volume (E+C)	2035 Peak V/C Ratio (E+C)	2035 LOS (E+C)	2035 Volume (E+C+I)	2035 Peak V/C Ratio (E+C+I)	2035 LOS (E+C+I)
23	SR 96	Arterial	SR 96	Mack Hatcher Parkway	N. Royal Oaks Blvd.	0.9	Widen From 5 to 7 Lanes	Y	\$8,713,000	31,600	0.62	C	47,700	0.73	C	45,100	0.72	C
24	SR 96	Arterial	SR 96 West	Mack Hatcher Parkway	7th Avenue North	2.6	Widen From 2 to 4 Lanes	Y	\$21,630,000	22,800	0.85	D	25,000	0.78	D	25,400	0.78	D
25	SR 98	Arterial	SR 98 West	Mack Hatcher Parkway	SR 46	1.8	Widen From 2 to 4 Lanes	Both	\$13,749,000	17,200	0.83	D	48,100	1.16	F	45,200	1.14	F
26		Collector	Liberty Pike	Franklin Road	Carothers Parkway	2.2	Widen From 3 to 4 Lanes	Y	\$10,912,000	8,800	0.80	D	18,400	1.24	F	13,600	1.29	F
27		Arterial	Carothers Parkway	Cool Springs Boulevard	Mayfield Drive	0.7	Widen From 4 to 6 Lanes	Y	\$6,110,000	17,600	0.68	C	27,500	1.09	F	28,100	0.78	D
28		Collector	Mallory Station Road	Seaboard Lane	Franklin Road	1.0	Widen From 3 to 4 Lanes	Y	\$4,783,000	9,200	0.81	D	13,500	1.19	F	17,400	0.89	E
29	SR 6	Arterial	Columble Avenue (US 31)	Downs Boulevard	Fowlkes Street	0.7	Widen From 2 to 3 Lanes	Y	\$3,334,000	14,800	0.70	C	18,100	0.91	E	19,100	0.65	C
30		Collector	North Royal Oaks Blvd.	Liberty Pike	Lakeview Drive	0.5	Widen From 2 to 4 Lanes	Y	\$6,200,000	6,800	0.61	C	14,800	0.97	E	14,500	0.92	E
31	SR 252	Collector	Wilson Pike	Split Log Road	Maple Lane	4.0	Widen From 2 to 3 Lanes	Both	\$30,553,000	12,100	0.67	C	22,200	1.11	F	22,400	0.74	C
32	SR 246	Collector	Carters Creek Pike	North of Coleman Road	Downs Boulevard	3.3	Widen From 2 to 3 Lanes	Both	\$14,734,000	8,100	0.80	D	17,200	1.16	F	16,000	1.05	F
33	SR 246	Collector	West Main Street	Battle Avenue	Natchez Street	0.3	Widen From 2 to 3 Lanes	Y	\$1,837,000	10,300	0.75	D	10,300	0.87	E	10,100	0.99	C
34		Collector	Mallory Lane	Liberty	Moore Lane	2.4	Widen From 4 to 6 Lanes	Y	\$27,805,000	14,900	0.67	C	21,500	1.02	F	20,100	1.10	F
35		Collector	Arno Road	South Carolhers Parkway	SR 98	2.1	Widen From 2 to 3 Lanes	N	\$10,001,000	9,200	0.83	C	13,400	1.02	F	11,900	0.67	C
36	SR 6	Arterial	Franklin Road	Harpeth Industrial Court	Mack Hatcher Parkway	0.9	Widen From 2 to 3 Lanes	Y	\$12,900,000	16,800	0.79	D	16,700	0.89	E	19,400	0.88	C
37		Interstate	I-65	SR 96	Moore Lane	3.7	Widen From 8 to 10 Lanes	Y	\$64,345,000	105,800	0.73	C	163,400	1.22	F	165,800	0.76	D
38	SR 248	Collector	Goose Creek Bypass	Lewisburg Pike	I-65	0.8	Widen From 2 to 4 Lanes	Y	\$6,111,000	12,500	0.85	C	40,700	0.98	E	37,500	0.78	D
39	SR 248	Collector	Goose Creek Bypass	US 31	Lewisburg Pike	2.8	Widen From 2 to 4 Lanes	N	\$23,294,000	8,100	0.30	A	19,900	0.90	E	19,100	0.45	B
40		Collector	Del Rio Pike	Carlisle Lane	Poplar Grove School	0.7	Improve Existing Lanes	Y	\$2,557,000	4,900	0.43	B	4,100	0.32	A	4,000	0.30	A
41		Collector	Del Rio Pike	Old Hillsboro Road	Cotton Lane	1.9	Improve Existing Lanes	N	\$7,755,000	11,800	0.61	C	14,500	0.92	E	12,300	0.85	D
42		Collector	Cotton Lane	Del Rio Pike	Berry Chapel Road	1.9	Improve Existing Lanes	Both	\$8,049,000	6,600	0.63	C	12,200	0.97	E	13,400	0.85	D
43		Collector	Liberty Pike	Terminus of Existing Liberty Pike	Wilson Pike	0.8	New 2 Lane Road	N	\$4,185,000	N/A	N/A	N/A	8,000	0.43	B	7,700	0.38	B
44		Collector	Paytonsville Road	Southeastern Urban Growth Boundary	Long Lane	0.6	Improve Existing Lanes	Y	\$2,449,000	2,500	0.22	A	5,600	0.52	B	4,900	0.48	B
45	SR 106	Arterial	Lewisburg Pike	Southern Urban Growth Boundary	Goose Creek Bypass	2.1	Widen From 2 to 4 Lanes	N	\$20,039,000	2,400	0.17	A	7,100	0.32	A	8,800	0.44	B
46		Collector	General George Patton Drive	Moore Lane	Mallory Station Road	1.2	Widen From 2 to 3 Lanes	Both	\$6,857,000	7,200	0.59	C	10,500	1.01	F	10,000	0.81	C
Total									\$322,182,000									

*Interchanges are not modeled for v/c ratio or LOS

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Franklin Major Thoroughfare Plan Long Range Projects (2035 Horizon Year)

Project No.	State Route #	Functional Class	Roadway	From	To	Length (miles)	Project Description	City Limits	Cost Estimate	2008 Volume	2008 Peak V/C Ratio	2008 Peak LOS	2035 Volume (E+C)	2035 Peak V/C Ratio (E+C)	2035 LOS (E+C)	2035 Volume (E+G+I)	2035 Peak V/C Ratio (E+G+I)	2035 LOS (E+G+I)
47		Collector	Boyd Mill Avenue	SR 98 West	Franklin Green Parkway	0.6	Improve Existing Lanes	Y	\$2,381,000	6,300	0.50	B	8,300	0.63	C	8,800	0.63	C
48		Collector	Clovercroft Road	SR 98	Wilson Pike	3.0	Improve Existing Lanes	Both	\$12,245,000	6,100	0.53	B	9,800	0.68	C	9,000	0.56	C
49	SR 106	Arterial	Lewisburg Avenue	South Margin Street	Mack Hatcher Parkway	2.8	Widen From 2 to 4 Lanes	Y	\$22,490,000	7,700	0.44	B	14,800	0.82	D	15,000	0.40	B
50		Collector	Spencer Creek Road	Mack Hatcher Parkway	Hillsboro Road	2.4	Improve Existing Lanes	Y	\$11,430,000	6,000	0.39	B	12,600	0.95	E	12,300	0.92	E
51		Collector	Horton Lane	Winberry Drive	Boyd Mill Avenue	0.3	Improve Existing Lanes	Y	\$1,224,500	6,000	0.36	A	8,000	0.43	B	5,700	0.41	B
52		Collector	North Chapel Road	Exist. Eastern 90-Degree Curve	Wilson Pike	0.9	Improve Existing Lanes	N	\$3,673,000	600	0.04	A	2,000	0.16	A	2,600	0.24	A
53		Collector	North Chapel Road	SR 98	Exist. Eastern 90-Degree Curve	0.3	New 2 Lane Road	N	\$1,510,000	N/A	N/A	N/A	N/A	N/A	N/A	1,800	0.19	A
54	SR 397	Arterial	Mack Hatcher Parkway	Columbia Pike	SR 98 West	4.2	New 4 Lane Road	Both	\$67,602,000	N/A	N/A	N/A	25,500	0.32	A	29,900	0.46	B
55		Collector	Paytonville Road	Terminus of Existing Paytonville Road	Long Lane	0.9	New 2 Lane Road	N	\$4,875,000	N/A	N/A	N/A	2,600	0.42	B	1,600	0.16	A
56		Collector	South Carothers Connector	South Carothers Road	Arno Road	1.4	New 3 Lane Road	Both	\$9,935,000	N/A	N/A	N/A	N/A	N/A	N/A	2,700	0.17	A
57		Collector	Boyd Mill Avenue Connector	Boyd Mill Avenue	Townsend Boulevard	0.8	New 2 Lane Road	Y	\$3,285,000	N/A	N/A	N/A	N/A	N/A	N/A	6,400	0.54	B
58	SR 8	Arterial	Columbia Pike	Goose Creek Bypass	Mack Hatcher Parkway	4.3	Widen From 2 to 4 Lanes	Both	\$41,032,000	18,000	0.81	D	22,600	1.09	F	31,800	0.79	D
59		Collector	Seaboard Lane	Mallory Station Road	Crossroads Blvd.	0.3	Widen From 3 to 4 Lanes	Y	\$1,837,000	5,600	0.55	B	8,400	0.82	E	9,300	0.66	C
60		Collector	Lynnwood Way	Franklin Road	North Barrys Chapel Road	1.0	Widen From 2 to 3 Lanes	Both	\$8,207,000	11,000	0.73	C	14,500	0.90	E	18,200	0.70	C
61		Collector	New Roadway	Carlisle Lane	Del Rio Pike	0.9	New 2 Lane Road	Both	\$3,673,000	N/A	N/A	N/A	N/A	N/A	N/A	4,400	0.31	A
62		Interstate	New I-65 Interchange	I-65	Prett Lane Connector	N/A	Construct new Interchange	Y	\$19,608,000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
63		Collector	Lewisburg Pike Connector	New I-65 Interchange	Lewisburg Pike	1.0	New 2 Lane Road	Both	\$5,034,000	N/A	N/A	N/A	N/A	N/A	N/A	4,100	0.38	B
64		Collector	Chadwell Connector	Goose Creek Bypass	Lewisburg Pike Connector	1.3	New 2 Lane Road	Y	\$6,544,000	N/A	N/A	N/A	N/A	N/A	N/A	900	0.06	A
65		Collector	Prett Lane Connector	Paytonville Road, east of I-65 interchange	Southern UGB	1.3	New 3 Lane Road	Y	\$9,225,000	N/A	N/A	N/A	N/A	N/A	N/A	300	0.02	A
66		Collector	Paytonville Road Connector	Long Lane	Paytonville Road	0.2	New 2 Lane Road	Y	\$1,415,000	N/A	N/A	N/A	N/A	N/A	N/A	1,300	0.09	A
67		Collector	Del Rio Pike	Western Urban Growth Boundary	Carlisle Lane	1.3	New 2 Lane Road	Both	\$5,306,000	N/A	N/A	N/A	N/A	N/A	N/A	6,300	0.42	B
68		Collector	New Roadway	Western Urban Growth Boundary	Hillsboro Road	1.8	New 2 Lane Road	Both	\$7,347,000	N/A	N/A	N/A	N/A	N/A	N/A	4,500	0.45	B
69		Collector	New Roadway	Old Charlotte Pike	Del Rio Pike	2.1	New 2 Lane Road	N	\$8,571,000	N/A	N/A	N/A	N/A	N/A	N/A	3,800	0.72	C
70		Collector	New Roadway	Nolen Lane	Del Rio Pike	1.1	New 2 Lane Road	Y	\$4,490,000	N/A	N/A	N/A	N/A	N/A	N/A	4,600	0.34	A
71		Collector	1st Avenue North	North Margin Street	Bridge Street	0.2	New 2 Lane Road	Y	\$1,225,000	N/A	N/A	N/A	N/A	N/A	N/A	6,400	0.63	C
72		Collector	Coleman Road	West of Kiltroll Road	Columbia Pike	3.6	Widen From 2 to 3 Lanes	N	\$18,121,000	9,200	0.46	B	6,600	0.58	C	5,700	0.58	C
73		Collector	Horton Lane Extension	Coleman Road	Terminus of Exist. Horton Lane	1.6	New 2 Lane Road	N	\$8,054,000	N/A	N/A	N/A	N/A	N/A	N/A	4,600	0.40	B
74		Collector	Spencer Creek Road	Mack Hatcher Parkway	Franklin Road	1.0	Extend to SW Quadrant	Y	\$5,715,000	N/A	N/A	N/A	N/A	N/A	N/A	700	0.13	A
75		Local	Daniel McMahon Lane	existing terminus	Mack Hatcher Parkway	0.1	Extend to MHP	Y	\$476,000	N/A	N/A	N/A	N/A	N/A	N/A	100	0.02	A
76		Collector	Charity Drive	SR 98	Split Log Road	4.6	New 2 Lane Road	Both	\$23,154,000	N/A	N/A	N/A	N/A	N/A	N/A	10,600	0.58	C
77		Collector	North Chapel Road	SR 98	Exist. Western 90-Degree Curve	1.7	Improve Existing Lanes	N	\$6,939,000	400	0.02	A	1,500	0.11	A	1,000	0.07	A
78		Collector	North Chapel Road	Exist. Western 90-Degree Curve	Charity Drive	1.0	New 2 Lane Road	N	\$4,082,000	N/A	N/A	N/A	N/A	N/A	N/A	1,700	0.12	A
Total									\$330,865,600									

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