City of Delaware
2006 Thoroughfare Plan Update & Traffic Projections

Final Report

May 31, 2006

Prepared by
Mid-Ohio Regional Planning Commission

For
City of Delaware

Table of Contents

I. Introduction 1

II. Land Use Forecasts 2
Overview 2
Horizon Years of the Data Sets 2
Land Use Review Area 2
Land Use Forecasting Process 3
2000 and 2030 Land Use Data 4

III. 2005 Model Review 19
Overview of Modeling Procedures 19
Traffic Counts and Existing Network Review 19

IV. 2030 Traffic Projections 23
Future Model Networks 23
2030 Average Daily Traffic Estimates 26
Comparison with the 2020 Thoroughfare Estimates 26
Limitations of the modeling procedure 30

Appendices
A. Detailed TAZ Land Use
B. Traffic Counts by City of Delaware

List of Figures

Figure II-1: MORPC Data Collection Area in Relation to the 7 Counties of Central Ohio 3
Figure II-2: Change in Housing Units by TAZ 2005-2030 5
Figure II-3: Housing Density 2005 (Units/Residential Acre) 6
Figure II-4: Housing Density 2030 (Units/Residential Acre) 7
Figure II-5: Change in Employment by TAZ 2005-2030 8
Figure II-6: Sub-Area Boundaries 9
Figure III-1: MORPC Transportation Modeling Area 20
Figure III-2: Traffic Analysis Zones 21
Figure III-3: 2005 Average Daily Traffic from Model Estimates and Traffic Counts 22
Figure IV-1: Modeled Network with All Alternatives 24
Figure IV-2: Modeled Network Number of Lanes 25
Figure IV-3: Model Estimates for year 2030 Existing + Committed Projects 27
Figure IV-4: Model Estimates for year 2030 Build with All Alternatives 28
Figure IV-5: Model Estimates for year 2030 Build with All Alternatives except Alt Y & 1 29

List of Tables

Table II-1: Total Land Use Review Area 4
Table II-2: Land Use Data for Sub-area A 10
Table II-3: Land Use Data for Sub-area B 10
Table II-4: Land Use Data for Sub-area C 11
Table II-5: Land Use Data for Sub-area D 11
Table II-6: Land Use Data for Sub-area E 12
Table II-7: Land Use Data for Sub-area F 12
Table II-8: Land Use Data for Sub-area G 13
Table II-9: Land Use Data for Sub-area H 13
Table II-10: Land Use Data for Sub-area I 14
Table II-11: Land Use Data for Sub-area J 14
Table II-12: Land Use Data for Sub-area K 15
Table II-13: Land Use Data for Sub-area L 15
Table II-14: Land Use Data for Sub-area M 16
Table II-15: Land Use Data for Sub-area N 16
Table II-16: Land Use Data for Sub-area O 17
Table II-17: Land Use Data for Sub-area P 17
Table II-18: Land Use Data for Sub-area Q 18
Table IV-1: Alternatives Coded in the Delaware 2030 Networks 23
Table IV-2: General Planning Level Average Daily Traffic LOS Thresholds 30

I. Introduction

The City of Delaware like many other areas in central Ohio is experiencing a great amount of growth. The limits of the City of Delaware are continuously expanding to accommodate growth in the form of new houses, retail and industrial centers. Although there have been several recent additions and improvements, the existing transportation system continues to be inadequate to accommodate the traffic volumes projected to occur due to this population growth.

Realizing the need for updated traffic projections to better plan for future roadways and improvements, the City of Delaware has contracted the Mid-Ohio Regional Planning Commission (MORPC) to update the traffic projections made in the City of Delaware Thoroughfare Plan of 2001. The present City of Delaware Thoroughfare Plan along with the Delaware County Thoroughfare Plan was prepared in 2001 by MORPC in conjunction with ms consultants and was adopted on February 25, 2002 by the Delaware City Council.

This study will update the 2020 traffic projections to horizon year 2030 and is consistent with the improvements of the adopted Thoroughfare Plan of 2001. The base year estimates were moved from 1995 to 2005 to reflect the existing and recent improvements. The steps in estimating the traffic projections are:

- Forecasting the land use of the region for the horizon year
- Calibrating the existing transportation network and establishing the future network
- Forecasting the volumes on the future network

This report documents these three steps to obtain the future projections around Delaware City for the year 2030 under different network assumptions and serves as an update to the traffic projections made in the City of Delaware Thoroughfare Plan.

II. Land Use Forecasts

Overview

Land use data were compiled for the update of the 2002 City of Delaware Thoroughfare Plan. The land use data are used for the purpose of developing future estimated traffic in the City of Delaware and surrounding area to assist in the planning of future transportation projects.

MORPC produces land use variables as a data input into the travel demand model for the purpose of preparing a regional transportation plan. These forecasts are guided by a controlled regional population number that subsequently determines employment totals for the region. The regional land use data are developed from local land use plans. They are reviewed by local governments and adopted as part of the Regional Transportation Plan. That plan is updated on a three-year basis and was last adopted in 2004.

The regional land use data generated for the Transportation Plan are intended to show areas of need on a regional scale. By using a controlled amount of growth, the projects can be compared on a level playing field both within the region, as the forecasts assume a geographic distribution of future growth based on local planning efforts and history, and also across the state, because all MPOs are guided by one common set of county-level population projections developed for the State of Ohio.

When thoroughfare plans or detailed project studies are conducted, the forecasts are reviewed out of context with the overall regional constraints, but still with consideration for reasonableness of the amount of development the region can actually absorb. The forecasts may be adjusted at the plan level to more accurately represent the actual number of houses and jobs associated with development in order to design the project to support projected demand.

The forecasts in this document were produced specifically for the Delaware Thoroughfare Plan Update. New information obtained during the review will be incorporated into the next Regional Transportation Plan that is currently being updated for 2007. However, the constraints placed on regional growth will almost always trump the complete inclusion of local level land use forecasts in the regional plan.

Horizon Years of the Data Sets

Data sets included with the overview include 2000, 2005 and 2030.

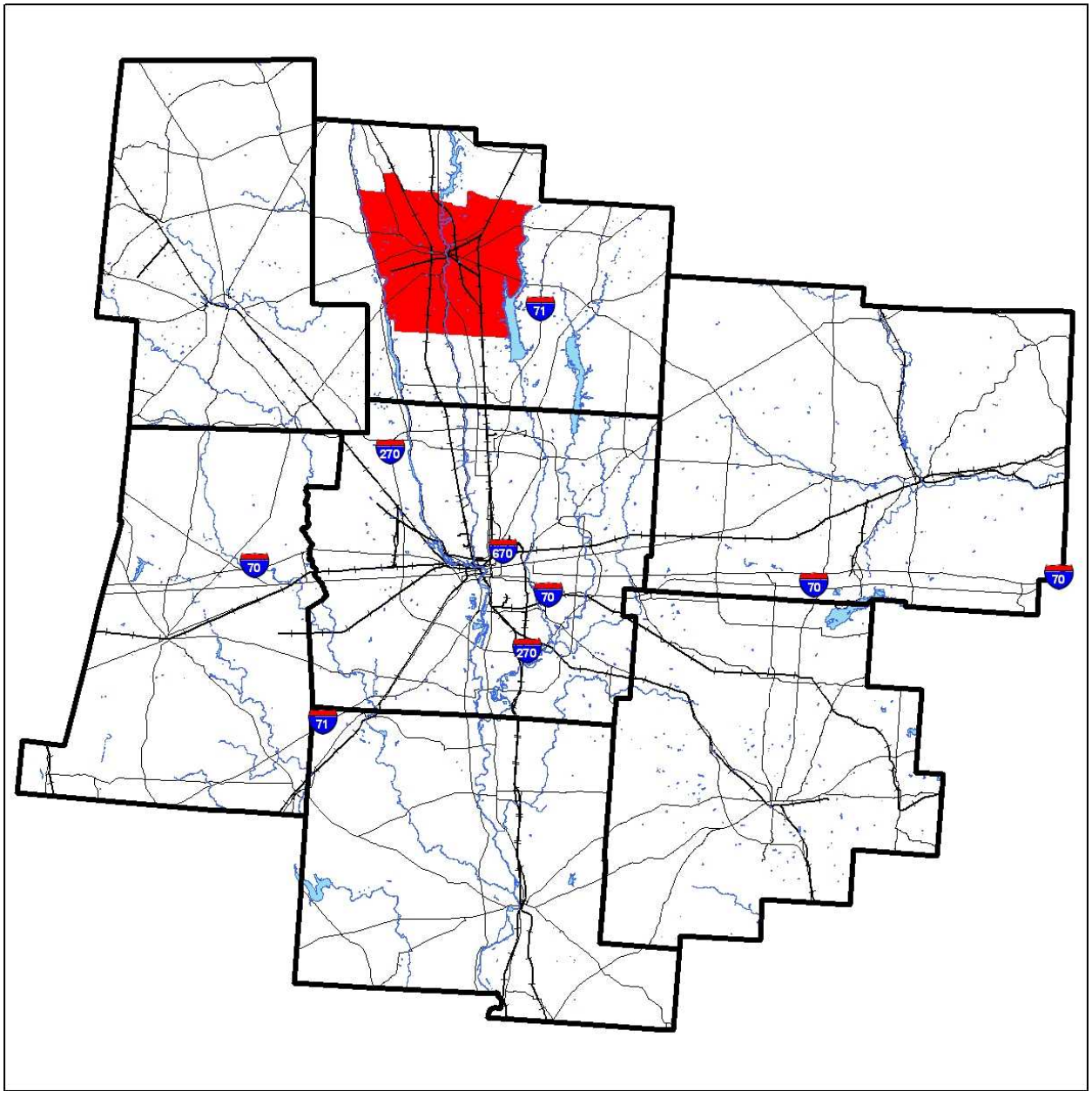
Base year 2000 data were compiled from information provided through the U.S. Census conducted in 2000. Data for 2005 are updates of the 2000 information from residential building permits and known development activity. Forecasted land use for 2030 is based on current land use plans and anticipated development with input from local sources. The forecasts were reviewed and approved by city and county planning and engineering staff.

Land Use Review Area

The Land Use Review Area (LRA) includes the City of Delaware in addition to a large area of unincorporated land surrounding the municipality. Because of the nature of transportation planning and the impact that the municipal transportation system has on the surrounding area, as well as the impact the surrounding area has on the municipal transportation system, it is prudent to not only analyze the City's land use and demographics, but that of the surrounding area as well. For the Delaware City Thoroughfare Plan, the Land Use Planning Area is bounded on the north by Penry Road and Leonardsburg Road, on the east by Alum Creek, on

the south by Hyatts Road, and on the west by the Scioto River. The study area is shown in context of the seven-county central Ohio region in Figure II-1.

Figure II-1: MORPC Data Collection Area in Relation to the 7 Counties of Central Ohio



Land Use Forecasting Process

The future land use data used in this thoroughfare plan are based on the regional forecasts developed for the 2004 MORPC Transportation Plan. The 2005 data are a product of projections made using the MORPC land use model using 2000 U.S. Census results as baseline data. These baseline data are then compared to actual construction through an analysis of local plans, building permits issued, and other known development projects that

were constructed. These revised data are then used as a base to update the 2030 land use projections.

The following Local Planning Documents were reviewed.

- 2003-2008 City of Delaware Comprehensive Plan, 2003
- City of Delaware Thoroughfare Plan, 2002
- City of Delaware Land Use & Major Facilities Plan, 2000
- Delaware County Sewer Master Plan, DRAFT, 2004
- Delaware County Thoroughfare Plan, 2002
- Berlin Township Comprehensive Land Use Plan, 2004
- Brown Township Comprehensive Plan, 2001
- Liberty Township Comprehensive Plan, DRAFT, 2005
- Troy Township Comprehensive Land Use Plan, 2002

2000 and 2030 Land Use Data

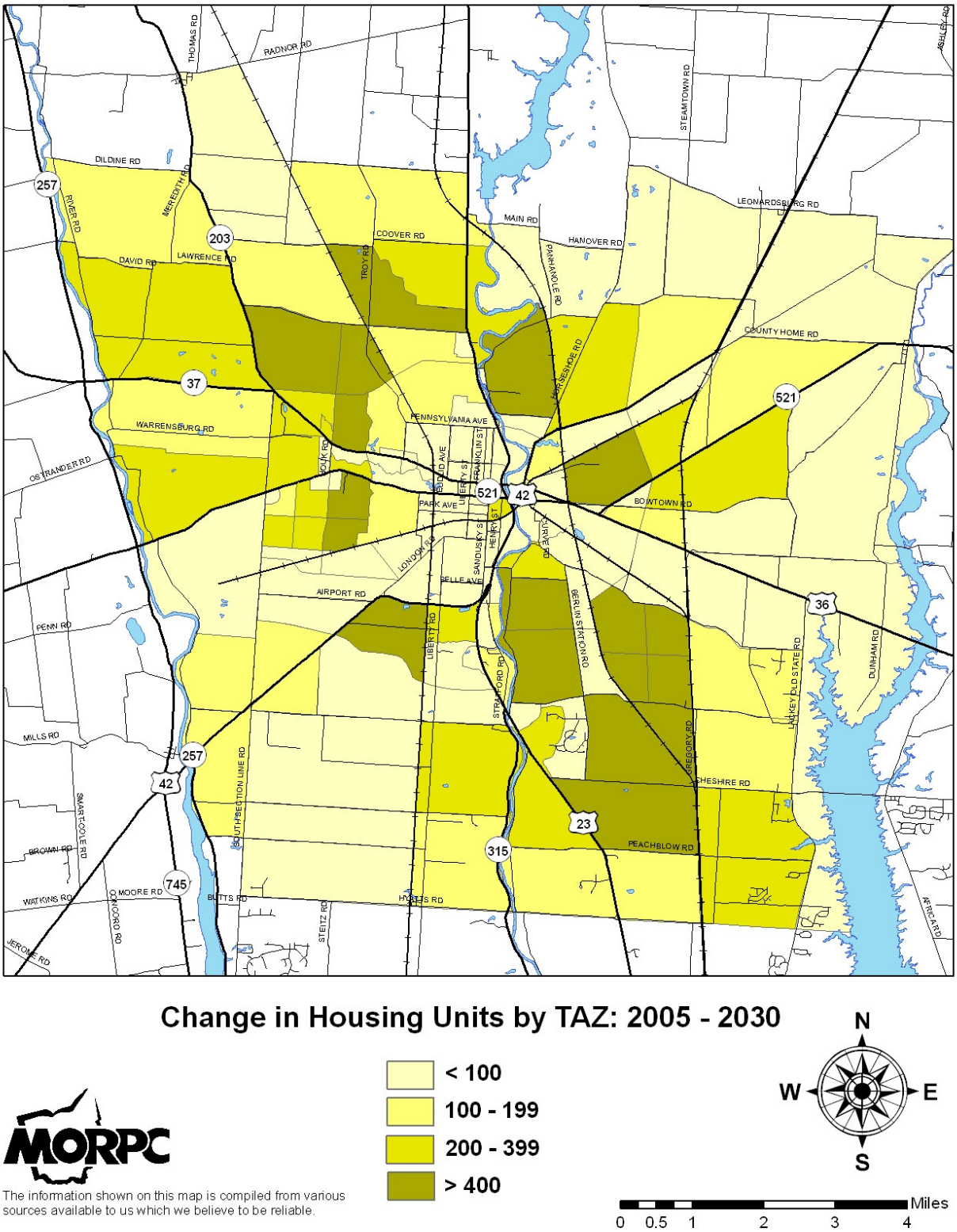
The total population of the LRA is projected to more than double between 2005 and 2030, growing from 38,722 to 87,580. During this time period housing units are projected to increase from 16,089 to 38,892 while overall net housing density (housing units per residential acre) will increase from 1.0 units/acre to1.2 units/acre as residential development occurs at higher densities away from the central part of the city. Jobs are also projected to increase from 20,060 to 38,518. The data are compiled in a special geography of Traffic Analysis Zones (TAZs). This is the geography the travel demand model recognizes. There are 154 TAZs in the study area. Figure II-2 shows the change in housing by TAZ for the years 2005-2030. The 2005 and 2030 net residential density is shown in figures II-3 and II-4. The changes in residential density illustrate the residential development that is projected to spread out to the edges of the study area. Figure II-5 shows the change of employment for the 2005 to 2030. Change of employment is a good general indicator of non-residential development.

To simplify the discussion of the assumptions used in the forecasts, the review area was divided into five sub-areas, which are illustrated in Figure II-6. Appendix A provides detailed TAZ level land use. A review of the assumptions used in each sub-area is as follows.

Table II-1: Total Land Use Review Area

Delaware Thoroughfare Plan Study Area				Change	% Change
	2000	2005	2030	2005 2030	2005 2030
People	35,514	38,437	101,965	62,528	159%
Houses	14,609	16,384	42,497	26,113	159%
Jobs	15,750	20,060	57,720	37,660	188%
Industrial Square Ft	2,301	3,808	20,070	16,262	427%
Retail Square Ft	2,114	2,827	8,000	5,173	183%
Office Square Ft	2527	2679	4,893	2,214	83%
Units/Acre	2.72	2.58	2.51	Industrial, Retail & Office data in thousands of square feet	
% Developed	22%	25%	49%		

Figure II-2: Change in Housing Units by TAZ 2005-2030



Change in Housing Units by TAZ: 2005 - 2030

- < 100
- 100 - 199
- 200 - 399
- > 400

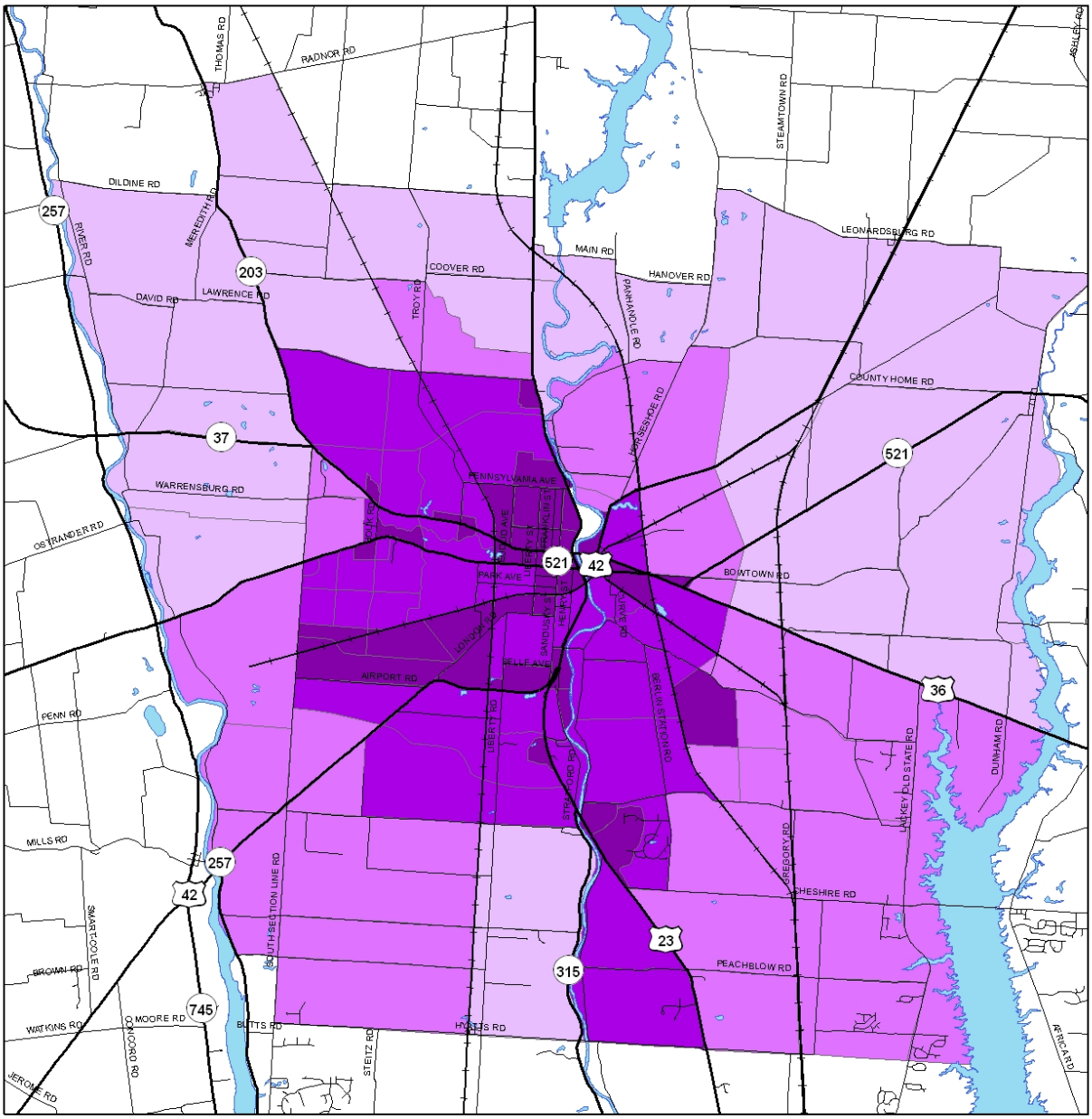
N
W
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0 0.5 1 2 3 4 Miles

MORPC

The information shown on this map is compiled from various sources available to us which we believe to be reliable.

Figure II-3: Housing Density 2005 (Units/Residential Acre)



Residential Density by TAZ: 2005

- > 1 unit/acre
- 1 - 2.49 units/acre
- 2.5 - 4.9 units/acre
- 5+ units/acre

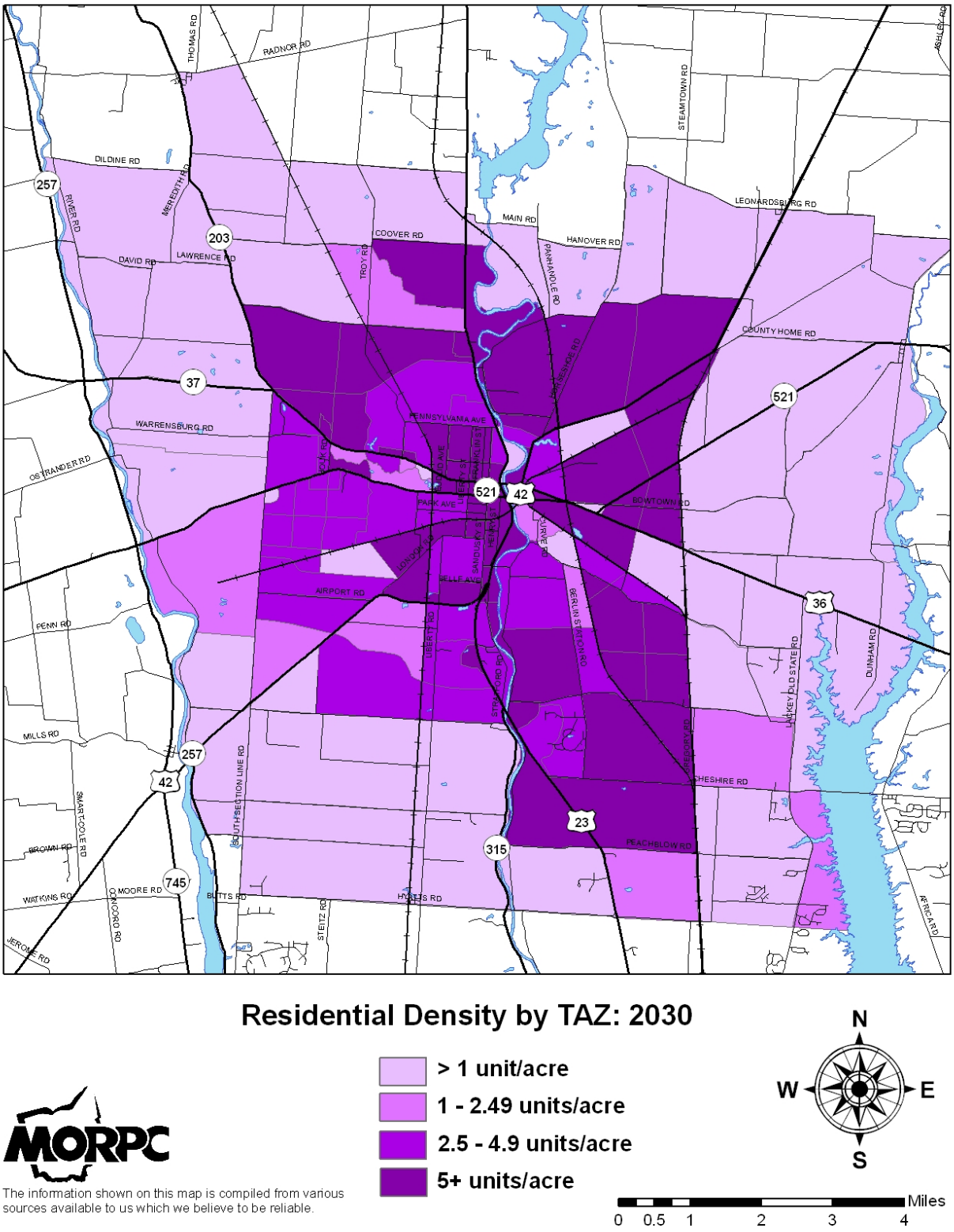
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MORPC

The information shown on this map is compiled from various sources available to us which we believe to be reliable.

Figure II-4: Housing Density 2030 (Units/Residential Acre)



Residential Density by TAZ: 2030

- > 1 unit/acre
- 1 - 2.49 units/acre
- 2.5 - 4.9 units/acre
- 5+ units/acre

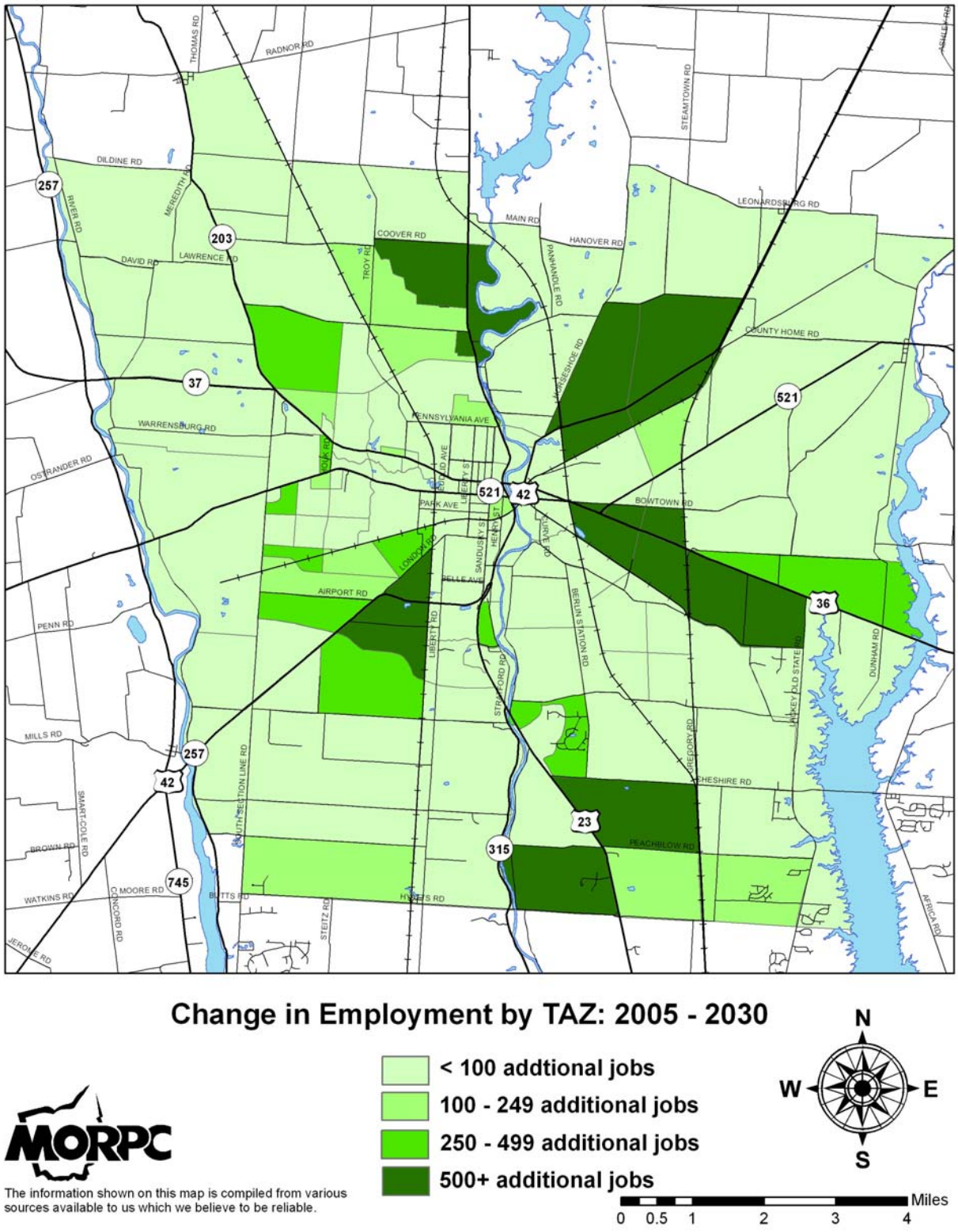
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MORPC

The information shown on this map is compiled from various sources available to us which we believe to be reliable.

Figure II-5: Change in Employment by TAZ 2005-2030



Change in Employment by TAZ: 2005 - 2030

- < 100 addtional jobs
- 100 - 249 additional jobs
- 250 - 499 additional jobs
- 500+ additional jobs

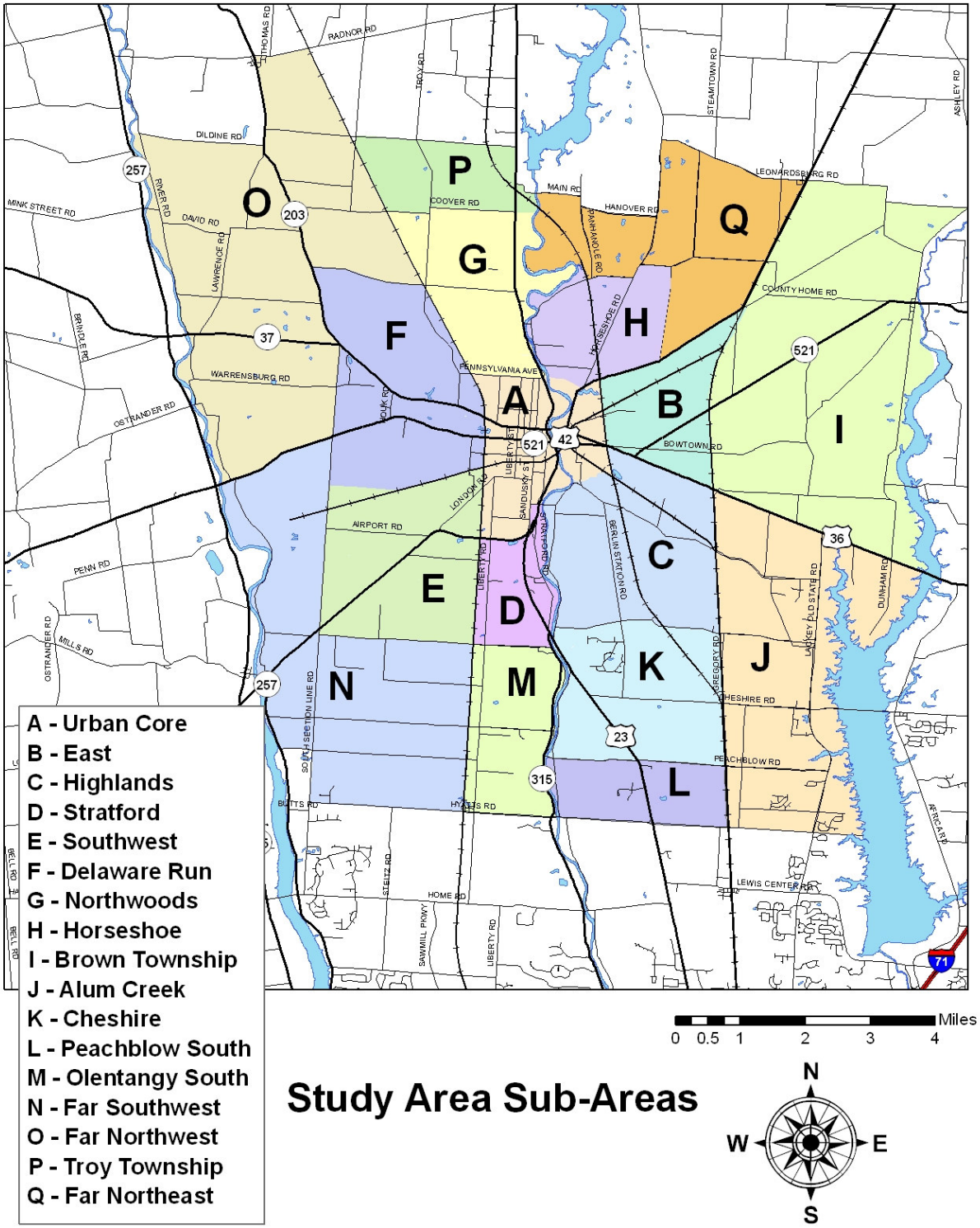
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0 0.5 1 2 3 4 Miles

MORPC

The information shown on this map is compiled from various sources available to us which we believe to be reliable.

Figure II-6: Sub-Area Boundaries



A) Delaware City Urban Core:

This sub-area is made up of the Downtown, Northwest, Near East, OWU, and Near South sub-areas of the City of Delaware Comprehensive Plan. These areas make up the historical core of the City of Delaware.

Table II-2: Land Use Data for Sub-area A

Delaware City Urban Core				Change	% Change
	2000	2005	2030	2005-2030	2005-2030
People	12,545	12,637	13,971	1,334	11%
Houses	5,047	5,091	5,652	561	11%
Jobs	7,107	7,213	7,962	749	10%
Industry	497	517	592	75	15%
Retail	571	592	703	111	19%
Office	980	992	1,167	175	18%
Units/Acre	6.50	6.07	5.96	Industrial, Retail & Office data in thousands of square feet	
% Developed	76%	77%	84%		

Assumptions:

- The area will remain stable over the next 25 years.
- Redevelopment and infill development will lead to small increases in residential and commercial development.
- The sub-area will be mostly developed by 2030.

B) East

This sub-area lies directly east of the urban core. It is bounded on all sides by railroad right-of-way. Most of the area is within the City; however, some of the outlying areas are unincorporated.

Table II-3: Land Use Data for Sub-area B

East				Change	% Change
	2000	2005	2030	2005-2030	2005-2030
People	836	923	7,116	6,193	671%
Houses	381	415	2,964	2,550	615%
Jobs	437	537	7,907	7,370	1373%
Industry	43	41	3,126	3,085	7596%
Retail	87	116	842	726	626%
Office	77	83	847	764	922%
Units/Acre	1.77	1.43	2.96	Industrial, Retail & Office data in thousands of square feet	
% Developed	22%	28%	94%		

Assumptions:

- Office and retail development will occur on the north side of 36/37.
- Residential development will occur adjacent to existing development along OH-521.
- The Glenn Road extension will bisect the sub-area opening new areas for development.
- The sub-area will be fully developed by 2030.

C) Highlands

This sub-area is directly southeast of the city core with the Olentangy River as the western boundary.

Table II-4: Land Use Data for Sub-area C

Highlands				Change	% Change
	2000	2005	2030	2005-2030	2005-2030
People	644	769	10,287	9,518	1237%
Houses	281	344	4,423	4,079	1186%
Jobs	95	532	9,745	9,212	1731%
Industry	13	368	2,882	2,514	682%
Retail	16	32	1,674	1,642	5141%
Office	12	12	779	767	6406%
Units/Acre	3.58	3.40	7.22	Industrial, Retail & Office data in thousands of square feet	
% Developed	6%	9%	89%		

Assumptions:

- More than 3,600 dwelling units will be added in the various proposed residential developments.
- Retail and industrial development will occur on the south side of the 36/37 corridor adjacent to the Kroger Distribution Center.
- The Glenn Road extension and Southeast Connector will bisect the sub-area.
- The area will be almost fully developed by 2030.

D) Stratford

This sub-area is located directly south of the urban core and is bisected by US 23. It has already seen a great deal of residential and commercial development.

Table II-5: Land Use Data for Sub-area D

Stratford				Change	% Change
	2000	2005	2030	2005-2030	2005-2030
People	3,100	3,255	4,906	1,651	51%
Houses	1,433	1,501	2,156	655	44%
Jobs	1,556	1,631	1,967	336	21%
Industry	99	103	122	19	19%
Retail	433	469	593	124	27%
Office	152	146	131	-15	-10%
Units/Acre	5.28	5.08	4.42	Industrial, Retail & Office data in thousands of square feet	
% Developed	45%	48%	65%		

Assumptions:

- Overall, the sub-area will see modest growth in the coming years.
- The main residential development will occur between US 42 and Slack Road.
- The area will be 2/3 developed by 2030.

E) Southwest

This sub-area is southwest of the urban core. It is the city's industrial base as well as being the home of the airport.

Table II-6: Land Use Data for Sub-area E

Southwest				Change	% Change
	2000	2005	2030	2005-2030	2005-2030
People	254	274	1,938	1,664	607%
Houses	110	114	943	829	727%
Jobs	2,783	4,092	7,953	3,861	94%
Industry	1,148	2,201	5,221	3,020	137%
Retail	150	210	405	194	93%
Office	493	502	534	32	6%
Units/Acre	2.44	2.40	1.80	Industrial, Retail & Office data in thousands of square feet	
% Developed	17%	20%	42%		

Assumptions:

- Substantial industrial development will take place in the sub-area by 2030 with 3 million square feet of floor space and almost 4,000 jobs being added.
- Limited residential development will take place along to the Slack Road corridor.
- The sub-area will be almost half developed by 2030.

F) Delaware Run

This sub-area is west of the urban core and is bisected by US 36 and OH 37. There has been a great deal of residential and retail development along these corridors.

Table II-7: Land Use Data for Sub-area F

Delaware Run				Change	% Change
	2000	2005	2030	2005-2030	2005-2030
People	7,260	8,693	22,599	13,906	160%
Houses	2,955	3,588	9,387	5,799	162%
Jobs	1,776	2,843	4,649	1,806	64%
Industry	80	105	175	70	66%
Retail	164	521	976	455	87%
Office	478	494	531	36	7%
Units/Acre	3.77	4.00	5.26	Industrial, Retail & Office data in thousands of square feet	
% Developed	33%	39%	63%		

Assumptions:

- Major residential development will occur with a high density of five-unit/acre range.
- Retail and mixed-use development will occur in the northwest quadrant.
- The existing Grady Hospital will be redeveloped as an affiliated medical facility with urgent care and professional offices.
- The sub-area will be almost 2/3 developed by 2030.

G) Northwoods

The Northwoods sub-area is on the northern edge of the city west of the Olentangy River. This area has seen recent residential development to the north of Pennsylvania Avenue.

Table II-8: Land Use Data for Sub-area G

Northwoods				Change	% Change
	2000	2005	2030	2005-2030	2005-2030
People	3,165	3,274	6,371	3,097	95%
Houses	1,354	1,413	2,706	1,293	91%
Jobs	629	791	3,674	2,883	365%
Industry	64	64	20	-45	-69%
Retail	168	227	1,048	821	362%
Office	169	172	360	188	109%
Units/Acre	2.52	2.74	3.77	Industrial, Retail & Office data in thousands of square feet	
% Developed	37%	37%	52%		

Assumptions:

- The southeast quadrant of US 23 and Coover Road will emerge as a neighborhood retail center by 2030.
- The area between Hills-Miller and Coover roads will develop residentially by 2030.
- The sub-area will be over half developed by 2030.

H) Horseshoe

This sub-area is located directly northeast of the city proper and contains the floodplains of the Olentangy River and Horseshoe Run.

Table II-9: Land Use Data for Sub-area H

Horseshoe				Change	% Change
	2000	2005	2030	2005-2030	2005-2030
People	318	367	3,040	2,673	729%
Houses	145	173	1,393	1,220	705%
Jobs	23	27	3,001	2,974	10939%
Industry	4	4	3,371	3,367	82446%
Retail	31	32	64	32	101%
Office	1	1	5	3	332%
Units/Acre	1.62	1.69	1.74	Industrial, Retail & Office data in thousands of square feet	
% Developed	9%	11%	46%		

Assumptions:

- This area is currently unincorporated and not served by utilities.
- The southeast quadrant will develop as light industry.
- Low-density residential will encompass the remainder of the area.
- The sub-area will be almost half developed by 2030.
-

I) Brown Township

Table II-10: Land Use Data for Sub-area I

Brown Township				Change	% Change
	2000	2005	2030	2005-2030	2005-2030
People	767	882	2,570	1,688	191%
Houses	272	312	1,035	722	231%
Jobs	125	190	533	343	181%
Industry	33	32	50	19	59%
Retail	34	60	154	94	156%
Office	17	19	34	15	78%
Units/Acre	0.70	0.67	0.58	Industrial, Retail & Office data in thousands of square feet	
% Developed	14%	15%	30%		

Assumptions:

- This sub-area will see some large lot residential development.
- It will be less than 1/3 developed by 2030.

J) Alum Creek

Table II-11: Land Use Data for Sub-area J

Alum Creek				Change	% Change
	2000	2005	2030	2005-2030	2005-2030
People	1,353	2,156	4,685	2,529	117%
Houses	482	775	1,798	1,023	132%
Jobs	221	251	1,478	1,227	488%
Industry	96	97	1,092	995	1024%
Retail	99	118	350	232	198%
Office	51	49	92	43	88%
Units/Acre	1.77	1.73	0.81	Industrial, Retail & Office data in thousands of square feet	
% Developed	38%	41%	67%		

Assumptions:

- Significant industrial and retail development will occur along 36/37.
- Large-lot housing will dominate the residential sector with most new builds occurring on 2+ acre lots.
- The sub-area will be 2/3 developed by 2030.

K) Cheshire

This sub-area is directly south of the Highlands sub-area and is bisected by US 23. Many parts of this area are currently unincorporated.

Table II-12: Land Use Data for Sub-area K

Cheshire				Change	% Change
	2000	2005	2030	2005-2030	2005-2030
People	602	1,111	11,684	10,572	952%
Houses	324	633	4,954	4,322	683%
Jobs	352	490	2,520	2,030	414%
Industry	0	2	7	5	250%
Retail	35	36	463	427	1185%
Office	40	57	157	100	177%
Units/Acre	3.06	2.70	14.51	Industrial, Retail & Office data in thousands of square feet	
% Developed	22%	32%	44%		

Assumptions:

- The northwest, northeast, and southeast will continue to develop residentially.
- The new Grady Memorial Hospital will be built along Glenn Road north of Peachblow.
- Retail development will occur along the US 23 corridor.
- Camp Lazarus will remain.
- The Glenn Road extension will bisect the sub-area.
- The sub-area will be about half developed by 2030.

L) Peachblow South

This sub-area is located south of the City and contains portions of Liberty Township.

Table II-13: Land Use Data for Sub-area L

Peachblow South				Change	% Change
	2000	2005	2030	2005-2030	2005-2030
People	727	739	1,566	827	112%
Houses	332	338	706	368	109%
Jobs	226	834	2,501	1,668	200%
Industry	115	142	260	118	83%
Retail	147	221	478	258	117%
Office	7	98	190	92	95%
Units/Acre	2.35	2.22	1.44	Industrial, Retail & Office data in thousands of square feet	
% Developed	20%	26%	51%		

Assumptions:

- The area will be served by County sewers within the next five years.
- Office and retail development will occur to the west of US 23.
- Residential development will occur to the east of US 23.

M) Olentangy South

This sub-area is located south of Stratford along the western banks of the Olentangy River in Liberty Township.

Table II-14: Land Use Data for Sub-area M

Olentangy South				Change	% Change
	2000	2005	2030	2005-2030	2005-2030
People	643	725	1,925	1,200	165%
Houses	242	280	749	469	168%
Jobs	49	51	58	7	13%
Industry	2	2	2	0	0%
Retail	62	63	67	4	7%
Office	6	7	12	5	69%
Units/Acre	0.95	0.97	0.95	Industrial, Retail & Office data in thousands of square feet	
% Developed	18%	20%	48%		

Assumptions:

- Moderate residential development will occur along the Liberty Road corridor.
- The sub-area will be ½ developed by 2030.

N) Far Southwest

This sub-area is located southwest of the City between the Scioto River and the Cheshire System RR tracks in Concord and Liberty townships.

Table II-15: Land Use Data for Sub-area N

Far Southwest				Change	% Change
	2000	2005	2030	2005-2030	2005-2030
People	1,206	1,401	2,792	1,391	99%
Houses	451	532	1,073	541	102%
Jobs	160	251	566	315	126%
Industry	27	43	108	65	151%
Retail	35	50	100	50	100%
Office	17	18	22	4	22%
Units/Acre	1.16	1.11	1.01	Industrial, Retail & Office data in thousands of square feet	
% Developed	19%	21%	31%		

Assumptions:

- Some residential development will occur along the Section Line Road corridor.
- The sub-area will be less than 1/3 developed by 2030.

O) Far Northwest

This sub-area is northwest of the City in Radnor and Troy townships.

Table II-16: Land Use Data for Sub-area O

Far Northwest				Change	% Change
	2000	2005	2030	2005-2030	2005-2030
People	1,059	1,132	4,022	2,890	255%
Houses	386	429	1,544	1,115	260%
Jobs	141	191	412	222	116%
Industry	65	68	77	10	14%
Retail	34	34	33	-1	-4%
Office	3	3	5	2	74%
Units/Acre	0.74	0.73	0.70	Industrial, Retail & Office data in thousands of square feet	
% Developed	14%	16%	35%		

Assumptions:

- Large-lot residential development will occur along the Byers Road corridor north of OH 37.
- The sub-area will be 1/3 developed by 2030.

P) Troy Township

This small sub-area is north of the Northwoods sub-area in Troy Township.

Table II-17: Land Use Data for Sub-area P

Troy Township				Change	% Change
	2000	2005	2030	2005-2030	2005-2030
People	218	220	825	605	275%
Houses	84	88	326	238	270%
Jobs	38	42	63	20	48%
Industry	9	11	21	10	89%
Retail	36	32	10	-22	-68%
Office	2	2	3	1	38%
Units/Acre	0.70	0.68	0.62	Industrial, Retail & Office data in thousands of square feet	
% Developed	10%	12%	39%		

Assumptions:

- There will be limited large-lot residential development.
- The area will be over 1/3 developed by 2030.

Q) Far Northeast

This sub-area is northeast of the City in Brown and Troy townships.

Table II-18: Land Use Data for Sub-area Q

				Change	% Change
	2000	2005	2030	2005-2030	2005-2030
People	818	881	1,668	788	89%
Houses	330	359	689	330	92%
Jobs	32	96	2,732	2,636	2756%
Industry	7	7	2,942	2,935	42538%
Retail	10	15	40	25	160%
Office	21	23	25	2	7%
Units/Acre	0.88	0.86	1.08	Industrial, Retail & Office data in thousands of square feet	
% Developed	13%	15%	42%		

Assumptions:

- There will be significant industrial development in the US 42 corridor.
- There will be minor large-lot residential development.
- The area will be less than 1/2 developed by 2030.

Land use forecasts were prepared for the City of Delaware study area for the purpose of traffic analysis associated with the update of the City of Delaware Thoroughfare Plan Update. The forecasts were developed from a base set of data from the 2000 census and updated to 2005 from building permit and other known development information.

The City of Delaware and the surrounding area will be subject to development pressure for at least the next 25 years. The City of Delaware will see mostly commercial and industrial development along the US 23 Corridor and adjacent to the airport. Outside of the municipal boundaries, the southeastern sub-areas will see the most commercial and industrial growth with commercial growth concentrated on the US 23 corridor and industrial growth centered on the US 36/37 corridor. The rest of the study area is projected to be developed in a mostly low-density residential fashion with some industrial in the southwest near the airport. Overall, in the next 25 years the population of the study area will nearly triple to 101,965 people and the percentage of developed land will increase from less than 26 percent to over 49 percent.

III. 2005 Model Review

Overview of Modeling Procedures

The regional travel demand model was used to estimate 2030 Average Daily Traffic (ADT) volumes for this study. The MORPC regional travel demand model covers all of Franklin, Delaware and Licking counties and parts of Fairfield, Madison, Union and Pickaway counties, as shown in Figure III-1. The general inputs to the process are the land use information discussed in Section II and information about the transportation system. The Traffic Analysis Zones (TAZs) for the study area and the detailed inset on Delaware City are shown in Figure III-2. The major component of the transportation system is the highway network. The highway network consists of the freeways, arterials, most collectors and in some areas significant local streets. General information about segments or "links" of the highway network such as distance, facility type, lanes, speed limit and urban/rural setting are the major attributes the modeling process considers when estimating the amount of traffic using a facility.

In the travel demand modeling chain, the initial process is to estimate the number of trips generated by the land uses in each TAZ. Then these trips generated from each TAZ are distributed among other zones in the region. This produces a matrix of trips with each trip's origin and destination identified. Then using the matrix output, the mode choice of the trip is determined. That is, will the trip be made using transit or in a vehicle. Finally, trips are "assigned" to the highway network taking into account the characteristics of the highway network. These trips are "loaded" onto the highway network from the center (referred to as centroid) of the zone through links called centroid connectors. Each zone may have up to four centroid connectors. In essence, these links represent the local streets in that zone leading to the higher functional class roads.

Traffic Counts and Existing Network Review

At the onset of the study, MORPC and the local jurisdictions conducted an inventory of available traffic counts in the area. In addition, the City of Delaware conducted seven 24-hour segment counts, which are provided as Appendix B. Based on this inventory and new counts, Figure III-3 provides existing ADT volumes on study area roadways.

The regional model has been validated with the existing traffic counts for the entire region for year 2000. In order to review the model's traffic estimates for the study year, the 2005 land use and transportation system was used to estimate year 2005 average daily traffic for the Delaware area. It is then used to compare with the available traffic counts in the region. Due to day-to-day variations in traffic counts and the discrepancies in the count year, it is not possible to match the counted volumes exactly. For the higher volume facilities, an acceptable performance is being within 10% to 15% of the observed volumes for the vast majority of the links. For low-volume roads (under 8,000 ADT), a wider variation is acceptable.

The existing network with the 2005 estimated volumes from the model is shown on Figure III-3. It also shows the available traffic counts in the study area along with the year the count was taken on the segment. The count year is coded as the last digit of the traffic count with '1,' '5' and '6' representing the counts taken in years 2001, 2005 and 1996 respectively. The actual traffic counts show that the modeled volumes represent the existing transportation network and their volumes within the acceptable range.

Figure III-1: MORPC Transportation Modeling Area

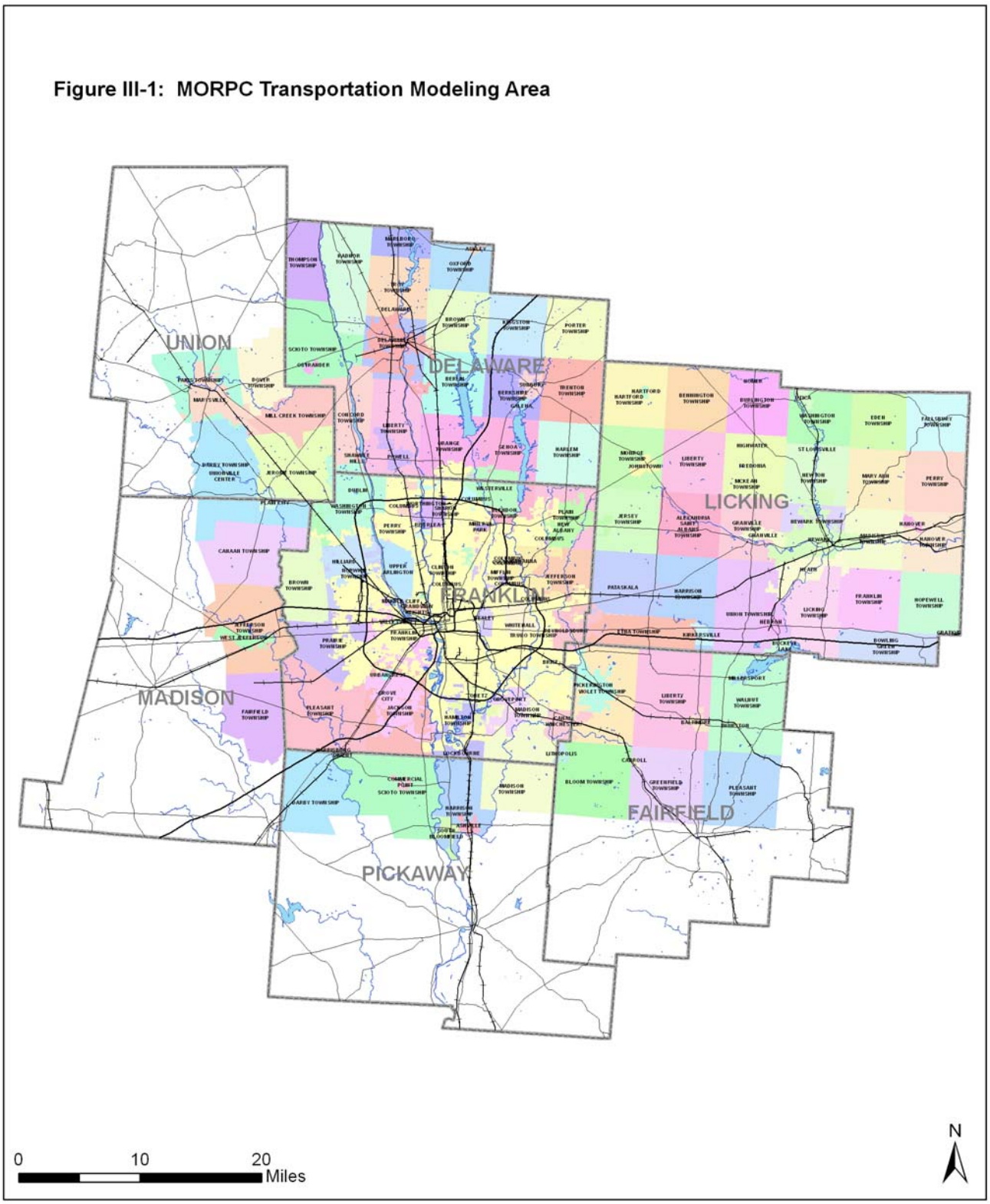
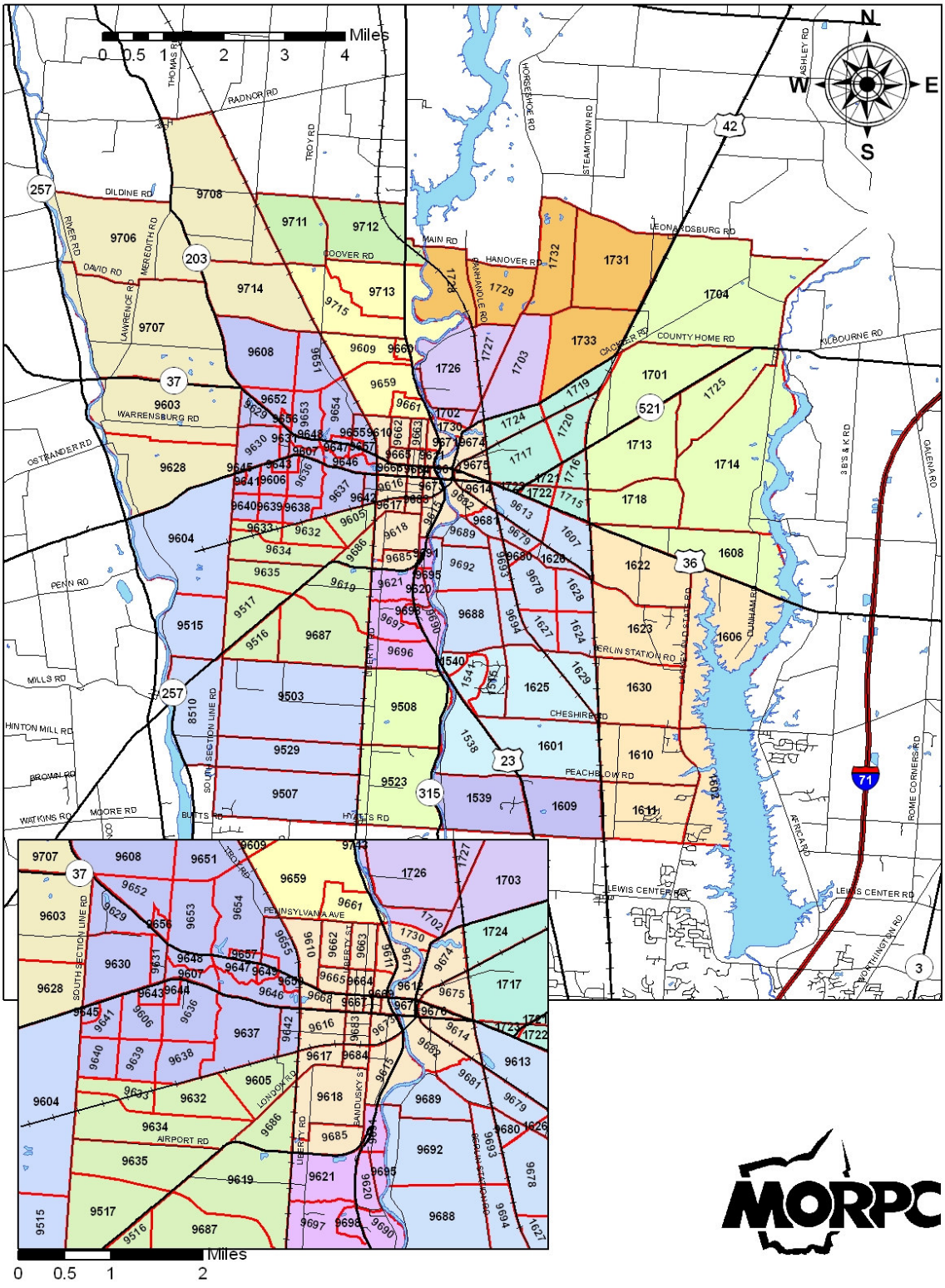
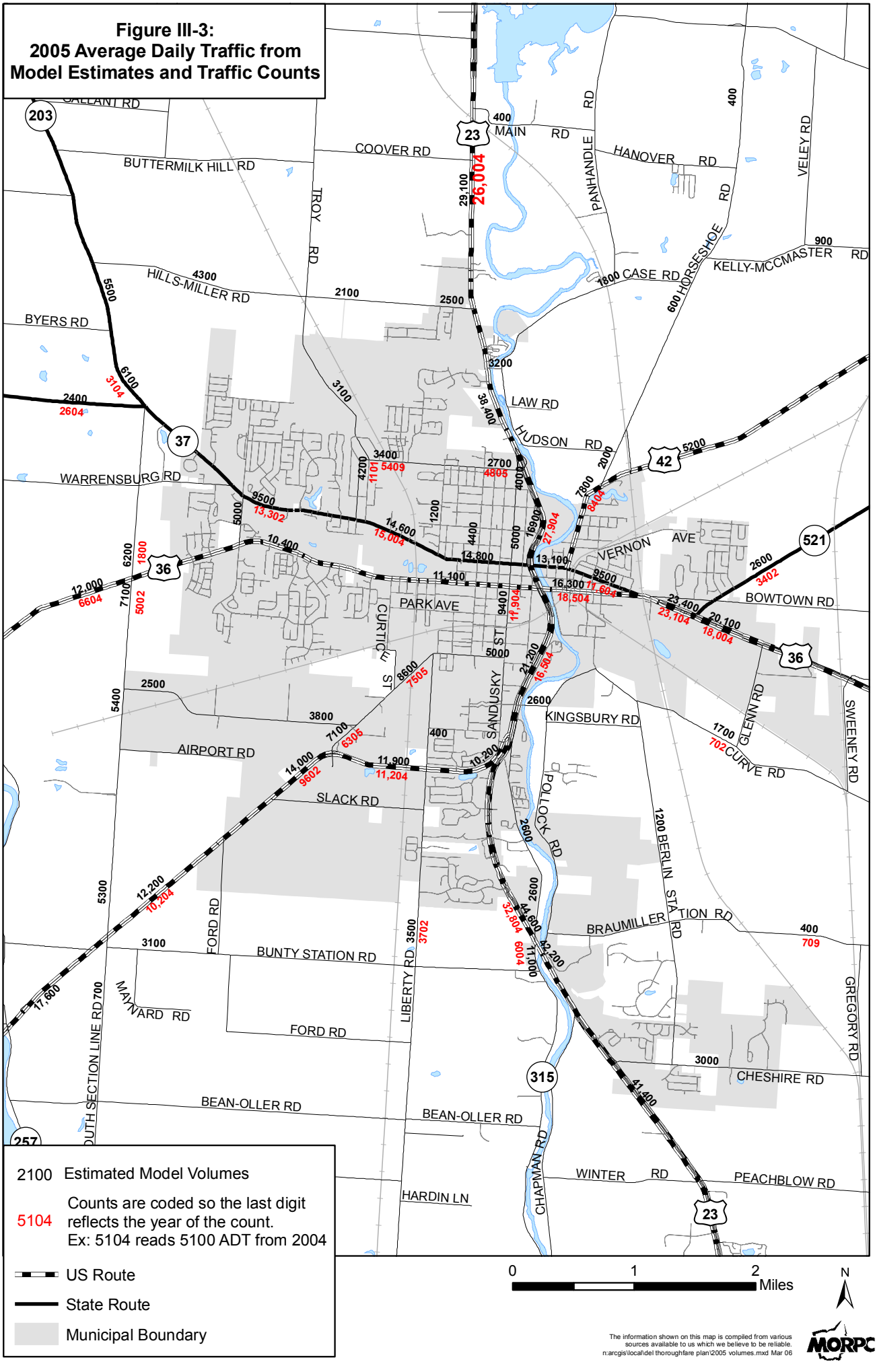


Figure III-2: Traffic Analysis Zones




Figure III-3:
2005 Average Daily Traffic from
Model Estimates and Traffic Counts
GALLANT RD
BUTTERMILK HILL RD
COOVER RD
TROY RD
MAIN RD
PANHANDLE RD
HANOVER RD
VELEY RD
HORSESHOE RD
KELLY-MCCMASTER RD
CASE RD
HILLS-MILLER RD
BYERS RD
LAW RD
HUDSON RD
WARRENSBURG RD
VERNON AVE
PARK AVE
CURTICE ST
SANDUSKY ST
BOWTOWN RD
KINGSBURY RD
GLENN RD
SWEENEY RD
CURVE RD
AIRPORT RD
SLACK RD
POLLOCK RD
BERLIN STATION RD
BRAUMILLER RD
BUNTY STATION RD
FORD RD
LIBERTY RD
MAYNARD RD
SOUTH SECTION LINE RD
GREGORY RD
CHESHIRE RD
BEAN-OLLER RD
HARDIN LN
CHAPMAN RD
WINTER RD
PEACHBLOW RD
203
23
37
42
36
521
315
257
2100 Estimated Model Volumes
5104 Counts are coded so the last digit reflects the year of the count.
Ex: 5104 reads 5100 ADT from 2004
US Route
State Route
Municipal Boundary
0
1
2
Miles
N
The information shown on this map is compiled from various sources available to us which we believe to be reliable.
n:arcgis\local\del thoroughfare plan\2005 volumes.mxd Mar 06
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IV. 2030 Traffic Projections

Future Networks

The 2030 highway network assumptions follow the network assumptions made in the 2020 Delaware Thoroughfare Plan. The 2030 Existing and Committed Projects (E+C) network starts with the existing 2005 network and adds the committed projects in the area. It is shown in Figure IV-1.

Then the alternatives from the 2004 Thoroughfare Plan Update are added to establish the 2030 Build Network. The specific list of projects included is provided in Table IV-1. Figure IV-2 provides the number of lanes for the 2030 Build Network and the alternatives included in the different scenarios. Through interagency correspondence with the City of Delaware, appropriate assumptions for various alternatives were chosen.

Table IV-1: Alternatives Coded in the Delaware 2030 Build Networks

Alternative	
1	Extension of Cheshire Road west from US 23 to connect with US 42
4	Extension of Pennsylvania Avenue east from US 23 to the intersection of US 42 and Horseshoe Road
5	North/south route extending from the intersection of Alternative Y between Horseshoe Road and US 42 south to intersect with US 36/SR 37 at Glenn Road and the extension of Panhandle Road east to connect with the north/south route between Horseshoe Road and US 42
6	East/west connector road from the existing intersection of SR 37/SR 203 and South Section Line Road east to the committed Houk Road extension
7	Extension of the committed connector road between Houk and Troy roads east to align with the existing intersection of US 23 and Panhandle Road
8	Extension of River Oaks Drive west from Stratford Road aligning with the existing intersection of US 23 and Cottswold Drive
9	Extension of Lexington Boulevard south to US 36
13	Modification of the US 23 and Pennsylvania Avenue interchange to provide for all the movements
16	US 42 extension to the extension of Glenn Road
18	Pollyanna Drive Extension
County Alt G	Extension of South Section Line Road north from SR 37 to align with North Section Line Road at Buttermilk Hill Road and a connection between South Section Line Road and SR 257 south of Bean-Oller Road
County Alt Y	Extension of Mink Street from River Road east to County Home Road at its intersection with US 42 and a new interchange at I-71 and SR 521

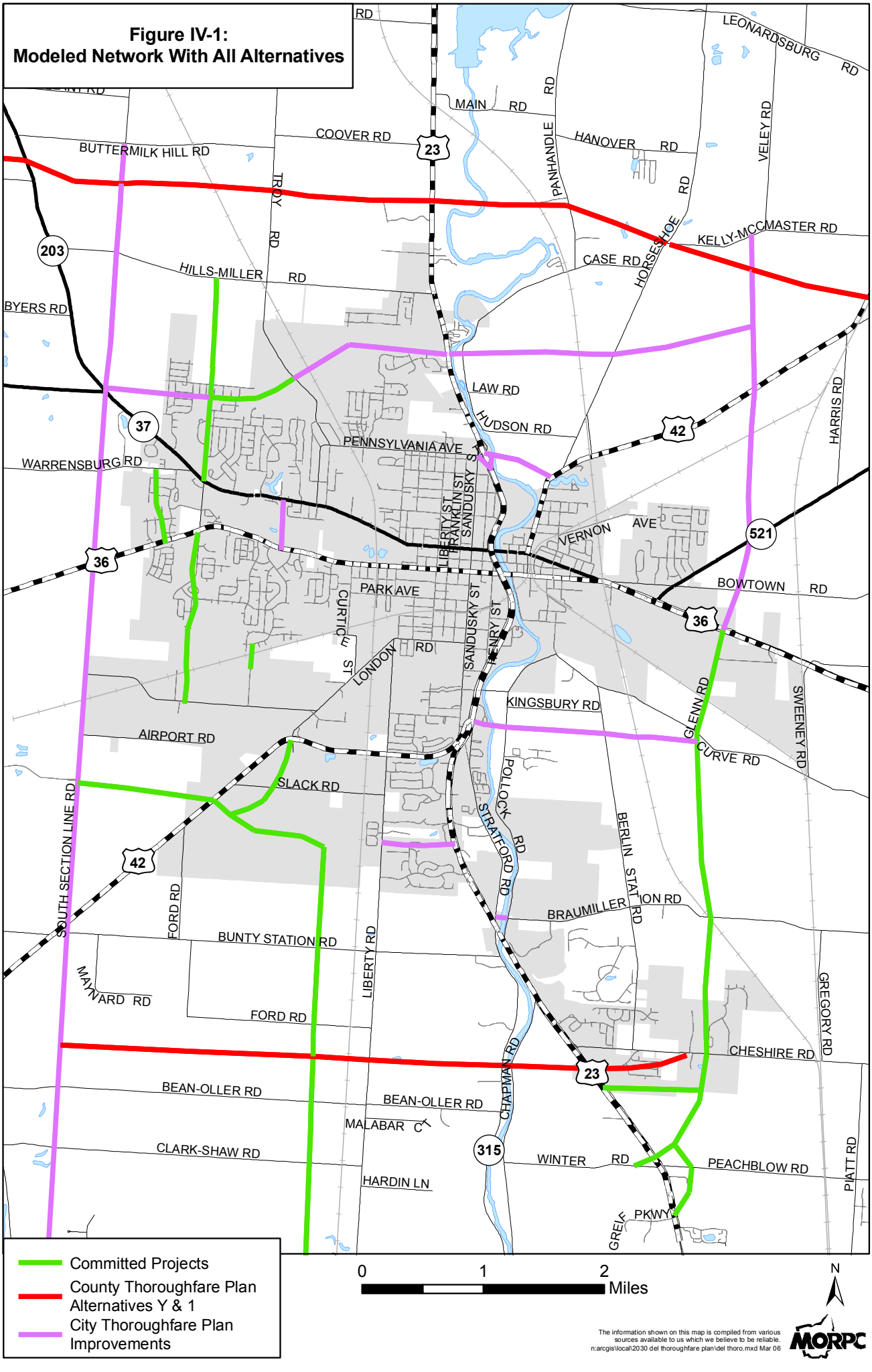
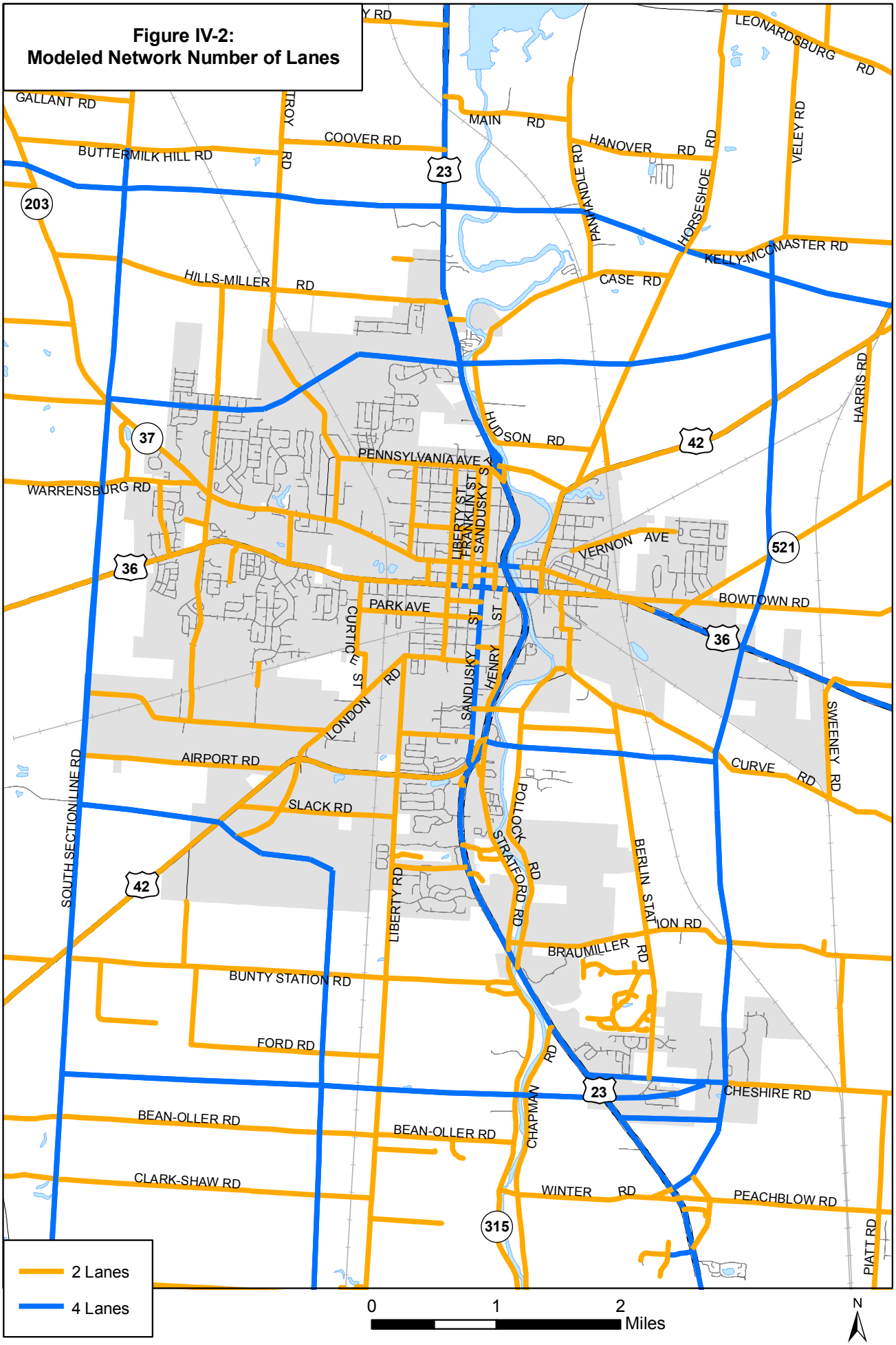

Figure IV-1:
Modeled Network With All Alternatives
LEONARDSBURG RD
MAIN RD
COOVER RD
BUTTERMILK HILL RD
HANOVER RD
VELEY RD
PANHANDLE RD
TROY RD
HORSESHOE RD
CASE RD
KELLY-MCCMASTER RD
HILLS-MILLER RD
BYERS RD
LAW RD
HUDSON RD
HARRIS RD
PENNSYLVANIA AVE
WARRENSBURG RD
IBERRY ST
FRANKLIN ST
SANDUSKY ST
VERNON AVE
BOWTOWN RD
PARK AVE
CURTICE ST
LONDON RD
HENRY ST
KINGSBURY RD
GLENN RD
SWEENEY RD
CURVE RD
AIRPORT RD
SLACK RD
POLLOCK RD
STRATFORD RD
BERLIN STATION RD
BRAUMILLER RD
SOUTH SECTION LINE RD
FORD RD
BUNTY STATION RD
MAYNARD RD
LIBERTY RD
FORD RD
GREGORY RD
CHESHIRE RD
BEAN-OLLER RD
BEAN-OLLER RD
CHAPMAN RD
MALABAR CT
CLARK-SHAW RD
WINTER RD
PEACHBLOW RD
PIATT RD
HARDIN LN
GREEN PKWY
203
37
23
42
36
521
315
Committed Projects
County Thoroughfare Plan Alternatives Y & 1
City Thoroughfare Plan Improvements
0
1
2
Miles
N
The information shown on this map is compiled from various sources available to us which we believe to be reliable.
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Figure IV-2:
Modeled Network Number of Lanes



The information shown on this map is compiled from various sources available to us which we believe to be reliable.
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2030 Average Daily Traffic Estimates

Three future scenarios are considered.

- Base Scenario: 2030 Existing and Committed Projects only
- Scenario A: One with all the alternatives listed on the above Table IV-1
- Scenario B: All the alternatives except County Alternatives 1 & Y

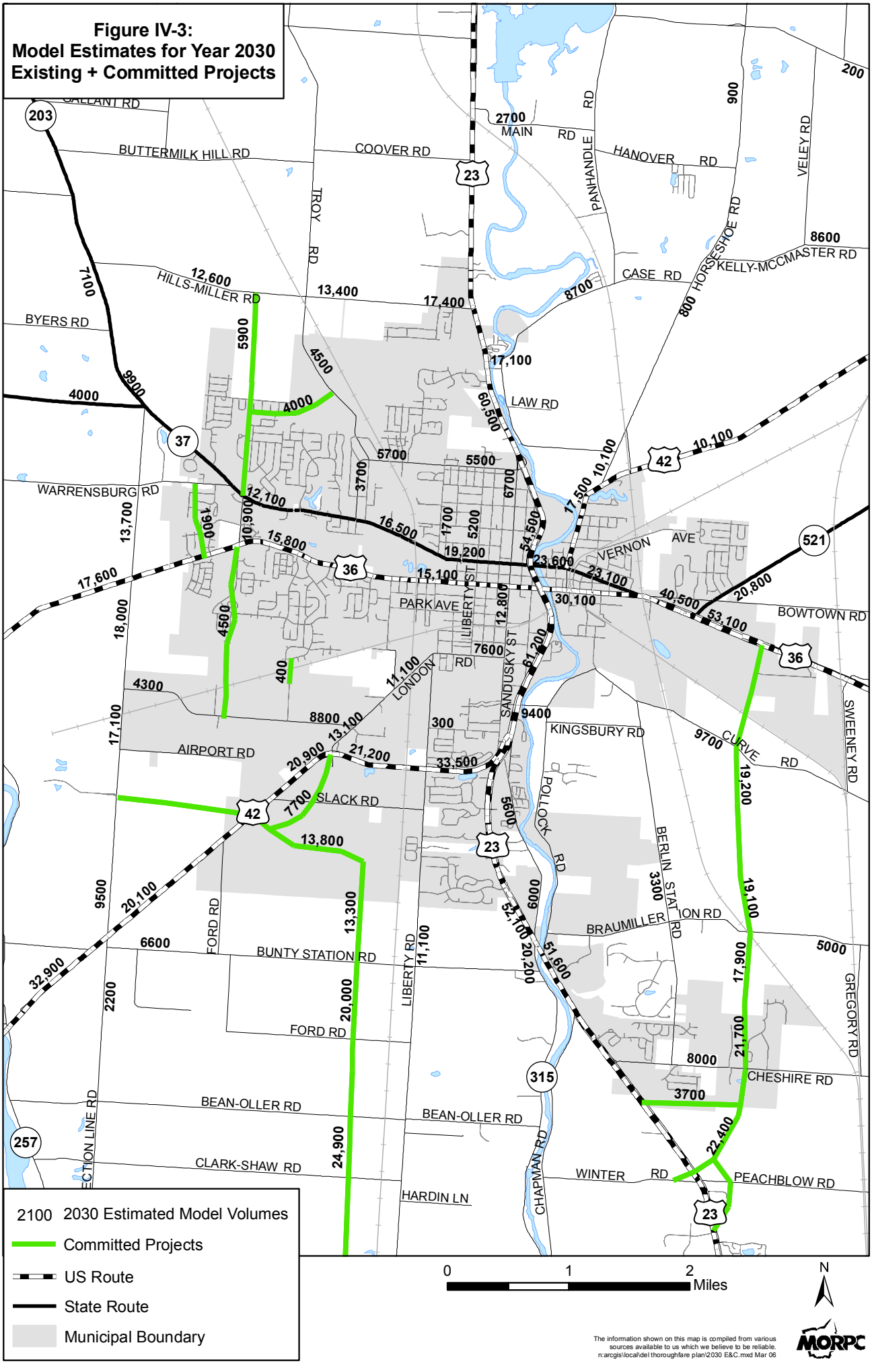
The trip tables were produced as per 2030 land use discussed earlier and assigned on the future transportation networks.

Figure IV-3 shows the Base Scenario with the Existing and Committed Projects Network under the 2030 land use. Scenario A is established with all the alternatives listed on Table IV-1 and thus, the 2030 Build Network with all the alternatives and their estimated traffic volumes in year 2030 are shown in Figure IV-4. Scenario B shows the 2030 Build Network from Scenario A with two alternatives removed, namely Alternatives Y & 1. It is shown in Figure IV-5.

Comparison with the 2020 Thoroughfare Estimates

It should be noted that the land use used in this report has changed considerably from the land use set used in the 2020 Thoroughfare Plan. Part of it is due to the change in growth patterns from 2000 to 2005. Also, the newer land use had the opportunity to be validated with the recently released 2000 census data. In addition, MORPC has updated its transportation model from the traditional four-step procedure to the state-of-the-art activity-based model. Also the year 2030 estimates are farther in horizon than the 2020 estimates and hence they add a 10-year increment to the projected volumes in the 2020 Thoroughfare Plan.

Careful review of the 2030 Build volumes with the 2020 Build volumes reveals the shift of growth pattern to southeast Delaware. As a result, slightly lower volumes were observed on and around the Sawmill Parkway area. Also, the higher volumes on US 36/SR 37 were observed. There is an observed shift in the volumes to the East-West Connector from Alternative 5. This could be the result of the changes in the land use patterns and modeling methods employed. Hence, the second scenario without Alternatives 1 & Y was modeled to capture the effects of the shift of the volumes due to the presence of those alternatives.


Figure IV-3:
Model Estimates for Year 2030
Existing + Committed Projects
BUTTERMILK HILL RD
COOVER RD
MAIN RD
HANOVER RD
PANHANDLE RD
VELEY RD
HORSESHOE RD
KELLY-MCCMASTER RD
CASE RD
HILLS-MILLER RD
BYERS RD
TROY RD
LAW RD
WARRENSBURG RD
VERNON AVE
PARK AVE
LIBERTY ST
SANDUSKY ST
LONDON RD
BOWTOWN RD
KINGSBURY RD
CURVE RD
SWEENEY RD
AIRPORT RD
SLACK RD
POLLOCK RD
BERLIN STATION RD
BRAUMILLER RD
BUNTY STATION RD
FORD RD
LIBERTY RD
GREGORY RD
CHESHIRE RD
BEAN-OLLER RD
CLARK-SHAW RD
HARDIN LN
WINTER RD
PEACHBLOW RD
CHAPMAN RD
SECTION LINE RD
2100 2030 Estimated Model Volumes
Committed Projects
US Route
State Route
Municipal Boundary
0
1
2
Miles
N
The information shown on this map is compiled from various sources available to us which we believe to be reliable.
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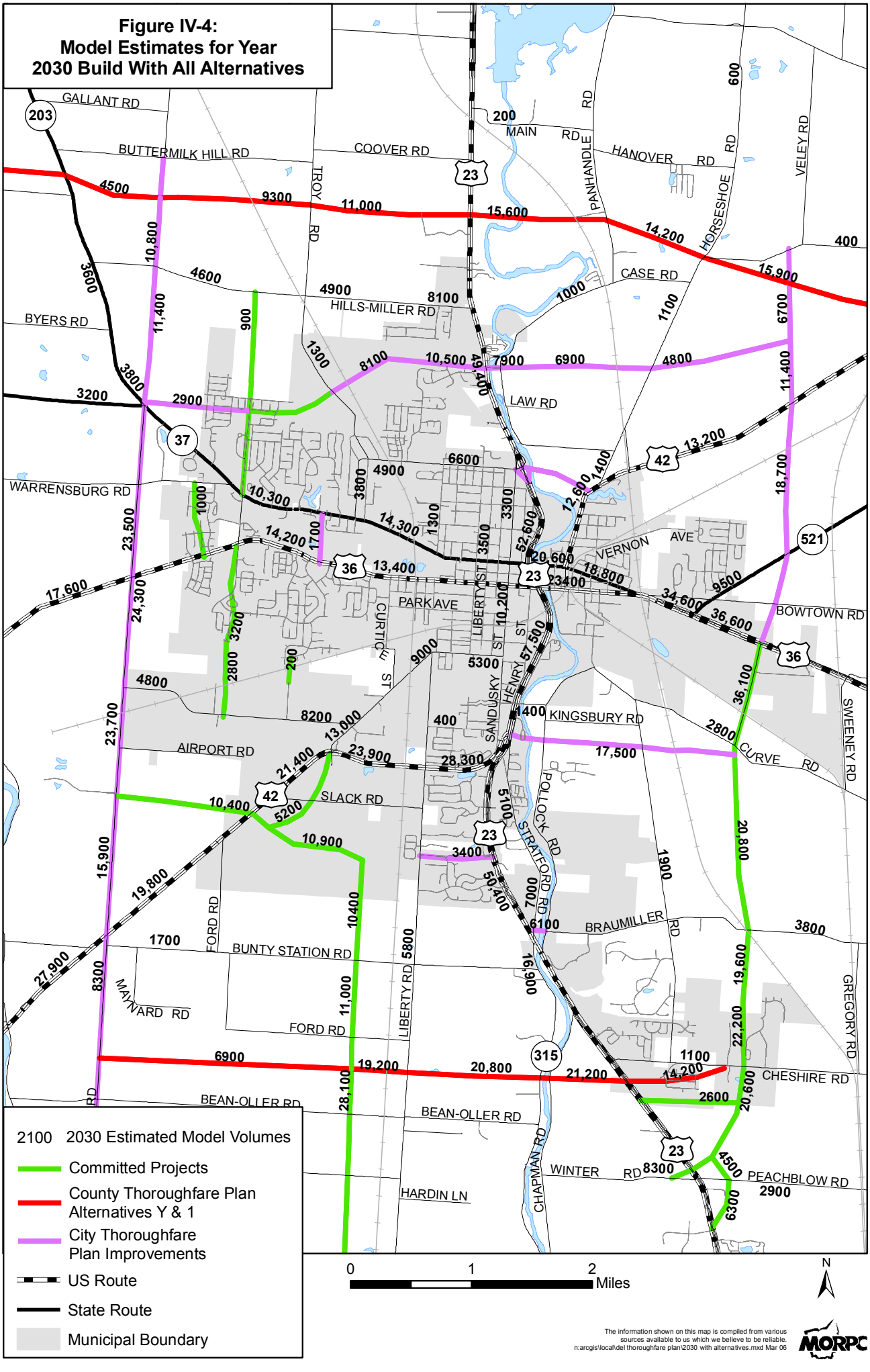
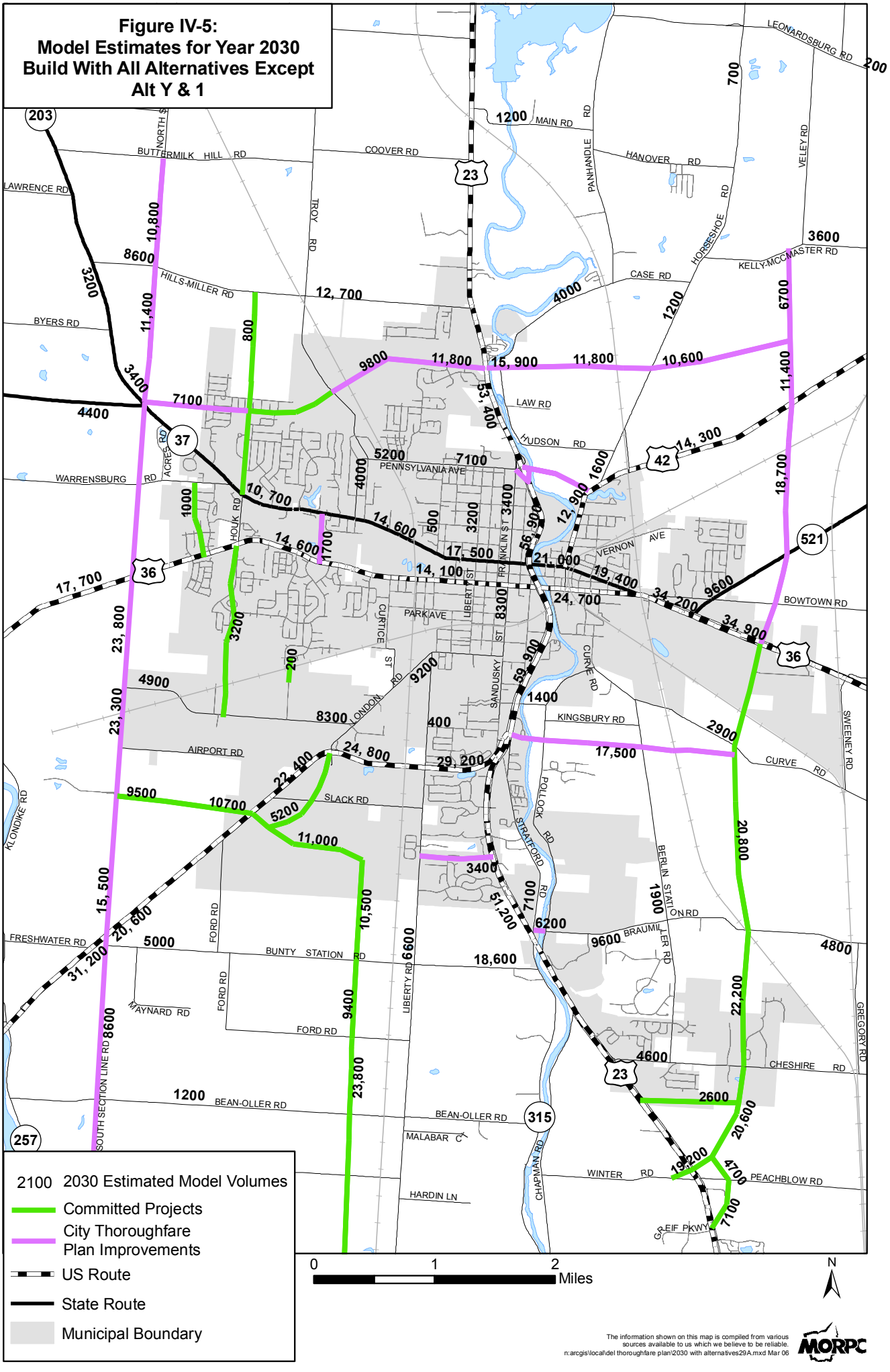

Figure IV-4:
Model Estimates for Year
2030 Build With All Alternatives
GALLANT RD
BUTTERMILK HILL RD
COOVER RD
TROY RD
MAIN RD
PANHANDLE RD
HANOVER RD
HORSESHOE RD
VELEY RD
CASE RD
HILLS-MILLER RD
BYERS RD
LAW RD
WARRENSBURG RD
PARK AVE
VERNON AVE
BOWTOWN RD
KINGSBURY RD
CURVE RD
SWEENEY RD
AIRPORT RD
SLACK RD
CURTIS ST
LIBERTY ST
SANDUSKY ST
HENRY ST
POLLOCK RD
STRATFORD RD
BRAUMILLER RD
GREGORY RD
BUNTY STATION RD
FORD RD
MAYNARD RD
LIBERTY RD
CHESHIRE RD
BEAN-OLLER RD
HARDIN LN
CHAPMAN RD
WINTER RD
PEACHBLOW RD
203
23
37
36
42
521
315
2100 2030 Estimated Model Volumes
Committed Projects
County Thoroughfare Plan Alternatives Y & 1
City Thoroughfare Plan Improvements
US Route
State Route
Municipal Boundary
0
1
2
Miles
N
The information shown on this map is compiled from various sources available to us which we believe to be reliable.
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Figure IV-5: Model Estimates for Year 2030 Build With All Alternatives Except Alt Y & 1



Limitations of the modeling procedure

Travel demand modeling should be used as a guideline for preliminary long-term growth analysis and transportation needs. Further traffic studies should be made to project the more detailed roadway volumes and intersection analysis might be useful to understand the capacity needs at particular intersections.

ADT projections provide the guide for the basic number of lanes needed. A planning level guide for estimating the number of lanes needed based on the Average Daily Traffic (ADT) is shown in Table IV-2 below.

Table IV-2: General Planning Level Average Daily Traffic LOS Thresholds[1]

Type of Facility	Max LOS C ADT	Max LOS D ADT	Max LOS E ADT
2-Lane Road[2]	10,000	10,000 to 15,000[4]	15,000
4/5-Lane Facility[3]	20,000	25,000 to 35,000[4]	33,000 to 41,000[4]
6/7-Lane Facility[3]	30,000	35,000 to 45,000[4]	50,000+[4]

[1]Assumes peak-hour traffic is approximately 9% of daily traffic with approximately a 60/40 directional split. Different peaking or directional split characteristics will lead to different peak-period operations.
[2]The threshold varies depending on the presence of a left-turn lane at intersections or other access points.
[3]Assumes necessary turn lanes at intersections.
[4]The threshold varies depending on the volume of cross-road traffic needing access to the facility.

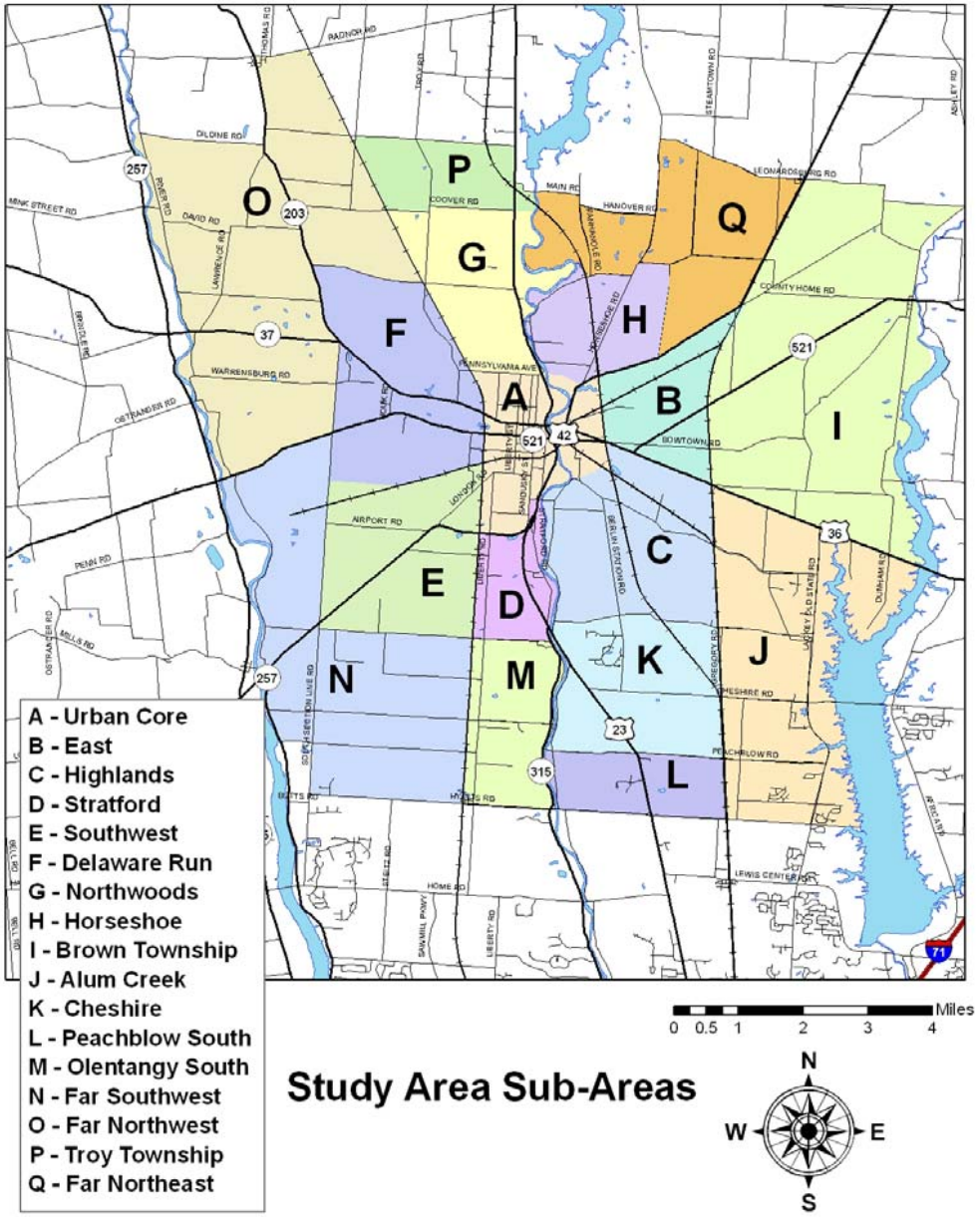
Table IV-2 is based on how congested a road segment with a certain number of lanes and a specified ADT will typically operate during the peak hour. Arterials with an ADT less than the Max LOS C will generally not have any peak-hour congestion. Moderate peak-hour congestion will occur and become more severe as facilities move from the Max LOS C values to the Max LOS E values. High peak-hour congestion will occur when ADTs are above the values in the last column in the table.

It is advisable to update the traffic projections when additional land usage information is available or if there is significant deviation from the underlying land use assumptions. Also, any new regionally significant trip generators might change the travel patterns in the region and hence the region-wide travel demand model would be beneficial. Other events that might trigger future updates to the modeling procedure include significant annexations, change in roadway alignments on the regional level, latent potential for high growth area in certain areas, or consideration of additional alternatives.

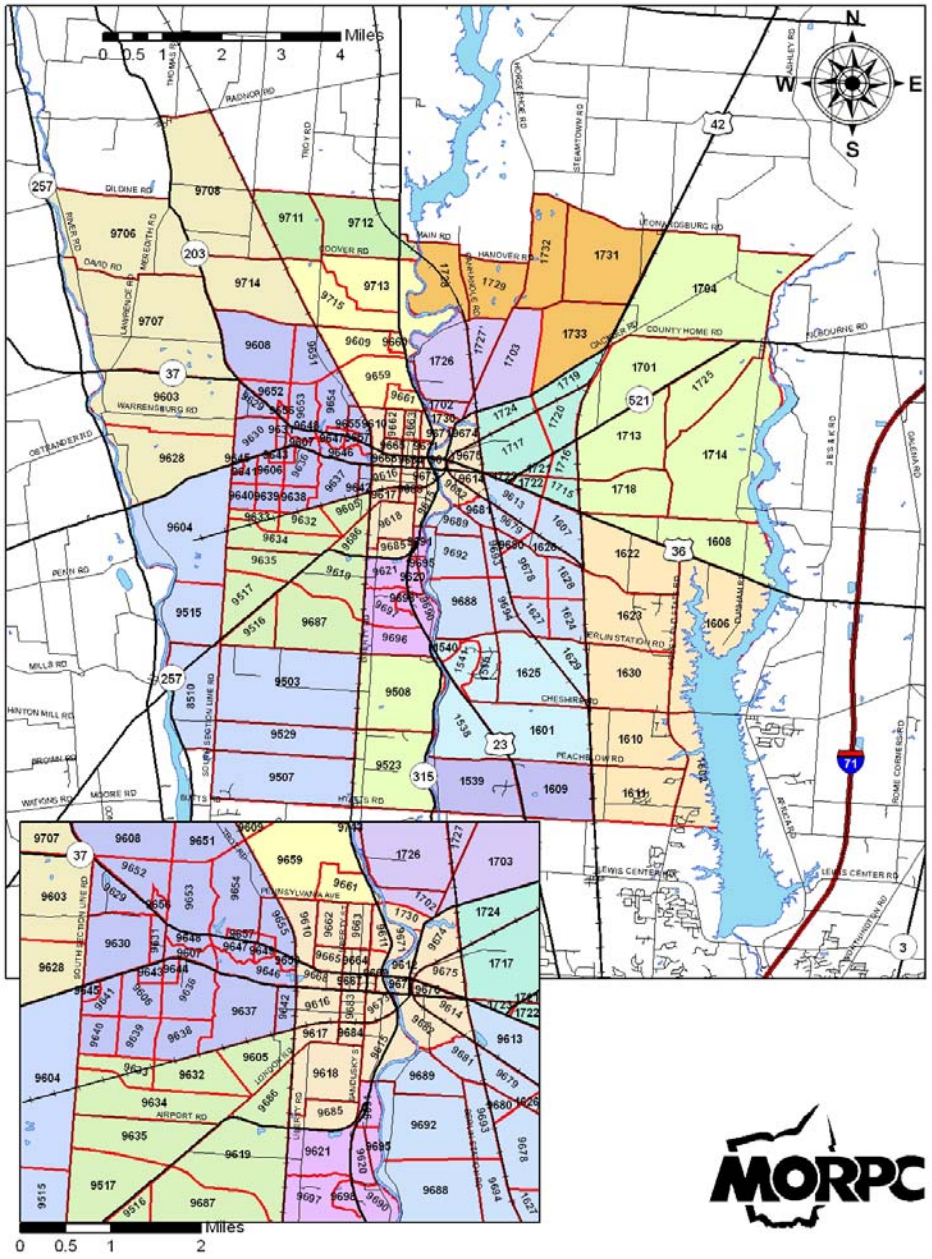
Appendix A

Detailed Traffic Analysis Zone Land Use Data

Study Area in Sub-Areas



Traffic Analysis Zones in Sub-Areas



TAZ LEVEL DATA: Population, Housing Units and Employment

	Population			2005-20	Pct Change	Housing Units			2005-20	Pct Change	Employment			2005-20	Pct Change
	2000	2005	2030	30	2005-2030	2000	2005	2030	30	2005-2030	2000	2005	2030	30	2005-2030
A	***Urban Core***														
9663	763	763	778	15	2%	312	312	331	19	6%	102	104	113	9	9%
9676	183	185	245	60	33%	83	84	116	32	39%	52	55	61	6	11%
9675	693	693	681	-12	-2%	269	269	286	17	6%	107	111	121	9	8%
9674	454	464	729	265	57%	186	190	319	129	68%	161	161	160	0	0%
9673	2,274	2,274	2,274	0	0%	603	603	603	0	0%	632	633	801	168	26%
9672	76	77	140	63	81%	22	22	49	27	123%	277	280	338	58	21%
9671	0	0	0	0	0%	0	0	0	0	0%	0	0	0	0	0%
9670	30	29	33	3	12%	28	28	23	-5	-18%	299	300	401	101	33%
9668	349	349	361	13	4%	174	174	177	3	2%	160	169	216	47	28%
9666	26	26	66	40	153%	17	17	42	25	150%	485	485	495	9	2%
9677	115	115	127	12	10%	67	67	67	0	0%	79	79	82	3	4%
9664	478	477	476	-2	0%	208	208	190	-18	-9%	488	491	521	30	6%
9669	243	242	257	14	6%	121	121	108	-13	-11%	245	248	277	28	11%
9662	611	610	684	74	12%	258	259	311	52	20%	56	58	64	6	9%
1730	13	12	171	159	1277%	5	5	71	66	1326%	0	0	0	0	0%
9610	535	535	557	23	4%	263	263	269	6	2%	165	171	180	9	5%
9611	421	422	387	-35	-8%	178	178	170	-8	-5%	60	61	67	6	10%
9612	238	243	306	63	26%	107	109	140	31	28%	111	112	120	9	8%
9614	197	197	386	189	96%	86	86	175	89	103%	459	485	560	75	15%
9615	211	211	191	-19	-9%	123	123	120	-3	-3%	915	917	931	13	1%
9616	661	665	653	-13	-2%	243	245	227	-18	-7%	43	46	58	12	27%
9617	307	309	380	72	23%	119	120	139	19	16%	163	169	185	16	9%
9618	762	768	975	207	27%	351	355	431	76	21%	309	310	313	2	1%
9665	499	499	486	-13	-3%	207	207	213	6	3%	40	49	77	28	56%
9667	220	222	251	28	13%	121	122	142	20	17%	202	202	248	45	22%
9683	372	375	505	130	35%	157	159	202	43	27%	1,172	1,174	1,192	19	2%
9684	253	247	253	6	2%	114	114	105	-9	-8%	141	141	141	0	0%
9685	1,171	1,173	1,128	-45	-4%	476	476	429	-47	-10%	89	105	144	38	36%
9682	390	455	493	38	8%	149	174	195	20	12%	94	94	96	2	2%
	12,545	*12,637*	*13,971*	*1,334*	*11%*	*5,047*	*5,091*	*5,652*	*561*	*11%*	*7,107*	*7,213*	*7,962*	*749*	*10%*
B	***East***														
1722	12	12	412	400	3395%	6	6	195	189	3128%	7	24	1,334	1,310	5385%
1715	31	31	492	461	1486%	11	11	187	177	1662%	0	26	2,983	2,956	11181%
1716	18	18	691	673	3797%	7	7	287	280	4230%	9	10	89	79	808%
1723	7	7	0	-7	-100%	3	3	0	-3	-100%	74	82	628	546	662%
1721	36	39	160	122	315%	12	13	61	48	361%	92	93	86	-7	-8%
1720	7	7	1,055	1,048	14390%	2	2	395	392	16000%	0	0	116	116	0%
1719	9	26	163	137	528%	1	1	34	33	2614%	18	14	1,752	1,738	12531%
1717	639	703	4,059	3,356	478%	334	367	1,804	1,437	392%	42	92	94	2	2%
1724	77	81	84	3	4%	5	5	0	-5	-100%	195	195	825	630	324%
	836	*923*	*7,116*	*6,193*	*671%*	*381*	*415*	*2,963*	*2,548*	*615%*	*437*	*537*	*7,907*	*7,370*	*1373%*

		Population					Housing Units					Employment				
		2000	2005	2030	2005-2030	Pct Change 2005-2030	2000	2005	2030	2005-2030	Pct Change 2005-2030	2000	2005	2030	2005-2030	Pct Change 2005-2030
C	***Highlands***															
1607		14	14	0	-14	-100%	9	9	0	-9	-100%	4	352	3,714	3,362	954%
9681		37	37	54	17	47%	14	14	22	7	52%	2	6	21	14	231%
9680		0	0	147	147	0%	1	2	98	96	5007%	0	0	0	0	0%
1628		12	12	1,345	1,333	11098%	4	4	522	518	12342%	0	0	0	0	0%
1627		9	9	1,023	1,015	11560%	3	3	429	426	12847%	0	0	0	0	0%
1626		27	27	222	195	722%	10	10	82	73	747%	2	3	0	-3	-100%
1624		13	13	1,444	1,431	11380%	4	4	561	557	12656%	0	0	0	0	0%
9613		86	86	225	140	163%	49	49	127	77	157%	59	132	5,918	5,786	4395%
9678		13	13	1,621	1,607	12132%	6	6	773	768	13473%	0	0	0	0	0%
9694		58	74	248	174	233%	21	27	97	70	260%	0	0	0	0	0%
9689		94	104	936	832	800%	29	32	322	290	900%	0	0	2	2	712%
9692		112	199	1,196	997	502%	62	110	600	490	447%	11	21	65	43	203%
9693		38	38	105	66	173%	14	14	41	27	194%	16	18	18	0	0%
9688		105	116	1,600	1,483	1274%	44	49	702	653	1322%	0	0	7	7	0%
9679		28	28	121	94	339%	10	10	46	37	372%	0	0	0	0	0%
		644	*769*	*10,287*	*9,518*	*1237%*	*281*	*344*	*4,423*	*4,079*	*1186%*	*95*	*532*	*9,745*	*9,212*	*1731%*
D	***Stratford***															
9691		426	426	342	-84	-20%	229	229	185	-44	-19%	119	121	129	7	6%
9620		101	108	176	68	63%	57	61	96	35	58%	445	510	811	301	59%
9698		120	113	119	6	5%	49	46	48	2	3%	727	734	752	18	2%
9695		477	477	799	321	67%	327	327	459	132	40%	15	17	31	13	77%
9696		119	117	222	105	90%	46	46	87	41	89%	14	14	13	-1	-6%
9697		855	1,009	1,107	98	10%	339	403	436	33	8%	31	31	33	2	5%
9690		148	150	565	415	276%	75	76	261	184	241%	95	96	101	4	5%
9621		853	854	1,575	721	84%	310	312	585	273	88%	110	107	98	-9	-8%
		3,100	*3,255*	*4,906*	*1,651*	*51%*	*1,433*	*1,501*	*2,156*	*655*	*44%*	*1,556*	*1,631*	*1,967*	*336*	*21%*
E	***Southwest***															
9516		54	54	322	268	498%	23	24	136	112	465%	17	40	110	70	177%
9619		6	27	874	847	3135%	4	4	451	447	11183%	6	361	1,631	1,271	352%
9635		39	39	79	40	102%	18	19	40	21	108%	0	171	623	452	264%
9634		21	19	23	4	20%	8	8	9	1	18%	1,035	1,117	1,344	227	20%
9517		35	32	357	325	1000%	13	13	146	133	1021%	24	26	34	8	31%
9605		13	15	46	32	215%	8	10	29	19	193%	405	586	1,059	474	81%
9686		3	4	147	142	3258%	3	3	99	96	3186%	585	803	1,372	569	71%
9687		37	37	40	3	8%	15	15	14	-1	-6%	0	83	360	277	333%
9632		4	4	0	-4	-100%	2	2	0	-2	-100%	711	764	905	141	18%
9633		43	42	50	8	20%	16	16	19	3	18%	0	141	514	373	264%
		254	*274*	*1,938*	*1,664*	*607%*	*110*	*114*	*943*	*829*	*727%*	*2,783*	*4,092*	*7,953*	*3,861*	*94%*

		Population			2005-20	Pct Change		Housing Units			2005-20	Pct Change		Employment			2005-20	Pct Change
		2000	2005	2030	30	2005-2030		2000	2005	2030	30	2005-2030		2000	2005	2030	30	2005-2030
F	***Delaware Run***																	
9608		234	431	2,744	2,313	537%		96	184	1,163	979	532%		6	49	312	263	541%
9606		64	416	1,193	778	187%		24	172	486	314	183%		0	0	0	0	0%
9630		548	592	1,189	597	101%		220	243	522	279	115%		18	20	26	6	31%
9629		278	288	727	439	153%		104	107	307	200	187%		110	109	108	-1	-1%
9607		10	41	495	454	1105%		12	31	303	272	876%		0	0	0	0	0%
9648		54	53	58	5	9%		26	26	29	3	11%		0	0	0	0	0%
9656		41	38	619	581	1519%		16	16	254	238	1486%		0	538	568	30	6%
9657		86	86	81	-5	-6%		39	39	39	0	-1%		284	334	468	134	40%
9658		42	41	48	6	15%		21	21	24	3	12%		129	140	223	83	59%
9653		711	840	2,384	1,544	184%		265	326	944	618	190%		46	46	46	0	0%
9652		161	154	1,118	964	626%		63	63	453	390	619%		5	31	216	185	595%
9651		225	209	1,344	1,135	543%		88	88	560	472	536%		5	74	53	-20	-27%
9654		1,430	1,435	1,738	303	21%		605	611	717	106	17%		139	146	165	18	13%
9649		22	21	30	9	41%		10	10	15	5	48%		564	564	566	1	0%
9655		362	361	323	-38	-11%		184	184	177	-7	-4%		67	72	87	16	22%
9647		112	112	237	125	111%		59	60	122	62	103%		40	40	41	1	2%
9646		92	91	95	4	4%		42	42	38	-4	-10%		4	4	19	15	367%
9638		88	226	1,211	986	436%		34	94	502	408	434%		2	7	26	18	255%
9644		15	123	24	-99	-80%		6	47	9	-38	-80%		0	13	103	90	722%
9643		19	89	25	-64	-72%		7	34	9	-25	-72%		0	36	206	170	475%
9642		174	174	168	-6	-3%		77	77	71	-6	-7%		62	86	149	63	73%
9641		0	1	291	290	19862%		1	1	195	194	19428%		0	125	473	348	279%
9640		8	6	1,180	1,174	19562%		2	2	387	385	19251%		0	0	0	0	0%
9639		48	98	869	771	783%		18	40	351	311	777%		0	0	0	0	0%
9631		69	67	160	93	138%		30	30	74	44	145%		50	140	463	323	231%
9645		0	0	0	0	0%		0	0	0	0	-100%		0	18	67	48	264%
9636		185	518	1,646	1,128	218%		67	202	649	447	221%		25	26	29	3	12%
9650		20	20	22	2	12%		7	7	8	1	13%		0	0	0	0	0%
9637		2,162	2,159	2,578	419	19%		829	831	980	149	18%		220	224	237	12	5%
		7,260	*8,693*	*22,599*	*13,906*	*160%*		*2,955*	*3,588*	*9,387*	*5,799*	*162%*		*1,776*	*2,843*	*4,649*	*1,806*	*64%*
G	***Northwoods***																	
9715	96	102	1,778	1,676	1637%	37	43	735	692	1610%	9	60	285	225	376%			
9713		296	296	790	494	167%		185	186	465	279	150%		144	150	1,847	1,696	1128%
9659		1,868	1,974	2,324	351	18%		708	753	871	118	16%		249	251	257	6	2%
9661		166	165	380	214	130%		61	61	148	87	142%		103	103	337	234	227%
9609		555	553	941	388	70%		197	204	355	151	74%		19	19	151	132	685%
9660		184	184	158	-26	-14%		166	166	132	-34	-21%		103	207	797	590	285%
		3,165	*3,274*	*6,371*	*3,097*	*95%*		*1,354*	*1,413*	*2,706*	*1,293*	*91%*		*629*	*791*	*3,674*	*2,883*	*365%*
H	***Horseshoe***																	
1703		63	83	902	819	987%		26	35	402	367	1048%		7	8	2,895	2,887	35233%
1702		28	26	246	220	860%		10	10	100	90	898%		6	6	13	7	117%
1726		200	205	1,362	1,157	564%		99	106	667	561	529%		9	13	7	-6	-43%
1727		26	53	529	477	901%		10	22	225	203	921%		0	0	86	86	0%
		318	*367*	*3,040*	*2,673*	*729%*		*145*	*173*	*1,393*	*1,220*	*705%*		*23*	*27*	*3,001*	*2,974*	*10939%*

		Population				Housing Units					Employment				
		2000	2005	2030	2005-2030	Pct Change 2005-2030	2000	2005	2030	2005-2030	Pct Change 2005-2030	2000	2005	2030	2005-2030	Pct Change 2005-2030
I	***Brown Twp***															
1701		46	49	389	339	690%	16	17	150	133	778%	0	0	0	0	0%
1608		154	172	293	121	70%	52	58	109	51	89%	64	129	461	331	256%
1725		112	115	294	179	155%	40	41	104	64	157%	15	16	21	4	27%
1704		201	267	501	235	88%	68	90	181	91	102%	35	35	35	0	0%
1713		22	22	627	605	2770%	9	9	285	276	3087%	0	0	0	0	0%
1718		11	12	86	74	594%	7	8	55	47	564%	0	0	0	0	0%
1714		220	245	381	136	56%	81	90	150	60	67%	10	9	17	8	82%
		767	*882*	*2,570*	*1,688*	*191%*	*272*	*312*	*1,035*	*722*	*231%*	*125*	*190*	*533*	*343*	*181%*
J	***Alum Creek***															
1602		349	456	568	113	25%	108	141	183	42	30%	54	54	66	12	23%
1606		78	95	231	136	144%	32	39	100	61	154%	38	43	75	31	73%
1610		171	356	958	602	169%	61	127	367	240	189%	33	32	94	62	190%
1611		219	530	1,381	851	161%	85	206	560	354	172%	49	41	172	132	324%
1622		104	115	184	69	60%	37	41	70	30	73%	3	36	1,004	968	2667%
1623		262	413	798	385	93%	94	148	292	144	97%	31	31	43	12	37%
1630		170	191	564	373	195%	64	72	225	153	211%	13	14	24	10	76%
		1,353	*2,156*	*4,685*	*2,529*	*117%*	*482*	*775*	*1,798*	*1,023*	*132%*	*221*	*251*	*1,478*	*1,227*	*488%*
K	***Cheshire***															
1515		152	510	802	293	57%	99	331	424	94	28%	6	60	480	420	700%
1538		47	47	888	841	1802%	22	22	422	400	1787%	11	12	0	-12	-98%
1540		34	34	38	5	14%	23	23	22	-1	-3%	173	178	474	296	166%
1541		108	149	760	611	410%	81	112	431	319	285%	17	18	21	3	15%
1601		88	191	3,188	2,997	1569%	37	80	1,362	1,282	1601%	132	209	1,543	1,334	640%
1629		46	46	1,770	1,724	3764%	14	14	606	592	4193%	2	3	0	-3	-100%
1625		127	135	4,237	4,102	3032%	48	51	1,687	1,636	3220%	10	10	1	-9	-86%
		602	*1,111*	*11,684*	*10,572*	*952%*	*324*	*633*	*4,954*	*4,322*	*683%*	*352*	*490*	*2,520*	*2,030*	*414%*
L	***Peachblow South***															
1539		136	136	637	501	369%	47	47	238	191	406%	93	662	2,215	1,554	235%
1609		591	603	929	326	54%	284	290	467	177	61%	133	172	286	114	66%
		727	*739*	*1,566*	*827*	*112%*	*332*	*338*	*706*	*368*	*109%*	*226*	*834*	*2,501*	*1,668*	*200%*
M	***Olentangy South***															
9523		361	433	788	355	82%	132	162	292	130	80%	13	14	17	3	23%
9508		282	292	1,137	845	290%	110	118	457	339	287%	36	37	40	4	10%
		643	*725*	*1,925*	*1,200*	*165%*	*242*	*280*	*749*	*469*	*168%*	*49*	*51*	*58*	*7*	*13%*
N	***Far Southwest***															
8510		216	224	537	314	140%	87	92	222	130	141%	23	24	29	5	21%
9503		366	418	627	209	50%	137	159	238	79	50%	17	26	51	26	100%
9507		253	309	574	265	86%	93	117	207	90	77%	14	71	240	168	236%
9529		158	236	359	123	52%	51	78	118	40	51%	3	4	5	2	42%
9515		89	87	365	278	320%	39	39	163	124	317%	12	32	126	94	295%
9604		124	127	329	202	158%	45	47	124	77	164%	90	95	115	20	22%
		1,206	*1,401*	*2,792*	*1,391*	*99%*	*451*	*532*	*1,073*	*541*	*102%*	*160*	*251*	*566*	*315*	*126%*

		Population					Housing Units					Employment				
		2000	2005	2030	2005-2030	Pct Change 2005-2030	2000	2005	2030	2005-2030	Pct Change 2005-2030	2000	2005	2030	2005-2030	Pct Change 2005-2030
O	***Far Northwest***															
9714		117	115	525	409	355%	44	45	214	169	375%	11	19	62	42	217%
9706		132	130	439	309	238%	45	46	152	106	231%	28	28	29	1	3%
9708		183	228	375	147	64%	73	93	150	57	61%	29	30	36	6	20%
9707		232	250	950	700	281%	86	96	389	293	306%	7	26	113	87	333%
9628		186	181	1,260	1,079	595%	62	64	453	389	607%	12	31	111	80	256%
9603		209	228	473	245	108%	76	85	186	101	119%	54	56	62	6	11%
		1,059	*1,132*	*4,022*	*2,890*	*255%*	*386*	*429*	*1,544*	*1,115*	*260%*	*141*	*191*	*412*	*222*	*116%*
P	***Troy Twp***															
9711		65	65	341	276	427%	24	25	126	101	404%	21	22	27	4	20%
9712		153	156	485	329	211%	60	63	200	137	217%	16	20	36	16	80%
		218	*220*	*825*	*605*	*275%*	*84*	*88*	*326*	*238*	*270%*	*38*	*42*	*63*	*20*	*48%*
Q	***Far Northeast***															
1729		477	500	724	223	45%	199	210	304	94	45%	15	15	13	-2	-12%
1732		131	143	174	31	22%	53	58	71	13	22%	8	8	5	-3	-33%
1731		92	102	157	55	53%	33	37	60	23	62%	2	11	53	43	397%
1733		30	41	400	359	877%	13	18	170	152	843%	2	58	2,655	2,597	4491%
1728		88	94	214	120	127%	33	36	84	48	134%	4	4	5	1	21%
		818	*881*	*1,668*	*788*	*89%*	*330*	*359*	*689*	*330*	*92%*	*32*	*96*	*2,732*	*2,636*	*2756%*
		35,514	*39,437*	*101,965*	*62,528*	*159%*	*14,609*	*16,384*	*42,495*	*26,112*	*159%*	*15,750*	*20,060*	*57,720*	*37,660*	*188%*

TAZ LEVEL DATA: Industrial, Retail and Office Floor Area (in Square Feet)

	Industrial Square Footage			2005-2030	Pct Change	Retail Square Footage			2005-2030	Pct Change	Office Square Footage			2005-2030	Pct Change
	2000	2005	2030		2005-2030	2000	2005	2030		2005-2030	2000	2005	2030		2005-2030
A	***Urban Core***														
9663	1,238	1,466	3,110	1,644	112%	4,914	5,192	7,198	2,006	39%	70,406	70,444	70,720	275	0%
9676	0	0	0	0	0%	12,388	13,212	14,911	1,699	13%	2,764	2,858	3,085	228	8%
9675	0	0	0	0	0%	3,686	5,069	8,265	3,196	63%	28,256	28,111	79,560	51,448	183%
9674	10,033	10,307	10,307	0	0%	7,064	6,987	6,987	0	0%	23,342	23,309	66,300	42,990	184%
9673	16,381	16,389	16,453	65	0%	6,962	7,048	7,713	665	9%	30,591	30,620	30,850	230	1%
9672	11,551	11,664	14,503	2,839	24%	1,229	1,325	3,740	2,415	182%	69,413	70,004	84,838	14,834	21%
9671	0	0	0	0	0%	0	0	0	0	0%	0	0	0	0	0%
9670	5,973	5,992	7,223	1,232	21%	46,070	46,537	77,126	30,589	66%	35,935	35,951	37,020	1,069	3%
9668	10,935	10,838	10,361	-477	-4%	17,200	17,506	19,024	1,518	9%	30,714	33,330	46,275	12,945	39%
9666	24,254	24,246	23,677	-569	-2%	43,799	43,839	46,462	2,623	6%	57,837	57,848	58,563	715	1%
9677	0	0	0	0	0%	21,807	22,045	23,138	1,093	5%	3,686	3,599	11,288	7,689	214%
9664	24,134	24,197	24,864	666	3%	2,457	2,689	5,142	2,453	91%	141,998	142,687	149,962	7,275	5%
9669	3,096	3,098	3,110	12	0%	21,807	22,230	25,709	3,479	16%	113,530	115,599	132,599	17,000	15%
9662	1,858	2,181	3,110	929	43%	3,101	3,453	4,466	1,013	29%	7,041	7,505	8,840	1,335	18%
1730	0	0	0	0	0%	0	0	0	0	0%	0	0	0	0	0%
9610	0	0	0	0	0%	16,278	17,913	20,567	2,654	15%	6,161	7,182	8,840	1,658	23%
9611	0	0	0	0	0%	4,335	4,496	6,531	2,035	45%	25,522	25,596	26,520	924	4%
9612	15,920	16,442	19,796	3,354	20%	21,807	21,964	23,138	1,173	5%	0	0	0	0	0%
9614	38,294	47,729	89,223	41,494	87%	2,167	4,448	8,214	3,766	85%	92,832	96,762	104,120	7,357	8%
9615	50,370	50,634	51,417	783	2%	144,968	146,058	149,110	3,052	2%	108,419	108,327	110,000	1,673	2%
9616	0	0	0	0	0%	5,836	6,984	11,744	4,760	68%	7,678	7,685	7,713	28	0%
9617	61,948	62,400	63,560	1,160	2%	14,128	16,063	21,021	4,959	31%	7,041	7,546	8,840	1,294	17%
9618	87,022	88,329	91,522	3,193	4%	15,664	15,893	16,453	560	4%	32,249	31,843	30,850	-992	-3%
9665	13,408	14,466	17,613	3,147	22%	2,764	5,819	14,911	9,092	156%	5,836	5,920	6,170	250	4%
9667	1,238	1,267	3,110	1,844	146%	6,143	6,320	17,996	11,676	185%	19,657	19,709	23,138	3,429	17%
9683	20,466	20,444	20,170	-274	-1%	100,331	100,816	106,758	5,942	6%	39,620	39,657	40,105	448	1%
9684	24,959	24,959	24,959	0	0%	18,530	18,530	18,530	0	0%	7,371	7,371	7,371	0	0%
9685	0	6,152	20,567	14,415	234%	11,671	14,947	22,624	7,677	51%	12,321	12,602	13,260	658	5%
9682	73,635	73,540	73,540	0	0%	14,305	14,385	15,240	855	6%	0	0	0	0	0%
	496,714	*516,738*	*592,194*	*75,456*	*15%*	*571,409*	*591,769*	*702,715*	*110,946*	*19%*	*980,219*	*992,065*	*1,166,828*	*174,763*	*18%*
B	***East***														
1722	0	0	0	0	0%	17,907	23,971	386,070	362,099	1511%	0	1,468	81,685	80,217	5464%
1715	0	1,696	0	-1,696	-100%	0	7,561	237,065	229,504	3035%	0	1,237	694,790	693,553	56055%
1716	2,223	2,792	0	-2,792	-100%	0	0	30,090	30,090	0%	0	0	0	0	0%
1723	22,933	22,302	0	-22,302	-100%	5,733	8,601	143,905	135,304	1573%	9,214	9,223	69,700	60,477	656%
1721	0	0	0	0	0%	4,162	4,423	0	-4,423	-100%	7,511	7,600	0	-7,600	-100%
1720	0	0	0	0	0%	0	0	42,160	42,160	0%	0	0	0	0	0%
1719	6,670	4,391	2,121,710	2,117,318	48217%	28,749	27,610	0	-27,610	-100%	0	0	0	0	0%
1717	7,371	6,221	13,693	7,472	120%	1,229	14,512	2,295	-12,217	-84%	7,064	10,035	510	-9,525	-95%
1724	3,605	3,210	990,200	986,990	30748%	29,135	29,205	0	-29,205	-100%	53,134	53,317	0	-53,317	-100%
	42,802	*40,613*	*3,125,602*	*3,084,990*	*7596%*	*86,915*	*115,884*	*841,585*	*725,701*	*626%*	*76,924*	*82,880*	*846,685*	*763,805*	*922%*

		Industrial Square Footage				Retail Square Footage					Office Square Footage				
		2000	2005	2030	2005-2030	Pct Change 2005-2030	2000	2005	2030	2005-2030	Pct Change 2005-2030	2000	2005	2030	2005-2030	Pct Change 2005-2030
C	***Highlands***															
1607		0	323,099	2,874,967	2,551,869	790%	10,366	16,587	504,220	487,633	2940%	0	0	170	170	0%
9681		0	0	0	0	0%	0	1,737	6,170	4,434	255%	1,760	1,969	4,420	2,451	124%
9680		0	0	0	0	0%	0	0	0	0	0%	0	0	0	0	0%
1628		0	0	0	0	0%	0	0	0	0	0%	0	0	0	0	0%
1627		0	0	0	0	0%	0	0	0	0	0%	0	0	0	0	0%
1626		1,502	2,223	0	-2,223	-100%	0	0	0	0	0%	0	0	0	0	0%
1624		0	0	0	0	0%	0	0	0	0	0%	0	0	0	0	0%
9613		7,219	37,102	1,000	-36,102	-97%	0	7,884	1,154,640	1,146,756	14545%	9,905	10,009	774,690	764,681	7640%
9678		0	0	0	0	0%	0	0	0	0	0%	0	0	0	0	0%
9694		0	0	0	0	0%	0	0	0	0	0%	0	0	0	0	0%
9689		0	0	0	0	0%	0	79	644	565	712%	0	0	0	0	0%
9692		0	0	0	0	0%	855	974	1,073	99	10%	0	0	0	0	0%
9693		4,745	5,968	5,968	0	0%	4,768	4,686	4,686	0	0%	0	0	0	0	0%
9688		0	0	0	0	0%	0	0	2,720	2,720	0%	0	0	0	0	0%
9679		0	0	0	0	0%	0	0	0	0	0%	0	0	0	0	0%
		13,466	*368,392*	*2,881,935*	*2,513,543*	*682%*	*15,989*	*31,946*	*1,674,153*	*1,642,207*	*5141%*	*11,665*	*11,978*	*779,280*	*767,302*	*6406%*
D	***Stratford***															
9691		11,551	12,100	14,503	2,403	20%	19,499	20,170	22,194	2,023	10%	29,923	30,016	30,940	924	3%
9620		62,499	64,221	75,623	11,402	18%	121,114	152,596	262,227	109,632	72%	6,757	6,652	7,500	848	13%
9698		8,666	9,984	13,471	3,488	35%	239,054	240,473	244,231	3,758	2%	25,799	25,915	26,223	307	1%
9695		0	0	0	0	0%	2,167	2,371	4,354	1,983	84%	8,801	8,803	8,840	37	0%
9696		4,914	4,788	4,113	-675	-14%	0	0	0	0	0%	4,400	4,403	4,420	17	0%
9697		8,663	8,328	7,251	-1,077	-13%	1,367	1,586	2,289	703	44%	7,921	8,139	8,840	701	9%
9690		2,888	3,527	7,251	3,725	106%	30,714	30,749	30,850	101	0%	11,441	11,572	13,260	1,688	15%
9621		0	0	0	0	0%	19,032	21,055	27,245	6,190	29%	57,205	50,735	30,940	-19,795	-39%
		99,180	*102,948*	*122,213*	*19,265*	*19%*	*432,946*	*468,999*	*593,390*	*124,391*	*27%*	*152,247*	*146,235*	*130,962*	*-15,273*	*-10%*
E	***Southwest***															
9516		1,456	1,105	0	-1,105	-100%	21,910	23,692	29,308	5,615	24%	5,818	5,531	4,628	-904	-16%
9619		2,457	181,486	822,673	641,187	353%	0	38,197	175,000	136,803	358%	0	7,639	35,000	27,361	358%
9635		0	203,348	740,406	537,058	264%	0	659	2,399	1,740	264%	0	0	0	0	0%
9634		403,473	468,441	647,855	179,415	38%	0	0	0	0	0%	352,031	352,448	353,599	1,151	0%
9517		1,456	1,088	0	-1,088	-100%	0	649	2,571	1,922	296%	23,272	24,774	29,219	4,446	18%
9605		137,853	268,440	611,863	343,424	128%	1,536	4,937	13,883	8,945	181%	52,213	52,702	53,988	1,286	2%
9686		149,984	318,810	758,402	439,592	138%	126,847	141,985	181,401	39,416	28%	32,563	32,113	30,940	-1,173	-4%
9687		0	99,691	431,904	332,213	333%	0	0	0	0	0%	0	0	0	0	0%
9632		450,874	489,291	591,297	102,005	21%	0	0	0	0	0%	27,282	27,074	26,520	-554	-2%
9633		0	169,555	617,005	447,450	264%	0	0	0	0	0%	0	0	0	0	0%
		1,147,554	*2,201,255*	*5,221,405*	*3,020,150*	*137%*	*150,293*	*210,120*	*404,562*	*194,442*	*93%*	*493,180*	*502,281*	*533,893*	*31,613*	*6%*

	Industrial Square Footage			2005-20	Pct Change	Retail Square Footage			2005-20	Pct Change	Office Square Footage			2005-20	Pct Change
	2000	2005	2030	30	2005-2030	2000	2005	2030	30	2005-2030	2000	2005	2030	30	2005-2030
F	***Delaware Run***														
9608	0	0	0	0	0%	1,300	1,420	0	-1,420	-100%	0	0	0	0	0%
9606	0	0	0	0	0%	0	0	0	0	0%	0	0	0	0	0%
9630	4,331	4,794	7,251	2,458	51%	5,635	5,777	6,531	754	13%	1,760	2,181	4,420	2,239	103%
9629	0	0	0	0	0%	1,300	1,407	2,177	770	55%	91,528	91,149	88,400	-2,750	-3%
9607	0	0	0	0	0%	0	0	0	0	0%	0	0	0	0	0%
9648	0	0	0	0	0%	0	0	0	0	0%	0	0	0	0	0%
9656	0	0	0	0	0%	0	195,800	195,800	0	0%	0	7,500	18,000	10,500	140%
9657	0	0	0	0	0%	76,784	95,244	143,941	48,697	51%	9,828	10,095	10,798	703	7%
9658	19,657	19,766	20,567	801	4%	19,452	23,358	51,931	28,573	122%	12,285	12,663	15,425	2,762	22%
9653	9,696	9,874	10,361	488	5%	4,446	4,452	4,466	15	0%	22,882	22,673	22,100	-573	-3%
9652	0	0	0	0	0%	2,279	2,470	3,832	1,362	55%	0	0	0	0	0%
9651	0	0	0	0	0%	1,300	23,303	0	-23,303	-100%	0	0	0	0	0%
9654	6,189	7,337	10,361	3,024	41%	18,952	19,820	22,107	2,287	12%	76,567	79,822	88,400	8,577	11%
9649	0	0	0	0	0%	3,512	3,325	2,177	-1,148	-35%	47,327	47,474	48,379	905	2%
9655	2,457	2,878	4,113	1,235	43%	9,581	10,494	13,174	2,680	26%	35,203	37,489	44,200	6,711	18%
9647	0	0	0	0	0%	0	0	0	0	0%	34,323	34,561	35,360	799	2%
9646	0	0	0	0	0%	0	0	0	0	0%	0	0	0	0	0%
9638	0	0	0	0	0%	614	2,173	7,713	5,540	255%	0	0	0	0	0%
9644	0	0	0	0	0%	0	4,380	35,992	31,612	722%	0	0	0	0	0%
9643	0	0	0	0	0%	0	14,305	82,267	67,963	475%	0	0	0	0	0%
9642	37,337	60,676	122,240	61,565	101%	7,986	10,737	17,996	7,259	68%	3,520	3,768	4,420	652	17%
9641	0	0	0	0	0%	0	47,655	180,474	132,819	279%	0	0	0	0	0%
9640	0	0	0	0	0%	0	0	0	0	0%	0	0	0	0	0%
9639	0	0	0	0	0%	0	0	0	0	0%	0	0	0	0	0%
9631	0	0	0	0	0%	867	36,590	165,137	128,546	351%	8,523	8,682	9,255	573	7%
9645	0	0	0	0	0%	0	6,928	25,194	18,266	264%	0	0	0	0	0%
9636	0	0	0	0	0%	5,635	5,882	6,531	650	11%	7,041	7,535	8,840	1,305	17%
9650	0	0	0	0	0%	0	0	0	0	0%	0	0	0	0	0%
9637	0	0	0	0	0%	4,379	5,508	8,820	3,312	60%	127,611	128,879	132,599	3,720	3%
	79,668	*105,324*	*174,895*	*69,571*	*66%*	*164,025*	*521,029*	*976,261*	*455,232*	*87%*	*478,399*	*494,472*	*530,595*	*36,123*	*7%*
G	***Northwoods***														
9715	0 0	0	0	0%	17,882	40,110	138,826	98,716	246%	0	0	0	0	0%	
9713	17,230	17,460	0	-17,460	-100%	84,542	81,294	552,585	471,291	580%	3,071	4,137	77,520	73,383	1774%
9659	8,663	8,285	7,251	-1,033	-12%	31,367	31,159	30,591	-568	-2%	145,213	147,755	154,699	6,944	5%
9661	28,877	28,907	0	-28,907	-100%	2,826	2,740	29,920	27,180	992%	10,443	10,404	76,500	66,096	635%
9609	0	0	0	0	0%	2,646	3,112	0	-3,112	-100%	4,400	3,274	42,755	39,481	1206%
9660	9,009	9,507	12,340	2,833	30%	28,666	68,549	295,648	227,099	331%	6,161	6,561	8,840	2,279	35%
	63,779	*64,159*	*19,591*	*-44,568*	*-69%*	*167,928*	*226,964*	*1,047,570*	*820,607*	*362%*	*169,288*	*172,132*	*360,314*	*188,183*	*109%*
H	***Horseshoe***														
1703	0	0	3,365,200	3,365,200	0%	14,640	15,064	33,065	18,001	119%	0	0	0	0	0%
1702	0	0	0	0	0%	15,826	14,958	85	-14,873	-99%	0	0	3,825	3,825	0%
1726	3,605	4,084	6,035	1,951	48%	921	1,871	0	-1,871	-100%	921	1,044	680	-364	-35%
1727	0	0	100	100	0%	0	0	31,110	31,110	0%	0	0	0	0	0%
	3,605	*4,084*	*3,371,335*	*3,367,251*	*82446%*	*31,388*	*31,893*	*64,260*	*32,367*	*101%*	*921*	*1,044*	*4,505*	*3,461*	*332%*

	Industrial Square Footage			2005-20	Pct Change	Retail Square Footage			2005-20	Pct Change	Office Square Footage			2005-20	Pct Change
	2000	2005	2030	30	2005-2030	2000	2005	2030	30	2005-2030	2000	2005	2030	30	2005-2030
I Brown Twp															
1701	0	0	0	0	0%	0	0	0	0	0%	0	0	0	0	0%
1608	32,508	31,540	31,540	0	0%	10,537	37,251	125,000	87,749	236%	7,863	9,302	20,000	10,698	115%
1725	0	0	0	0	0%	4,162	4,317	10,452	6,135	142%	3,993	4,099	4,628	529	13%
1704	0	0	0	0	0%	0	0	0	0	0%	0	0	0	0	0%
1713	0	0	0	0	0%	0	0	0	0	0%	0	0	0	0	0%
1718	0	0	0	0	0%	0	0	0	0	0%	0	0	0	0	0%
1714	0	0	18,526	18,526	0%	19,021	18,526	18,526	0	0%	5,633	5,737	9,431	3,694	64%
	32,508	*31,540*	*50,065*	*18,526*	*59%*	*33,720*	*60,094*	*153,978*	*93,884*	*156%*	*17,489*	*19,138*	*34,058*	*14,921*	*78%*
J	***Alum Creek***														
1602	0	0	0	0	0%	0	0	0	0	0%	2,144	2,035	4,070	2,035	100%
1606	12,112	11,501	11,501	0	0%	46,818	48,674	102,238	53,563	110%	7,863	8,582	17,950	9,369	109%
1610	15,775	16,178	29,731	13,552	84%	29,348	29,731	147,124	117,394	395%	6,433	5,895	11,791	5,895	100%
1611	10,517	11,279	11,279	0	0%	0	0	0	0	0%	26,448	23,649	47,298	23,649	100%
1622	15,775	15,704	996,802	981,098	6247%	0	16,550	77,897	61,347	371%	0	0	0	0	0%
1623	26,292	26,296	26,296	0	0%	17,153	17,084	17,084	0	0%	5,719	5,830	7,180	1,350	23%
1630	15,775	16,160	16,160	0	0%	5,525	5,469	5,469	0	0%	2,859	2,918	3,590	672	23%
	96,247	*97,118*	*1,091,768*	*994,650*	*1024%*	*98,844*	*117,508*	*349,812*	*232,304*	*198%*	*51,467*	*48,909*	*91,879*	*42,970*	*88%*
K	***Cheshire***														
1515	0	0	0	0	0%	11,617	11,574	100,000	88,426	764%	0	16,197	60,000	43,803	270%
1538	0	0	0	0	0%	8,291	8,499	0	-8,499	-100%	1,103	1,081	85	-996	-92%
1540	0	0	0	0	0%	0	1,051	6,599	5,548	528%	33,076	33,579	36,914	3,336	10%
1541	0	0	2,268	2,268	0%	2,073	2,268	6,413	4,145	183%	0	0	0	0	0%
1601	0	2,038	0	-2,038	-100%	6,313	5,670	349,945	344,275	6072%	0	0	60,000	60,000	0%
1629	0	0	0	0	0%	1,842	2,097	0	-2,097	-100%	0	0	0	0	0%
1625	0	0	4,871	4,871	0%	5,183	4,871	0	-4,871	-100%	5,719	5,910	0	-5,910	-100%
	0	*2,038*	*7,139*	*5,101*	*250%*	*35,319*	*36,030*	*462,957*	*426,927*	*1185%*	*39,897*	*56,766*	*156,999*	*100,233*	*177%*
L	***Peachblow South***														
1539	85,822	86,267	87,677	1,410	2%	80,632	146,123	393,321	247,198	169%	0	90,000	180,000	90,000	100%
1609	29,032	55,832	172,253	116,420	209%	66,088	74,409	85,000	10,591	14%	7,148	7,512	10,000	2,488	33%
	114,854	*142,099*	*259,929*	*117,830*	*83%*	*146,721*	*220,532*	*478,321*	*257,789*	*117%*	*7,148*	*97,512*	*190,000*	*92,488*	*95%*
M	***Olentangy South***														
9523	2,427	2,429	2,438	8	0%	3,071	3,534	5,142	1,608	45%	3,491	4,017	5,844	1,827	45%
9508	0	0	0	0	0%	58,907	59,410	61,936	2,526	4%	2,327	2,911	5,844	2,933	101%
	2,427	*2,429*	*2,438*	*8*	*0%*	*61,978*	*62,944*	*67,077*	*4,133*	*7%*	*5,818*	*6,928*	*11,688*	*4,760*	*69%*
N	***Far Southwest***														
8510	3,378	3,821	5,656	1,835	48%	6,699	7,180	9,175	1,995	28%	5,979	5,984	6,005	21	0%
9503	3,398	2,566	0	-2,566	-100%	9,726	20,555	53,988	33,433	163%	5,818	5,824	5,844	20	0%
9507	3,398	11,788	36,565	24,777	210%	12,520	13,330	15,720	2,390	18%	0	0	0	0	0%
9529	0	0	0	0	0%	0	0	0	0	0%	3,491	4,112	5,844	1,732	42%
9515	1,941	11,304	56,066	44,762	396%	0	0	0	0	0%	0	0	0	0	0%
9604	14,438	13,641	10,000	-3,641	-27%	6,203	8,854	20,969	12,115	137%	1,760	2,238	4,420	2,182	98%
	26,553	*43,120*	*108,286*	*65,166*	*151%*	*35,148*	*49,919*	*99,852*	*49,934*	*100%*	*17,048*	*18,158*	*22,113*	*3,955*	*22%*

	Industrial Square Footage			2005-20	Pct Change	Retail Square Footage			2005-20	Pct Change	Office Square Footage			2005-20	Pct Change
	2000	2005	2030	30	2005-2030	2000	2005	2030	30	2005-2030	2000	2005	2030	30	2005-2030
O	***Far Northwest***														
9714	16,080	15,935	15,190	-745	-5%	0	0	0	0	0%	0	0	0	0	0%
9706	0	0	0	0	0%	0	0	0	0	0%	819	856	1,028	172	20%
9708	31,508	33,209	40,762	7,553	23%	20,929	17,838	4,113	-13,724	-77%	0	0	0	0	0%
9707	0	0	0	0	0%	1,381	1,754	3,467	1,713	98%	0	0	0	0	0%
9628	0	0	0	0	0%	1,946	4,251	13,964	9,713	229%	1,760	2,270	4,420	2,150	95%
9603	17,827	18,561	21,318	2,757	15%	9,760	10,043	11,109	1,066	11%	0	0	0	0	0%
	65,415	*67,704*	*77,269*	*9,565*	*14%*	*34,016*	*33,886*	*32,654*	*-1,232*	*-4%*	*2,579*	*3,126*	*5,448*	*2,322*	*74%*
P	***Troy Twp***														
9711	2,872	3,193	4,807	1,614	51%	10,218	8,863	2,057	-6,806	-77%	1,638	1,708	2,057	349	20%
9712	6,202	8,119	16,552	8,434	104%	26,267	22,926	8,227	-14,699	-64%	410	524	1,028	504	96%
	9,073	*11,312*	*21,360*	*10,048*	*89%*	*36,486*	*31,789*	*10,283*	*-21,506*	*-68%*	*2,048*	*2,232*	*3,085*	*853*	*38%*
Q	***Far Northeast***														
1729	2,223	1,982	0	-1,982	-100%	10,405	10,410	10,452	41	0%	7,511	7,719	9,431	1,711	22%
1732	2,223	1,853	0	-1,853	-100%	0	0	0	0	0%	9,389	9,396	9,431	35	0%
1731	0	0	0	0	0%	0	5,058	29,822	24,764	490%	0	1,046	6,170	5,124	490%
1733	0	0	2,938,600	2,938,600	0%	0	0	0	0	0%	3,756	5,272	0	-5,272	-100%
1728	2,964	3,066	3,722	656	21%	0	0	0	0	0%	0	0	0	0	0%
	7,411	*6,901*	*2,942,322*	*2,935,421*	*42538%*	*10,405*	*15,468*	*40,274*	*24,805*	*160%*	*20,656*	*23,434*	*25,032*	*1,598*	*7%*
	2,301,256	*3,807,775*	*20,069,748*	*16,261,973*	*427%*	*2,113,530*	*2,826,774*	*7,999,705*	*5,172,931*	*183%*	*2,526,993*	*2,679,289*	*4,893,366*	*2,214,077*	*83%*

Appendix B

Traffic Counts by City of Delaware

The following tables show the Traffic Counts taken during the month of August, 2005 by City of Delaware.

Traffic Count at North LIBERTY St between SR37 and GRISWOLD St

Date	Time	Total	Northbound	Southbound
8/9/2005	15:00	210	125	85
8/9/2005	16:00	248	166	82
8/9/2005	17:00	288	184	104
8/9/2005	18:00	227	154	73
8/9/2005	19:00	185	107	78
8/9/2005	20:00	166	96	70
8/9/2005	21:00	142	91	51
8/9/2005	22:00	72	47	25
8/9/2005	23:00	36	22	14
8/10/2005	0:00	17	9	8
8/10/2005	1:00	8	4	4
8/10/2005	2:00	14	8	6
8/10/2005	3:00	7	4	3
8/10/2005	4:00	15	3	12
8/10/2005	5:00	29	4	25
8/10/2005	6:00	110	32	78
8/10/2005	7:00	209	66	143
8/10/2005	8:00	206	78	128
8/10/2005	9:00	188	77	111
8/10/2005	10:00	179	75	104
8/10/2005	11:00	233	122	111
8/10/2005	12:00	248	137	111
8/10/2005	13:00	201	106	95
8/10/2005	14:00	221	109	112
	ADT	**3459**	**1826**	**1633**

Traffic Count at South LIBERTY St between SPRING St and ROWLAND Ave

Date	Time	Total	Northbound	Southbound
8/11/2005	16:00	559	336	223
8/11/2005	17:00	664	369	295
8/11/2005	18:00	546	295	251
8/11/2005	19:00	478	271	207
8/11/2005	20:00	359	211	148
8/11/2005	21:00	294	161	133
8/11/2005	22:00	151	92	59
8/11/2005	23:00	117	70	47
8/12/2005	0:00	68	40	28
8/12/2005	1:00	46	26	20
8/12/2005	2:00	50	25	25
8/12/2005	3:00	36	15	21
8/12/2005	4:00	50	20	30
8/12/2005	5:00	95	32	63
8/12/2005	6:00	254	87	167
8/12/2005	7:00	440	201	239
8/12/2005	8:00	459	217	242
8/12/2005	9:00	500	239	261
8/12/2005	10:00	562	270	292
8/12/2005	11:00	577	285	292
8/12/2005	12:00	664	356	308
8/12/2005	13:00	642	332	310
8/12/2005	14:00	616	332	284
8/12/2005	15:00	630	360	270
	ADT	**8857**	**4642**	**4215**

Traffic Count at North LIBERTY St between West WINTER St and SR37

Date	Time	Total	Northbound	Southbound
8/10/2005	16:00	540	322	218
8/10/2005	17:00	498	309	189
8/10/2005	18:00	428	257	171
8/10/2005	19:00	397	241	156
8/10/2005	20:00	287	165	122
8/10/2005	21:00	197	124	73
8/10/2005	22:00	145	95	50
8/10/2005	23:00	90	55	35
8/11/2005	0:00	47	33	14
8/11/2005	1:00	29	17	12
8/11/2005	2:00	25	11	14
8/11/2005	3:00	18	5	13
8/11/2005	4:00	25	6	19
8/11/2005	5:00	82	26	56
8/11/2005	6:00	222	63	159
8/11/2005	7:00	404	136	268
8/11/2005	8:00	416	178	238
8/11/2005	9:00	422	209	213
8/11/2005	10:00	409	223	186
8/11/2005	11:00	465	249	216
8/11/2005	12:00	505	272	233
8/11/2005	13:00	481	260	221
8/11/2005	14:00	441	253	188
8/11/2005	15:00	504	294	210
	ADT	**7077**	**3803**	**3274**

Traffic Count at LONDON Rd between Liberty Rd and Curtis St

Date	Time	Total	Northbound	Southbound
8/2/2005	14:00	573	294	279
8/2/2005	15:00	686	415	271
8/2/2005	16:00	594	332	262
8/2/2005	17:00	554	311	243
8/2/2005	18:00	359	170	189
8/2/2005	19:00	344	148	196
8/2/2005	20:00	259	119	140
8/2/2005	21:00	216	100	116
8/2/2005	22:00	130	63	67
8/2/2005	23:00	114	75	39
8/3/2005	0:00	46	28	18
8/3/2005	1:00	33	18	15
8/3/2005	2:00	26	16	10
8/3/2005	3:00	16	5	11
8/3/2005	4:00	79	10	69
8/3/2005	5:00	124	35	89
8/3/2005	6:00	388	130	258
8/3/2005	7:00	496	206	290
8/3/2005	8:00	466	244	222
8/3/2005	9:00	435	202	233
8/3/2005	10:00	443	246	197
8/3/2005	11:00	662	380	282
8/3/2005	12:00	677	315	362
8/3/2005	13:00	606	287	319
	Total Vehicles	8326	4149	4177
	Axles (2 per veh.)	16652	8298	8354
	Adjusted Volume (2.21 axle/veh.)	**7535**	**3755**	**3780**

Traffic Count at LONDON Rd SOUTH between SR42 and Advanced Auto Drive

Date	Time	Volume
8/3/2005	14:00	573
8/3/2005	15:00	693
8/3/2005	16:00	597
8/3/2005	17:00	546
8/3/2005	18:00	300
8/3/2005	19:00	230
8/3/2005	20:00	115
8/3/2005	21:00	113
8/3/2005	22:00	105
8/3/2005	23:00	91
8/4/2005	0:00	70
8/4/2005	1:00	55
8/4/2005	2:00	42
8/4/2005	3:00	72
8/4/2005	4:00	106
8/4/2005	5:00	213
8/4/2005	6:00	485
8/4/2005	7:00	566
8/4/2005	8:00	491
8/4/2005	9:00	386
8/4/2005	10:00	357
8/4/2005	11:00	423
8/4/2005	12:00	493
8/4/2005	13:00	445
	Total (2 Axle/Vehicle)	7567
	Axle Volume	15134
	Adjusted Total (2.4 Axle per Vehicle)	**6306 ADT**

Traffic Count at PENNSYLVANIA Ave between SPENCER St and KIRKLAND St

Date	Time	Total	Eastbound	Westbound
8/8/2005	12:00	304	149	155
8/8/2005	13:00	294	165	129
8/8/2005	14:00	277	126	151
8/8/2005	15:00	345	166	179
8/8/2005	16:00	384	191	193
8/8/2005	17:00	387	154	233
8/8/2005	18:00	348	159	189
8/8/2005	19:00	281	141	140
8/8/2005	20:00	224	107	117
8/8/2005	21:00	210	94	116
8/8/2005	22:00	84	39	45
8/8/2005	23:00	63	28	35
8/9/2005	0:00	30	7	23
8/9/2005	1:00	17	4	13
8/9/2005	2:00	18	6	12
8/9/2005	3:00	16	10	6
8/9/2005	4:00	17	10	7
8/9/2005	5:00	65	47	18
8/9/2005	6:00	147	107	40
8/9/2005	7:00	277	167	110
8/9/2005	8:00	224	135	89
8/9/2005	9:00	243	135	108
8/9/2005	10:00	253	131	122
8/9/2005	11:00	266	151	115
8/9/2005	12:00	321	162	159
8/9/2005	13:00	320	160	160
	ADT	**5415**	**2751**	**2664**

Traffic Count at PENNSYLVANIA Ave between North WASHINGTON St and North FRANKLIN St

Date	Time	Total	Westbound	Eastbound
8/4/2005	15:00	362	198	164
8/4/2005	16:00	328	190	138
8/4/2005	17:00	395	238	157
8/4/2005	18:00	390	217	173
8/4/2005	19:00	340	190	150
8/4/2005	20:00	269	143	126
8/4/2005	21:00	233	121	112
8/4/2005	22:00	95	38	57
8/4/2005	23:00	59	31	28
8/5/2005	0:00	41	26	15
8/5/2005	1:00	23	12	11
8/5/2005	2:00	9	5	4
8/5/2005	3:00	12	5	7
8/5/2005	4:00	21	12	9
8/5/2005	5:00	60	20	40
8/5/2005	6:00	96	27	69
8/5/2005	7:00	180	50	130
8/5/2005	8:00	191	89	102
8/5/2005	9:00	186	91	95
8/5/2005	10:00	210	110	100
8/5/2005	11:00	241	114	127
8/5/2005	12:00	281	144	137
8/5/2005	13:00	286	155	131
8/5/2005	14:00	260	141	119
8/5/2005	15:00	279	151	128
	ADT	**4847**	**2518**	**2329**