9-1-2011

Airport master plan update: Manchester- Boston regional airport, Manchester, New Hampshire

URS; Jacobs Consultancy; McFarland Johnson; The Smart Associates, Environmental Consultants, Inc.

APPENDICES

Airport Master Plan Update

Manchester-Boston Regional Airport

Manchester, New Hampshire

Prepared For:

City of Manchester
Department of Aviation

Prepared By:

URS

In Association With:

JACOBS CONSULTANCY

McFarland Johnson

The Smart Associates
Environmental Consultants, Inc.

September 2011

DRAFT

APPENDICES

MANCHESTER-BOSTON REGIONAL AIRPORT
Airport Master Plan Update

Prepared for:

City of Manchester
Department of Aviation

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Jacobs Consultancy
McFarland Johnson, Inc.
The Smart Associates

December 2010

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MANCHESTER-BOSTON REGIONAL AIRPORT

Airport Master Plan Update

APPENDIX A

List of Acronyms

The following contains a list of acronyms used in the Manchester-Boston Regional Airport Master Plan Update.

A

AC	Advisory Circular
ACC	Airport Communications Center
ACS	Airport Access Control
ACIP	Airport Capital Improvement Program
ADF	Aircraft Deicing Fluid
ADG	Aircraft Design Group
ADO	Airport District Office
ADPM	Average Day Peak Month
AFFF	Aqueous Film-Forming Foam
AGL	Aboveground Level
AIP	Airport Improvement Program
ALD	Airport Layout Drawing
ALP	Airport Layout Plan
ALS	Approach Lighting System
ALSF-2	High Intensity Approach Lighting System with Sequenced Flashing Lights (CAT II Standard)
AMX	Amoskeag Millyard Mixed Use District
AOA	Airport Operations Area
APM	Automated People Mover
ARC	Aircraft Reference Code
ARFF	Airport Rescue and Firefighting
ARP	Airport Reference Point
ASDA	Accelerate-Stop Distance Available
ASOS	Automatic Surface Observation System
ASPM	Aviation System Performance Metrics
ASR-9	Airport Surveillance RADAR Model 9
ASR	Alkali Silica Reaction
ASV	Annual Service Volume
ATADC	Air Traffic Activity Data System
ATC	Air Traffic Control
ATCT	Airport Traffic Control Tower
ATO	Airline Ticket Office
AURs	Activities and Use Restrictions
AVI	Automated Vehicle Identifier
AWOS	Automated Weather Observing System

B

BDL	Bradley International Airport
BHS	Baggage Handling System
BMPs	Best Management Practices
BPDU	Bridge Protocol Data Unit
BRT	Bus Rapid Transit
BSO	Baggage Services Office

C

CAFR	Comprehensive Annual Financial Report
CAST	Comprehensive Airport Simulation Technology
CAT	Category
CBD	Central Business District
CBIS	Checked Baggage Inspection System
CBP	U.S. Customs and Border Protection
CCSP	Certified Cargo Screening Program
CCTV	Close Circuit Television
CFC	Customer Facility Charge
CFR	Code of Federal Regulations
CGP	Construction General Permit
CIP	Capital Improvement Plan/Program
CL	Centerline
CONRAC	Consolidated Rental Car Faciility
CPU	Central Processing Unit
CSA	Combined Statistical Area
CUSS	Common Use Self Service Devices
CUTE	Common Use Terminal Devices
CWA	Clean Water Act

D

D-IV	Airplane Approach Speed D, Wingspan IV
DA	Decision Altitude
DCA	Washington Reagan Airport
DHART	Dartmouth-Hitchcock Advanced Response Team
DHS	U.S. Department of Homeland Security
DME	Distance Measuring Equipment
DOT	Department of Transportation
DSCP	Differentiated Service Code Point
DTG	Dollar Thrifty Automotive Group

DXP	Digital Extended Processor

E

EDS	Explosives Detection System
EIGRP	Enhanced Interior Gateway Routing Protocol
EIS	Environmental Impact Statement
ELGs	Effluent Limitation Guidelines
EMAS	Engineered Materials Arresting System
EMS	Emergency Medical Services
EMT	Emergency Medical Technician
EOC	Emergency Operations Center
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
EST	Edwards System Technology
ETD	Explosives Trace Detection
E&P	Engineering and Planning

F

FAA	Federal Aviation Administration
FAC	Family Assistance Center
FAR	Federal Aviation Regulations
FBO	Fixed Base Operator
FedEx	Federal Express
FEET	F.E. Everett Turnpike
FEMA	Federal Emergency Management Agency
FFY	Federal Fiscal Year
FHWA	Federal Highway Administration
FIS	Federal Inspection Services
FOD	Foreign Object Damage
FTZ	Foreign Trade Zone
FY	Fiscal Year

G

GA	General Aviation
GDP	Gross Domestic Product
GPS	Global Positioning Satellite (System)
GQS	Glidepath Qualification Surface
GSE	Ground Support Equipment

H

HATh	Height Above Threshold
HIRL	High Intensity Runway Lights
HSRP	Hot Standby Routing Protocol
HVAC	Heating, Ventilation, and Air Conditioning

I

IATA	International Air Transport Association
ICA	Initial Climb Area
IFR	Instrument Flight Rules
ILS	Instrument Landing System
IMC	Instrument Meteorological Conditions
IP	Internet Protocol
IPTV	Internet Protocol Television
IS	Information System
IT	Information Technology

L

LAHSO	Land and Hold Short Operations
LAN	Local Area Network
LAWRS	Limited Aviation Weather Reporting Station
LBA	Lavallee Brensinger Architects
LBS	Pounds
LCC	Low Cost Carrier
LDA	Landing Distance Available
LMPOD	Lake Massabesic Protection Overlay District
LOC	Localizer
LOI	Letter of Intent
LOS	Level of Service
LPV	Localizer Precision with Vertical Guidance

M

MAC	Media Access Control
MALSF	Medium Intensity Approach Lighting System with Sequenced Flashing Lights
MALSR	Medium Intensity Approach Lighting System with Runway Alignment Indicator Lights
MAP	Million Annual Passengers
MASSPORT	Massachusetts Port Authority
MBTA	Massachusetts Bay Transit Authority
MDA	Minimum Descent Altitude
MHT	Manchester-Boston Regional Airport

MITL	Medium Intensity Taxiway Lights
MPU	Master Plan Update
MSGP	Multi-Sector General Permit
MSL	Mean Sea Level
MTA	Manchester Transit Authority

N

N/A	Not Applicable
NAVAID	Navigational Aid
NCDC	National Climatic Data Center
NEEP	New England Economic Partnership
NH	New Hampshire
NHDES	New Hampshire Department of Environmental Services
NHDHR	New Hampshire Division of Historical Resources
NHDOT	New Hampshire Department of Transportation
NHF&G	New Hampshire Fish and Game Department
NHNHB	New Hampshire Natural Heritage Bureau
NHRTA	New Hampshire Rail Transit Authority
NOI	Notice of Intent
NOT	Notice of Termination
NOTAM	Notice To Airmen
NPDES	National Pollutant Discharge Elimination System
NPIAS	National Plan of Integrated Airport Systems
NPR	National Priority Rating
NWI	National Wetlands Inventory

O

OAG	Official Airline Guide
OC	Obstruction Chart
OCS	Obstacle Clearance Surface
O&D	Origin and Destination
O&M	Operation and Maintenance
OMB	U.S. Office of Management and Budget
OPS	Operations
OSPF	Open Shortest Path First

P

PA	Public Address System
PAL	Passenger Activity Level
PAPI	Precision Approach Path Indicator
PCC	Portland Cement Concrete
PCI	Pavement Condition Index
PCPI	Per Capita Personal Income
PFC	Passenger Facility Charge
PIM	Protocol Independent Multicast
PIW	Public Information Workshop
PLC	Programmable Logic Controllers
POFZ	Precision Obstacle Free Zone
PSI	Per Square Inch
PSNH	Public Service of New Hampshire
PVD	T.F. Green State Airport
PVST	Per VLAN Spanning Tree

Q

QoS	Quality of Service
QTA	Quick-Turn-Around

R

RAC	Rent-a-Car
REIL	Runway End Identification Lights
RNAV	Area Navigation
RNP	Required Navigational Precision
ROFA	Runway Object Free Area
RON	Remain Over Night
RPZ	Runway Protection Zone
RSA	Runway Safety Area
RSAT	Runway Safety Action Team
RSEDS	Reduced Size EDS
RVR	Runway Visual Range
RVZ	Runway Visibility Zone
RWY	Runway

S

SAC	Study Advisory Committee
SF	Square Feet
SHPO	State Historic Preservation Officer
SMGCS	Surface Movement Guidance and Control System
SNHPC	Southern New Hampshire Planning Commision
SSCP	Security Screening Check Points
SWPPP	Stormwater Pollution Prevention Plan
SY	Square Yards

T

TACAN	Tactical Air Navigation System
TAF	Terminal Area Forecast
TBD	To be Determined
TCH	Threshold Crossing Height
TCP	Transmission Control Protocol
TDZL	Touchdown Zone Lights
TERPS	Terminal Instrument Procedures
TODA	Takeoff Distance Available
TORA	Take-off Run Available
TOFA	Taxiway Object Free Area
TSA	Transportation Security Administration
TSAR	Transportation Security Administration Regulations
TSO	Transportation Security Officer
T/W	Taxiway

U

UDLD	Uni-Directional-Link-Detection
UPS	United Parcel Service
US	United States
USACE	U.S. Army Corps of Engineers
USDHS	U.S. Department of Homeland Security
USDOT	U.S. Department of Transportation
USFWS	U.S. Fish and Wildlife Service
USPS	U.S. Postal Service

V

VFR	Visual Flight Rules
VLAN	Virtual Local Area Network
VMC	Visual Meteorological Conditions
VoIP	Voice over IP
VOR	VHF Omnidirectional Range
VORTAC	Very High Frequency Omni-Directional Radio Range Tactical Air Navigation Aid

W

WAAS	Wide Area Augmentation System
WBI	Whole Body Imagers

MANCHESTER-BOSTON REGIONAL AIRPORT

Airport Master Plan Update

APPENDIX B

Study Advisory Committee (SAC)

The following contains a list of Study Advisory Committee (SAC) members involved in the Manchester-Boston Regional Airport Master Plan Update.

Organization	Name
Airport Authority	Gary O'Neil
Airport Administration	Mark Brewer
FAA Planning	Lisa Lesperance
FAA Engineering	Cliff Vacirca
FAA ATCT	Bob Locke and Dan Obert
NHDOT Aeronautics	Jack Ferns
NHDOT	Chris Clement
NHDES	Harry Stewart
Greater Manchester Chamber of Commerce	Michael Skelton
Southern New Hampshire Planning Commission	David Preece and Tim White
Passenger Airlines	Steve Sisneros and Tom Labrie
Cargo Airlines	Maria Hannemann
General Aviation	Steve Young
FBO	Jim Thomforde
City of Manchester Planning Department	Leon LaFreniere
Town of Londonderry Planning & Economic Development	Andre Garron
Manchester Citizen	Bradford E. Cook
Londonderry Citizen	Earl Rosse
Bedford Citizen	Bill Dermody
Goffstown Citizen	Barbara Griffin and Mike Pelletier
Litchfield Citizen	George Lambert
Merrimack Citizen	--
Auburn Citizen	Paula Marzloff
TSA	Rob Krekorian
Manchester Conservation Commission	Jane Beaulieu
Londonderry Conservation Commission	Deb Lievens

MANCHESTER-BOSTON REGIONAL AIRPORT

Airport Master Plan Update

APPENDIX C

FAA Forecasts Approval Letter

U.S. Department
of Transportation
**Federal Aviation
Administration**

Federal Aviation Administration
New England Region

12 New England Executive Park
Burlington, MA 01803

June 10, 2010

Mr. Mark P. Brewer
Airport Director
Manchester-Boston Regional Airport
One Airport Road, Suite 300
Manchester, NH 03103

Dear Mr. Brewer:

The Federal Aviation Administration (FAA) has reviewed the forecast for Manchester-Boston Regional Airport, Manchester, NH, as depicted in *"Final Technical Report-Aviation Activity Forecasts"* dated May 2010, prepared by Jacobs Consultancy. This forecast development is associated with the Airport Master Plan project under Airport Improvement Program (AIP) number 3-33-0011-76-2009.

The methodologies used to develop base and high scenario forecasts reasonably represents anticipated growth at the airport.

FAA accepts these forecasts.

Sincerely,

ORIGINAL SIGNED BY:

Lisa J. Lesperance
Airport Planner

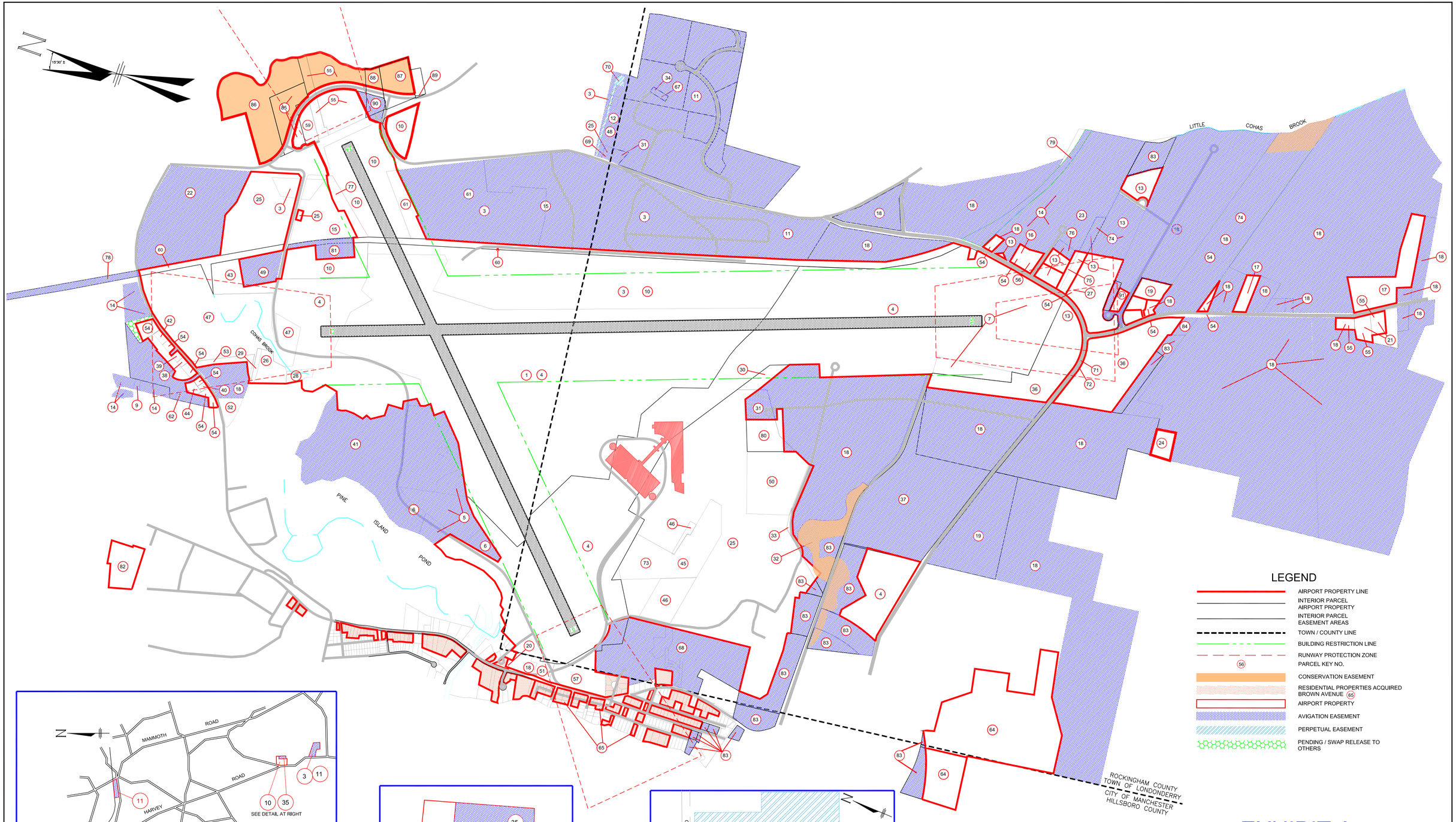
Cc: Rich Fixler, MHT
Mike Steer, URS

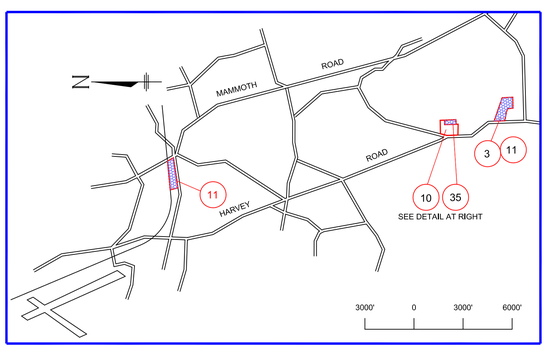
MANCHESTER-BOSTON REGIONAL AIRPORT

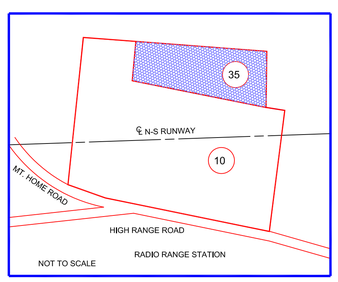
Airport Master Plan Update

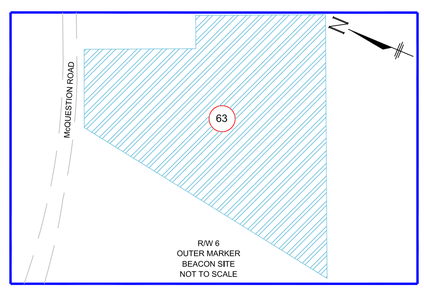
APPENDIX D

Exhibit "A" Property Map









LEGEND

- AIRPORT PROPERTY LINE
- INTERIOR PARCEL AIRPORT PROPERTY
- INTERIOR PARCEL EASEMENT AREAS
- TOWN / COUNTY LINE
- BUILDING RESTRICTION LINE
- RUNWAY PROTECTION ZONE
- (56) PARCEL KEY NO.
- CONSERVATION EASEMENT
- RESIDENTIAL PROPERTIES ACQUIRED BROWN AVENUE (65)
- AIRPORT PROPERTY
- AVIGATION EASEMENT
- PERPETUAL EASEMENT
- PENDING / SWAP RELEASE TO OTHERS

EXHIBIT A

MANCHESTER•BOSTON REGIONAL AIRPORT

ORIGINALLY PREPARED BY

HOYLE, TANNER & ASSOCIATES, INC.

SCALE: 1"=600'

JANUARY 21, 2003
UPDATED: MAY 21, 2008

GRAPHIC SCALE

600' 300' 0 600' 1200' 1800'

NOTES:

1. SEE INSTRUMENT OF TRANSFER DATED 4/2/65 AND RECORDED (R) 1775/330, (H) 1825/153, RELEASING UTILITIES FROM U.S.A. TO CITY OF MANCHESTER
2. ORIGINAL LAND LEASED BY GOVERNMENT UNDER LEASE NO. DA-19-016-ENG-5278 INCLUDE PARCELS,2,3,5,33 AND 35. LAND TRANSFERED BACK TO CITY OF MANCHESTER, EXCLUDING A PORTION OF PARCEL 5. (SEE CANCELATION OF LEASE 4/3/57, PARCEL NO. 2).

REV.	DATE	DESCRIPTION	C/O	DR	CK
1					
2					
3					
4					

NOT FOR RECORDING PURPOSES

FILE	EX-A1.DWG	SIZE	D	TYPE	F	ALT		REV		SHEET 1 OF 3

K:\Exhibit 'A'\CADD\Current as of 5-21-08\Ex-A-5-21-08.dwg, 5/29/2008 10:19:17 AM

KEY	GRANTOR	GRANTEE	INST.	ACRES	(H) H.C.R.D. (R) R.C.R.D. BK & PG	DATE	REMARKS
1	MHT	U. S. A.	LEASE	64	(H) 977/450	6/13/41	INCLUDES AP-4 LAND
2	NO LONGER USED						
3	CITY OF MANCHESTER	U. S. A.	FEE	192.22	(H) 1703/333 (R) 1647/1	9/25/62	TRANSFER OF PROPERTY PER QUITCLAIM DEED
4	U. S. A.	CITY OF MANCHESTER	FEE	407	(H) 1703/317 (R) 1646/481	9/27/62	SURPLUS PROPERTY DEED (CORRECTED 4/27/72) INCLUDES AP-4 LAND
5	CITY OF MANCHESTER	AIRPORT REALTY CORP.	FEE	15	(H) 1733/359	6/10/63	AVIGATION EASEMENT RETAINED
6	CITY OF MANCHESTER	AIRPORT REALTY CORP.	FEE	4.03	(H) 1898/157	9/22/66	RELEASE 9/16/66 PORTION OF TRANSFER 9/27/62 AVIGATION EASEMENT RETAINED
7	AMOSKEAG DEV. CORP. PUBLIC SERVICE CO. OF N.H. GRENIER-LONDONDERRY DEV. CORP. MANCHESTER SAVINGS BANK	CITY OF MANCHESTER	FEE	53.77	(R) 1877/206	9/6/67	CONDEMNATION FAAP 9-27-018-C603
9	JOHN AND YOLAUDE MORRILL	CITY OF MANCHESTER	EASE	N/A	(H) 1973/390	04/16/68	AVIGATION ADAP 8-23-0011-02
10	U. S. A.	CITY OF MANCHESTER	FEE	157	(H) 1994/155 (R) 1930/282 (H) 1994/166	8/16/68	SURPLUS PROPERTY DEED
11	U. S. A.	LONDONDERRY HOUSING & REDEVELOPMENT AUTHORITY	EASE	276.11	(H) 2002/147 (R) 1936/257	9/19/68 9/19/68	DEED INCLUDES AVIGATION EASEMENT IN FAVOR OF CITY
12	LONDONDERRY HOUSING & REDEVELOPMENT AUTHORITY	CITY OF MANCHESTER	FEE	5.5	(H) 2066/143	12/1/68	QUITCLAIM
13	VARIOUS OWNERS	CITY OF MANCHESTER	FEE	50.7± (S)	VARIOUS	FROM 10/15/69 TO 12/23/71	FAAP 9-27-018-C905
14	VARIOUS OWNERS	CITY OF MANCHESTER	EASE	N/A	VARIOUS	FROM 12/4/69 TO 1/14/71	AVIGATION FAAP 9-27-018-C603
15	CITY OF MANCHESTER	MANCHESTER HOUSING AUTHORITY	FEE	101.7	(H) 2086/437	6/3/70	RELEASE 8/16/68 AVIGATION EASEMENT RETAINED (H) 1994/166
16	ROBERT J. AND MARY C. JANKOWSKI	CITY OF MANCHESTER	EASE	1 ±	(R) 2039/186	10/13/70	AVIGATION FAAP 9-27-018-C603 ACQUIRED IN FEE (SEE NO. 56)
17	VARIOUS OWNERS	CITY OF MANCHESTER	FEE	10 ± (S)	VARIOUS	FROM 4/18/72 TO 3/1/73	ADAP 8-33-0011-02
18	VARIOUS OWNERS	CITY OF MANCHESTER	EASE	N/A	VARIOUS	FROM 10/5/72 TO 2/3/86	AVIGATION ADAP 8-33-0011-02 SOME LATER ACQUIRED IN FEE SEE #55
19	LILLIAN E. & WILLIAM J. MARSH	CITY OF MANCHESTER	FEE	3 ± (S)	(R) 2158/358	6/30/72	
20	FELIX A. CATUDAL, COLLECTOR OF TAXES MANCHESTER	CITY OF MANCHESTER	FEE	5,855 (S.F.)	(H) 2337/557	12/12/73	FORMER SCHOOL HOUSE LOT
21	THOMAS J. AND JEAN MARIE CURRAN, HAROLD AND CONSTANCE CHARLAND	CITY OF MANCHESTER	EASE	3.5 ± (S)	VARIOUS	1/74	AVIGATION EASEMENT ADAP 8-33-0011-02 ACQUIRED IN FEE SEE #55
22	MANCHESTER BOARD OF WATER COMMISSIONERS	CITY OF MANCHESTER	EASE	36	(H) 2375/14	9/30/74	AVIGATION
23	LONDONDERRY INDUSTRIAL AIRPARK	CITY OF MANCHESTER	EASE	N/A	(R)2230/1157	8/27/74	AVIGATION FAAP 9-27-018-C603
24	WEBCO DEVELOPMENT CORPORATION	CITY OF MANCHESTER	FEE	2.863	(R) 2233/691	2/12/75	ADAP 8-33-0011-02 SUBJECT TO RIGHT-OF-WAY (R) 2385/101
25	U. S. A.	CITY OF MANCHESTER	FEE	177.94	(H) 2405/271 (R) 2243/378	6/4/75 6/4/75	SURPLUS PROPERTY DEED
26	PAUL COWETTE	CITY OF MANCHESTER	FEE	3.2 ± (S)	(H) 2445/348	3/22/76	FAAP 9-27-018-C603
27	RACHAEL CARRIER	CITY OF MANCHESTER	EASE	3.64	(R) 2048/307	12/8/76	AVIGATION ADAP 8-33-0011-02
28	AMERICAN BUILDERS, INC	CITY OF MANCHESTER	FEE	0.1±	(H)2006/427	11/18/68	FAAP 9-27-018-C603
29	PUBLIC SERVICE CO. OF N.H.	CITY OF MANCHESTER	FEE	0.94±	(H)2006/427	11/18/68	FAAP 9-27-018-C603
30	SAMUEL TAMPOSI & GERALD NASH	CITY OF MANCHESTER	FEE	2.632	(R) 2311/998	1/23/78	
31	CITY OF MANCHESTER	LONDONDERRY HOUSING & REDEVELOPMENT AUTHORITY	FEE	25.719	(R) 2311/987	4/4/78 (RECORDED 5/22/78)	FAA RELEASED DEED 5/1/78 RELEASE FOR PROPERTY EXCHANGE PORTION OF TRANSFER 6/4/75 AVIGATION EASEMENT RETAINED
32	LONDONDERRY HOUSING & REDEVELOPMENT AUTHORITY	CITY OF MANCHESTER	FEE	11.5	(R) 2311/993	5/19/78	
33	LONDONDERRY HOUSING & REDEVELOPMENT AUTHORITY	CITY OF MANCHESTER	FEE	2,792 (S.F.)	(R) 2311/991	5/19/78	
34	LONDONDERRY HOUSING & REDEVELOPMENT AUTHORITY	CITY OF MANCHESTER	FEE	0.468	(R) 2311/995	5/19/78	SUBJECT TO RESTRICTION RELEASED 3660/549; 7/9/01 ROTATING BEACON SITE
35	CITY OF MANCHESTER	FORREST N. KIMBALL	FEE	2.87	(R) 2335/1808	4/9/79	RELEASE 3/15/79 PORTION OF TRANSFER 8/16/68
36	GRENIER-LONDONDERRY DEVELOPMENT CORPORATION	CITY OF MANCHESTER	FEE	56.354	(R) 2379/869	10/17/80	FAAP 9-27-018-C603
37	CITY OF MANCHESTER	GRENIER-LONDONDERRY DEVELOPMENT CORP.	FEE	71.1	(R) 2379/862	10/24/80	RELEASE 12/5/74 PORTION OF TRANSFER 9/27/62
38	BERNADETTE J. AND JOHN D. LUXTON	CITY OF MANCHESTER	FEE	13,000 (S.F.)	(H)	11/23/81	
39	FABIOLA G. BERGERON	CITY OF MANCHESTER	FEE	.3 ± (S)	(H) 2970/39	11/19/82	
40	WILLIAM T. SHREVE	CITY OF MANCHESTER	FEE	.25 ± (S)	(H) 3198/497	8/15/84	
41	CITY OF MANCHESTER	HI-TENSION REALTY CORP	FEE	32	(H) 3204/79	8/28/84	RELEASE 1/3/84 PORTION OF TRANSFER 9/27/62 AVIGATION EASEMENT RETAINED
42	DANIEL T. AND AGNES A. McCARTHY	CITY OF MANCHESTER	FEE	.46 ± (S)	(H) 3360/858	8/15/85	
43	MANCHESTER BOARD OF WATER COMMISSIONERS	CITY OF MANCHESTER AIRPORT AUTHORITY	FEE	3	UNRECORDED	9/10/85	MEMORANDUM OF AGREEMENT

KEY	GRANTOR	GRANTEE	INST.	ACRES	(H) H.C.R.D. (R) R.C.R.D. BK & PG	DATE	REMARKS
44	WILLIAM D. AND DORIS L. AUGER	CITY OF MANCHESTER	FEE	.75 ± (S)	(H) 3384/305	9/24/85	
45	CITY OF MANCHESTER	U. S. A.	FEE	9.24	(R) 2629/2652	1/9/86	ACQUIRED UNDER SURPLUS PROPERTY (PARCEL 25)
46	U. S. A.	CITY OF MANCHESTER	FEE	9.06	(R) 2629/2640	3/27/86	LAND EXCHANGE
47	MANCHESTER BOARD OF WATER COMMISSIONERS	CITY OF MANCHESTER AIRPORT AUTHORITY	EASE	30	UNRECORDED	1/11/87	MEMORANDUM OF AGREEMENT
48	CITY OF MANCHESTER	VERRES FINANCIAL CORP	FEE	5.5	(H) 4073/210	1/14/87	SEE NO. 12 EASEMENTS RETAINED
49	CITY OF MANCHESTER	THE FELTERS COMPANY	FEE	4.68	(H) 4385/276	9/9/87	AVIGATION EASEMENT RETAINED
50	AIRSIDE ASSOC. LIMITED PARTNERSHIP	CITY OF MANCHESTER	FEE	14.159	(R)2895/761	10/18/91	AIP-3-33-0011-13
51	HELEN M. CHOUINARD ESTATE	CITY OF MANCHESTER	FEE	1.3 ± (S)	(H) 5564/1241	7/18/94	CITY FUNDS
52	CITY OF MANCHESTER	1064 GOFFS FALLS ROAD, L.L.C.	FEE	1.258	H 5616/0275	12/29/94	LAND SWAP WITH NO. 53 ACQUIRED UNDER ADAP 8-33-0011-02
53	1064 GOFFS FALLS ROAD, L.L.C.	CITY OF MANCHESTER	FEE	1.371	H 5616/273	12/20/94	LAND SWAP WITH NO. 52
54	VARIOUS OWNERS	CITY OF MANCHESTER	FEE	45.67	VARIOUS	FROM 1/11/95 TO 1/30/97	AIP-3-33-0011-29
55	VARIOUS OWNERS	CITY OF MANCHESTER	FEE	23.36	VARIOUS	FROM 09/25/95 TO 10/30/98	AIP 3-33-0011-31
56	SACKETT PLACE DEVELOPMENT CORP	CITY OF MANCHESTER	FEE	1.796	(R)3139/0061	02/05/96	AIP 3-33-0011-26
57	ROMAN CATHOLIC BISHOP OF MANCHESTER	CITY OF MANCHESTER	FEE	6.82	(R)3335/1355 (H)6013/0152	10/27//98	CITY FUNDS
58	NO LONGER USED						
59	FT. WORTH ASSOCIATES, LLC	CITY OF MANCHESTER	FEE	2.36	(H) 6015/728	10/30/98	CITY FUNDS
60	B&M RAILROAD CORP.	CITY OF MANCHESTER	FEE	21.64	(R)3431/2023 (H)6160/0557	10/20/99 09/23/99	CITY FUNDS
61	COTTER & CO. COTTER & CO.	CITY OF MANCHESTER CITY OF MANCHESTER	FEE EASE	4.614 38.088	(H)6203/1194 (H)6203/1194	1-25-00 1-25-00	AIP 3-33-0011-37
62	VARIOUS OWNERS	CITY OF MANCHESTER	EASE	1.4±	VARIOUS	VARIOUS	ACQUIRED UNDER PURCHASE ASSURANCE AGREEMENT AVIGATION EASEMENT RETAINED
63	1 LINE REALTY DEVELOPMENT LLC	CITY OF MANCHESTER	EASE	2.62	(H)6331/1735	12/20/00	PERPETUAL EASEMENT R/W 6 OUTERMARKER SITE
64	PETER J. KING REVOCABLE TRUST OF 1994 ET.AL	CITY OF MANCHESTER	FEE	11.961 44.691	(H)6484/2664 (H)3660/1670	9-05-01 10/22/01	CITY FUNDS
65	VARIOUS OWNERS	CITY OF MANCHESTER	FEE	15.2 ±	VARIOUS	VARIOUS	CITY FUNDS
66	HEIRS OF THE PETTENGILL FAMILY	CITY OF MANCHESTER	FEE	0.2± (S)	(R)3648/2006	9/27/01	CITY FUNDS
67	CITY OF MANCHESTER	FERROTEC INVESTMENTS	FEE	0.468±	(R)3660/0559	7/30/01	SEE NO. 34 AVIGATION ESMT
68	PROPERTY SERVICES CO. INC.	CITY OF MANCHESTER	EASE	35.76±	NOT RECORDED	1/1/96	AVIGATION ESMT RETAINED
69	CITY OF MANCHESTER	VERRES FINANCIAL CORP	FEE	0.55	(H)6602/0038	3/22/02	SEE NO. 25 LAND SWAP WITH NO. 70 RELEASE 3/22/02
70	VERRES FINANCIAL CORP	CITY OF MANCHESTER	EASE	1.09	(H)6602/0040	3/22/02	LAND SWAP WITH NO. 69 ROTATING BEACON SITE
71	CITY OF MANCHESTER	TOWN OF LONDONDERRY	FEE		PLAN D-30302	12/5/02	LAND SWAP WITH NO.72 FOR PETTENGILL ROAD REALIGNMENT
72	TOWN OF LONDONDERRY	CITY OF MANCHESTER	FEE		PLAN D-30302	12/5/02	LAND SWAP WITH NO. 71 FOR PETTENGILL ROAD REALIGNMENT
73	U.S. ARMY CORPS OF ENG.	CITY OF MANCHESTER	FEE	16.35	(R)4046/0977	6/03/03	LAND SWAP WITH NO. 74
74	CITY OF MANCHESTER	U.S. ARMY CORPS OF ENG.	FEE	47.6334	(R)4046/0986	6/03/03	LAND SWAP WITH NO. 73 AVIGATION ESMT RETAINED
75	CHESTER R. HAM	CITY OF MANCHESTER	FEE	0.6899	(R)4138/0951	9/02/03	LAND SWAP WITH NO. 76
76	CITY OF MANCHESTER	CHESTER R. HAM	FEE	1.0014	(R)4138/0954	7/31/03	LAND SWAP WITH NO. 75 - AVIGATION ESMT. RETAINED-RELEASE 11/15/05
77	VARIOUS OWNERS	CITY OF MANCHESTER	FEE	3.223	(H)7231/2010 (H)7197/1322	5/11/04 3/31/04	CITY FUNDS
78	CITY OF MANCHESTER	STATE OF NEW HAMPSHIRE DOT	FEE	22.47	(H)7042/0623	8/5/03	AVIGATION ESMT RETAINED
79	CITY OF MANCHESTER	STATE OF NEW HAMPSHIRE DOT	FEE	12.16	(R)4125/2744	8/5/03	AVIGATION ESMT RETAINED
80	WIGGINS AIRWAYS, INC.	CITY OF MANCHESTER	FEE	5.58±	(R)4304/1020	6/2/04	CITY FUNDS
81	CITY OF MANCHESTER	ACORN ASSOCIATES LXXXII, LTD.	FEE	3.98±	(H)7731/2005	8/31/06	AVIGATION ESMT RETAINED DATE OF RELEASE 9/8/06
82	TWENTY SIXTY BROWN AVENUE, L.L.C	CITY OF MANCHESTER	FEE	5.80±	(H)6666/1265	7/10/02	CITY FUNDS
83	CITY OF MANCHESTER	STATE OF NEW HAMPSHIRE	FEE	60.002±	(H)&(R) VARIOUS	VARIES	AVIGATION ESMT RETAINED DATE OF RELEASE 2/21/07
84	KARL R. RITZINGER	CITY OF MANCHESTER	FEE	1.17±	(R) 4593/2343	12/13/05	AVIGATION ESMT OBTAINED
85	KATHERINE D. BRODSKY	CITY OF MANCHESTER	FEE	7.32±	(H) 7809/2681	2/21/07	AIP 3-33-0011-67
86	DANIEL G. DONOVAN & EILEEN P. DONOVAN	CITY OF MANCHESTER	FEE	18.66±	(H) 7811/0629	2/23/07	AIP 3-33-0011-67
87	RICHARD MAILLOUX	CITY OF MANCHESTER	FEE	5.981	(H) 7811/0627	2/23/07	AIP 3-33-0011-67
88	ADVANTAGE GAS OWNED BY VARIOUS OWNERS-TENNANT IN COMMON	CITY OF MANCHESTER	FEE	2.01±	(H) 7933/1085	12/20/07	AIP 3-33-0011-67
89	RICHARD E. GORSEY REVOCABLE TRUST DATED 6-24-93	CITY OF MANCHESTER	FEE	0.05±	(H) 7903/0481	9/24/07	AIP 3-33-0011-67
90	CITY OF MANCHESTER	ADVANTAGE GAS OWNED BY VARIOUS OWNERS-TENNANT IN COMMON	FEE	3.24	(H) 7933/1085 (H) 7933/1092	12/20/07	SWAP WITH 88-AVIGATION ESMT. RETAINED RELEASE XX/XX/07, FORMERLY PART OF 55
91	AEROREPAIR CORPORATION	CITY OF MANCHESTER	FEE	1.0	(R) 4910/1148	4/25/08	AIP 3-33-0011-75

REV.	DATE	DESCRIPTION	C/O	DR	CK

(H) = HILLSBOROUGH COUNTY REGISTRY OF DEEDS (R) = ROCKINGHAM COUNTY REGISTRY OF DEEDS
(S) = SCALED

ORIGINALLY PREPARED BY
HOYLE, TANNER & ASSOCIATES, INC.
NOT FOR RECORDING PURPOSES

EXHIBIT A

MANCHESTER•BOSTON REGIONAL AIRPORT
SCALE: NONE
JANUARY 21, 2003
UPDATED: NOVEMBER 19, 2008

FILE EXH-A2.DWG SIZE D TYPE F ALT REV SHEET 2 OF 3

MANCHESTER-BOSTON REGIONAL AIRPORT

Airport Master Plan Update

APPENDIX E

Inventory/Existing Conditions

APPENDIX E1

INVENTORY/EXISTING CONDITIONS

1.0 AIRFIELD PAVEMENT CONDITION INDEX SCORES

The airport conducts annual pavement inspections for the purpose of determining the Pavement Condition Index for the areas which are included in the study. PCI scores are based on a visual review of the pavement, where the scores start at 100 (no distresses) and are reduced according to the length, width, area and severity of distresses. The inspection process usually starts by breaking down the major runway, taxiway or apron pavement areas into similar construction, condition and history sub-units or Sections, which are further broken down into samples. A number of samples within each Section are then randomly chosen for inspection purposes, and the average PCI of the sampled units is presented as the branch PCI. As of October 2009, the majority of the latest PCI inspections were conducted during May and June 2009, with three of the inspections dating to March and April 2008.

The Manchester Terminal Apron ASR Investigation study provided a system for associating PCI scores with a subjective pavement rating on page 6 of the report, where:

86-100 is considered Good
71-85 is considered Satisfactory
56-70 is considered Fair
41-55 is considered Poor
26-40 is considered Very Poor
11-25 is considered Serious
0-10 is considered Failed

The following **Figure E1-1** defines the individual runway and taxiway branches which were used during the PCI inspection and scoring process, which include Sections that have similar construction and history. Aprons are not included in the PCI analysis.

The major runway and taxiway pavement branch/Section PCI are presented in **Table E1-1**, where the taxiway areas include the three partial parallel taxiways ("A", "H" and "J") and the associated stub taxiways, and Taxiway "M" which provides access to the Runway06 threshold from the terminal and air cargo areas. It should be noted that several of the stub taxiways are included in the rating Section for the partial parallel taxiway they connect to, and some of the taxiway connectors are included with other connecting taxiways.

FIGURE E1-1
PAVEMENT PCI SECTIONS

TABLE E1-1
RUNWAY AND PARTIAL PARALLEL TAXIWAY PCI SCORES

Branch ID	Section ID	True Area (sf)	Last Inspection	Age at Inspection	PCI
Runway 17/35	AREA 1 03'	311,100	05/20/2009	6	88
Runway 17/35	AREA 2 02'	1,136,250	05/20/2009	7	83
Runway 06/24	6/24 Intersection	338,213	05/26/2009	6	86
Runway 06/24	RWY 24	323,391	06/04/2009	10	63
Runway 06/24	RWY 06	600,239	06/04/2009	3	85
Partial Par. Taxiway "H"	BLUE 4	226,039	03/24/2008	13	78
Partial Par. Taxiway "H"	GREEN 1	269,066	05/21/2009	16	81
Partial Par. Taxiway "H"	RED 3	79,711	05/20/2009	6	75
Partial Par. Taxiway "H"	RED 4	395,852	05/21/2009	6	74
Partial Par. Taxiway "H"	YELLOW 2	175,066	05/24/2009	16	57
Partial Par. Taxiway "A" (includes Taxiway "P" and "U")	DARK BLUE 4b	970,173	05/21/2009	6	78
Partial Par. Taxiway "A"	GREEN 4a	492,007	05/24/2009	6	62
Partial Par. Taxiway "A"	RED 5	59,338	05/26/2009	6	89
Partial Par. Taxiway "A"	YELLOW 2	333,282	05/24/2009	6	83
Partial Par. Taxiway "J"/"J1"	RED 5	526,978	05/24/2009	10	75
Taxiway "M"/"M1"	BLUE 6	309,922	06/03/2009	6	78
Taxiway "M"/"M1"	GREEN 5	77,356	05/24/2009	3	95
Taxiway "M"	RED 1	166,843	06/03/2009	8	56

Source: Airport PCI Scoring System, October 7, 2009.

The PCI scores for the remaining taxiway Sections which were scored by the airport are provided in the following **Table E1-2**.

TABLE E1-2
CONNECTOR, STUB AND OTHER TAXIWAY PCI SCORES

Branch ID	Section ID	True Area (sf)	Last Inspection	Age at Inspection	PCI
Five Taxiway "H" Stubs[1]	BLACK 7	156,333	05/24/2009	6	83
Taxiway "G" and "N"	BLACK 8	469,802	06/03/2009	1	97
Taxiway "N"	GREEN 6	126,700	06/03/2009	11	73
Taxiway "N"	ORANGE 3	142,613	06/03/2009	16	55
Taxiway "B"	RED 6	88,887	05/26/2009	10	62
Taxiway "E"	RED 7a	48,428	04/01/2009	15	57
Taxiway "E" (stub taxiway)	YELLOW 7	215,981	06/03/2009	16	80
Taxiway "L"	GRAY 1	60,813	04/01/2008	6	83

Source: Airport PCI Scoring System, October 7, 2009.
Notes: [1] Includes Stub Taxiways "A1", "B", "C", "D" and "F" on east side of Taxiway "H".

Based on the subjective ratings for PCI scores, most of the major runway and partial parallel taxiway pavements at MHT are in Satisfactory to Good condition, with four Sections in Fair condition. The connector and stub taxiways at MHT are generally in Fair to Good condition.

All of the airport runway and taxiway Sections are constructed with an asphalt overlay on asphalt concrete, except for a small Section of Taxiway "L" near the northeast hangar area which is asphalt.

The airport PCI program does not routinely include apron areas, where the apron condition is visually inspected by airport personnel during snow removal operations. The concrete airline terminal apron was the subject of a PCI analysis during the 2007 study of the apron's susceptibility to Alkali Silica Reaction (ASR) distresses and deterioration. The apron PCI scores varied from 79 to 95, and suggest that the apron surface is in satisfactory to good condition. The majority of the distresses impacting at least 1% of Section slabs were in the "no" to "low" intensity range, and the predominant distress is low intensity map cracking/scaling. **Figure E1-2** depicts the terminal apron PCI sections. **Table E1-3** describes the airline terminal apron PCI.

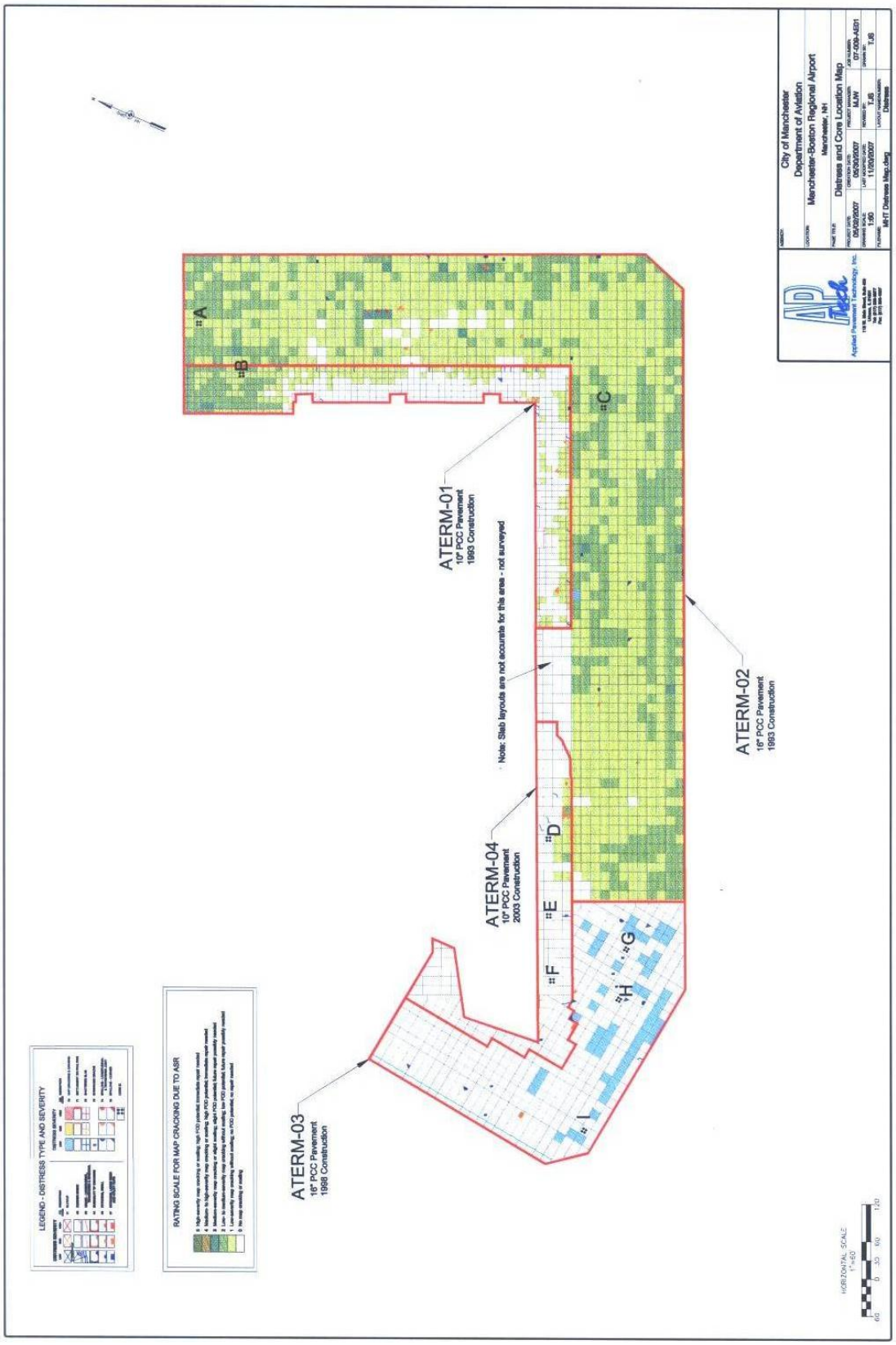
TABLE E1-3
AIRLINE TERMINAL APRON PCI

Terminal Apron Section	Original Date	PCI	Major Distresses Affecting at Least 1% of Total Section Slabs
ATERM-01	1993	85	316 slabs (51.6% of total) with low intensity map cracking/scaling 18 slabs (2.9% of total) with low intensity linear cracking
ATERM-02	1993	79	1,287 slabs (93.8% of total) with low intensity map cracking/scaling 572 slabs (41.7% of total) with low intensity joint seal damage 416 slabs (30.3% of total) with medium intensity joint seal damage
ATERM-03	1998	95	65 slabs (15.4% of total) with low intensity joint seal damage 47 slabs (11.1% of total) with low intensity map cracking/scaling 8 slabs (1.9% of total) with no intensity shrinkage cracking
ATERM-04	2003	95	9 slabs (4.5% of total) with low intensity map cracking/scaling 5 slabs (2.5% of total) with low intensity linear cracking 2 slabs (1.0% of total) with medium intensity corner spalling 2 slabs (1.0% of total) with no intensity shrinkage cracking

Source: MHT Terminal Apron ASR Investigation, 2007.

The study concluded that a significant portion of the concrete distresses and deterioration on the 1993 pavement areas (ATERM-01 and ATERM-02) were related to ASR conditions, and were expected to be a problem in the future. Sections ATERM-03 and ATERM-04 did not show signs of ASR, but the possibility existed in the presence of potassium acetate.

FIGURE E1-2
TERMINAL APRON PCI SECTIONS



The major study recommendations include, but are not limited to:

- Short-Term repairs at 20 locations to eliminate Foreign Object Damage (FOD) potential and extend pavement life, concentrating on:
    - Medium-severity blow-ups
    - Medium-severity corner spalls
    - Medium- and high-severity joint spalls
    - Medium-severity partial-depth patches
    - Application of lithium to retard ASR, if resources allow, with monitoring of treated and untreated areas to judge effectiveness
- Long-Term recommendations:
    - Patching and slab replacement every three years for medium- and high-severity distresses
    - New expansion joint along the trench drain, and monitor need for another trench drain

The study concluded that the ATERM-01 and ATERM-02 areas should continue to provide adequate service for another ten years after implementation of the study recommendations. Areas ATERM-03 and ATERM-04 should provide the full design life which they were designed for (assumed to be twenty years).

The airport assessment of other major apron area condition is:

Wiggins Apron: Fair

FedEx Apron: Fair

Cargex Apron: Fair

UPS Apron: Fair

APPENDIX E2

INVENTORY/EXISTING CONDITIONS

1.0 AIRSPACE AND AIR TRAFFIC CONTROL

1.1 AIRSPACE STRUCTURE

Airspace in the United States is classified as controlled, uncontrolled, or special use as described in **Table E2-1**. Controlled airspace describes airspace where air traffic control service is provided to IFR and VFR flights in accordance with the rules of each airspace classification. Controlled airspace includes Class A through Class E airspace, each of which has defined dimensions and altitudes within which air traffic control (ATC) service is provided to IFR flights, and may extend to VFR flights in accordance with the airspace classification. Uncontrolled airspace includes areas where ATC has neither authority nor responsibility to control aircraft, and is classified as Class G airspace. An additional type of airspace, is special use airspace. This classification consists of airspace where activities must be confined because of their nature, or where limitations are imposed upon aircraft operations that are not part of the confined activities. Special use or restricted airspace is clearly depicted on aeronautical charts.

TABLE E2-1
AIRSPACE CLASSIFICATIONS

Controlled Airspace
Class A: Generally consists of the airspace between 18,000 feet mean sea level (MSL) up to and including Flight Level 600 (60,000 feet MSL), including the airspace above the U.S. coastal waters and within 12 nautical miles of the coast for the 48 contiguous states and Alaska, and designated international airspace. Class A airspace contains all high altitude airways and jet routes, and unless otherwise authorized all operations must be conducted under instrument flight rules (IFR). IFR flights are provided sequencing and separation from other IFR flights.
Class B: Generally consists of the airspace from the surface up to as high as 10,000 feet MSL, and is found above the nation's busiest airports in terms of IFR operations or passenger enplanements. The configuration of each airport's Class B airspace is individually tailored to contain all instrument procedures once an aircraft enters the airspace. The airspace consists of a surface area and two or more layers of increasing width at higher altitudes (may take on an upside-down wedding cake appearance). Air traffic control clearance is needed to enter or operate within the area and aircraft separation services are provided to all aircraft. Air Traffic Control provides sequencing and separation from other flights for IFR and VFR flights. Airports with Class B airspace also have a Mode C Veil, which extends from the surface to 10,000 feet MSL, covers the airspace within 30 nautical miles of the Class B airport, and generally requires aircraft to have automatic pressure altitude reporting equipment with Mode C capability.
Class C: Terminal airspace from the surface to 4,000 feet above airport elevation, which surrounds airports with control towers, radar approach control service, and a specified level of IFR operations or passenger enplanements. The configuration and shape for each airport is individually tailored, and usually is based around a surface that starts at the surface area and extends upward and within a 5 nautical mile radius, with a higher altitude circular segment with a 10 nautical mile radius that extends from no lower than 1,200 feet to 4,000 feet above the airport elevation. Aircraft entering or operating within the area must establish two-way radio communications with air traffic control, and Air Traffic Control provides sequencing and separation from other flights for IFR and VFR flights
Class D: Terminal airspace that extends from the surface to 2,500 feet above the airport elevation and protects the airspace around airports that have an open and operational control tower. The configuration and shape is individually tailored for the airport, and the airspace is designed to contain instrument procedures. Aircraft establish two-way radio communications with the air traffic control tower prior to entering the airspace, and while operating within the airspace. Air Traffic Control separation services are provided for IFR flights, and

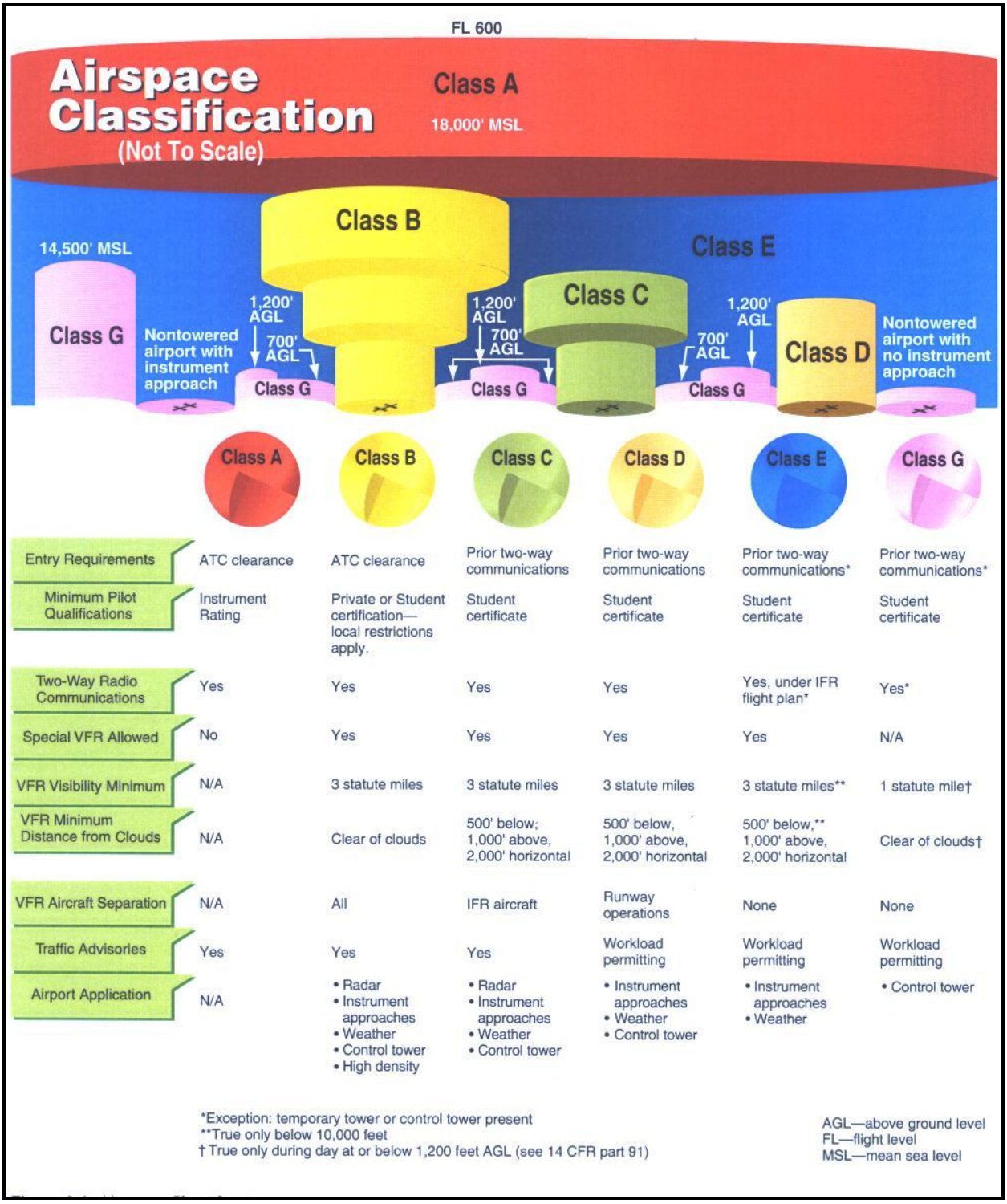
are not available for VFR flights.
Class E: If airspace is controlled and does not fall into one of the preceding categories it is Class E airspace. Class E airspace is made up of several sub-categories, and may extend from the surface or an indicated altitude to the next controlled airspace area (which includes the 18,000 feet MSL floor of Class A airspace). Class E areas that start at 700' to 1,200' AGL above the Class G airspace surrounding airports may serve as transitions to/from the terminal or en route environment. Class E airspace below 14,500 feet MSL is depicted on Sectional, Terminal and IFR Enroute Low Altitude charts. Air Traffic Control separation services are provided for IFR flights, and are not available for VFR flights.
Uncontrolled Airspace
Class G: Occupies all airspace which is not within Class A-E airspace, where Class G airspace is not controlled and generally includes all low level airspace from the surface to the bottom of Class E airspace. The range of Class G airspace extends from the surface to 700' to 1200' AGL, or to 14,500' MSL in areas which are removed from airports. Air traffic control may provide basic information services to aircraft in radio contact.
Special Use
Area of special concern or restrictions due to unusual hazards (e.g., military activity, gunnery).

Source: McFarland Johnson.

Figure E2-1 addresses the shape of the airspace classifications which are discussed in **Table E2-1** and provides a summary of the different airspace characteristics.

Manchester-Boston Regional Airport is within Class C airspace, where the airspace is depicted in **Figure E2-2**. The central Section extends outward 5 nautical miles from the center of Runway 17/35 in a circular shape, and rises from the airport surface elevation to 4,300 feet MSL (circular tube shape). The second Section extends from 5 to 10 nautical miles from the center of Runway 17/35, and includes elevations from 2,500 to 4,300 MSL. A third Section occurs within the second Section, is north-northwest of the airport, and includes elevations from 2,000 to 4,300 feet MLS. The fourth Section occurs within the second Section, is south-southeast of the Airport, and includes elevations from 1,500 to 4,300 feet MSL.

FIGURE E2-1: AIRSPACE CLASSIFICATION GRAPHIC AND OPERATIONAL SUMMARY



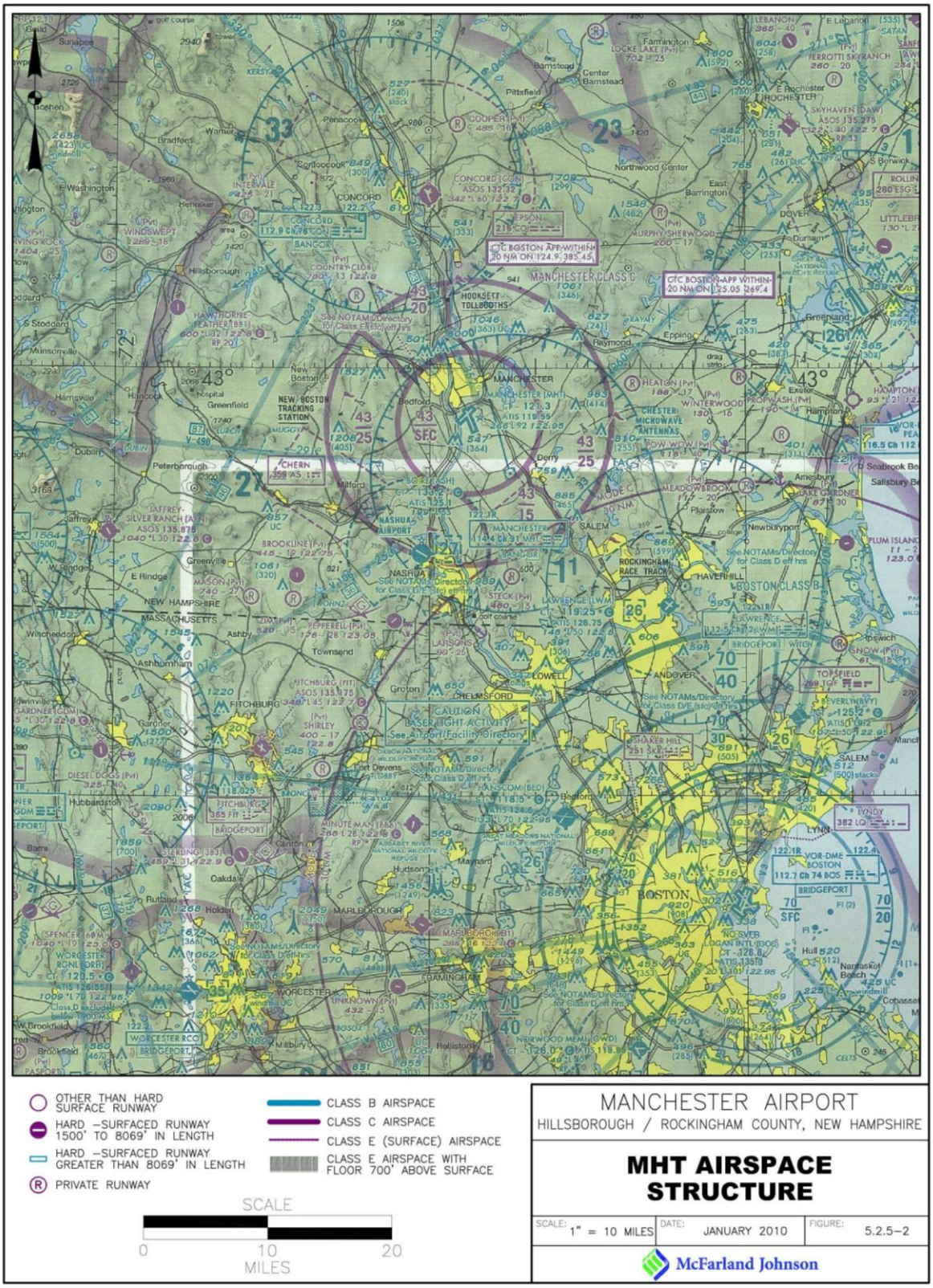
	Class A	Class B	Class C	Class D	Class E	Class G
Entry Requirements	ATC clearance	ATC clearance	Prior two-way communications	Prior two-way communications	Prior two-way communications*	Prior two-way communications*
Minimum Pilot Qualifications	Instrument Rating	Private or Student certification—local restrictions apply.	Student certificate	Student certificate	Student certificate	Student certificate
Two-Way Radio Communications	Yes	Yes	Yes	Yes	Yes, under IFR flight plan*	Yes*
Special VFR Allowed	No	Yes	Yes	Yes	Yes	N/A
VFR Visibility Minimum	N/A	3 statute miles	3 statute miles	3 statute miles	3 statute miles**	1 statute mile†
VFR Minimum Distance from Clouds	N/A	Clear of clouds	500' below; 1,000' above, 2,000' horizontal	500' below, 1,000' above, 2,000' horizontal	500' below,** 1,000' above, 2,000' horizontal	Clear of clouds†
VFR Aircraft Separation	N/A	All	IFR aircraft	Runway operations	None	None
Traffic Advisories	Yes	Yes	Yes	Workload permitting	Workload permitting	Workload permitting
Airport Application	N/A	• Radar • Instrument approaches • Weather • Control tower • High density	• Radar • Instrument approaches • Weather • Control tower	• Instrument approaches • Weather • Control tower	• Instrument approaches • Weather	• Control tower

*Exception: temporary tower or control tower present
**True only below 10,000 feet
† True only during day at or below 1,200 feet AGL (see 14 CFR part 91)

AGL—above ground level
FL—flight level
MSL—mean sea level

Source: http://www.faa.gov/library/manuals/aviation/instrument_flying_handbook/

FIGURE E2-2
MHT AIRSPACE STRUCTURE



Source: McFarland Johnson.

Manchester Class C airspace overlaps a small area of the Class E airspace associated with the instrument approaches for Concord Airport, located about 8.5 nautical miles north-northwest of Manchester-Boston Regional Airport. To the south, a small Section of the Manchester airspace, located about 8.5 nautical miles south-southwest of the Airport, is within the Mode C Veil for Boston Logan International Airport (BOS). The Mode C Veil boundary is located 30 nautical miles from BOS and extends from the surface to 10,000 feet MSL. Unless otherwise authorized, aircraft operating within the Mode C Veil must be equipped with an operating Mode C transponder having automatic pressure altitude reporting capability. The Mode C Transponder is used to identify aircraft and their flight information on a radar screen, where this information is provided to the air traffic controllers and displayed on the radar screens, and is essential to providing appropriate aircraft separation.

Essentially the entire New England region surrounding the Airport, from southeast Maine through Connecticut, which is not classified as Class B, C, or D airspace is classified as Class E airspace with a floor at 700' above the surface and a top elevation at the base of the overlying Class A airspace. IFR aircraft within the Class E airspace are provided separation from other IFR aircraft and participating VFR aircraft by Air Traffic Control. Air traffic control typically provides alerts of non-participating aircraft to IFR aircraft.

1.2 AIR TRAFFIC CONTROL

The Manchester-Boston Regional Airport's Air Traffic Control Tower (ATCT) is located in the Ammon Center, 1,600 feet south of the interSection of Runways 17/35 and 06/24. The ATCT operates twenty four hours per day, 365 days per year, and coordinates traffic located within the Airport Traffic Area, typically within five statue miles of the Airport, as well as for aircraft taxiing on the airport surface and aircraft requiring IFR clearances. Control of aircraft arrivals and departures prior to landing or immediately after takeoff are controlled by Boston Approach and Departure Control. Other than standard separation of participating aircraft, Boston Approach typically provides vectoring of IFR aircraft to final alignment with the runway prior to landing. Departure control will provide vectors for aircraft to an initial departure gate to join the en-route flight plan.

MHT operations are significantly influenced by its proximity to BOS. Air Carrier Flights through Manchester operate most often in three compass directions.

- West, (e.g. Chicago, Detroit, Cleveland, Minneapolis)
- Southwest (Las Vegas, Cincinnati, Memphis)
- South (e.g. New York Metro, Philadelphia, Charlotte, Orlando, Washington D.C., etc.)

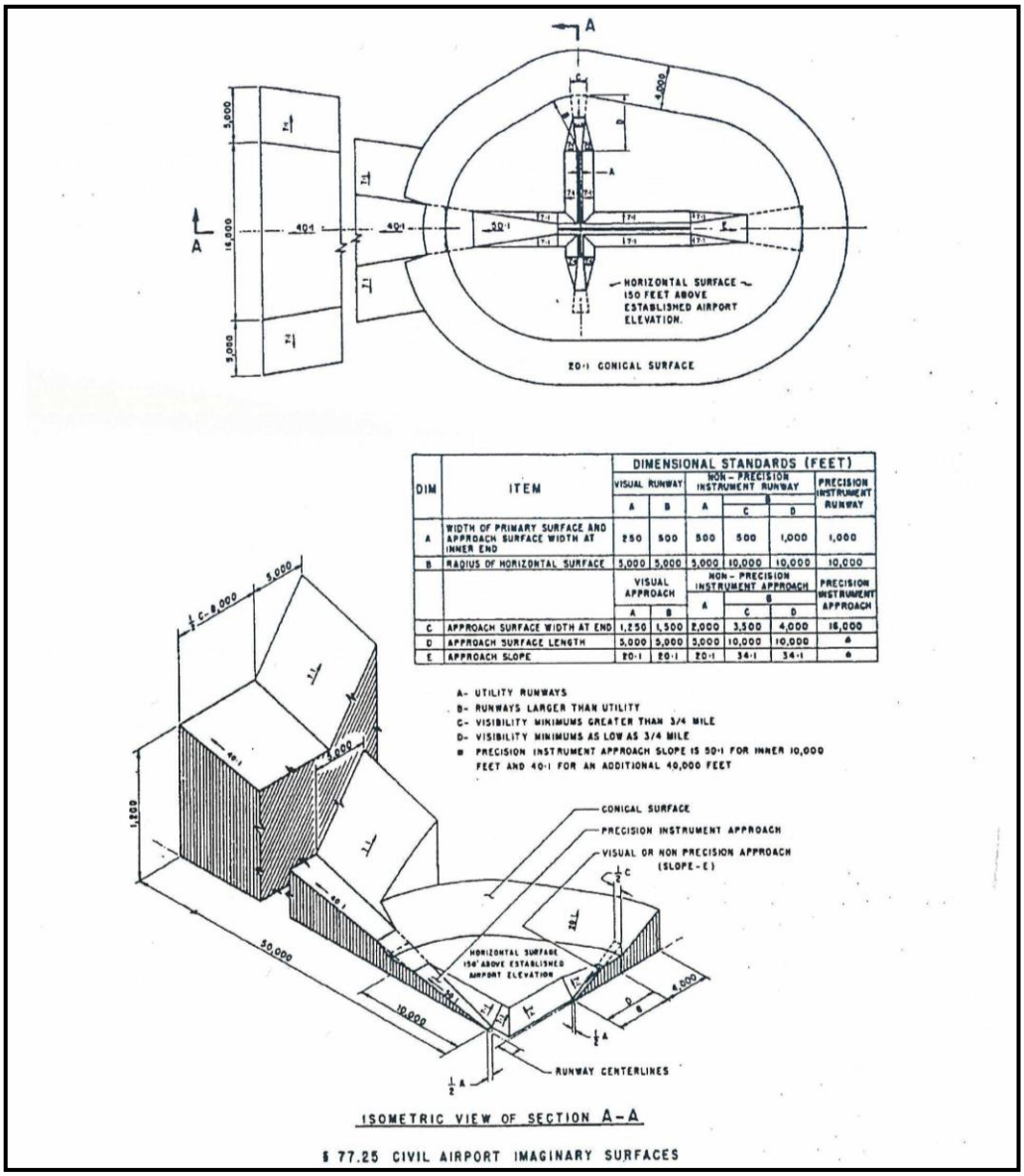
Flights operating to the south are routed to avoid conflict with Boston airspace. As a result, air carrier turbojet flights to or from the south must initially fly to west or northeast fixes prior to joining southbound airways. Almost all arrivals enter the Manchester terminal area from the vicinity of the Keene VOR. Turbo prop operations are handled differently and are usually cleared on more direct routes, as they tend to fly at lower altitudes, thus avoiding the more congested jet routes.

1.3 PART 77 IMAGINARY SURFACES AND OBSTRUCTIONS

1.3.1 PART 77 SURFACES DEFINED

To protect the safety of aircraft operations, the FAA defines and regulates the airspace surrounding airports in Federal Aviation Regulation (FAR) Part 77, Objects Affecting Navigable Airspace. Airspace is defined and delineated by a set of geometric surfaces referred to as "imaginary surfaces," that extend outward and upward from airport runways. These imaginary surfaces identify the maximum acceptable height of objects beneath them. **Figure E2-3** shows a diagram of the various surfaces included as Part 77 surfaces at MHT, as further described below.

FIGURE E2-3
PART 77 SURFACE DIAGRAM



Source: Federal Aviation Regulation Part 77.

Surface slopes are expressed in terms of "run over rise" where a 40:1 slope, for example, represents a surface which rises one foot in elevation for every forty feet of horizontal distance (40 foot run for every 1 foot rise).

Primary Surface – The Primary Surface for all runways is 1000' wide with the edge parallel to runway centerline. The primary surface extends 200 feet beyond the runway end and is at the same elevation as the adjacent runway.

Approach Surfaces – The Precision Approach Surfaces for Runways 06, 17 and 35 start 200 feet from the end of the runway, have an initial width of 1,000 feet, and slope upward at 50:1 for the first 10,000 feet and then slope at 40:1 for an additional 40,000 feet. The slope is based on the distance along the extended centerline. The width of the approach surface at 2,700 feet from threshold is 1,750 feet. The Non-Precision Approach Surface for Runway 24 starts 200 feet from the end of runway, has an initial width of 1,000 feet, and slopes upward at 34:1. It should be noted that Part 77 does not recognize displaced thresholds, which explains why the surfaces start 200 feet from the end of the runway instead of 200' from the displaced threshold.

Horizontal Surface – The Horizontal Surface is defined by 10,000 foot arcs drawn from each runway end and connected with tangents. The surface elevation is 150 feet above the highest runway elevation.

Transitional Surfaces – The Transitional Surfaces extend upward from the edges of the primary and approach surfaces at a 7:1 slope, perpendicular to the runway centerline. They end at the Horizontal Surface elevation. Above the Horizontal Surface, the 7:1 transitional surfaces for precision approaches extend outward and upward from the 40,000 foot length of the 40:1 Approach Surfaces for a distance of 5,000 feet. The slope is measured perpendicular to the runway centerline.

Conical Surface – The Conical Surface starts at the edge of the Horizontal Surface and extends upward at a 20:1 slope for a 4,000 foot distance. The slope is measured perpendicular to the closest horizontal surface location.

APPENDIX E3

INVENTORY/EXISTING CONDITIONS

1.1 PUBLISHED INSTRUMENT APPROACHES AND TERPS SURFACES

1.2 INSTRUMENT APPROACHES

Manchester-Boston Regional Airport has an extensive and sophisticated group of instrument approaches. Approaches based on an FAA installed and maintained Instrument Landing System (ILS) are available to Runways 06, 17 and 35. ILS approaches provide precise vertical and horizontal course guidance which helps to line up the aircraft with centerline, and bring the plane down to the Decision Altitude and the corresponding Height Above Threshold along a defined glide path. The approach lights on ILS runways 17 and 35 assist in the early identification of the runway centerline, provide roll and distance information, and decrease the allowable visibility minimums. The Required Navigation Precision (RNP) vertical guidance approach to Runway 17 is a state-of-the-art approach, which is capable of using curved horizontal paths to the runway centerline, reducing aircraft separation, and decreasing aircraft flight time and fuel usage. **Table E3-1** shows the straight-in instrument approaches to MHT along with the applicable weather minimums. The first listed minimum is the "Height Above Threshold" (HATh) for vertical guidance approaches (ILS, LPV, RNP and VNAV/LNAV), which is also the Minimum Descent Altitude (MDA) above runway for non-vertical guidance approaches. The second minimum is the approach visibility (in statute miles) for values from 1 ½ to 2, and Runway Visual Range (RVR) in hundreds of feet for figures from 06 to 60.

TABLE E3-1
STRAIGHT-IN INSTRUMENT APPROACHES AT MHT

Runway	Instrument Approach Procedure	CAT A Minimums	CAT B Minimums	CAT C Minimums	CAT D Minimums
6	ILS	250-40	250-40	250-40	250-40
6	LOC (ILS localizer without glide slope)	596-50	596-50	596-1 1/2	596- 1 3/4
6	RNAV (GPS) LPV	269-50	269-50	269-50	269-50
6	RNAV (GPS) LNAV/VNAV	647-2 1/2	647-2 1/2	647-2 1/2	647-2 ½
6	RNAV (GPS) LNAV	576-50	576-50	576-1 1/2	576-1 ¾
24	RNAV (GPS) LNAV	638-50	638-50	638-1 3/4	638-2
17	ILS	200-18	200-18	200-18	200-18
17	LOC/DME (ILS localizer with DME, without glide slope)	411-24	411-24	411-40	411-40
17	RNAV (GPS) Y LPV	200-24	200-24	200-24	200-24
17	RNAV (GPS) Y LNAV/VNAV	543-1 ½	543-1 ½	543-1 ½	543-1 ½
17	RNAV (GPS) Y LNAV	531-24	531-24	531-50	531-60
17	RNAV (GPS) Z RNP 0.11	377-40	377-40	377-40	377-40
17	RNAV (GPS) Z RNP 0.30	581-1 ½	581-1 1/2	581-1 1/2	581-1 ½
17	VOR/DME or GPS	771-50	771-60	771-2 1/4	771-2 1/2
35	ILS	200-18	200-18	200-18	200-18
35	LOC (ILS localizer without glide slope)	435-24	435-24	435-40	435-50
35	ILS (CAT II)	100-12	100-12	100-12	100-12
35	ILS (CAT IIIA)	RVR 07	RVR 07	RVR 07	RVR 07
35	ILS (CAT IIIB)	RVR 06	RVR 06	RVR 06	RVR 06
35	RNAV (GPS) LPV	200-24	200-24	200-24	200-24
35	RNAV (GPS) LNAV/VNAV	474-60	474-60	474-60	474-60
35	RNAV (GPS) LNAV	555-24	555-24	555-50	555-60
35	VOR	595-40	595-40	595-1 1/2	595-1 3/4

Source: Digital Terminal Procedures Publication at http://avn.faa.gov/index.asp?xml=naco/online/d_tpp
Note: An italicized designation is given to identify which approach the minimums refer to, such as when the approach plate for Runway 35 RNAV (GPS) includes three different approach types.

Localizer Precision with Vertical guidance (LPV) approaches use ground augmented GPS signals to function like an ILS. While they possess slightly less vertical signal accuracy than an ILS, the LPV approaches have the potential to obtain minimums as low as 200 feet and ½ mile visibility. LNAV/VNAV instrument approaches use GPS signals for the horizontal course and a computer generated glide path for approach guidance based

on barometric pressure readings. LNAV also uses GPS satellite signals for lateral course guidance, and the approach uses a stepped descent process. The non-precision stepped descent process requires aircraft to stay at or above a specified altitude until they pass a specified "fix" location, after which, the pilot descends to a lower altitude. After the Final Approach Fix is reached, the aircraft may descend to the Minimum Descent Altitude and a landing may only be attempted if the pilot sees the runway end environment and a safe approach is possible. VOR approaches use a vertical stepped descent procedure similar to LNAV where VOR radials from a ground transmitter are used for horizontal guidance. The VOR signal is not as accurate as a GPS signal, however. Localizer approaches use a precise horizontal signal for runway alignment and a vertical stepped descent procedure.

While the Localizer, VOR, GPS and LNAV approaches at the Airport offer relatively high minimums compared to ILS and LPV approaches, the latter types of approaches provide instrument access to many types of aircraft that do not carry advanced instrumentation. The LPV approach appears to duplicate some of the instrument approach access offered by ILS, which provides an important back-up if the ILS glide slope or localizer is out of service for any reason.

Runway 24 is the only runway end at Manchester without a vertical guidance instrument approach. The existing non-precision approach has relatively high ceiling and visibility minimums, especially for Approach Category C/D business and commercial jets. Vertical guidance approaches such as ILS, LPV or RNP may provide lower ceiling and visibility minimums, and also improve approach safety through reduced pilot workload, positive vertical guidance during periods with reduced visual cues (IFR and night landings), and by supporting stabilized approaches.

Trees in the Runway 24 approach appear to present significant obstructions to a number of critical clearance surfaces for a vertical guidance instrument approach, including the Glidepath Qualification Surface (GQS) for a 3.1 degree LPV approach. The GQS obstructions might be remediated by a moderate displaced threshold on Runway 24 if tree cutting is not an option within a wetland and conservation area.

1.2.1 INSTRUMENT APPROACH RELATED WEATHER INFORMATION

Weather information is important to pilots, as it is a key determinant of which runway is optimally utilized (aircraft operate best into the wind). This is particularly true if the airport is operating below Visual Flight Rule (VFR) minimums due to a ceiling below 1,000 feet or visibility below three miles, and if an existing instrument approach is above or below applicable weather minimums.

Weather condition information at the Airport is provided by an on-airport Automated Surface Observation System (ASOS), and a Limited Aviation Weather Reporting Station (LAWRS). The Manchester ASOS is an automated weather reporting system which is owned and maintained by the Federal government, and can be accessed by telephone or by a radio capable of accessing the 119.55 frequency. The ASOS takes readings for temperature, dew point, sky condition, altimeter, wind direction and wind speed at the ASOS site. The ASOS issues time averaged weather results using a computerized human voice format. The ASOS visibility reading is calculated from light attenuation measurements, is stated in terms of statute miles (plus fractions), and is based on the night viewing of a moderate intensity light and daytime sighting of a dark object. The Manchester ASOS is located in the infield area between taxiways "A", "D" and "G", about 480 feet east of the airport terminal building.

LAWRS reports include cloud height, weather (rain, snow, etc.), obstructions to vision, temperature and dew point, surface wind, altimeter and pertinent remarks. The observer based reports supplement the ASOS. LAWRS visibility is based on the prevailing visibility around the airport, using lights at night and dark objects during the day, and is given in statute miles with fractions.

Runway Visual Range (RVR) is an important reporting device at the Airport and the touchdown results are directly used in 76% of the published instrument approach weather minimums. The RVR reports the calculated distance that a pilot can see HIRL lights or runway markers when the plane is on or near the surface, and are based on measurements of HIRL intensity, light attenuation and ambient light level. RVR reports sighting distance in hundreds of feet (RVR 12 is 1200 feet) and, has a maximum reading of RVR 60 (6000 feet). RVR is reported when the visibility is 1 mile or less, or the RVR reading is 60 (6000 feet) or less. RVR reports are included in ASOS and LAWRS weather announcements.

Since fog and snow impacts on runway sighting may vary along the length of the runway, several RVR are located along each runway. The three RVR on Runway 17/35 are located at the Runway 17 and 35 touchdown points (about 1,000 feet past landing threshold), and close to the runway mid-point, providing touchdown, mid-field and roll-out RVR for operations on both runways. The Category II and III ILS approaches to Runway 35 require touchdown point, midfield and departure end RVR. An RVR is provided at the touchdown points for Runways 06 and 24, and provides touchdown and roll-out RVR estimates for operations on both runways.

1.3 TERMINAL INSTRUMENT PROCEDURES (TERPS)

Final Approach Obstacle Clearance Surfaces – Instrument approach minimums and limitations are based on a number of obstacle clearance surfaces that apply to a specific approach type. Instrument Landing System (ILS), Localizer Precision with Vertical guidance (LPV), LNAV/VNAV, and Required Navigational Precision (RNP) approaches provide positive lateral and vertical guidance during the final approach segment, presenting the pilot with a defined target that will bring the aircraft to the approach decision point. The “Height Above Threshold” (HATh) decision point for vertical guidance approaches is based on the top elevation and location of objects that obstruct an Obstacle Clearance Surface (OCS). If the final approach segment surfaces are clear, the approaches may provide lowest possible minimums for the approach type if other criteria are met including the missed approach.

Non-precision approaches at the Airport without positive vertical guidance, such as VOR, LOC (localizer only), and LNAV (GPS lateral guidance without the benefit of WAAS improvements), depend upon stepped decreases in allowable altitude at defined fixes and base the Minimum Descent Altitude on a required clearance above the highest object in the final segment. Missed approach areas are also considered.

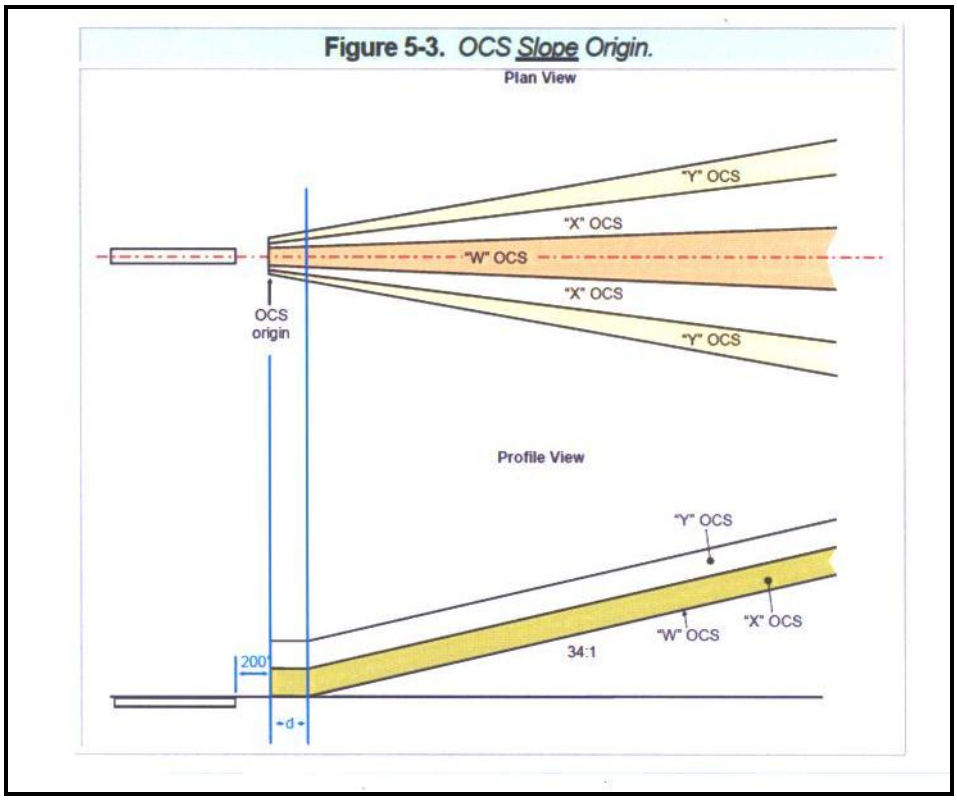
For ILS and LPV approaches, the final segment evaluation includes the W, X and Y surfaces, which are addressed in **Table E3-2** and **Figure E3-1**. The W, X and Y surfaces at MHT extend from 200 feet beyond the landing threshold to the interSection of the glide path with the intermediate approach altitude (“d”=0 on **Figure 5-3**), which may occur at a distance less than or greater than 50,200 feet (the distance used for planning purposes) from landing threshold. If the W, X and Y surfaces, as well as the missed approach and approach light plane surfaces are clear, Category I ILS and LPV approaches may obtain minimums as low as 200 feet HATh and ½ mile visibility with approach lights.

TABLE E3-2:
TERPS W, X, AND Y FINAL APPROACH SEGMENT SURFACES

Surface	Initial Half Width At 200' From Landing Threshold	Half Width At 50,200'	Surface Slope
W	400' from centerline	2200' from centerline	(102/Glidepath Angle) slope Along extended runway centerline
X	Ends at 700' from centerline	6076' from centerline	4:1 perpendicular to centerline starting at W surface edge
Y	Ends at 1000' from centerline	8576' from centerline	7:1 perpendicular to centerline starting at X surface edge

Source: FAA Orders 8260.3B (for ILS) and 8260.54A (for LPV).

FIGURE E3-1
W, X, AND Y FINAL APPROACH SEGMENT SURFACES



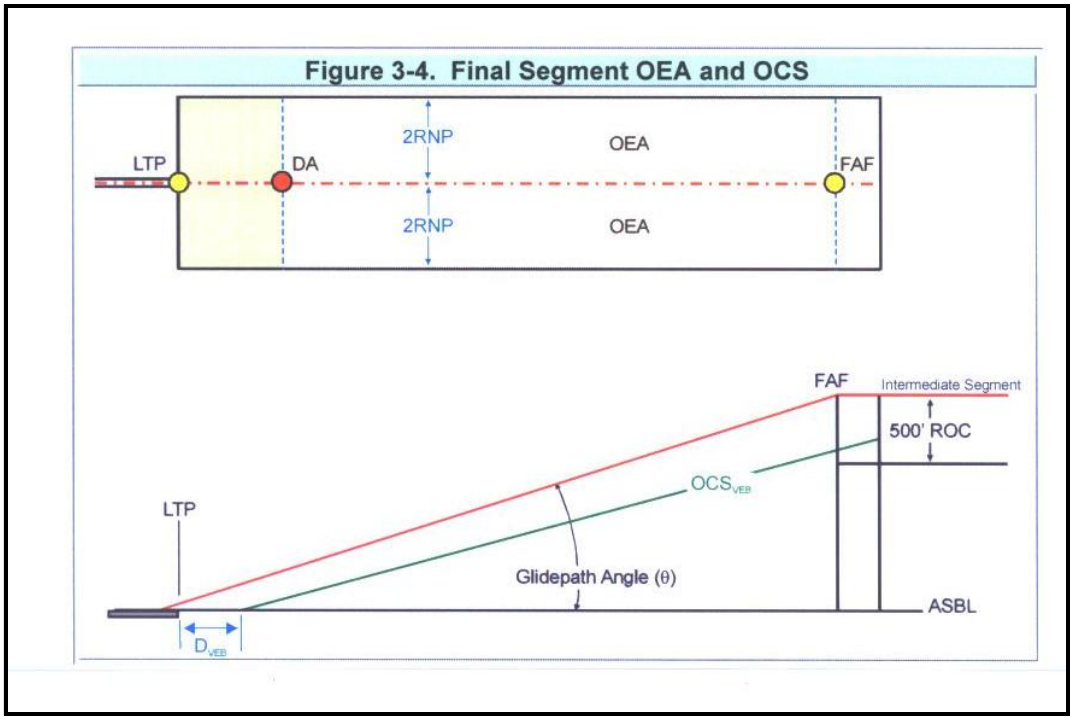
Source: FAA Order 8260.54A.

The W surface slope for Runway 17 ILS is different from the ILS approach to Runways 06 and 35, due to the glide path angles for each ILS approach. The Runway 06 and 35 W surfaces have a 34:1 slope (102/3.00), while the W surface for Runway 17 has a 32.91:1 slope (102/3.10) due to a 3.10 degree glide path angle.

For RNP approaches, the criteria is different from ILS/LPV due to increased reliance on GPS/WAAS signal accuracy at low RNP values, and the use of barometric pressure to generate a vertical guidance path. The RNP surfaces are rectangles centered on the approach course as shown in **Figure E3-2**, where the half-width

of the final segment rectangle is a function of the required approach RNP (2 x RNP), and the OCS starting slope location is a function of airport and approach variables.

FIGURE E3-2
RNP FINAL APPROACH SEGMENT SURFACES



Source: FAA Order 8260.52.

While the RNP OCS starts 200 feet from the landing threshold, the sloping Section generally starts at a distance D_{veb} from threshold, which is usually from 1500 feet to 3000 feet in length. The OCS slope is generally about 20:1. Objects within the initial zero slope area and above threshold may increase the HATh above 250 feet, which is the lowest possible HATh with RNP.

For the RNP 0.11 approach to Runway 17, the OCS half-width from centerline is 0.22 nautical miles (RNP is always expressed in terms of nautical miles), and the half width of the RNP 0.30 approach is 0.6 nautical miles (3645.6 feet) from centerline. While the RNP approach to Runway 17 results in higher approach minimums than the ILS or LPV approaches, RNP provides benefits in terms of closer aircraft spacing within the airspace, which can reduce delays and decrease fuel use.

For the non-precision approaches based on LOC, VOR and LNAV, the width of the final approach segment surfaces at the landing threshold and in the approach are considerably larger than ILS, LPV or RNP, and the Minimum Descent Altitude is determined by adding 250 feet (plus modifiers) to the highest object elevation in the area. Thus, the highest point on objects which rise to a relatively high elevation but which are below the W, X, and Y surfaces may significantly raise non-precision minimums but result in relatively low ILS or LPV HATh.

TERPS Paragraph 251 Visual Area – The lowest visibility that an instrument approach may obtain, and the ability to use the approach at night, is based on the Visual Area criteria set forth in Paragraph 251 of FAA Order 8260.3B. The Visual Area surfaces at MHT start 200 feet from the landing threshold, where they have an 800 foot total width, and the surface extends out to the Decision Altitude location. The total surface width for instrument approaches lined up with runway centerline is a function of distance from start, and equals 800 feet + (0.276 x the distance from surface start).

The criteria associated with the various Visual Area surface slopes are:

- If the 34:1 slope Visual Area surface is penetrated, the visibility minimums may not be less than ¾ mile. If the 34:1 slope surface is clear, visibility minimums less than ¾ mile may be approved with the prescribed runway and approach lighting.
- If the 20:1 slope Visual Area surface is clear, the visibility minimums may be less than 1 mile.
- If the 20:1 slope Visual Area surface is penetrated, visibility minimums cannot be less than 1 mile, and night authorization for the approach may be withheld unless the obstructions are removed, marked and lighted, or FAA approves remediation via a visual glide slope.
- If the number of 20:1 penetrations is unusually high, FAA may withhold night authorization even if lighting/marking and a visual glide slope are in place.

Glidepath Qualification Surface – Vertical guidance instrument approaches (ILS, LPV and RNP) cannot be approved if the Glidepath Qualification Surface (GQS) has obstructions. The GQS surfaces at MHT extend from the landing threshold to the Decision Altitude (DA) location, with a slope equal to $\frac{1}{Tan(2 \times (GlidepathAngle \div 3))}$

For Runways 06 and 35 the GQS slope is 28.64:1, and the slope for Runway 17 is 27.72:1. The GQS for Runways 06 and 17 starts at the runway threshold elevation, while the Runway 35 GQS starts 1 foot above the threshold elevation due to a 51 foot Threshold Crossing Height (TCH). The GQS starting elevation is raised one foot for every TCH foot above 50.

The GQS starting width is 200 feet greater than the runway width, for a 350 feet total starting width for all runways at MHT, and the DA location width of the GQS is equal to the W surface width at the DA:

- 1063.12’ GQS width at Runway 06 CAT I ILS DA
- 986.35’ GQS width at Runway 17 CAT I ILS DA
- 990.31’ GQS width at Runway 35 CAT I ILS DA
- 852.92’ GQS width at Runway 35 CAT II ILS DA

GQS obstructions may be remediated in some cases by increasing the TCH above 50 feet. Changes to the TCH, up to 60 feet above threshold, may be used without glidepath angle modifications when obstructions are 10 feet or less above the GQS.

TCH modifications can also be used in conjunction with the application of glidepath angles above 3 degrees (3 degrees is the standard starting glidepath angle), since increases in the approach angle change the GQS

slope. It is important to note that increasing the TCH will reduce the available landing length, and 60 feet is the normal TCH maximum without a special FAA waiver. Glidepath angles above 3.1 degrees limit the aircraft which are authorized to use vertical guidance approaches in accordance with the following guidelines contained in FAA Orders 8260-3B and 8260-54A:

- Glidepath angles up to 3.1 degrees: May be used by Approach Categories A-D
- Above 3.1 degrees and up to 3.6 degrees: Approach Categories A-C (Category D not authorized)
- Above 3.6 degrees and up to 4.2 degrees: Approach Categories A-B
- Over 4.2 degrees: Approach Category A

Since MHT is regularly used by aircraft in Approach Categories C and D, care should be taken when glidepath angle changes from 3 degrees are considered to obtain clearances over obstructions that cannot be removed.

Precision Obstacle Free Zone – The Precision Obstacle Free Zone (POFZ) applies when the weather conditions for a vertical guidance instrument approach are less than 250 feet HATh, or the prevailing visibility is less than ¾ mile (or RVR 4000). The POFZ extends from the landing threshold to 200 feet out, and has a total width of 800 feet. Taxiing, holding and parked aircraft, and ground vehicles within the POFZ are considered to be obstacles unless positive control will allow the surface to be cleared when aircraft are within 2 nautical miles of the threshold and the reported minimums are below 300 feet or ¾ mile (RVR 4000).

The POFZ is considered clear if the tail and/or fuselage of a taxing aircraft do not penetrate the zone. The wing of aircraft holding on a perpendicular taxiway, while they wait for runway clearance, may penetrate the POFZ. If the POFZ is penetrated when an aircraft is on its final approach and is within 2 nautical miles, the lowest approach minimums are 300 feet and ¾ mile.

Departure Surface – Departure minimums are published for each runway end at MHT, and are derived from the departure surface analysis. If the departure surface is clear of obstructions, the runway end may obtain standard departure minimums which consist of 1 mile visibility for two engine aircraft, and ½ mile visibility for aircraft having more than two engines. If the departure surface has obstructions, the departure minimums are based on the ceiling and visibility which will allow pilots to see and avoid obstacles. Alternate departure minimums may also be published that allow the use of the standard departure minimums if a specified aircraft climb gradient may be obtained, where the needed climb gradient is sufficient to obtain adequate clearance over obstacles.

The Initial Climb Area (ICA) departure surface at MHT starts at the departure end of runway where it has a 1,000 foot width, and the width reaches 7,512.36 feet at a distance of 2 nautical miles (12,152.23 feet). The 40:1 surface slope which is depicted in TERPS is associated with a 200 foot per nautical mile climb gradient, and the slope becomes steeper if the minimum climb gradient is increased to obtain the required clearance over obstacles.

The departure obstructions for Runways 17 and 35 at MHT require that specified ceiling and visibility minimums be met to allow pilots to see and avoid the obstacles, and alternate departure minimums are published that require a climb gradient above 200 feet per nautical mile. Runway 06 and 24 departures may use standard departure minimums.

The published departure minimums at MHT are shown in **Table E3-3**:

TABLE E3-3
MHT DEPARTURE MINIMUMS

Departure Runway	Departure Minimums	Required Minimum Climb Gradient with Standard Departure Minimums
Runway 35	300 feet and 1 ½ miles	253 feet per nautical mile
Runway 17	300 feet and 1 ½ miles	277 feet per nautical mile to 500 foot MSL
Runway 24	Standard	--
Runway 06	Standard	--

Source: http://avn.faa.gov/d-tpp/0910/NE1TO.PDF

Lower than standard departure minimums, which may range from an RVR of 1600 feet to an RVR equal to or lower than 600 feet, must be authorized by the FAA for individual airline certificate holders, by aircraft type, and for other operators. The general runway requirements for lower than standard departure minimums for Part 121 Airplane Operations are shown in **Table E3-4**. The required takeoff aids may include operative centerline lights, operative high intensity edge lights, serviceable centerline markings and one or more RVR. If available, RVR reports from specified locations along the departure runway must be used for takeoff operations in place of prevailing visibility or ASOS/AWOS estimates.

TABLE E3-4
LOWER THAN STANDARD DEPARTURE MINIMUMS CRITERIA

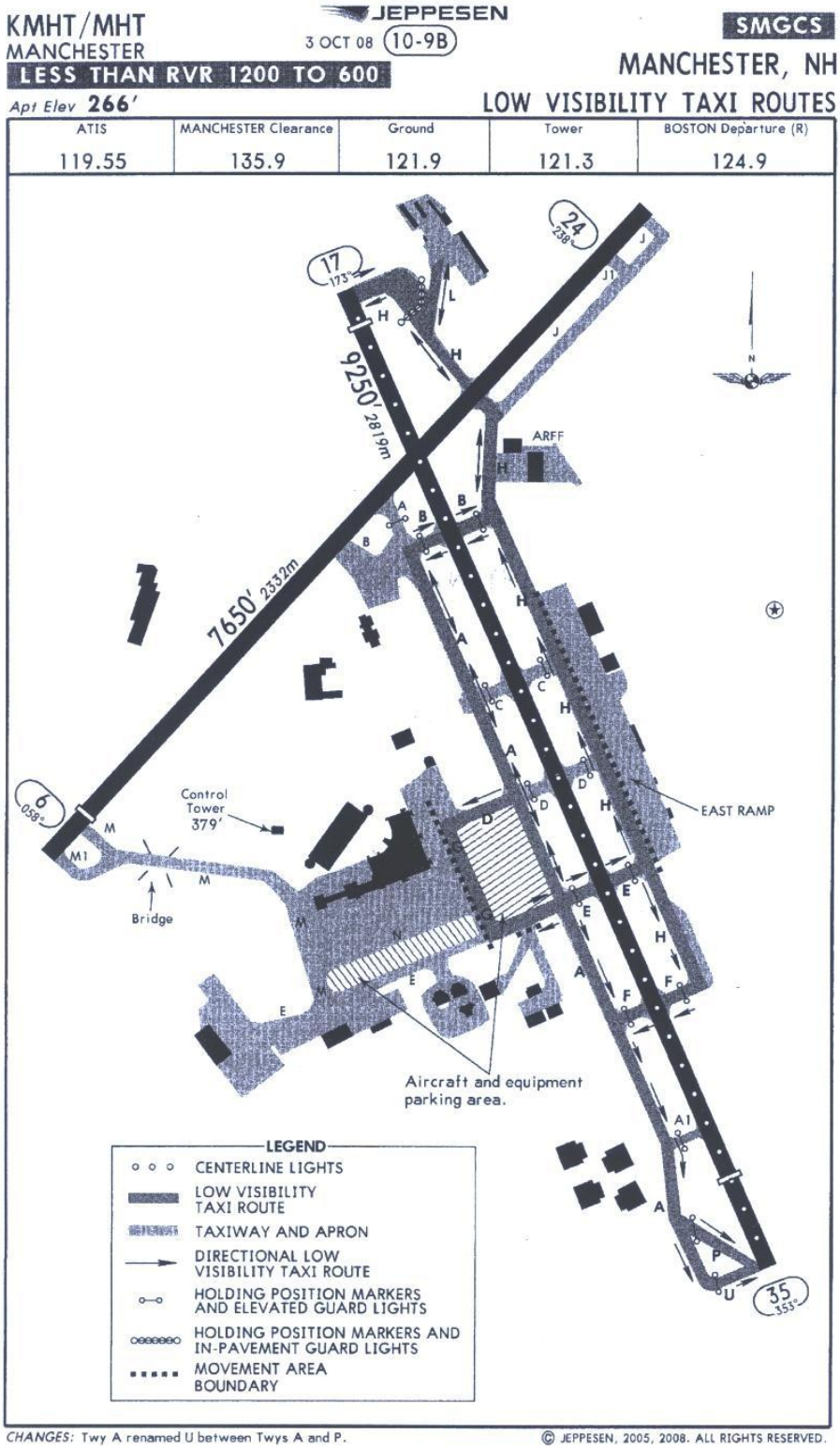
Operative or Serviceable Runway Facilities and other Specified Requirements	RVR Minimum in Feet or Visibility
Runway centerline marking (day only) or HIRL or centerline lights	RVR 1600, or Runway Visibility Value of ¼ mile if no RVR
Runway centerline marking (day only) or HIRL or centerline lights, with two or more operative RVR reporting systems	RVR 1200/1200/1000
HIRL with centerline marking or centerline lights, with two or more operative RVR reporting systems	RVR 1000/1000/1000
HIRL and centerline lights, with two or more operative RVR reporting systems	RVR 600/600/600
HIRL and centerline lights, with two or more operative RVR reporting systems	RVR 500/500/500 requires appropriate surface movement and guidance control procedures (SMGCS)
HIRL and centerline lights, front course guidance from a localizer meeting criteria, 10 knot maximum crosswind component, taxiway routing with taxiway centerline lighting or other appropriate guidance, Approved Head-Up Display (HUD) aircraft takeoff guidance system, and three operative RVR reporting systems	RVR 300/300/300 requires appropriate surface movement and guidance control procedures (SMGCS)

Source: FAA Notice 8900.38.
Notes:
1. Appropriate pilot training and aircraft equipment is needed for each RVR.
2. When RVR is expressed as a/b/c, "a" refers to beginning of takeoff roll or touchdown zone RVR, "b" refers to mid-field RVR (if installed), and "c" refers to end of runway or rollout RVR (if authorized).
3. RVR readings are in hundreds of feet (an RVR of 1,200 feet is stated as RVR 12 in the reports).

MHT has lower than standard takeoff minima of RVR 500 on Runways 17 and 35, and RVR 1000 on Runways 06 and 24. The RVR 1000 departure minimums on Runway 06/24 are higher than would normally be associated with a runway served by HIRL, centerline lights and touchdown zone/roll-out RVR.

In accordance with the Surface Movement Guidance Control System (SMGCS) plan which was prepared by the airport and is dated March 2009, Part 121 airline takeoffs and departures are limited to weather conditions where the RVR is 600 or higher, and Part 121 operations are restricted to Runway 17/35 when the RVR is below 1200. The SMGCS plan is required for Part 121 airline operations in conditions below RVR 1200, and identifies the special ground facilities, operating procedures and designated taxi paths which must be adhered to. The following **Figure E3-3** identifies the low visibility taxi routes at the airport, including the holding position markers and elevated or in-pavement Guard Lights.

FIGURE E3-3
LOW VISIBILITY TAXI ROUTES



Source: Jeppesen Approach Plates.

APPENDIX E4

INVENTORY/EXISTING CONDITIONS

1.0 HISTORICAL CARGO ACTIVITY

Air cargo is an important part of the business of airports. Airlines carry cargo and mail to the Airport in the belly of scheduled passenger flights ("belly cargo"), and all-cargo carriers provide both scheduled and on-demand flights. **Table E4-1** shows the cargo landed weight at Manchester-Boston Regional Airport for the past five years.

TABLE E4-1
TOTAL CARGO WEIGHT AT MHT

Year	Total Weight (lbs)
2004	162,080,948
2005	155,503,955
2006	176,382,468
2007	193,487,647
2008	178,155,941
2009	161,670,797

Source: MHT Activity Reports.

Cargo is generally separated into two categories: freight and mail. **Table E4-2** displays the total weight of mail handled at MHT over the past five full years and 2009 year to date.

TABLE E4-2
TOTAL MAIL HANDLED AT MHT

Year	Mail (000 pounds)
2004	5,767
2005	3,800
2006	503
2007	445
2008	208
2009	900

Source: MHT Activity Reports.

Five companies currently provide all-cargo flights at MHT: FedEx, Mountain Air Cargo, Telford Aviation, UPS and Wiggins Airways. Cargo flown by Mountain Air Cargo is reported as part of FedEx totals and Telford Aviation's cargo is reported as part of the UPS total **Table E4-3** shows the cargo trends over the past two full calendar years, by carrier, for airlines serving Manchester-Boston Regional Airport.

TABLE E4-3
CHANGES IN CARGO WEIGHT, 2009 VS. 2008

Airline/Year	2009	2008	% Change
Atlantic Southeast	153	8,109	-79.47%
Comair	42	11,195	-57.92%
Delta Airlines	0	381	100.00%
Total DL & Affiliates		19,685	-70.22%
Meseba Aviation	421	9,326	4257.94%
Northwest Airlines	9,300	59,705	-35.20%
Pinnacle Airlines	0	25	-99.35%
Total NW & Affiliates		69,056	-28.22%
Air Wisconsin	12,879	3,082	-32.55%
Mesa Airlines	0	4,121	100.00%
Piedmont Airlines	6	1,416	19.09%
US Airways	5,823	82,505	-39.96%
Total US & Affiliates		91,124	-36.62%
Continental Express	7,192	3,937	100.00%
Southwest Airlines	1,544,084	1,690,752	19.48%
United Airlines	0	44,914	-27.95%
Total Belly Cargo	1,579,900	1,919,468	-17.69%
ASTAR (DHL)	0	3,398,668	-6.92%
Air Now	1,069,649	1,511,139	-18.92%
FedEx	87,446,085	94,459,635	-11.55%
UPS	67,477,097	72,316,254	-3.24%
Wiggins Airways	4,098,066	4,550,777	-1.97%
Total All-Cargo Carriers	160,090,897	176,236,473	-9.16%
Total Cargo	161,670,797	178,155,941	-9.25%

Source: MHT Activity Reports and Analysis.

Table E4-4 displays the cargo enplaned and deplaned at MHT for the period September 2008 through August 2009.

TABLE E4-4
AIR CARGO TOTALS BY COMPANY (9/08 – 8/09)

Company	Enplaned Pounds	Deplaned Pounds	Total Pounds	% Share of Total
Air Now	782,763	432,646	1,215,409	0.7
Air Wisconsin (US Airways Express)	5,148	3,533	8,681	0.0
ASTAR Air Cargo-DHL	651,356	557,615	1,208,971	0.7
Atlantic Southeast Airlines (Delta Connection)	401	1	402	0.0
Comair	--	--	--	0.0
Continental Express	1,666	6,712	8,378	0.0
Delta Airlines				0.0
Federal Express Corporation	41,170,133	46,801,316	87,971,449	53.5
Mesa Airlines Inc. (USAir Express)	--	--	--	0.0
Mesaba Aviation, Inc. (Northwest)	357	2,595	2,952	0.0
Northwest Airlines, Inc.	2,022	6,053	8,075	0.0
Piedmont Airlines, Inc. (USAir Express)	0	154	154	0.0
Pinnacle Airlines, Inc. (Northwest Airlink)	0	25	25	0.0
Regional/Elite Airline Services	320	2,196		0.0
Southwest Airlines, Inc.	831,800	941,064	1,772,864	1.1
United Airlines, Inc.				0.0
United Parcel Services, Inc.	32,057,787	35,818,987	67,876,774	41.3
US Airways, Inc.	3,967	12,007	15,974	0.0
Wiggins Airways	2,711,310	1,733,508	4,444,818	2.7
Totals	**78,219,030**	**86,318,412**	**164,537,442**	

Source: MHT ACTIVITY REPORT, September, 27, 2009.

During the September, 2008-August, 2009 period the all-cargo carriers used a wide variety of aircraft for their operations. **Table E4-5** provides the aircraft, its gross landing weight, and the number of landings by each aircraft type for MHT's all-cargo carriers.

TABLE E4-5
ALL-CARGO AIRCRAFT LANDINGS DURING 9/08-8/09 PERIOD

Company	Aircraft Make/Model	FAA Gross Landing Weight	Landings
Air Now	E-110/0 (Bandeirante)	12,500	321
		Total Air Now	**321**
ASTAR Air Cargo – DHL	B-727/200	161,000	24
(Terminated operations 12/08)	B-727/A	164,000	29
		Total DHL	**53**
Federal Express Corporation	A-300/0	308,650	54
	A-300-60/0	308,700	505
	A-310/0	267,900	2
	DC-10/0	436,000	3
	DC-10/10	375,000	4
	DC-10/30	424,000	4
	MD-10-10/0	375,000	111
		Total FedEx	**683**
United Parcel Services, Inc.	A-300/0	315,920	404
	B-727/100	142,500	2
	B-757/200	210,000	251
	B-767/300	326,000	19
	DC-8/71	258,000	7
	DC-8/73	275,000	9
		Total UPS	**692**
Wiggins Airways	B-100/0 (King Air)	10,500	90
	B-99/0 (Beech 99)	10,900	2,012
	C-208/B (Caravan)	8,500	372
		Total Wiggins	**2,474**

Sources: MHT Cargo Detail Spreadsheet (9/2009).

UPS flights arrive and depart for Louisville, KY. FedEx aircraft fly between Manchester and Memphis, TN and Indianapolis, IN. The smaller carriers generally provide feeder services for the major carriers, carrying cargo between MHT and communities in New York, New England and Canada.

APPENDIX E5

INVENTORY/EXISTING CONDITIONS

1.0 AIRPORT ZONING

The Airport property lines fall within two municipalities: the City of Manchester and the Town of Londonderry, as shown in **Figure E5-1**. The Airport property within the City includes most of Runway 06/24, and the northern third of Runway 17/35 plus various taxiways, aprons and hangars on the north side of the airport. Airport property within the Town of Londonderry includes the Runway 06 threshold area, the central and southern terminal areas, the southern two-thirds of Runway 17/35 and associated aprons and taxiways.

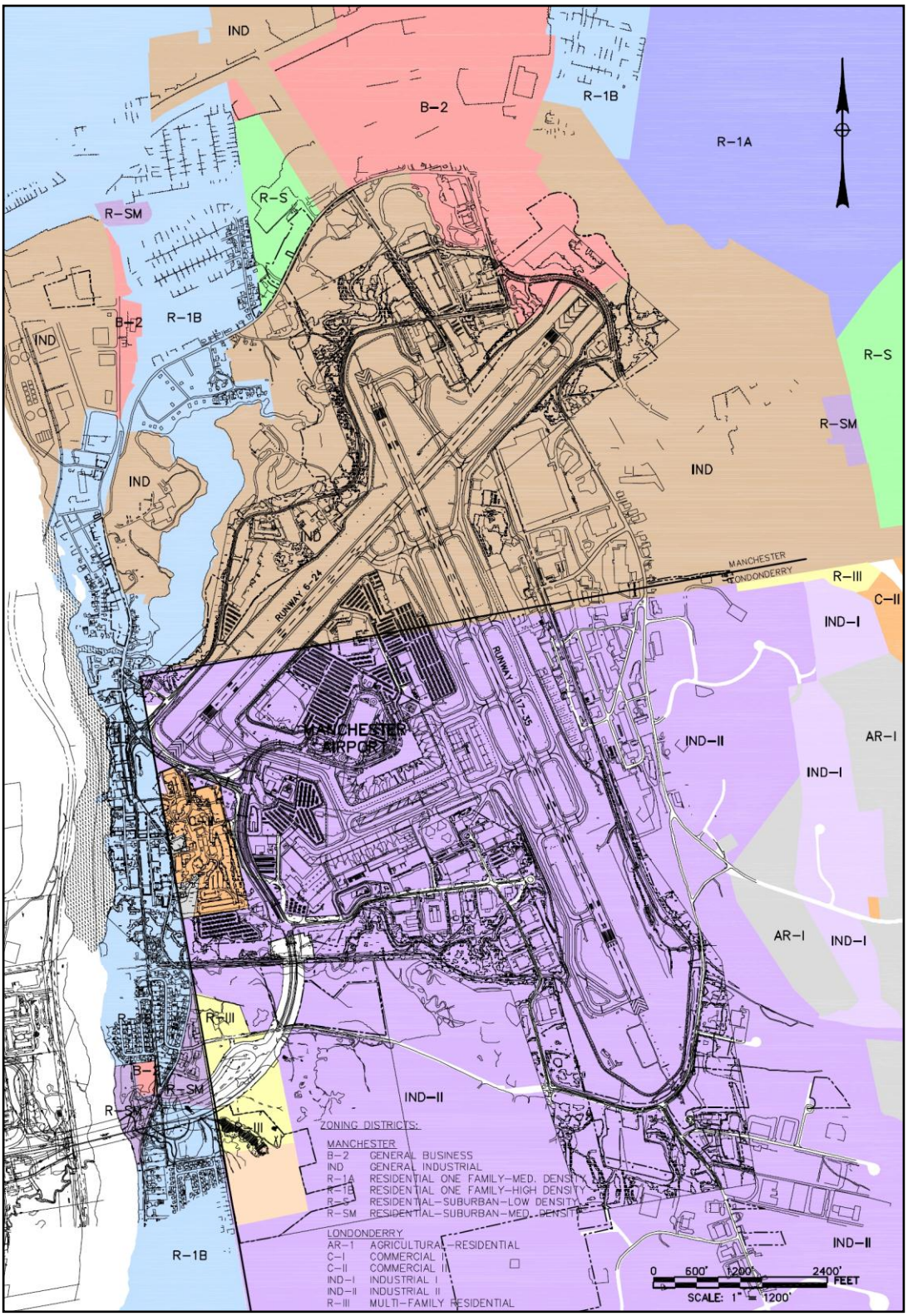
The Airport property within the City of Manchester is zoned IND (industrial), and the property within the Town of Londonderry is zoned IND-II (industrial). The uses permitted within the City of Manchester's IND zone, and the Town of Londonderry's IND-II zone, are shown in **Table E5-1**.

TABLE E5-1
AIRPORT ZONING

Applicable Municipality	Zoning District	Permitted Uses
City of Manchester	IND - General Industrial/ Industrial Park	Veterinary Hospital, Construction, Manufacturing, Transportation/Communication/Utilities, Sales and Service, Medical Services, Schools, Child Care Facilities, Municipal Facilities, Ambulance and Emergency Services.
Town of Londonderry	IND-II - Industrial II	Public Facilities, Excavation Business, Heavy and Light Manufacturing, Motor Vehicle Repair and Maintenance, Professional Office, Research Laboratory, Business Uses.

Source: McFarland Johnson.

FIGURE E5-1
AIRPORT ZONING



Source: McFarland Johnson.

1.1 ZONING AND LAND USES ADJACENT TO THE AIRPORT

There are a large number of land-use zones applicable to the areas surrounding the Airport in the City of Manchester, Town of Londonderry and the Town of Bedford. **Figure E5-2** shows a map of the City of Manchester zoning areas. **Table E5-2** shows the applicable zones and permissible uses within the City of Manchester, while **Table E5-3** shows the overlay district zones and purpose. Zoning and overlay district information for the Town of Londonderry is shown in **Tables E5-4 and E5-5**, and **Table E5-6** shows the zoning districts within the Town of Bedford. **Figures E5-3 and E5-4** shows the zoning district and applicable overlay districts for the Towns of Londonderry and New Bedford, respectively.

The City of Manchester Zoning Map as shown in **Figure E5-2** also includes ten overlay districts, where the districts are identified as to purpose in **Table E5-2**. Three of the district overlays apply to the airport. The overlay districts are superimposed upon the base districts and the overlay district provisions apply in addition to the base district provisions.

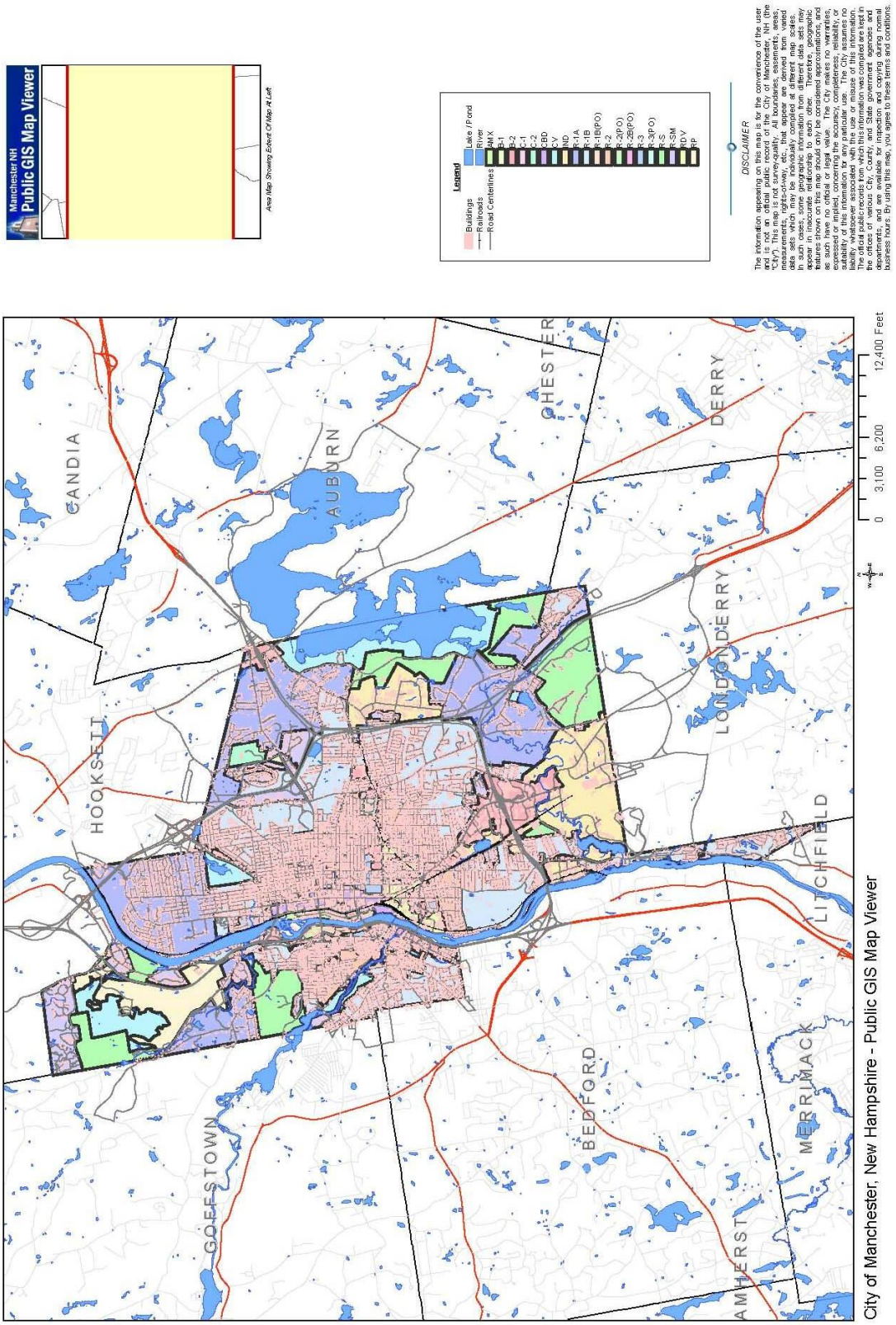
The Town of Londonderry zoning map is shown in **Figure E5-3**, and information on the zoning codes and permitted uses is provided in **Table E5-3**. The zoning codes include an Airport District, which provides standards for certain airport related use and structures that are not compatible with generally applicable commercial and industrial standards. The general standards within the Town of Londonderry Airport District provide criteria for building setbacks, a maximum building height of 65 feet for structures (exceptions: terminal building, airport parking garage and aircraft control tower), storage areas, sewage and waste disposal, curb and gutter, sidewalks, electrical power, and parking standards. Proposed airport development within the Airport District must meet the standards of the Town Site Plan Regulations for surface water drainage control, and a permit application must be submitted to the Town engineer simultaneously with submittal to the state and/or federal agencies having jurisdiction over the development.

The Town of Londonderry overlay districts and permitted uses are identified in **Tables E5-4 and E5-5**, where two of the overlay districts pertain to the airport.

The Town also includes a Historic District which currently includes five lots which are defined in the Zoning Ordinance. The Historic District is superimposed upon other established districts, where uses permitted in underlying districts are permitted within the Historic District. The purpose of the Historic District is to safeguard and preserve the heritage of the Town for the benefit of residents and businesses.

The Town of Londonderry Northwest Small Area Plan, which was published and adopted by the Town during September, 2009, includes three airport related overlay districts which are shown in **Figure E5-4**.

FIGURE E5-2
ZONING MAP – CITY OF MANCHESTER



Source: http://208.82.76.123/pubgis/mainScreen.asp?MFHeight=949

TABLE E5-2
CITY OF MANCHESTER ZONING DISTRICTS

Zoning Code	Permitted Uses
R-S – Residential-Suburban District, Low Density	Single Family Residences, Transportation/Communication/Utilities, Agricultural, Essential Public Services And Utilities, Schools, Places of Worship, Cemeteries, Municipal Facilities.
R-1A – Residential One Family District, Medium Density	Single Family Residences, Schools, Municipal Facilities.
R-1B – Residential One Family District, High Density	Single Family Residences, Schools, Municipal Facilities.
R-2 – Residential Two Family District	Single and Two Family Residences, Schools, Municipal Facilities.
R-SM – Residential Suburban Multifamily District	Single and Multiple Family Residences, Elderly Housing And Assisted Living, Schools, Places of Worship, Cemeteries, Municipal Facilities.
R-3 – Urban Multifamily District	Single and Multiple Family Residences, Congregate Housing, Elderly Housing And Assisted Living, Congregate Housing, Schools, Places of Worship, Cemeteries, Municipal Facilities.
B-1 – Neighborhood Business District	Single and Multiple Family Residences, Bed & Breakfast, Transportation/Communication/Utilities, Retail Trade, Manufacturing, Medical Services, Sales and Service, Schools, Museums and Libraries, Child Care Facilities, Places of Worship, Cemeteries, Municipal Facilities.
B-2 – General Business District	Dwellings In Upper Stories With Commercial First Floor, Veterinary Hospital, Transportation/Communication/Utilities, Manufacturing, Sales and Services, Retail Trade, Medical Services, Schools and Colleges, Lodging and Meeting Places, Child Care Facilities, Places of Worship, Cemeteries, Municipal Facilities, Ambulance and Emergency Services
CBD – Central Business District	Single Family Residences, Dwellings In Upper Stories With Commercial First Floor, Manufacturing, Medical Services, Sales and Service, Retail Trade, Schools and Colleges, Child Care Facilities, Lodging and Meeting Places, Places of Worship, Municipal Facilities, Ambulance and Emergency Services.
RDV – Redevelopment District, Mixed Use	Single and Multiple Family Residences, Veterinary Hospital, Construction, Manufacturing, Transportation/Communication/Utilities, Retail Trade, Sales and Service, Lodging and Meeting Facilities, Child Care Facilities, Schools, Medical Services, Ambulance and Emergency Services.
IND – General Industrial/ Industrial Park	Veterinary Hospital, Construction, Manufacturing, Transportation/Communication/Utilities, Sales and Service, Medical Services, Schools, Child Care Facilities, Municipal Facilities, Ambulance and Emergency Services,
AMX – Amoskeag Millyard Mixed Use District	Manufacturing, Transportation/Communication/Utilities, Retail Trade, Sales and Services, Medical Services, Lodging and Meetings, Schools and Colleges, Child Care Facilities, Ambulance and Emergency Services, Municipal Facilities

TABLE E5-2 (CONTINUED)
CITY OF MANCHESTER ZONING DISTRICTS

Zoning Code	Permitted Uses
C-1 – Civic-Institutional District	Single and Multiple Family Residences, Congregate Housing, Transportation/Communication/Utilities, Nursing Homes, Medical Services, Sales and Service, Schools and Colleges, Places of Worship, Municipal Facilities
C-2 – Civic-Hospital District	Congregate Housing, Communications, Hospitals, Nursing Homes, Medical Offices, Sales and Service, Medical Services, Schools, Places of Worship, Ambulance and Emergency Services, Municipal Facilities
RP – Research Park District	Manufacturing, Research and Development, Telecommunications, Medical and Dental Labs, Vehicle Parking Garage and Lots, Child Care Facilities, Municipal Facilities.
CV – Conservation District	Agricultural, Municipal Facilities

Source: Zoning Ordinance, City of Manchester, NH February 7, 2001.

TABLE E5-3
CITY OF MANCHESTER OVERLAY DISTRICTS

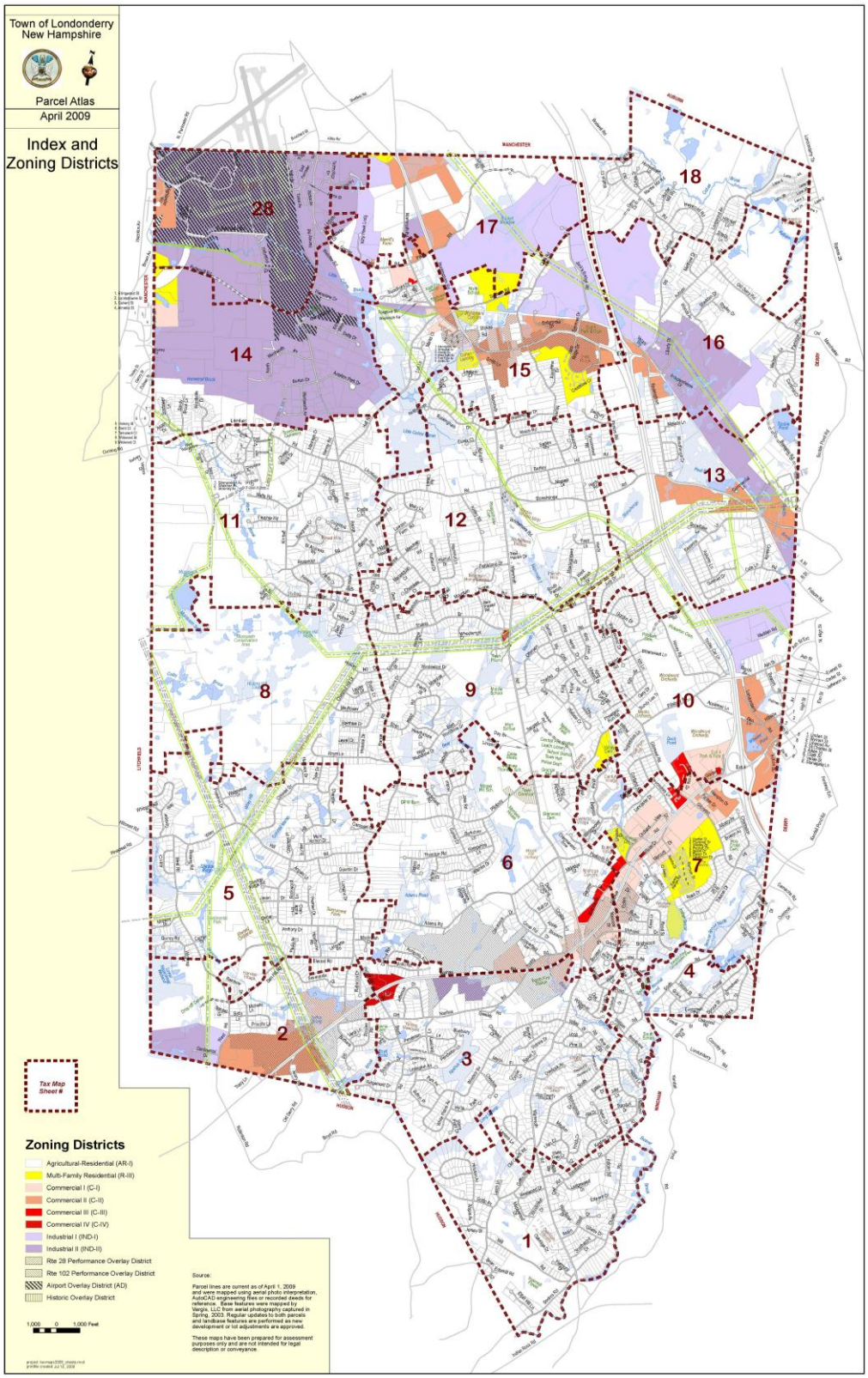
Overlay District	Purpose
1. Floodplain (F) Overlay	Reduce hazards of floods upon public health, safety, and welfare; protect floodplain occupants from a flood that is or may be associated with their land use; protect public from extraordinary financial expenditures for flood control and relief; protect capacity of floodplain areas to absorb, transmit and store runoff.
2. Residential-Professional Office District (R-PO) Overlay	Preserve concentrations of large, architecturally significant, older residential structures within a residential district by allowing them to be converted and maintained as low-intensity professional buildings compatible with surrounding neighborhoods.
3. Amoskeag Millyard Historic District Overlay	To preserve the structures and areas of historic or architectural value, which does not prohibit demolition, new construction or alterations but insures that the unique character of the Millyard is preserved. Preventing the irretrievable loss of historic or architecturally significant buildings and their unique characteris is important to the economic well-being of the City. This district is superimposed over the entirety of the Amoskeag Millyard Historic Mixed Use District (AMX).
4. Amoskeag Corporation Housing Historic District Overlay	Protect an area of unique character and architecture which can contribute significantly to the attractiveness and vitality of downtown Manchester. This overlay is intended to regulate the exterior appearance of existing and proposed structures, and to restrict activities which might alter the use and appearance of exterior spaces. This district is superimposed over the entirety of the Amoskeag Millyard Historic Mixed Use District (AMX).

TABLE E5-3 (CONTINUED)
CITY OF MANCHESTER OVERLAY DISTRICTS

Overlay District	Purpose
5. Airport Navigation Hazard Overlay	To maintain reasonable visibility and navigational control in the vicinity of Manchester Airport by precluding buildings, structures, trees or other intrusions from penetrating the airspace reserved for landings and takeoffs at the Airport. The overlay is also intended to preclude the establishment of uses, structures or other activities which would impair the aerial approach to the Airport by creating electrical impulses or disturbances which interfere with radio aids, communications and lights that may result in glare in the vision of pilots or be confused with Airport lights.
6. Airport Approach Overlay District	To prevent the penetration of buildings, structures, trees or other intrusions into airspace reserved for use of aircraft landing or taking of at the Manchester Airport. The overlay provides a review and approval procedure which places supplemental controls on the height of structures or natural growth along an imaginary inclined surface. The approach overlay district boundaries are based on the ultimate future expansion and orientation of runways planned for the Airport.
7. Airport Noise Overlay District	To avoid the establishment of land uses in the vicinity of Manchester Airport that are incompatible with the noise levels generated by the take off and landing of aircraft, and to allow other uses to be established which may be compatible if soundproofing standards are integrated into new building construction. The district is also intended to reduce future public costs for land acquisition and noise mitigation by identifying and precluding the establishment of incompatible uses, and to require soundproofing for compatible new development that may be affected by Airport noise.
8. Arena Overlay District	To develop an area that is compatible with and complimentary to the Civic Center. This can be accomplished by creating an area which is pedestrian oriented; discourages auto intensive uses, promotes a higher quality of design including signage; and ensuring compatible land uses.
9. Manchester Landfill Groundwater Management Zone (ML-GMZ)	To protect public health by restricting groundwater use. Pumping of groundwater from any well, trench, or other structure for residential, irrigation, agricultural or industrial purpose is prohibited in most cases.
10. Lake Massabesic Protection Overlay District (LMPOD)	To protect the Lake Massabesic drinking water supply.

Source: Zoning Ordinance, City of Manchester, NH February 7, 2001.

FIGURE E5-3
TOWN OF LONDONDERRY ZONING MAP



Source: http://www.londonderrynh.org/planning/zoningmap012010.pdf

TABLE E5-4
TOWN OF LONDONDERRY ZONING DISTRICTS

Zoning Code	Permitted Uses
AR-1 Agricultural-Residential	Agriculture, Single and Multiple Family Residences, Elderly Housing, Public Facilities, Civic Uses, Bed & Breakfast, Excavation Business, Cemetery, Religious Facilities.
R-III Multi-family –Residential	Agriculture, Single and Multiple Family Residences, Elderly Housing, Assisted Living Facilities, Nursing Homes, Public Utilities.
C-I Commercial I	Assisted Living Facilities, Elderly Housing, Nursing Homes, Excavation Business, Public Facilities, Civic Uses, Business Uses, Religious Facilities, Business Center Development, Professional Office.
C-II Commercial II	Assisted Living Facilities, Elderly Housing, Nursing Homes, Excavation Business, Public Facilities, Civic Uses, Business Uses, Religious Facilities, Business Center Development, Professional Office, Hotels and Motels, Light Manufacturing, Research Laboratory.
C-III Commercial III	Assisted Living Facilities, Elderly Housing, Nursing Homes, Group Child Care, Excavation Business, Business Uses, Religious Facilities, Business Center Development, Professional Office, Private Schools.
C-IV Commercial IV	Elderly Housing, Business Uses, Religious Facilities, Business Center Development, Professional Office, Business Uses.
IND-1 Industrial I	Public Facilities, Excavation Business, Light Manufacturing, Professional Office, Research Laboratory, Business Uses.
IND-2 Industrial II	Public Facilities, Excavation Business, Heavy and Light Manufacturing, Motor Vehicle Repair and Maintenance, Professional Office, Research Laboratory, Business Uses.
AD Airport District	Public Facilities, Aeronautical Facilities, Excavation Business, Light and Heavy Manufacturing, Professional Office, Research Laboratory, Business Uses.

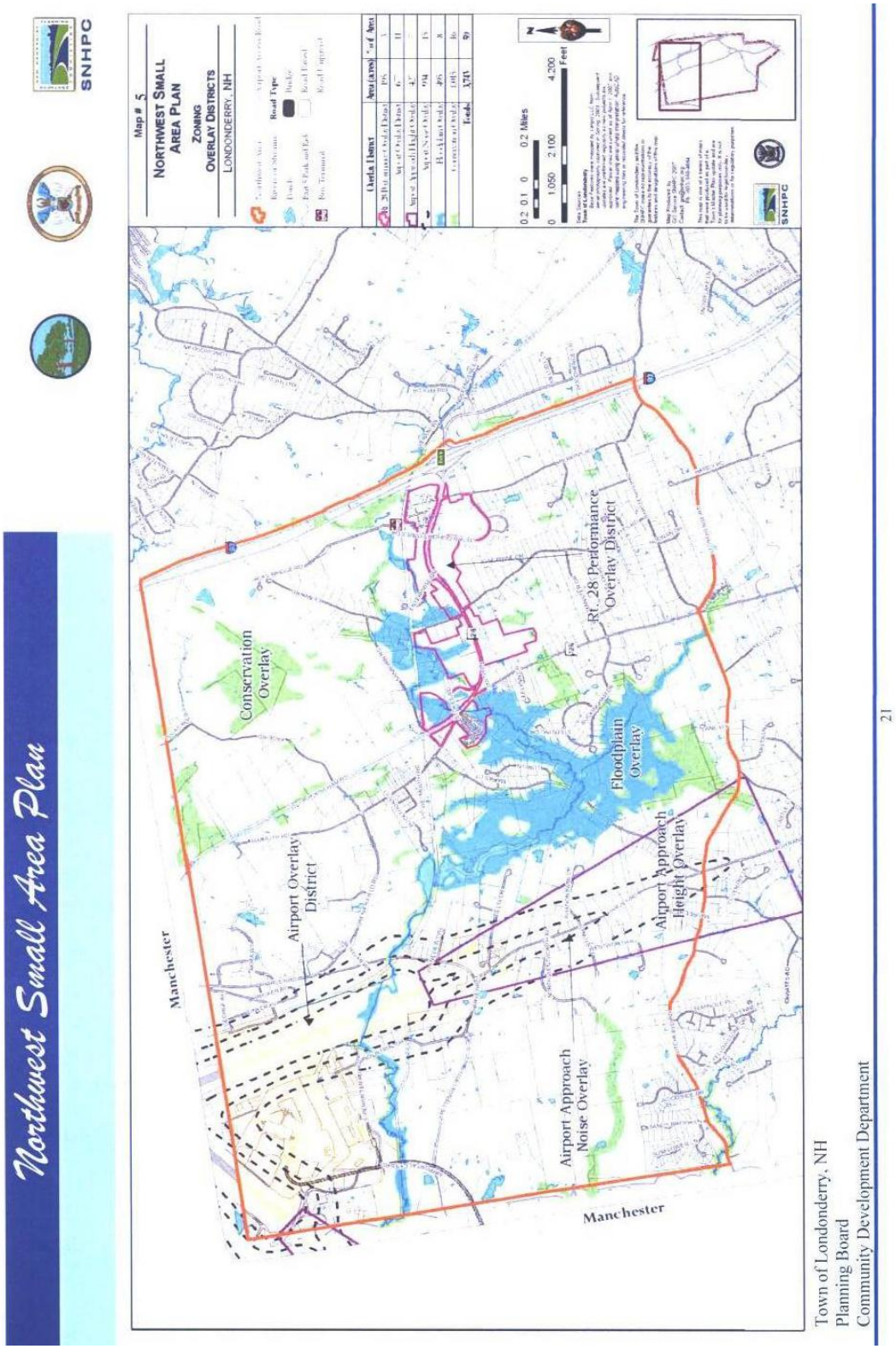
Source: Town of Londonderry, NH Zoning Ordinance, As Amended Through August 2009.

TABLE E5-5
TOWN OF LONDONDERRY OVERLAY DISTRICTS

Overlay District	Permitted Uses
POD-102 Performance Overlay District	Assisted Living, Elderly Housing, Nursing Homes, Public Recreational Uses, Religious Facilities, Business Center Development, Business Uses, Private Schools.
POD-28 Performance Overlay District	Assisted Living, Elderly Housing, Nursing Homes, Public Recreational Uses, Religious Facilities, Business Center Development, Business Uses, Private Schools.
CO Conservation Overlay	Wildlife habitat development and management, conservation areas and nature trails, open-air recreation, education, seasonally permitted hunting and fishing, forestry, minor accessory structures, production, cultivation, growing or harvesting of compatible fruits, vegetables or other crops (except turf grasses).
AH Airport Approach Height Overlay	Height limits are specified as a function of imaginary surface elevations and slopes, where no structure or tree shall be erected or allowed to grow within the defined areas such that it penetrates a surface. Regardless of penetration, a structure or tree less than 30 feet above ground shall not be limited due to surface penetrations.
AZ Airport Approach Noise Overlay	The Noise Overlay applies to the entire Town area within the 65 Ldn contour in accordance with the 1991 Part 150 Noise Compatibility Plan conducted by the Manchester Airport Authority. The Ldn contours are based on the forecast 1991 conditions with noise abated operating conditions. Land uses are prohibited based on the Table of Land Use Compatibility Standards.
FP Flood Plain Overlay	Applies to all lands designated as special flood hazard areas by Federal Emergency Management Agency in its “Flood Insurance Study for Rockingham County”, dated May 17, 2005, together with associated Flood Insurance Maps panels identified in Zoning Ordinances. Proposed development in special flood hazard area requires a permit. Building inspector shall review all building permit applications for new construction or substantial improvements to determine if proposed sites will be reasonably safe from flooding and are consistent with overlay area requirements.

Source: Town of Londonderry, NH Zoning Ordinance, As Amended Through August 2009.

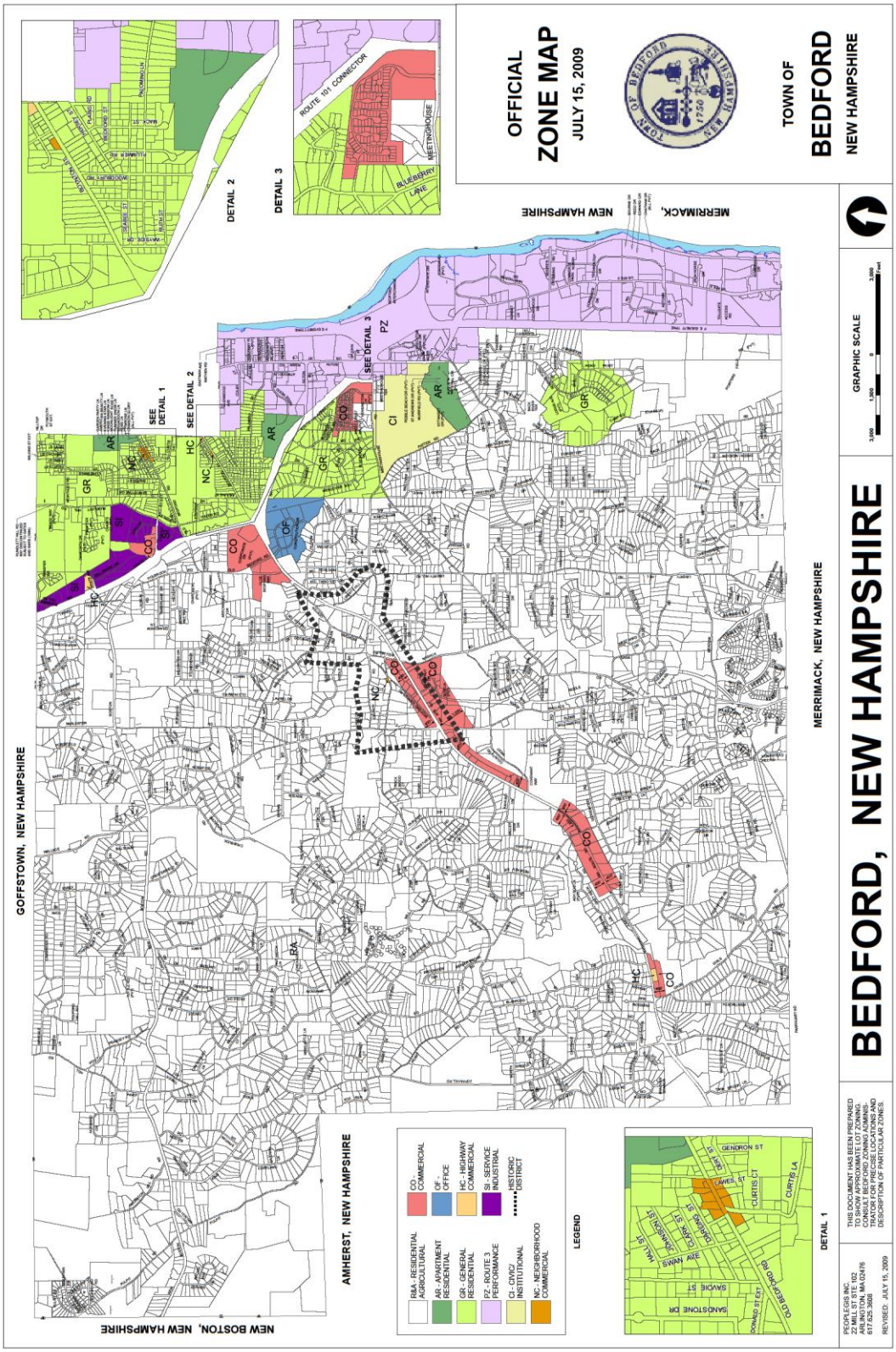
FIGURE E5-4
TOWN OF LONDONDERRY
NORTHWEST SMALL AREA PLAN - AIRPORT OVERLAY DISTRICTS



Source: http://www.londonderrynh.org/planning/adoptednwsamp090909.pdf

Figure E5-5 shows the Town of Bedford zoning map, and **Table E5-6** identifies the zoning codes and permitted uses. A small Section of the Runway 06 Runway Protection Zone (RPZ) extends over the west side of the Merrimack River into the Town of Bedford. Zoning on the privately owned parcels with the Runway 06 RPZ is PZ–Route 3 Performance. Residential zoning exists beyond the approximately 3,000 foot deep PZ designation on the west bank of the Merrimack River.

FIGURE E5-5
TOWN OF BEDFORD ZONING MAP



Source: http://bedfordnh.virtualtownhall.net/pages/BedfordNH_BComm/Zoning/ZoningMap

TABLE E5-6
TOWN OF BEDFORD ZONING DISTRICTS

Zoning Code	Permitted Uses
RA Residential & Agricultural	Single Dwelling, Elderly Housing, Workforce Housing, Place of Worship, Educational Institution, Hospital, Nursing Homes & Assisted Living, Public Parks & Playgrounds, Day Care Facility, Agricultural, General Farming, Helicopter Operation, Wireless Communications Facilities, Customary Accessory Uses.
GR General Residential	Single Dwelling, Elderly Housing, Workforce Housing, Place of Worship, Educational Institution, Hospital, Nursing Homes & Assisted Living, Public Parks & Playgrounds, Day Care Facility, Gardens, Nurseries and Greenhouses, Wireless Communications Facilities, Customary Accessory Uses.
AR Apartment Residential	Duplex and Multiple Dwellings, Elderly Housing, Workforce Housing, Public Parks & Playgrounds, Day Care Facility, Wireless Communications Facilities, Customary Accessory Uses.
CI Civic & Institutional	Commercial Recreation Facility, Membership Club, Wide Range of Public/Institutional Uses including Places of Worship, Educational Facilites, Public Parks & Playgrounds, Day Care Facility, Cemeteries, Golf Course, Community Center and Government Facilities, Wireless Communications Facilities, Customary Accessory Uses.
CO Commercial	Elderly Housing, Workforce Housing, Wide Range of Commercial Uses including Motels, Hotels and Professional Offices, Educational Institution, Nursing Homes and Assisted Living, Public Parks & Playgrounds and Day Care Facility, Customary Accessory Uses, Wireless Communications Facilities.
OF Office	Elderly Housing, Workforce Housing, Banks, Retail Sales, Business and Professional Offices, Medical or Dental Clinics, Public Parks & Playgrounds, Day Care Facility, Wireless Communications Facilities, Customary Accessory Uses.
NC Neighborhood Commercial	Retail Sales, Professional Office, Personal Service Establishment, Public Parks & Playgrounds, Day Care Facility, Wireless Communications Facilities, Customary Accessory Uses.
HC Highway Commercial	Retail Sales, Hotels and Motels, Wide Range of Commercial Uses, Public Parks & Playgrounds, Day Care Facility, Wireless Communications Facilities, Customary Accessory Uses.
SI Service Industrial	Elderly Housing, Workforce Housing, Wholesaling, Rental & Service of Tools & Equipment, Light Manufacturing, Warehousing, Truck Terminal, Industrial Research and Development, Public Parks & Playgrounds, Day Care Facility, Wireless Communications Facilities, Customary Accessory Uses, Business Office.
PZ Performance Standards	Home Occupation Residential, Wide Range of Commercial Uses including Hotels, Motels and Professional Offices, Wide Range of Industrial Uses, Wide Range of Public and Institutional Uses including Schools, Nursing Homes, Hospitals, Day Care Facilities, Community Centers and Government Facilities, General Farming and Gardens, Nurseries and Greenhouses, Wide Range of Accessory Uses including Business Offices.

Source: Town of Bedford, NH Zoning Ordinance, Part IV Zoning Ordinance.

APPENDIX E6

INVENTORY/EXISTING CONDITIONS

1.0 RECENT AND FUTURE AIRPORT DEVELOPMENT AT MAJOR COMPETING AIRPORTS

Boston Logan International Airport [1]

On February 14, 2008, the Massachusetts Port Authority (MASSPORT), the operator of Boston Logan International Airport, approved its capital program for fiscal years 2008, through 2012 (the "FY08-FY12 Capital Program"). The program was developed in order to continue to fund security initiatives and airfield operation enhancements, through maximizing Federal Aviation Administration ("FAA") and Transportation Security Administration ("TSA") grant receipts and utilizing a $4.50 Passenger Facility Charge ("PFC"). The FY08-FY12 Capital Program allocates a significant amount of funding to important initiatives including existing security challenges facing the aviation industry, maintaining and enhancing the public airfield and making improvements to the public parking facilities at the Airport. The FY08-FY12 Capital Program includes capital projects totaling approximately $899.7 million. Funding for these projects will be provided from a number of sources, primarily bond issuances, grant funding, PFCs and MASSPORT's own revenues. During fiscal year 2008, MASSPORT disbursed approximately $155.2 million on its on-going capital program. Major projects under construction during fiscal year 2008 include the Southwest Taxiway, Centerfield Taxiway, acquisition of the airport roadways, runway guard lights, taxiway lighting improvements and modifications to the baggage rooms.

MASSPORT participates in the FAA's Airport Improvement Program ("AIP"), which provides Airport and Airway Trust Fund money for airport development, airport planning and noise abatement programs. The FAA offers both entitlement and discretionary grants for eligible projects. AIP grant revenue in fiscal years 2008 and 2007 totaled $39.4 million and $9.8 million, respectively. AIP grant revenue represents approximately 94.3% and 91.6% of total capital grant revenue earned during fiscal year 2008 and 2007, respectively. During fiscal year 2004, MASSPORT and the FAA executed a Letter of Intent ("LOI") pursuant to which the FAA agreed to provide approximately $90.8 million in grants over an eight-year period to assist MASSPORT with its airside improvement program. In fiscal year 2008, MASSPORT secured a $25.4 million grant under the LOI, which was included in the $39.4 million of AIP grant revenue discussed above. In addition, MASSPORT secured $13.6 million and $15.0 million in AIP grants during fiscal years 2006 and 2005, respectively, under the LOI. Total grants awarded under the LOI through June 30, 2008 were approximately $54.0 million.

Portland International Jetport

Due in part to recent lower air fares associated with service by JetBlue and Air Tran, airline enplanements at Portland International Jetport ("Jetport") increased by +27.4% during the CY 2004-2008 period, rising from 687,344 to 875,877. This extremely fast growth has exacerbated space problems in the Terminal. In a 2008 carrier notification letter, a $152 million terminal expansion was proposed. The proposed expansion will result in approximately 165,000 additional square feet of terminal space including a new airline ticketing area, a bridge connecting the parking garage and the terminal, five additional airline gates, refurbishing of existing

[1] Massachusetts Port Authority Comprehensive Annual Financial Report for the year ending June 30, 2008.

airline gate area, additional security lanes, additional concession areas, and the relocation of the Jetport's administrative offices. The Jetport is also contemplating the addition of an in-line baggage system which is currently not part of the proposed terminal expansion project[2].

The Maine Biennial Capital Work Plan for 2010-2011 lists a number of projects to be undertaken at the Jetport. These include:

- Taxiway "C" and "J" resurfacing,
- Taxiway "C" extension,
- Improved signage on the access roads,
- Reconstruction of runway 18/36,
- Safety area construction on Runways 18/36 and 11/29

The Maine State Airport System Plan also recommended adding over 5,000 additional vehicle parking spaces, 86 additional hangar spaces, and 40 additional aircraft tie-down spaces by 2021.

Burlington International Airport

From 2004 through 2009 Burlington received FAA grants for apron, taxiway and terminal projects, as well as safety area improvements for Runway 15-33 and development land acquisition. An update to the master plan was funded during Federal Fiscal Year 2008 and is currently underway. In addition, the airport recently received funding under the American Recovery and Reinvestment Act for reconstruction of the interSections of Taxiways "C" and "G," an extension of Taxiway "G" and the construction of Taxiway "J." Since 2004, enplanements at Burlington have increased by +19.2%, with an additional 240,000 passengers at the airport during CY 2008 compared to CY 2004. Burlington International Airport is now served by two low cost carriers, JetBlue and Air Tran, which helped contribute to the recent growth in airport passengers.

T.F. Green Airport

One of the major development aspects at T.F. Green Airport is the Warwick Intermodal Facility, which is scheduled to open for train service in late 2010. This facility will serve as a connector for both local and interstate (AMTRAK) train service to the Airport. In addition, the facility will house a consolidated rental car facility; a parking garage for rental car operations and rail commuters; a bus hub for local and intercity buses; and a skywalk with moving sidewalks to connect the facility with the Airport.

Following the completion of the airport master plan in 2004, an Environmental Impact Statement (EIS) process commenced. From this process, a refined development option was prepared, which would extend the main runway (Runway 05/23) south for a total of 8,700 feet and shift Runway 16/34 north approximately 100 feet to accommodate safety improvements. These runway alignments would minimize impacts to businesses and natural resources. The Runway 16/34 safety improvements would require a partial relocation of Airport Road at the intersection of Post Road and Airport Road. This option would not require a full relocation of Airport Road, but Main Avenue would be shifted to the south at the Runway 05 end. This alternative also includes:

- Improvements to the Runway 16/34 safety areas

[2] Carrier Notification Letter at www.portlandjetport.org

- Relocation of Taxiway C
- Demolition of Hangar 1
- Expansion of the passenger terminal
- Construction of a new ground support equipment (GSE) facility
- Construction of new cargo facilities for belly cargo and the USPS
- Construction of a new fuel farm
- Construction of a new integrated cargo facility

The EIS process is currently on-going.

Bradley International Airport

The Connecticut Department of Transportation, operator of Bradley International Airport's five year capital plan features significant work on noise mitigation and preliminary work on the design and planning for a new terminal, with demolition now planned for 2011-2012 and construction for sometime beyond 2013. Some taxiway rehabilitation is also planned for 2011-2013.

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MANCHESTER-BOSTON REGIONAL AIRPORT

Airport Master Plan Update

APPENDIX F

Surface Transportation

Appendix F1

Traffic Counts

Accurate Counts
978-664-2565

Location : Perimeter Road North of
Location : Brown Avenue
City/State: Manchester, NH
Counter : 13866

Site Code: 17266001
17266001

Start	19-Oct-09		Tue		Wed		Thu		Fri		Sat		Sun		Week Average	
Time	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
12:00 AM	*	*	10	16	10	21	18	41	*	*	*	*	*	*	13	26
01:00	*	*	14	23	11	7	6	7	*	*	*	*	*	*	10	12
02:00	*	*	15	7	14	6	14	6	*	*	*	*	*	*	14	6
03:00	*	*	12	4	12	7	15	9	*	*	*	*	*	*	13	7
04:00	*	*	44	23	37	17	39	19	*	*	*	*	*	*	40	20
05:00	*	*	67	75	58	64	63	66	*	*	*	*	*	*	63	68
06:00	*	*	115	138	108	126	103	142	*	*	*	*	*	*	109	135
07:00	*	*	117	**260**	134	**233**	120	**278**	*	*	*	*	*	*	124	**257**
08:00	*	*	116	202	93	203	130	189	*	*	*	*	*	*	113	198
09:00	*	*	76	119	99	124	84	112	*	*	*	*	*	*	86	118
10:00	*	*	127	121	101	109	118	135	*	*	*	*	*	*	115	122
11:00	*	*	**129**	133	**136**	134	**146**	115	*	*	*	*	*	*	**137**	127
12:00 PM	*	*	147	142	168	141	135	138	*	*	*	*	*	*	150	140
01:00	*	*	163	150	140	140	163	166	*	*	*	*	*	*	155	152
02:00	*	*	166	143	166	164	174	155	*	*	*	*	*	*	169	154
03:00	*	*	189	**218**	236	**207**	185	188	*	*	*	*	*	*	203	**204**
04:00	*	*	261	169	**248**	167	239	**205**	*	*	*	*	*	*	249	180
05:00	*	*	**279**	156	234	154	**255**	141	*	*	*	*	*	*	**256**	150
06:00	*	*	112	139	121	119	184	129	*	*	*	*	*	*	139	129
07:00	*	*	84	99	108	106	107	100	*	*	*	*	*	*	100	102
08:00	*	*	63	79	77	79	93	102	*	*	*	*	*	*	78	87
09:00	*	*	66	58	60	58	72	50	*	*	*	*	*	*	66	55
10:00	*	*	48	87	37	78	42	43	*	*	*	*	*	*	42	69
11:00	*	*	30	52	44	44	39	67	*	*	*	*	*	*	38	54
Lane	0	0	2450	2613	2452	2508	2544	2603	0	0	0	0	0	0	2482	2572
Day	0		5063		4960		5147		0		0		0		5054	
AM Peak			11:00	07:00	11:00	07:00	11:00	07:00							11:00	07:00
Vol.			129	260	136	233	146	278							137	257
PM Peak			17:00	15:00	16:00	15:00	17:00	16:00							17:00	15:00
Vol.			279	218	248	207	255	205							256	204

Comb. Total	0	5063	4960	5147	0	0	0	5054

ADT ADT 5,057 AADT 5,057

Accurate Counts
978-664-2565

Location : Brown Avenue North of
Location : Perimeter Road
City/State: Manchester, NH
Counter : 13569

Site Code: 12766002
17266002

Start	20-Oct-09	NB		Hour Totals		SB		Hour Totals		Combined Totals	
Time	Tue	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		34	197			20	198				
12:15		22	160			17	190				
12:30		10	193			19	181				
12:45		19	190	85	740	33	194	89	763	174	1503
01:00		13	180			21	187				
01:15		44	168			18	192				
01:30		58	163			9	166				
01:45		16	161	131	672	14	203	62	748	193	1420
02:00		10	162			9	197				
02:15		13	176			6	240				
02:30		8	213			10	265				
02:45		10	205	41	756	20	258	45	960	86	1716
03:00		16	284			6	260				
03:15		12	266			20	277				
03:30		15	299			43	268				
03:45		10	270	53	1119	47	322	116	1127	169	2246
04:00		36	284			46	288				
04:15		35	344			54	302				
04:30		36	302			120	258				
04:45		66	335	173	1265	133	255	353	1103	526	2368
05:00		70	377			174	288				
05:15		83	284			180	274				
05:30		122	287			175	276				
05:45		92	198	367	1146	179	241	708	1079	1075	2225
06:00		101	199			165	211				
06:15		142	282			199	186				
06:30		175	178			235	197				
06:45		191	146	609	805	258	156	857	750	1466	1555
07:00		264	144			208	156				
07:15		284	196			232	139				
07:30		290	118			267	120				
07:45		292	90	1130	548	304	125	1011	540	2141	1088
08:00		275	81			239	144				
08:15		258	70			233	142				
08:30		233	119			222	122				
08:45		207	150	973	420	225	123	919	531	1892	951
09:00		223	101			204	91				
09:15		161	90			158	110				
09:30		194	74			189	88				
09:45		180	54	758	319	199	96	750	385	1508	704
10:00		153	129			166	86				
10:15		188	167			184	63				
10:30		154	129			201	77				
10:45		193	62	688	487	192	79	743	305	1431	792
11:00		192	88			188	40				
11:15		148	88			176	55				
11:30		184	115			193	45				
11:45		180	53	704	344	186	44	743	184	1447	528
Total		5712	8621			6396	8475			12108	17096
Percent		39.9%	60.1%			43.0%	57.0%			41.5%	58.5%

Accurate Counts
978-664-2565

Location : Brown Avenue North of
Location : Perimeter Road
City/State: Manchester, NH
Counter : 13569

Site Code: 12766002
17266002

Start	21-Oct-09	NB		Hour Totals		SB		Hour Totals		Combined Totals	
Time	Wed	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		59	230			21	181				
12:15		30	224			19	172				
12:30		24	187			19	176				
12:45		18	157	131	798	11	208	70	737	201	1535
01:00		12	152			11	203				
01:15		8	184			10	210				
01:30		19	184			5	180				
01:45		11	158	50	678	12	176	38	769	88	1447
02:00		9	188			5	215				
02:15		5	145			7	210				
02:30		9	172			7	265				
02:45		7	184	30	689	22	280	41	970	71	1659
03:00		18	305			11	267				
03:15		13	276			21	279				
03:30		8	367			41	281				
03:45		14	269	53	1217	48	284	121	1111	174	2328
04:00		18	277			42	329				
04:15		22	318			78	291				
04:30		31	353			84	300				
04:45		37	321	108	1269	151	307	355	1227	463	2496
05:00		72	379			154	264				
05:15		69	341			168	306				
05:30		101	301			166	265				
05:45		88	203	330	1224	181	255	669	1090	999	2314
06:00		97	179			177	206				
06:15		138	177			214	181				
06:30		165	196			193	193				
06:45		214	189	614	741	284	196	868	776	1482	1517
07:00		270	144			202	153				
07:15		271	152			188	154				
07:30		279	167			238	154				
07:45		259	167	1079	630	312	151	940	612	2019	1242
08:00		261	111			235	146				
08:15		264	99			199	126				
08:30		226	93			219	154				
08:45		187	241	938	544	206	124	859	550	1797	1094
09:00		141	129			189	105				
09:15		169	117			156	114				
09:30		169	101			140	92				
09:45		153	86	632	433	175	94	660	405	1292	838
10:00		154	116			142	99				
10:15		145	128			183	67				
10:30		164	168			155	82				
10:45		191	91	654	503	203	75	683	323	1337	826
11:00		201	122			184	42				
11:15		198	70			159	55				
11:30		184	85			199	50				
11:45		174	62	757	339	187	44	729	191	1486	530
Total		5376	9065			6033	8761			11409	17826
Percent		37.2%	62.8%			40.8%	59.2%			39.0%	61.0%

Accurate Counts
978-664-2565

Location : Brown Avenue North of
Location : Perimeter Road
City/State: Manchester, NH
Counter : 13569

Site Code: 12766002
17266002

Start Time	22-Oct-09 Thu	NB Morning	NB Afternoon	Hour Totals Morning	Hour Totals Afternoon	SB Morning	SB Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		52	239			34	204				
12:15		79	211			25	181				
12:30		105	198			19	191				
12:45		30	204	266	852	17	205	95	781	361	1633
01:00		17	203			12	185				
01:15		13	153			11	223				
01:30		10	174			10	185				
01:45		9	172	49	702	8	214	41	807	90	1509
02:00		6	200			6	182				
02:15		11	170			4	234				
02:30		11	205			12	277				
02:45		11	212	39	787	16	286	38	979	77	1766
03:00		28	281			11	254				
03:15		7	271			22	281				
03:30		7	311			40	273				
03:45		18	247	60	1110	44	297	117	1105	177	2215
04:00		14	311			44	340				
04:15		26	323			78	320				
04:30		35	311			108	313				
04:45		58	352	133	1297	141	301	371	1274	504	2571
05:00		61	416			135	292				
05:15		78	354			141	320				
05:30		75	280			153	248				
05:45		109	230	323	1280	134	284	563	1144	886	2424
06:00		82	188			174	214				
06:15		151	171			208	228				
06:30		165	201			248	209				
06:45		205	195	603	755	260	231	890	882	1493	1637
07:00		227	176			187	181				
07:15		261	158			198	201				
07:30		283	104			246	164				
07:45		251	99	1022	537	303	186	934	732	1956	1269
08:00		302	152			213	164				
08:15		241	120			238	151				
08:30		215	98			226	167				
08:45		234	185	992	555	199	136	876	618	1868	1173
09:00		173	187			177	144				
09:15		144	173			159	101				
09:30		144	138			151	107				
09:45		158	140	619	638	169	100	656	452	1275	1090
10:00		200	121			161	87				
10:15		146	131			147	85				
10:30		161	202			169	83				
10:45		158	149	665	603	183	85	660	340	1325	943
11:00		186	128			194	47				
11:15		203	104			187	61				
11:30		179	123			212	51				
11:45		180	107	748	462	202	54	795	213	1543	675
Total		5519	9578			6036	9327			11555	18905
Percent		36.6%	63.4%			39.3%	60.7%			37.9%	62.1%
Grand Total		16607	27264			18465	26563			35072	53827
Percent		37.9%	62.1%			41.0%	59.0%			39.5%	60.5%

ADT ADT 29,633 AADT 29,633

Accurate Counts
978-664-2565

Location : Brown Avenue North of
Location : Perimeter Road
City/State: Manchester, NH
Counter : 13569

Site Code: 12766002
17266002

Start	19-Oct-09		Tue		Wed		Thu		Fri		Sat		Sun		Week Average	
Time	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
12:00 AM	*	*	85	89	131	70	266	95	*	*	*	*	*	*	161	85
01:00	*	*	131	62	50	38	49	41	*	*	*	*	*	*	77	47
02:00	*	*	41	45	30	41	39	38	*	*	*	*	*	*	37	41
03:00	*	*	53	116	53	121	60	117	*	*	*	*	*	*	55	118
04:00	*	*	173	353	108	355	133	371	*	*	*	*	*	*	138	360
05:00	*	*	367	708	330	669	323	563	*	*	*	*	*	*	340	647
06:00	*	*	609	857	614	868	603	890	*	*	*	*	*	*	609	872
07:00	*	*	**1130**	**1011**	**1079**	**940**	**1022**	**934**	*	*	*	*	*	*	**1077**	**962**
08:00	*	*	973	919	938	859	992	876	*	*	*	*	*	*	968	885
09:00	*	*	758	750	632	660	619	656	*	*	*	*	*	*	670	689
10:00	*	*	688	743	654	683	665	660	*	*	*	*	*	*	669	695
11:00	*	*	704	743	757	729	748	795	*	*	*	*	*	*	736	756
12:00 PM	*	*	740	763	798	737	852	781	*	*	*	*	*	*	797	760
01:00	*	*	672	748	678	769	702	807	*	*	*	*	*	*	684	775
02:00	*	*	756	960	689	970	787	979	*	*	*	*	*	*	744	970
03:00	*	*	1119	**1127**	1217	1111	1110	1105	*	*	*	*	*	*	1149	1114
04:00	*	*	**1265**	1103	**1269**	**1227**	**1297**	**1274**	*	*	*	*	*	*	**1277**	**1201**
05:00	*	*	1146	1079	1224	1090	1280	1144	*	*	*	*	*	*	1217	1104
06:00	*	*	805	750	741	776	755	882	*	*	*	*	*	*	767	803
07:00	*	*	548	540	630	612	537	732	*	*	*	*	*	*	572	628
08:00	*	*	420	531	544	550	555	618	*	*	*	*	*	*	506	566
09:00	*	*	319	385	433	405	638	452	*	*	*	*	*	*	463	414
10:00	*	*	487	305	503	323	603	340	*	*	*	*	*	*	531	323
11:00	*	*	344	184	339	191	462	213	*	*	*	*	*	*	382	196
Lane	0	0	14333	14871	14441	14794	15097	15363	0	0	0	0	0	0	14626	15011
Day	0		29204		29235		30460		0		0		0		29637	
AM Peak			07:00	07:00	07:00	07:00	07:00	07:00							07:00	07:00
Vol.			1130	1011	1079	940	1022	934							1077	962
PM Peak			16:00	15:00	16:00	16:00	16:00	16:00							16:00	16:00
Vol.			1265	1127	1269	1227	1297	1274							1277	1201

Comb. Total	0	29204	29235	30460	0	0	0	29637

ADT ADT 29,633 AADT 29,633

Accurate Counts
978-664-2565

Location : Airport Road East of
Location : Perimeter Road
City/State: Manchester, NH
Counter : 13940

Site Code: 17266003
17266003

Start	20-Oct-09	WB		Hour Totals		EB		Hour Totals		Combined Totals	
Time	Tue	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		40	149			7	114				
12:15		15	111			4	115				
12:30		13	132			8	126				
12:45		8	127	76	519	25	115	44	470	120	989
01:00		17	111			12	126				
01:15		55	104			13	128				
01:30		61	112			8	94				
01:45		14	101	147	428	12	148	45	496	192	924
02:00		8	98			7	103				
02:15		14	103			8	160				
02:30		7	136			8	163				
02:45		9	120	38	457	18	164	41	590	79	1047
03:00		10	233			6	151				
03:15		6	189			23	159				
03:30		8	197			42	150				
03:45		7	194	31	813	49	204	120	664	151	1477
04:00		34	184			52	151				
04:15		32	231			58	148				
04:30		38	190			121	120				
04:45		48	235	152	840	154	122	385	541	537	1381
05:00		58	257			187	152				
05:15		77	174			198	99				
05:30		96	155			166	116				
05:45		62	95	293	681	175	114	726	481	1019	1162
06:00		63	127			153	82				
06:15		60	193			169	70				
06:30		76	94			180	92				
06:45		96	87	295	501	216	68	718	312	1013	813
07:00		127	113			154	60				
07:15		97	163			154	63				
07:30		116	89			177	50				
07:45		86	59	426	424	212	45	697	218	1123	642
08:00		84	51			174	61				
08:15		91	52			166	60				
08:30		98	137			139	60				
08:45		121	126	394	366	157	60	636	241	1030	607
09:00		128	97			153	46				
09:15		101	65			101	42				
09:30		109	56			107	53				
09:45		130	48	468	266	130	56	491	197	959	463
10:00		83	129			112	55				
10:15		125	177			141	42				
10:30		114	116			157	58				
10:45		136	49	458	471	140	62	550	217	1008	688
11:00		136	95			112	29				
11:15		120	92			138	37				
11:30		105	113			136	24				
11:45		127	38	488	338	133	22	519	112	1007	450
Total		3266	6104			4972	4539			8238	10643
Percent		34.9%	65.1%			52.3%	47.7%			43.6%	56.4%

Accurate Counts
978-664-2565

Location : Airport Road East of
Location : Perimeter Road
City/State: Manchester, NH
Counter : 13940

Site Code: 17266003
17266003

Start	21-Oct-09	WB		Hour Totals		EB		Hour Totals		Combined Totals	
Time	Wed	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		69	164			6	115				
12:15		30	140			4	108				
12:30		19	124			4	107				
12:45		16	112	134	540	6	147	20	477	154	1017
01:00		10	95			5	133				
01:15		11	133			4	119				
01:30		11	105			2	124				
01:45		7	101	39	434	7	121	18	497	57	931
02:00		6	98			3	131				
02:15		3	84			7	117				
02:30		6	114			6	166				
02:45		1	105	16	401	18	186	34	600	50	1001
03:00		17	205			6	167				
03:15		5	188			22	190				
03:30		4	241			43	154				
03:45		11	177	37	811	48	168	119	679	156	1490
04:00		3	189			43	193				
04:15		13	201			85	133				
04:30		20	224			89	159				
04:45		37	199	73	813	163	143	380	628	453	1441
05:00		62	264			162	110				
05:15		50	240			156	103				
05:30		60	192			155	107				
05:45		53	90	225	786	167	118	640	438	865	1224
06:00		45	84			148	73				
06:15		61	101			177	89				
06:30		65	136			144	93				
06:45		96	109	267	430	232	105	701	360	968	790
07:00		139	101			150	75				
07:15		79	110			121	70				
07:30		84	121			146	60				
07:45		81	122	383	454	226	65	643	270	1026	724
08:00		86	74			150	58				
08:15		102	65			145	58				
08:30		112	93			143	61				
08:45		86	212	386	444	151	63	589	240	975	684
09:00		61	119			123	52				
09:15		88	84			100	48				
09:30		101	83			130	37				
09:45		101	69	351	355	138	53	491	190	842	545
10:00		93	102			100	43				
10:15		104	116			141	31				
10:30		82	177			106	49				
10:45		152	77	431	472	128	52	475	175	906	647
11:00		128	118			120	25				
11:15		151	60			126	47				
11:30		108	75			135	29				
11:45		120	63	507	316	114	24	495	125	1002	441
Total		2849	6256			4605	4679			7454	10935
Percent		31.3%	68.7%			49.6%	50.4%			40.5%	59.5%

Accurate Counts
978-664-2565

Location : Airport Road East of
Location : Perimeter Road
City/State: Manchester, NH
Counter : 13940

Site Code: 17266003
17266003

Start	22-Oct-09	WB		Hour Totals		EB		Hour Totals		Combined Totals	
Time	Thu	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		40	158			15	144				
12:15		114	129			17	132				
12:30		94	158			12	134				
12:45		26	142	274	587	11	119	55	529	329	1116
01:00		19	127			3	114				
01:15		14	89			4	142				
01:30		8	115			5	134				
01:45		7	89	48	420	3	145	15	535	63	955
02:00		4	137			3	95				
02:15		5	84			5	138				
02:30		7	138			11	181				
02:45		12	145	28	504	17	190	36	604	64	1108
03:00		20	199			10	170				
03:15		2	213			21	162				
03:30		7	208			37	190				
03:45		9	199	38	819	47	193	115	715	153	1534
04:00		8	246			48	198				
04:15		20	219			84	169				
04:30		25	180			107	153				
04:45		44	246	97	891	149	139	388	659	485	1550
05:00		50	282			143	118				
05:15		61	236			138	129				
05:30		53	166			158	120				
05:45		57	110	221	794	133	124	572	491	793	1285
06:00		56	81			153	87				
06:15		69	91			165	67				
06:30		66	155			200	84				
06:45		86	122	277	449	193	88	711	326	988	775
07:00		131	146			152	77				
07:15		59	96			122	58				
07:30		97	58			157	58				
07:45		84	63	371	363	202	88	633	281	1004	644
08:00		87	139			160	66				
08:15		92	81			146	49				
08:30		112	72			160	73				
08:45		93	188	384	480	159	71	625	259	1009	739
09:00		89	138			130	57				
09:15		86	146			101	41				
09:30		78	101			115	57				
09:45		102	109	355	494	118	50	464	205	819	699
10:00		121	72			128	45				
10:15		86	104			109	58				
10:30		97	172			112	52				
10:45		83	107	387	455	130	60	479	215	866	670
11:00		126	90			139	28				
11:15		159	66			137	33				
11:30		105	84			148	35				
11:45		120	64	510	304	129	41	553	137	1063	441
Total		2990	6560			4646	4956			7636	11516
Percent		31.3%	68.7%			48.4%	51.6%			39.9%	60.1%
Grand Total		9105	18920			14223	14174			23328	33094
Percent		32.5%	67.5%			50.1%	49.9%			41.3%	58.7%

ADT ADT 18,807 AADT 18,807

Accurate Counts
978-664-2565

Location : Airport Road East of
Location : Perimeter Road
City/State: Manchester, NH
Counter : 13940

Site Code: 17266003
17266003

Start	19-Oct-09		Tue		Wed		Thu		Fri		Sat		Sun		Week Average	
Time	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
12:00 AM	*	*	76	44	134	20	274	55	*	*	*	*	*	*	161	40
01:00	*	*	147	45	39	18	48	15	*	*	*	*	*	*	78	26
02:00	*	*	38	41	16	34	28	36	*	*	*	*	*	*	27	37
03:00	*	*	31	120	37	119	38	115	*	*	*	*	*	*	35	118
04:00	*	*	152	385	73	380	97	388	*	*	*	*	*	*	107	384
05:00	*	*	293	**726**	225	640	221	572	*	*	*	*	*	*	246	646
06:00	*	*	295	718	267	**701**	277	**711**	*	*	*	*	*	*	280	**710**
07:00	*	*	426	697	383	643	371	633	*	*	*	*	*	*	393	658
08:00	*	*	394	636	386	589	384	625	*	*	*	*	*	*	388	617
09:00	*	*	468	491	351	491	355	464	*	*	*	*	*	*	391	482
10:00	*	*	458	550	431	475	387	479	*	*	*	*	*	*	425	501
11:00	*	*	**488**	519	**507**	495	**510**	553	*	*	*	*	*	*	**502**	522
12:00 PM	*	*	519	470	540	477	587	529	*	*	*	*	*	*	549	492
01:00	*	*	428	496	434	497	420	535	*	*	*	*	*	*	427	509
02:00	*	*	457	590	401	600	504	604	*	*	*	*	*	*	454	598
03:00	*	*	813	**664**	811	**679**	819	**715**	*	*	*	*	*	*	814	**686**
04:00	*	*	**840**	541	**813**	628	**891**	659	*	*	*	*	*	*	**848**	609
05:00	*	*	681	481	786	438	794	491	*	*	*	*	*	*	754	470
06:00	*	*	501	312	430	360	449	326	*	*	*	*	*	*	460	333
07:00	*	*	424	218	454	270	363	281	*	*	*	*	*	*	414	256
08:00	*	*	366	241	444	240	480	259	*	*	*	*	*	*	430	247
09:00	*	*	266	197	355	190	494	205	*	*	*	*	*	*	372	197
10:00	*	*	471	217	472	175	455	215	*	*	*	*	*	*	466	202
11:00	*	*	338	112	316	125	304	137	*	*	*	*	*	*	319	125
Lane	0	0	9370	9511	9105	9284	9550	9602	0	0	0	0	0	0	9340	9465
Day	0		18881		18389		19152		0		0		0		18805	
AM Peak			11:00	05:00	11:00	06:00	11:00	06:00							11:00	06:00
Vol.			488	726	507	701	510	711							502	710
PM Peak			16:00	15:00	16:00	15:00	16:00	15:00							16:00	15:00
Vol.			840	664	813	679	891	715							848	686

Comb. Total	0	18881	18389	19152	0	0	0	18805

ADT ADT 18,807 AADT 18,807

Accurate Counts
978-664-2565

Location : Airport Road East of
Location : S. Perimeter Road
City/State: Manchester, NH
Counter : 10122

Site Code: 17266004
17266004

Start Time	20-Oct-09 Tue	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		22	114			8	90				
12:15		7	107			2	106				
12:30		4	111			10	113				
12:45		6	98	39	430	21	104	41	413	80	843
01:00		13	93			11	105				
01:15		48	88			13	112				
01:30		61	71			6	93				
01:45		15	104	137	356	4	111	34	421	171	777
02:00		4	60			5	95				
02:15		12	95			4	133				
02:30		4	101			6	150				
02:45		6	79	26	335	13	120	28	498	54	833
03:00		9	200			5	135				
03:15		4	173			7	124				
03:30		3	125			36	157				
03:45		2	152	18	650	44	143	92	559	110	1209
04:00		28	122			48	131				
04:15		29	198			38	107				
04:30		34	126			107	96				
04:45		46	161	137	607	110	88	303	422	440	1029
05:00		58	160			162	98				
05:15		74	101			149	62				
05:30		83	111			132	67				
05:45		55	51	270	423	106	69	549	296	819	719
06:00		46	70			113	46				
06:15		57	166			123	49				
06:30		60	65			134	50				
06:45		67	51	230	352	143	37	513	182	743	534
07:00		94	56			109	35				
07:15		60	133			113	37				
07:30		62	56			121	31				
07:45		55	39	271	284	116	23	459	126	730	410
08:00		58	16			98	24				
08:15		53	21			104	33				
08:30		78	87			100	46				
08:45		57	120	246	244	108	44	410	147	656	391
09:00		66	72			95	37				
09:15		67	37			91	29				
09:30		89	28			89	42				
09:45		101	27	323	164	119	64	394	172	717	336
10:00		76	97			104	46				
10:15		87	159			136	41				
10:30		74	114			150	51				
10:45		111	31	348	401	119	59	509	197	857	598
11:00		118	77			102	22				
11:15		112	82			127	31				
11:30		97	107			113	24				
11:45		99	43	426	309	97	15	439	92	865	401
Total		2471	4555			3771	3525			6242	8080
Percent		35.2%	64.8%			51.7%	48.3%			43.6%	56.4%

Accurate Counts
978-664-2565

Location : Airport Road East of
Location : S. Perimeter Road
City/State: Manchester, NH
Counter : 10122

Site Code: 17266004
17266004

Start Time	21-Oct-09 Wed	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		55	122			7	77				
12:15		26	119			1	77				
12:30		11	99			3	86				
12:45		8	89	100	429	2	104	13	344	113	773
01:00		10	79			1	112				
01:15		8	110			1	103				
01:30		3	81			1	106				
01:45		2	83	23	353	3	83	6	404	29	757
02:00		4	61			1	103				
02:15		3	56			4	95				
02:30		2	72			5	149				
02:45		1	79	10	268	9	154	19	501	29	769
03:00		14	176			4	130				
03:15		2	144			8	151				
03:30		2	173			37	132				
03:45		3	128	21	621	31	134	80	547	101	1168
04:00		5	136			40	156				
04:15		10	169			59	124				
04:30		18	165			64	106				
04:45		29	149	62	619	130	84	293	470	355	1089
05:00		64	196			136	80				
05:15		48	151			133	67				
05:30		50	143			111	70				
05:45		49	57	211	547	110	49	490	266	701	813
06:00		42	34			110	41				
06:15		46	45			120	48				
06:30		62	103			114	43				
06:45		54	81	204	263	138	49	482	181	686	444
07:00		81	57			96	45				
07:15		45	75			86	42				
07:30		47	83			98	32				
07:45		45	101	218	316	117	43	397	162	615	478
08:00		54	48			80	21				
08:15		42	41			73	35				
08:30		61	50			95	44				
08:45		54	152	211	291	81	52	329	152	540	443
09:00		40	101			73	44				
09:15		55	71			96	44				
09:30		74	30			101	33				
09:45		84	38	253	240	117	55	387	176	640	416
10:00		65	70			85	33				
10:15		65	87			105	36				
10:30		55	155			107	46				
10:45		114	64	299	376	121	42	418	157	717	533
11:00		127	111			120	29				
11:15		105	51			109	39				
11:30		78	68			116	26				
11:45		81	54	391	284	92	19	437	113	828	397
Total		2003	4607			3351	3473			5354	8080
Percent		30.3%	69.7%			49.1%	50.9%			39.9%	60.1%

Accurate Counts
978-664-2565

Location : Airport Road East of
Location : S. Perimeter Road
City/State: Manchester, NH
Counter : 10122

Site Code: 17266004
17266004

Start Time	22-Oct-09 Thu	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		37	130			13	113				
12:15		85	120			20	103				
12:30		96	126			5	123				
12:45		25	123	243	499	8	102	46	441	289	940
01:00		20	112			2	108				
01:15		9	72			2	101				
01:30		6	86			0	119				
01:45		1	74	36	344	0	113	4	441	40	785
02:00		4	105			2	99				
02:15		3	65			6	115				
02:30		4	108			6	156				
02:45		6	108	17	386	15	172	29	542	46	928
03:00		24	166			7	142				
03:15		2	194			10	168				
03:30		2	137			40	151				
03:45		6	153	34	650	31	162	88	623	122	1273
04:00		3	194			50	172				
04:15		20	184			68	141				
04:30		26	142			81	108				
04:45		40	218	89	738	119	112	318	533	407	1271
05:00		49	209			122	80				
05:15		57	185			94	87				
05:30		42	122			115	72				
05:45		46	73	194	589	89	57	420	296	614	885
06:00		43	44			120	58				
06:15		55	38			116	36				
06:30		43	109			134	60				
06:45		51	97	192	288	105	49	475	203	667	491
07:00		94	90			99	33				
07:15		45	83			91	31				
07:30		47	36			89	35				
07:45		45	22	231	231	110	45	389	144	620	375
08:00		55	96			82	37				
08:15		51	65			91	28				
08:30		69	40			104	60				
08:45		54	132	229	333	90	59	367	184	596	517
09:00		59	137			87	47				
09:15		59	91			87	37				
09:30		58	83			107	40				
09:45		75	70	251	381	95	52	376	176	627	557
10:00		102	49			95	41				
10:15		69	77			96	49				
10:30		70	147			97	51				
10:45		64	103	305	376	123	42	411	183	716	559
11:00		115	68			138	23				
11:15		161	51			108	29				
11:30		99	77			132	32				
11:45		97	55	472	251	131	40	509	124	981	375
Total		2293	5066			3432	3890			5725	8956
Percent		31.2%	68.8%			46.9%	53.1%			39.0%	61.0%
Grand Total		6767	14228			10554	10888			17321	25116
Percent		32.2%	67.8%			49.2%	50.8%			40.8%	59.2%

ADT ADT 14,146 AADT 14,146

Accurate Counts
978-664-2565

Location : Airport Road East of
Location : S. Perimeter Road
City/State: Manchester, NH
Counter : 10122

Site Code: 17266004
17266004

Start	19-Oct-09		Tue		Wed		Thu		Fri		Sat		Sun		Week Average	
Time	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
12:00 AM	*	*	39	41	100	13	243	46	*	*	*	*	*	*	127	33
01:00	*	*	137	34	23	6	36	4	*	*	*	*	*	*	65	15
02:00	*	*	26	28	10	19	17	29	*	*	*	*	*	*	18	25
03:00	*	*	18	92	21	80	34	88	*	*	*	*	*	*	24	87
04:00	*	*	137	303	62	293	89	318	*	*	*	*	*	*	96	305
05:00	*	*	270	**549**	211	**490**	194	420	*	*	*	*	*	*	225	486
06:00	*	*	230	513	204	482	192	475	*	*	*	*	*	*	209	**490**
07:00	*	*	271	459	218	397	231	389	*	*	*	*	*	*	240	415
08:00	*	*	246	410	211	329	229	367	*	*	*	*	*	*	229	369
09:00	*	*	323	394	253	387	251	376	*	*	*	*	*	*	276	386
10:00	*	*	348	509	299	418	305	411	*	*	*	*	*	*	317	446
11:00	*	*	**426**	439	**391**	437	**472**	**509**	*	*	*	*	*	*	**430**	462
12:00 PM	*	*	430	413	429	344	499	441	*	*	*	*	*	*	453	399
01:00	*	*	356	421	353	404	344	441	*	*	*	*	*	*	351	422
02:00	*	*	335	498	268	501	386	542	*	*	*	*	*	*	330	514
03:00	*	*	**650**	**559**	**621**	**547**	650	**623**	*	*	*	*	*	*	640	**576**
04:00	*	*	607	422	619	470	**738**	533	*	*	*	*	*	*	**655**	475
05:00	*	*	423	296	547	266	589	296	*	*	*	*	*	*	520	286
06:00	*	*	352	182	263	181	288	203	*	*	*	*	*	*	301	189
07:00	*	*	284	126	316	162	231	144	*	*	*	*	*	*	277	144
08:00	*	*	244	147	291	152	333	184	*	*	*	*	*	*	289	161
09:00	*	*	164	172	240	176	381	176	*	*	*	*	*	*	262	175
10:00	*	*	401	197	376	157	376	183	*	*	*	*	*	*	384	179
11:00	*	*	309	92	284	113	251	124	*	*	*	*	*	*	281	110
Lane	0	0	7026	7296	6610	6824	7359	7322	0	0	0	0	0	0	6999	7149
Day	0		14322		13434		14681		0		0		0		14148	
AM Peak			11:00	05:00	11:00	05:00	11:00	11:00							11:00	06:00
Vol.			426	549	391	490	472	509							430	490
PM Peak			15:00	15:00	15:00	15:00	16:00	15:00							16:00	15:00
Vol.			650	559	621	547	738	623							655	576

Comb. Total	0	14322	13434	14681	0	0	0	14148

ADT ADT 14,146 AADT 14,146

Accurate Counts
978-664-2565

Location : Airport Road EB West of
Location : Terminal
City/State: Manchester, NH
Counter : 2377

Site Code: 17266005
17266005

Start Time	Tue 20-Oct-09 A.M.	Tue 20-Oct-09 P.M.	Wed 21-Oct-09 A.M.	Wed 21-Oct-09 P.M.	Thu 22-Oct-09 A.M.	Thu 22-Oct-09 P.M.	Daily Average A.M.	Daily Average P.M.
12:00	19	79	19	81	47	76	28	79
12:15	10	62	10	59	34	91	18	71
12:30	7	94	3	69	22	99	11	87
12:45	30	71	6	69	17	116	18	85
01:00	49	87	7	88	4	92	20	89
01:15	48	74	6	79	5	72	20	75
01:30	22	60	6	72	12	75	13	69
01:45	9	88	9	66	8	85	9	80
02:00	10	70	10	89	9	72	10	77
02:15	9	99	11	70	7	81	9	83
02:30	9	108	6	94	10	111	8	104
02:45	11	127	9	127	11	130	10	128
03:00	10	**145**	7	135	9	**169**	9	**150**
03:15	3	**126**	9	133	9	**123**	7	**127**
03:30	13	**128**	10	**121**	12	**147**	12	**132**
03:45	20	**136**	16	**135**	18	**149**	18	**140**
04:00	38	126	18	**153**	31	156	29	145
04:15	43	127	46	**139**	57	120	49	129
04:30	90	102	54	104	70	111	71	106
04:45	**113**	93	**115**	122	118	122	**115**	112
05:00	**142**	104	**145**	82	115	103	**134**	96
05:15	**148**	65	**133**	87	89	77	**123**	76
05:30	**122**	53	**87**	61	91	59	**100**	58
05:45	93	83	105	43	80	47	93	58
06:00	99	83	104	39	101	52	101	58
06:15	107	83	97	72	81	48	95	68
06:30	86	43	71	80	98	58	85	60
06:45	83	56	86	43	65	59	78	53
07:00	90	75	70	49	76	41	79	55
07:15	83	34	51	74	78	25	71	44
07:30	95	32	60	49	64	38	73	40
07:45	93	22	92	49	73	49	86	40
08:00	73	31	55	34	75	55	68	40
08:15	76	28	45	35	69	25	63	29
08:30	72	74	66	53	83	86	74	71
08:45	78	70	68	79	89	97	78	82
09:00	89	58	72	45	70	70	77	58
09:15	83	43	70	59	63	78	72	60
09:30	74	51	90	60	83	45	82	52
09:45	97	92	101	92	85	76	94	87
10:00	86	132	79	66	83	72	83	90
10:15	113	107	95	82	91	74	100	88
10:30	135	53	81	62	68	60	95	58
10:45	122	46	81	55	104	34	102	45
11:00	113	46	97	50	**143**	48	118	48
11:15	111	87	94	55	**101**	66	102	69
11:30	94	68	100	58	**108**	92	101	73
11:45	90	52	92	52	**118**	113	100	72
Total	3310	3773	2764	3670	2954	3944	3011	3796
Combined Total	7083		6434		6898		6807	
Peak	04:45	03:00	04:45	03:30	11:00	03:00	04:45	03:00
Vol.	525	535	480	548	470	588	472	549
P.H.F.	0.887	0.922	0.828	0.895	0.822	0.870	0.881	0.915

ADT ADT 6,805 AADT 6,805

Accurate Counts
978-664-2565

Location : Airport Road EB West of
Location : Terminal
City/State: Manchester, NH
Counter : 2377

Site Code: 17266005
17266005

Start Time	Mon 19-Oct-09	Tue 20-Oct-09	Wed 21-Oct-09	Thu 22-Oct-09	Fri 23-Oct-09	Average Day	Sat 24-Oct-09	Sun 25-Oct-09	Week Average
12:00 AM	*	66	38	120	*	75	*	*	75
01:00	*	128	28	29	*	62	*	*	62
02:00	*	39	36	37	*	37	*	*	37
03:00	*	46	42	48	*	45	*	*	45
04:00	*	284	233	276	*	264	*	*	264
05:00	*	**505**	**470**	375	*	**450**	*	*	**450**
06:00	*	375	358	345	*	359	*	*	359
07:00	*	361	273	291	*	308	*	*	308
08:00	*	299	234	316	*	283	*	*	283
09:00	*	343	333	301	*	326	*	*	326
10:00	*	456	336	346	*	379	*	*	379
11:00	*	408	383	**470**	*	420	*	*	420
12:00 PM	*	306	278	382	*	322	*	*	322
01:00	*	309	305	324	*	313	*	*	313
02:00	*	404	380	394	*	393	*	*	393
03:00	*	**535**	**524**	**588**	*	**549**	*	*	**549**
04:00	*	448	518	509	*	492	*	*	492
05:00	*	305	273	286	*	288	*	*	288
06:00	*	265	234	217	*	239	*	*	239
07:00	*	163	221	153	*	179	*	*	179
08:00	*	203	201	263	*	222	*	*	222
09:00	*	244	256	269	*	256	*	*	256
10:00	*	338	265	240	*	281	*	*	281
11:00	*	253	215	319	*	262	*	*	262
Day Total	0	7083	6434	6898	0	6804	0	0	6804
% Avg. WkDay	0.0%	104.1%	94.6%	101.4%	0.0%				
% Avg. Week	0.0%	104.1%	94.6%	101.4%	0.0%	100.0%	0.0%	0.0%	
AM Peak		05:00	05:00	11:00		05:00			05:00
Vol.		505	470	470		450			450
PM Peak		15:00	15:00	15:00		15:00			15:00
Vol.		535	524	588		549			549
Grand Total	0	7083	6434	6898	0	6804	0	0	6804

ADT ADT 6,805 AADT 6,805

Accurate Counts
978-664-2565

Location : Shephard Drive @ Terminal
Location :
City/State: Manchester, NH
Counter : 103

Site Code: 17266006
17266006

Start Time	Tue 20-Oct-09 A.M.	P.M.	Wed 21-Oct-09 A.M.	P.M.	Thu 22-Oct-09 A.M.	P.M.	Daily Average A.M.	P.M.
12:00	7	44	12	47	23	41	14	44
12:15	0	36	1	39	20	55	7	43
12:30	3	54	1	35	16	56	7	48
12:45	11	42	1	35	5	67	6	48
01:00	28	54	2	51	0	54	10	53
01:15	28	37	1	43	1	40	10	40
01:30	9	36	3	39	2	40	5	38
01:45	1	48	2	32	2	42	2	41
02:00	4	32	1	40	3	44	3	39
02:15	5	50	4	33	2	39	4	41
02:30	2	55	1	55	5	51	3	54
02:45	3	67	2	62	2	77	2	69
03:00	4	**76**	2	79	4	99	3	85
03:15	0	**75**	2	76	2	71	1	74
03:30	3	**66**	3	**72**	6	**94**	4	**77**
03:45	8	**78**	8	**67**	7	**83**	8	**76**
04:00	18	67	7	**84**	13	**99**	13	**83**
04:15	23	78	24	**80**	38	**73**	28	**77**
04:30	53	52	29	59	45	61	42	57
04:45	54	45	63	62	68	62	**62**	56
05:00	83	55	**89**	48	73	63	**82**	55
05:15	88	27	**59**	49	59	44	**69**	40
05:30	58	26	**47**	30	55	29	**53**	28
05:45	54	44	**64**	21	55	20	58	28
06:00	50	44	43	13	57	24	50	27
06:15	55	41	59	30	59	23	58	31
06:30	45	16	31	38	57	31	44	28
06:45	35	23	52	16	33	30	40	23
07:00	40	41	44	25	49	13	44	26
07:15	41	12	23	32	44	11	36	18
07:30	60	14	33	19	42	13	45	15
07:45	40	7	55	20	44	22	46	16
08:00	46	10	34	11	43	26	41	16
08:15	42	10	25	13	42	6	36	10
08:30	42	32	38	23	53	40	44	32
08:45	39	33	37	37	48	57	41	42
09:00	53	33	38	20	44	36	45	30
09:15	49	14	41	21	33	41	41	25
09:30	40	20	48	25	53	21	47	22
09:45	60	45	59	47	59	40	59	44
10:00	35	75	37	23	49	32	40	43
10:15	64	57	48	38	57	37	56	44
10:30	**76**	18	52	26	36	29	55	24
10:45	**71**	15	50	20	54	13	58	16
11:00	**64**	18	58	24	**92**	19	71	20
11:15	**77**	42	60	22	**62**	31	66	32
11:30	52	38	53	31	**59**	46	55	38
11:45	54	19	48	22	**69**	62	57	34
Total	1777	1921	1494	1834	1744	2107	1671	1950
Combined Total	3698		3328		3851		3621	
Peak	10:30	03:00	05:00	03:30	11:00	03:30	04:45	03:30
Vol.	288	295	259	303	282	349	266	313
P.H.F.	0.818	0.946	0.728	0.902	0.766	0.881	0.811	0.943

ADT ADT 3,626 AADT 3,626

Accurate Counts
978-664-2565

Location : Shephard Drive @ Terminal
Location :
City/State: Manchester, NH
Counter : 103

Site Code: 17266006
17266006

Start Time	Mon 19-Oct-09	Tue 20-Oct-09	Wed 21-Oct-09	Thu 22-Oct-09	Fri 23-Oct-09	Average Day	Sat 24-Oct-09	Sun 25-Oct-09	Week Average
12:00 AM	*	21	15	64	*	33	*	*	33
01:00	*	66	8	5	*	26	*	*	26
02:00	*	14	8	12	*	11	*	*	11
03:00	*	15	15	19	*	16	*	*	16
04:00	*	148	123	164	*	145	*	*	145
05:00	*	**283**	**259**	242	*	**261**	*	*	**261**
06:00	*	185	185	206	*	192	*	*	192
07:00	*	181	155	179	*	172	*	*	172
08:00	*	169	134	186	*	163	*	*	163
09:00	*	202	186	189	*	192	*	*	192
10:00	*	246	187	196	*	210	*	*	210
11:00	*	247	219	**282**	*	249	*	*	249
12:00 PM	*	176	156	219	*	184	*	*	184
01:00	*	175	165	176	*	172	*	*	172
02:00	*	204	190	211	*	202	*	*	202
03:00	*	**295**	**294**	**347**	*	**312**	*	*	**312**
04:00	*	242	285	295	*	274	*	*	274
05:00	*	152	148	156	*	152	*	*	152
06:00	*	124	97	108	*	110	*	*	110
07:00	*	74	96	59	*	76	*	*	76
08:00	*	85	84	129	*	99	*	*	99
09:00	*	112	113	138	*	121	*	*	121
10:00	*	165	107	111	*	128	*	*	128
11:00	*	117	99	158	*	125	*	*	125
Day Total	0	3698	3328	3851	0	3625	0	0	3625
% Avg. WkDay	0.0%	102.0%	91.8%	106.2%	0.0%				
% Avg. Week	0.0%	102.0%	91.8%	106.2%	0.0%	100.0%	0.0%	0.0%	
AM Peak		05:00	05:00	11:00		05:00			05:00
Vol.		283	259	282		261			261
PM Peak		15:00	15:00	15:00		15:00			15:00
Vol.		295	294	347		312			312
Grand Total	0	3698	3328	3851	0	3625	0	0	3625

ADT ADT 3,626 AADT 3,626

Accurate Counts
978-664-2565

Location : Allard Drive North of
Location : Garage Drive
City/State: Manchester, NH
Counter : 2582

Site Code: 17266007
17266007

Start Time	Tue 20-Oct-09 A.M.	Tue 20-Oct-09 P.M.	Wed 21-Oct-09 A.M.	Wed 21-Oct-09 P.M.	Thu 22-Oct-09 A.M.	Thu 22-Oct-09 P.M.	Daily Average A.M.	Daily Average P.M.
12:00	14	46	31	57	22	49	22	51
12:15	3	52	7	51	44	60	18	54
12:30	5	61	4	44	22	65	10	57
12:45	19	51	7	45	15	76	14	57
01:00	28	60	7	53	7	66	14	60
01:15	43	41	6	50	4	52	18	48
01:30	14	49	7	43	9	47	10	46
01:45	13	53	3	45	7	52	8	50
02:00	5	42	7	52	4	53	5	49
02:15	11	57	6	44	5	44	7	48
02:30	9	73	3	59	9	52	7	61
02:45	6	58	6	75	9	79	7	71
03:00	7	**103**	4	87	5	102	5	**97**
03:15	2	**77**	7	89	6	**97**	5	**88**
03:30	9	**87**	6	**85**	10	**98**	8	**90**
03:45	12	**95**	9	**74**	12	**99**	11	**89**
04:00	28	77	12	**97**	16	**108**	19	94
04:15	29	86	32	**100**	35	84	32	90
04:30	54	63	38	66	47	64	46	64
04:45	**64**	70	**57**	74	86	93	**69**	79
05:00	**90**	68	**105**	63	78	88	**91**	73
05:15	**88**	42	**63**	73	73	62	**75**	59
05:30	**81**	35	**55**	42	69	51	**68**	43
05:45	55	54	57	31	54	25	55	37
06:00	70	47	56	21	64	32	63	33
06:15	54	62	69	36	69	27	64	42
06:30	55	27	41	58	58	46	51	44
06:45	44	25	53	30	38	42	45	32
07:00	41	50	45	27	56	26	47	34
07:15	47	34	36	42	47	19	43	32
07:30	57	24	35	36	50	20	47	27
07:45	56	14	51	30	50	21	52	22
08:00	54	15	51	23	55	42	53	27
08:15	49	16	37	20	46	14	44	17
08:30	50	54	36	37	52	45	46	45
08:45	46	42	47	44	51	78	48	55
09:00	61	40	43	34	61	40	55	38
09:15	48	25	39	35	40	56	42	39
09:30	50	25	54	30	52	34	52	30
09:45	60	44	75	40	63	41	66	42
10:00	50	86	45	50	68	44	54	60
10:15	71	85	60	56	59	46	63	62
10:30	80	37	49	46	44	61	58	48
10:45	80	23	58	30	57	20	65	24
11:00	87	32	71	33	**100**	20	86	28
11:15	75	48	68	32	**79**	48	74	43
11:30	65	58	57	37	**65**	63	62	53
11:45	67	25	63	35	**81**	59	70	40
Total	2106	2438	1778	2361	2053	2610	1974	2472
Combined Total	4544		4139		4663		4446	
Peak	04:45	03:00	04:45	03:30	11:00	03:15	04:45	03:00
Vol.	323	362	280	356	325	402	303	364
P.H.F.	0.897	0.879	0.667	0.890	0.813	0.931	0.832	0.938

ADT ADT 4,449 AADT 4,449

Accurate Counts
978-664-2565

Location : Allard Drive North of
Location : Garage Drive
City/State: Manchester, NH
Counter : 2582

Site Code: 17266007
17266007

Start Time	Mon 19-Oct-09	Tue 20-Oct-09	Wed 21-Oct-09	Thu 22-Oct-09	Fri 23-Oct-09	Average Day	Sat 24-Oct-09	Sun 25-Oct-09	Week Average
12:00 AM	*	41	49	103	*	64	*	*	64
01:00	*	98	23	27	*	49	*	*	49
02:00	*	31	22	27	*	27	*	*	27
03:00	*	30	26	33	*	30	*	*	30
04:00	*	175	139	184	*	166	*	*	166
05:00	*	**314**	**280**	274	*	289	*	*	289
06:00	*	223	219	229	*	224	*	*	224
07:00	*	201	167	203	*	190	*	*	190
08:00	*	199	171	204	*	191	*	*	191
09:00	*	219	211	216	*	215	*	*	215
10:00	*	281	212	228	*	240	*	*	240
11:00	*	294	259	**325**	*	**293**	*	*	**293**
12:00 PM	*	210	197	250	*	219	*	*	219
01:00	*	203	191	217	*	204	*	*	204
02:00	*	230	230	228	*	229	*	*	229
03:00	*	**362**	335	**396**	*	**364**	*	*	**364**
04:00	*	296	**337**	349	*	327	*	*	327
05:00	*	199	209	226	*	211	*	*	211
06:00	*	161	145	147	*	151	*	*	151
07:00	*	122	135	86	*	114	*	*	114
08:00	*	127	124	179	*	143	*	*	143
09:00	*	134	139	171	*	148	*	*	148
10:00	*	231	182	171	*	195	*	*	195
11:00	*	163	137	190	*	163	*	*	163
Day Total	0	4544	4139	4663	0	4446	0	0	4446
% Avg. WkDay	0.0%	102.2%	93.1%	104.9%	0.0%				
% Avg. Week	0.0%	102.2%	93.1%	104.9%	0.0%	100.0%	0.0%	0.0%	
AM Peak		05:00	05:00	11:00		11:00			11:00
Vol.		314	280	325		293			293
PM Peak		15:00	16:00	15:00		15:00			15:00
Vol.		362	337	396		364			364
Grand Total	0	4544	4139	4663	0	4446	0	0	4446

ADT ADT 4,449 AADT 4,449

Accurate Counts
978-664-2565

Location : French Drive West of
Location : Allard Drive
City/State: Manchester, NH
Counter : 5865

Site Code: 17266008
17266008

Start Time	Tue 20-Oct-09 A.M.	Tue 20-Oct-09 P.M.	Wed 21-Oct-09 A.M.	Wed 21-Oct-09 P.M.	Thu 22-Oct-09 A.M.	Thu 22-Oct-09 P.M.	Daily Average A.M.	Daily Average P.M.
12:00	11	40	25	49	21	39	19	43
12:15	1	44	6	40	37	52	15	45
12:30	4	55	2	41	20	55	9	50
12:45	14	39	6	36	10	66	10	47
01:00	22	47	3	41	3	52	9	47
01:15	42	35	3	41	3	43	16	40
01:30	10	45	3	33	2	36	5	38
01:45	10	46	1	33	2	43	4	41
02:00	4	34	2	39	1	41	2	38
02:15	8	50	1	38	4	36	4	41
02:30	4	66	1	52	3	44	3	54
02:45	3	52	2	59	2	68	2	60
03:00	6	**99**	2	79	4	88	4	**89**
03:15	1	**70**	3	75	2	**82**	2	**76**
03:30	5	**78**	1	**71**	6	**85**	4	**78**
03:45	10	**84**	4	**61**	6	**86**	7	**77**
04:00	21	70	4	**81**	10	**95**	12	82
04:15	24	77	21	**89**	29	64	25	77
04:30	45	60	23	56	35	57	34	58
04:45	52	61	44	71	47	85	48	72
05:00	64	56	80	52	63	74	69	61
05:15	70	35	48	62	56	56	58	51
05:30	72	31	46	37	52	39	57	36
05:45	46	45	42	24	36	26	41	32
06:00	50	47	42	14	52	27	48	29
06:15	44	55	47	33	50	26	47	38
06:30	48	24	33	50	34	41	38	38
06:45	34	21	40	25	27	39	34	28
07:00	31	47	37	25	36	17	35	30
07:15	41	32	24	34	34	14	33	27
07:30	47	20	29	30	40	19	39	23
07:45	46	9	41	25	33	19	40	18
08:00	43	10	36	16	37	34	39	20
08:15	39	10	26	14	39	9	35	11
08:30	42	50	32	30	44	47	39	42
08:45	36	37	34	41	39	66	36	48
09:00	51	35	31	28	35	41	39	35
09:15	40	19	31	28	25	53	32	33
09:30	40	21	46	21	38	27	41	23
09:45	55	41	61	41	55	42	57	41
10:00	45	77	28	37	50	34	41	49
10:15	58	78	45	49	48	45	50	57
10:30	**67**	28	40	37	34	49	47	38
10:45	**72**	18	46	26	42	15	53	20
11:00	**75**	24	**62**	27	**80**	21	**72**	24
11:15	**71**	46	**58**	29	**63**	44	**64**	40
11:30	57	51	**52**	35	**50**	61	**53**	49
11:45	61	24	**52**	28	**70**	64	**61**	39
Total	1742	2143	1346	1983	1509	2266	1532	2133
Combined Total	3885		3329		3775		3665	
Peak	10:30	03:00	11:00	03:30	11:00	03:15	11:00	03:00
Vol.	285	331	224	302	263	348	250	320
P.H.F.	0.950	0.836	0.700	0.848	0.822	0.916	0.868	0.899

ADT ADT 3,663 AADT 3,663

Accurate Counts
978-664-2565

Location : French Drive West of
Location : Allard Drive
City/State: Manchester, NH
Counter : 5865

Site Code: 17266008
17266008

Start Time	Mon 19-Oct-09	Tue 20-Oct-09	Wed 21-Oct-09	Thu 22-Oct-09	Fri 23-Oct-09	Average Day	Sat 24-Oct-09	Sun 25-Oct-09	Week Average
12:00 AM	*	30	39	88	*	52	*	*	52
01:00	*	84	10	10	*	35	*	*	35
02:00	*	19	6	10	*	12	*	*	12
03:00	*	22	10	18	*	17	*	*	17
04:00	*	142	92	121	*	118	*	*	118
05:00	*	252	216	207	*	225	*	*	225
06:00	*	176	162	163	*	167	*	*	167
07:00	*	165	131	143	*	146	*	*	146
08:00	*	160	128	159	*	149	*	*	149
09:00	*	186	169	153	*	169	*	*	169
10:00	*	242	159	174	*	192	*	*	192
11:00	*	**264**	**224**	**263**	*	**250**	*	*	**250**
12:00 PM	*	178	166	212	*	185	*	*	185
01:00	*	173	148	174	*	165	*	*	165
02:00	*	202	188	189	*	193	*	*	193
03:00	*	**331**	286	**341**	*	**319**	*	*	**319**
04:00	*	268	**297**	301	*	289	*	*	289
05:00	*	167	175	195	*	179	*	*	179
06:00	*	147	122	133	*	134	*	*	134
07:00	*	108	114	69	*	97	*	*	97
08:00	*	107	101	156	*	121	*	*	121
09:00	*	116	118	163	*	132	*	*	132
10:00	*	201	149	143	*	164	*	*	164
11:00	*	145	119	190	*	151	*	*	151
Day Total	0	3885	3329	3775	0	3661	0	0	3661
% Avg. WkDay	0.0%	106.1%	90.9%	103.1%	0.0%				
% Avg. Week	0.0%	106.1%	90.9%	103.1%	0.0%	100.0%	0.0%	0.0%	
AM Peak		11:00	11:00	11:00		11:00			11:00
Vol.		264	224	263		250			250
PM Peak		15:00	16:00	15:00		15:00			15:00
Vol.		331	297	341		319			319
Grand Total	0	3885	3329	3775	0	3661	0	0	3661

ADT ADT 3,663 AADT 3,663

Accurate Counts
978-664-2565

Location : French Drive North of
Location : Airport Road
City/State: Manchester, NH
Counter : 2743

Site Code: 17266009
17266009

Start Time	Tue 20-Oct-09 A.M.	Tue 20-Oct-09 P.M.	Wed 21-Oct-09 A.M.	Wed 21-Oct-09 P.M.	Thu 22-Oct-09 A.M.	Thu 22-Oct-09 P.M.	Daily Average A.M.	Daily Average P.M.
12:00	24	111	64	133	54	126	47	123
12:15	8	99	23	125	125	132	52	119
12:30	4	126	6	91	77	127	29	115
12:45	17	111	5	110	23	161	15	127
01:00	32	102	10	88	12	116	18	102
01:15	76	94	8	128	7	100	30	107
01:30	57	91	5	83	7	108	23	94
01:45	13	90	6	81	3	110	7	94
02:00	12	84	9	83	7	119	9	95
02:15	10	110	9	76	6	87	8	91
02:30	8	121	5	104	11	126	8	117
02:45	5	118	4	118	6	141	5	126
03:00	9	**219**	3	183	5	194	6	199
03:15	5	**176**	5	194	6	235	5	202
03:30	6	**144**	3	185	7	156	5	162
03:45	11	**178**	6	145	10	181	9	168
04:00	35	161	7	176	11	**258**	18	**198**
04:15	34	197	20	**221**	30	**199**	28	**206**
04:30	49	148	28	**179**	38	**167**	38	**165**
04:45	63	168	44	**182**	55	**268**	54	**206**
05:00	73	167	91	**191**	66	220	77	193
05:15	88	117	64	182	68	205	73	168
05:30	90	106	55	140	62	129	69	125
05:45	73	78	59	65	47	81	60	75
06:00	61	114	51	57	65	48	59	73
06:15	69	166	65	80	69	52	68	99
06:30	71	57	61	125	52	150	61	111
06:45	63	71	67	82	48	95	59	83
07:00	72	83	64	69	68	91	68	81
07:15	75	139	60	98	63	77	66	105
07:30	71	60	51	105	72	38	65	68
07:45	75	26	61	101	65	32	67	53
08:00	76	24	71	47	65	135	71	69
08:15	71	15	50	39	62	41	61	32
08:30	78	140	66	86	84	64	76	97
08:45	70	106	66	136	80	205	72	149
09:00	93	92	59	107	83	124	78	108
09:15	92	46	66	71	67	129	75	82
09:30	97	38	91	44	73	77	87	53
09:45	104	62	109	72	111	87	108	74
10:00	94	164	84	101	109	65	96	110
10:15	107	195	89	128	96	116	97	146
10:30	**120**	103	82	172	79	169	94	148
10:45	**143**	32	**142**	63	91	82	**125**	59
11:00	**131**	59	**119**	90	**165**	38	**138**	62
11:15	**154**	127	**127**	63	**163**	84	**148**	91
11:30	103	127	**105**	91	**120**	114	**109**	111
11:45	124	48	110	79	**141**	114	125	80
Total	3016	5210	2455	5369	2834	5973	2766	5521
Combined Total	8226		7824		8807		8287	
Peak	10:30	03:00	10:45	04:15	11:00	04:00	10:45	04:00
Vol.	548	717	493	773	589	892	520	775
P.H.F.	0.890	0.818	0.868	0.874	0.892	0.832	0.878	0.941

ADT ADT 8,286 AADT 8,286

Accurate Counts
978-664-2565

Location : French Drive North of
Location : Airport Road
City/State: Manchester, NH
Counter : 2743

Site Code: 17266009
17266009

Start Time	Mon 19-Oct-09	Tue 20-Oct-09	Wed 21-Oct-09	Thu 22-Oct-09	Fri 23-Oct-09	Average Day	Sat 24-Oct-09	Sun 25-Oct-09	Week Average
12:00 AM	*	53	98	279	*	143	*	*	143
01:00	*	178	29	29	*	79	*	*	79
02:00	*	35	27	30	*	31	*	*	31
03:00	*	31	17	28	*	25	*	*	25
04:00	*	181	99	134	*	138	*	*	138
05:00	*	324	269	243	*	279	*	*	279
06:00	*	264	244	234	*	247	*	*	247
07:00	*	293	236	268	*	266	*	*	266
08:00	*	295	253	291	*	280	*	*	280
09:00	*	386	325	334	*	348	*	*	348
10:00	*	464	397	375	*	412	*	*	412
11:00	*	**512**	**461**	**589**	*	**521**	*	*	**521**
12:00 PM	*	447	459	546	*	484	*	*	484
01:00	*	377	380	434	*	397	*	*	397
02:00	*	433	381	473	*	429	*	*	429
03:00	*	**717**	707	766	*	730	*	*	730
04:00	*	674	**758**	**892**	*	**775**	*	*	**775**
05:00	*	468	578	635	*	560	*	*	560
06:00	*	408	344	345	*	366	*	*	366
07:00	*	308	373	238	*	306	*	*	306
08:00	*	285	308	445	*	346	*	*	346
09:00	*	238	294	417	*	316	*	*	316
10:00	*	494	464	432	*	463	*	*	463
11:00	*	361	323	350	*	345	*	*	345
Day Total	0	8226	7824	8807	0	8286	0	0	8286
% Avg. WkDay	0.0%	99.3%	94.4%	106.3%	0.0%				
% Avg. Week	0.0%	99.3%	94.4%	106.3%	0.0%	100.0%	0.0%	0.0%	
AM Peak		11:00	11:00	11:00		11:00			11:00
Vol.		512	461	589		521			521
PM Peak		15:00	16:00	16:00		16:00			16:00
Vol.		717	758	892		775			775
Grand Total	0	8226	7824	8807	0	8286	0	0	8286

ADT ADT 8,286 AADT 8,286

Accurate Counts
978-664-2565

Location : S. Perimeter Road South of
Location : Airport Road
City/State: Manchester, NH
Counter : 5864

Site Code: 17266010
17266010

Start	20-Oct-09	NB		Hour Totals		SB		Hour Totals		Combined Totals	
Time	Tue	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		22	60			1	43				
12:15		8	48			3	53				
12:30		12	58			1	52				
12:45		4	58	46	224	6	44	11	192	57	416
01:00		2	53			2	61				
01:15		3	63			2	53				
01:30		4	44			3	39				
01:45		3	33	12	193	8	58	15	211	27	404
02:00		2	61			4	53				
02:15		4	38			4	56				
02:30		2	70			2	44				
02:45		5	57	13	226	7	58	17	211	30	437
03:00		2	55			2	54				
03:15		5	52			16	46				
03:30		7	114			13	42				
03:45		10	71	24	292	10	61	41	203	65	495
04:00		9	89			9	49				
04:15		8	59			27	42				
04:30		7	83			27	44				
04:45		13	75	37	306	38	48	101	183	138	489
05:00		11	115			29	58				
05:15		23	66			40	44				
05:30		23	70			39	62				
05:45		23	53	80	304	74	46	182	210	262	514
06:00		26	40			50	39				
06:15		22	32			71	32				
06:30		39	35			78	47				
06:45		51	29	138	136	98	39	297	157	435	293
07:00		60	52			68	32				
07:15		66	29			60	43				
07:30		79	34			74	25				
07:45		58	33	263	148	105	32	307	132	570	280
08:00		39	36			63	45				
08:15		63	31			67	36				
08:30		51	44			53	28				
08:45		87	20	240	131	52	29	235	138	475	269
09:00		72	30			51	10				
09:15		40	26			30	17				
09:30		39	30			45	19				
09:45		49	30	200	116	30	10	156	56	356	172
10:00		29	26			29	13				
10:15		51	22			34	13				
10:30		48	18			40	12				
10:45		51	17	179	83	41	4	144	42	323	125
11:00		43	15			37	9				
11:15		38	4			45	12				
11:30		36	10			45	5				
11:45		49	9	166	38	52	11	179	37	345	75
Total		1398	2197			1685	1772			3083	3969
Percent		38.9%	61.1%			48.7%	51.3%			43.7%	56.3%

Accurate Counts
978-664-2565

Location : S. Perimeter Road South of
Location : Airport Road
City/State: Manchester, NH
Counter : 5864

Site Code: 17266010
17266010

Start	21-Oct-09	NB		Hour Totals		SB		Hour Totals		Combined Totals	
Time	Wed	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		17	53			5	44				
12:15		10	51			5	47				
12:30		6	49			0	35				
12:45		7	36	40	189	4	56	14	182	54	371
01:00		2	55			12	50				
01:15		9	45			3	58				
01:30		7	57			2	57				
01:45		8	39	26	196	6	51	23	216	49	412
02:00		3	61			2	54				
02:15		0	44			3	45				
02:30		3	52			2	48				
02:45		1	49	7	206	8	56	15	203	22	409
03:00		2	55			3	47				
03:15		6	48			16	60				
03:30		4	115			8	56				
03:45		8	77	20	295	14	48	41	211	61	506
04:00		2	82			8	57				
04:15		10	65			36	45				
04:30		14	101			33	58				
04:45		11	76	37	324	43	67	120	227	157	551
05:00		14	104			23	58				
05:15		19	93			26	45				
05:30		22	65			43	54				
05:45		17	45	72	307	59	64	151	221	223	528
06:00		27	46			60	35				
06:15		32	54			75	52				
06:30		38	50			63	58				
06:45		68	37	165	187	117	44	315	189	480	376
07:00		83	46			67	31				
07:15		42	37			52	39				
07:30		65	29			67	28				
07:45		55	31	245	143	110	34	296	132	541	275
08:00		51	26			73	40				
08:15		91	24			70	35				
08:30		68	53			54	37				
08:45		30	42	240	145	40	19	237	131	477	276
09:00		35	31			35	25				
09:15		54	39			35	16				
09:30		48	37			43	11				
09:45		33	22	170	129	32	14	145	66	315	195
10:00		44	21			39	22				
10:15		42	29			41	6				
10:30		57	29			36	17				
10:45		58	20	201	99	40	9	156	54	357	153
11:00		27	14			36	7				
11:15		41	6			36	8				
11:30		53	15			38	11				
11:45		49	6	170	41	41	5	151	31	321	72
Total		1393	2261			1664	1863			3057	4124
Percent		38.1%	61.9%			47.2%	52.8%			42.6%	57.4%

Accurate Counts
978-664-2565

Location : S. Perimeter Road South of
Location : Airport Road
City/State: Manchester, NH
Counter : 5864

Site Code: 17266010
17266010

Start	22-Oct-09	NB		Hour Totals		SB		Hour Totals		Combined Totals	
Time	Thu	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		14	67			4	55				
12:15		19	43			5	61				
12:30		8	65			5	57				
12:45		4	42	45	217	8	55	22	228	67	445
01:00		10	49			6	37				
01:15		3	30			5	44				
01:30		4	54			5	48				
01:45		4	51	21	184	2	63	18	192	39	376
02:00		1	59			1	46				
02:15		3	41			1	57				
02:30		0	71			8	55				
02:45		5	50	9	221	4	52	14	210	23	431
03:00		5	60			5	61				
03:15		2	66			11	58				
03:30		9	114			7	59				
03:45		9	96	25	336	15	61	38	239	63	575
04:00		8	88			8	62				
04:15		10	65			31	50				
04:30		11	90			34	61				
04:45		15	69	44	312	40	61	113	234	157	546
05:00		15	105			33	63				
05:15		22	87			34	61				
05:30		20	62			48	52				
05:45		30	52	87	306	54	76	169	252	256	558
06:00		20	58			52	45				
06:15		28	38			56	35				
06:30		50	45			74	45				
06:45		53	39	151	180	100	39	282	164	433	344
07:00		53	39			64	45				
07:15		42	23			59	41				
07:30		55	21			81	31				
07:45		60	44	210	127	110	51	314	168	524	295
08:00		58	37			79	40				
08:15		75	21			69	26				
08:30		56	62			68	35				
08:45		47	42	236	162	44	19	260	120	496	282
09:00		55	33			51	21				
09:15		34	28			22	14				
09:30		35	32			33	22				
09:45		33	44	157	137	37	14	143	71	300	208
10:00		32	21			43	12				
10:15		45	22			40	24				
10:30		42	27			39	13				
10:45		49	22	168	92	40	15	162	64	330	156
11:00		38	19			41	9				
11:15		37	11			54	9				
11:30		53	12			59	6				
11:45		48	11	176	53	44	9	198	33	374	86
Total		1329	2327			1733	1975			3062	4302
Percent		36.4%	63.6%			46.7%	53.3%			41.6%	58.4%
Grand Total		4120	6785			5082	5610			9202	12395
Percent		37.8%	62.2%			47.5%	52.5%			42.6%	57.4%

ADT ADT 7,199 AADT 7,199

Accurate Counts
978-664-2565

Location : S. Perimeter Road South of
Location : Airport Road
City/State: Manchester, NH
Counter : 5864

Site Code: 17266010
17266010

Start	19-Oct-09		Tue		Wed		Thu		Fri		Sat		Sun		Week Average	
Time	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
12:00 AM	*	*	46	11	40	14	45	22	*	*	*	*	*	*	44	16
01:00	*	*	12	15	26	23	21	18	*	*	*	*	*	*	20	19
02:00	*	*	13	17	7	15	9	14	*	*	*	*	*	*	10	15
03:00	*	*	24	41	20	41	25	38	*	*	*	*	*	*	23	40
04:00	*	*	37	101	37	120	44	113	*	*	*	*	*	*	39	111
05:00	*	*	80	182	72	151	87	169	*	*	*	*	*	*	80	167
06:00	*	*	138	297	165	**315**	151	282	*	*	*	*	*	*	151	298
07:00	*	*	**263**	**307**	**245**	296	210	**314**	*	*	*	*	*	*	**239**	**306**
08:00	*	*	240	235	240	237	**236**	260	*	*	*	*	*	*	239	244
09:00	*	*	200	156	170	145	157	143	*	*	*	*	*	*	176	148
10:00	*	*	179	144	201	156	168	162	*	*	*	*	*	*	183	154
11:00	*	*	166	179	170	151	176	198	*	*	*	*	*	*	171	176
12:00 PM	*	*	224	192	189	182	217	228	*	*	*	*	*	*	210	201
01:00	*	*	193	**211**	196	216	184	192	*	*	*	*	*	*	191	206
02:00	*	*	226	211	206	203	221	210	*	*	*	*	*	*	218	208
03:00	*	*	292	203	295	211	**336**	239	*	*	*	*	*	*	308	218
04:00	*	*	**306**	183	**324**	**227**	312	234	*	*	*	*	*	*	**314**	215
05:00	*	*	304	210	307	221	306	**252**	*	*	*	*	*	*	306	**228**
06:00	*	*	136	157	187	189	180	164	*	*	*	*	*	*	168	170
07:00	*	*	148	132	143	132	127	168	*	*	*	*	*	*	139	144
08:00	*	*	131	138	145	131	162	120	*	*	*	*	*	*	146	130
09:00	*	*	116	56	129	66	137	71	*	*	*	*	*	*	127	64
10:00	*	*	83	42	99	54	92	64	*	*	*	*	*	*	91	53
11:00	*	*	38	37	41	31	53	33	*	*	*	*	*	*	44	34
Lane	0	0	3595	3457	3654	3527	3656	3708	0	0	0	0	0	0	3637	3565
Day	0		7052		7181		7364		0		0		0		7202	
AM Peak			07:00	07:00	07:00	06:00	08:00	07:00							07:00	07:00
Vol.			263	307	245	315	236	314							239	306
PM Peak			16:00	13:00	16:00	16:00	15:00	17:00							16:00	17:00
Vol.			306	211	324	227	336	252							314	228

Comb. Total	0	7052	7181	7364	0	0	0	7202

ADT ADT 7,199 AADT 7,199

Accurate Counts
978-664-2565

Location : S. Perimeter Road North of
Location : Woodlawn Avenue
City/State: Manchester, NH
Counter : 192

Site Code: 17266011
17266011

Start	20-Oct-09	NB		Hour Totals		SB		Hour Totals		Combined Totals	
Time	Tue	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		19	65			2	39				
12:15		7	35			5	44				
12:30		12	48			1	48				
12:45		2	41	40	189	6	45	14	176	54	365
01:00		3	41			2	45				
01:15		3	44			1	43				
01:30		6	37			7	37				
01:45		4	26	16	148	5	55	15	180	31	328
02:00		6	54			5	50				
02:15		5	32			5	55				
02:30		2	65			2	39				
02:45		5	57	18	208	6	69	18	213	36	421
03:00		2	44			3	46				
03:15		1	65			12	50				
03:30		10	107			8	35				
03:45		7	64	20	280	8	47	31	178	51	458
04:00		10	90			7	41				
04:15		10	53			21	40				
04:30		11	79			21	49				
04:45		11	75	42	297	34	39	83	169	125	466
05:00		14	108			29	47				
05:15		27	70			43	44				
05:30		34	71			40	55				
05:45		32	57	107	306	69	56	181	202	288	508
06:00		31	41			48	43				
06:15		24	31			54	32				
06:30		45	33			77	53				
06:45		61	34	161	139	104	39	283	167	444	306
07:00		63	51			60	24				
07:15		52	28			60	53				
07:30		75	41			56	22				
07:45		61	32	251	152	100	36	276	135	527	287
08:00		41	45			63	39				
08:15		54	26			59	37				
08:30		41	42			53	36				
08:45		93	28	229	141	44	24	219	136	448	277
09:00		74	29			41	11				
09:15		51	22			59	17				
09:30		35	24			32	17				
09:45		52	31	212	106	48	11	180	56	392	162
10:00		24	24			24	17				
10:15		38	22			26	11				
10:30		42	19			31	14				
10:45		41	14	145	79	36	4	117	46	262	125
11:00		37	19			29	11				
11:15		37	3			31	13				
11:30		29	9			44	4				
11:45		50	11	153	42	47	8	151	36	304	78
Total		1394	2087			1568	1694			2962	3781
Percent		40.0%	60.0%			48.1%	51.9%			43.9%	56.1%

Accurate Counts
978-664-2565

Location : S. Perimeter Road North of
Location : Woodlawn Avenue
City/State: Manchester, NH
Counter : 192

Site Code: 17266011
17266011

Start	21-Oct-09	NB		Hour Totals		SB		Hour Totals		Combined Totals	
Time	Wed	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		17	53			7	35				
12:15		11	52			5	46				
12:30		5	43			1	34				
12:45		7	34	40	182	5	49	18	164	58	346
01:00		2	40			4	50				
01:15		8	38			9	53				
01:30		12	48			1	49				
01:45		8	44	30	170	5	53	19	205	49	375
02:00		3	51			2	49				
02:15		0	45			2	44				
02:30		3	47			3	46				
02:45		1	45	7	188	7	45	14	184	21	372
03:00		3	47			5	49				
03:15		4	43			13	59				
03:30		8	109			8	54				
03:45		7	82	22	281	9	45	35	207	57	488
04:00		3	83			8	53				
04:15		10	59			31	45				
04:30		17	90			28	53				
04:45		13	82	43	314	34	64	101	215	144	529
05:00		13	103			28	60				
05:15		25	88			28	45				
05:30		22	70			45	48				
05:45		16	52	76	313	58	64	159	217	235	530
06:00		34	43			57	37				
06:15		33	53			63	47				
06:30		33	40			70	62				
06:45		86	34	186	170	100	45	290	191	476	361
07:00		77	45			73	23				
07:15		40	34			54	52				
07:30		66	30			59	26				
07:45		56	24	239	133	102	37	288	138	527	271
08:00		57	29			65	41				
08:15		78	29			55	35				
08:30		67	48			55	40				
08:45		26	44	228	150	34	19	209	135	437	285
09:00		40	29			27	21				
09:15		44	29			36	14				
09:30		46	30			34	13				
09:45		31	13	161	101	35	12	132	60	293	161
10:00		36	27			34	17				
10:15		40	23			37	7				
10:30		48	29			28	16				
10:45		49	19	173	98	37	11	136	51	309	149
11:00		27	13			42	5				
11:15		36	5			34	8				
11:30		51	16			36	10				
11:45		52	2	166	36	36	7	148	30	314	66
Total		1371	2136			1549	1797			2920	3933
Percent		39.1%	60.9%			46.3%	53.7%			42.6%	57.4%

Accurate Counts
978-664-2565

Location : S. Perimeter Road North of
Location : Woodlawn Avenue
City/State: Manchester, NH
Counter : 192

Site Code: 17266011
17266011

Start Time	22-Oct-09 Thu	NB Morning	NB Afternoon	Hour Totals Morning	Hour Totals Afternoon	SB Morning	SB Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		13	67			7	50				
12:15		17	39			4	54				
12:30		8	57			6	50				
12:45		8	44	46	207	6	54	23	208	69	415
01:00		13	40			5	32				
01:15		3	27			6	44				
01:30		5	50			4	37				
01:45		4	38	25	155	2	50	17	163	42	318
02:00		1	57			1	40				
02:15		1	36			1	55				
02:30		3	56			8	56				
02:45		5	44	10	193	4	42	14	193	24	386
03:00		3	50			3	57				
03:15		5	60			11	53				
03:30		10	111			5	61				
03:45		9	85	27	306	11	59	30	230	57	536
04:00		7	87			7	51				
04:15		14	62			26	43				
04:30		8	86			33	46				
04:45		14	64	43	299	33	52	99	192	142	491
05:00		22	101			27	56				
05:15		23	84			33	55				
05:30		22	58			49	45				
05:45		30	46	97	289	56	74	165	230	262	519
06:00		23	56			50	43				
06:15		40	38			51	41				
06:30		49	41			72	49				
06:45		53	27	165	162	107	40	280	173	445	335
07:00		45	38			66	41				
07:15		40	15			57	37				
07:30		64	19			71	29				
07:45		70	38	219	110	96	52	290	159	509	269
08:00		56	38			71	41				
08:15		72	17			56	29				
08:30		57	58			65	32				
08:45		46	41	231	154	39	21	231	123	462	277
09:00		49	31			43	21				
09:15		31	25			20	18				
09:30		33	24			33	22				
09:45		31	44	144	124	26	16	122	77	266	201
10:00		39	21			32	14				
10:15		39	19			32	22				
10:30		32	30			27	15				
10:45		43	19	153	89	37	13	128	64	281	153
11:00		39	19			37	11				
11:15		39	9			42	8				
11:30		46	15			52	5				
11:45		56	8	180	51	42	10	173	34	353	85
Total		1340	2139			1572	1846			2912	3985
Percent		38.5%	61.5%			46.0%	54.0%			42.2%	57.8%
Grand Total			4105		6362		4689		5337		8794	11699
Percent			39.2%		60.8%		46.8%		53.2%		42.9%	57.1%

ADT ADT 6,831 AADT 6,831

Accurate Counts
978-664-2565

Location : Perimeter Road North of
Location : Brown Avenue
City/State: Manchester, NH
Counter : 13866

Site Code: 17266001
17266001

Start	20-Oct-09	NB		Hour Totals		SB		Hour Totals		Combined Totals	
Time	Tue	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		3	40			10	44				
12:15		2	27			1	34				
12:30		1	39			4	26				
12:45		4	41	10	147	1	38	16	142	26	289
01:00		6	38			3	35				
01:15		2	45			6	43				
01:30		1	34			8	25				
01:45		5	46	14	163	6	47	23	150	37	313
02:00		4	37			0	35				
02:15		4	35			2	34				
02:30		2	44			1	42				
02:45		5	50	15	166	4	32	7	143	22	309
03:00		3	58			2	61				
03:15		2	40			0	52				
03:30		3	54			0	54				
03:45		4	37	12	189	2	51	4	218	16	407
04:00		5	65			4	39				
04:15		8	73			4	58				
04:30		13	62			6	34				
04:45		18	61	44	261	9	38	23	169	67	430
05:00		15	80			9	38				
05:15		20	85			14	37				
05:30		15	64			21	51				
05:45		17	50	67	279	31	30	75	156	142	435
06:00		26	33			19	32				
06:15		23	29			31	49				
06:30		29	23			34	31				
06:45		37	27	115	112	54	27	138	139	253	251
07:00		24	27			68	22				
07:15		26	21			75	36				
07:30		30	21			54	21				
07:45		37	15	117	84	63	20	260	99	377	183
08:00		34	19			63	20				
08:15		38	14			58	12				
08:30		21	10			46	25				
08:45		23	20	116	63	35	22	202	79	318	142
09:00		23	19			36	21				
09:15		18	17			27	20				
09:30		21	18			23	10				
09:45		14	12	76	66	33	7	119	58	195	124
10:00		23	14			24	18				
10:15		42	9			35	30				
10:30		26	16			25	24				
10:45		36	9	127	48	37	15	121	87	248	135
11:00		24	11			49	17				
11:15		31	3			24	6				
11:30		31	11			28	21				
11:45		43	5	129	30	32	8	133	52	262	82
Total		842	1608			1121	1492			1963	3100
Percent		34.4%	65.6%			42.9%	57.1%			38.8%	61.2%

Accurate Counts
978-664-2565

Location : Perimeter Road North of
Location : Brown Avenue
City/State: Manchester, NH
Counter : 13866

Site Code: 17266001
17266001

Start	21-Oct-09	NB		Hour Totals		SB		Hour Totals		Combined Totals	
Time	Wed	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		2	57			12	33				
12:15		1	44			5	36				
12:30		1	33			2	28				
12:45		6	34	10	168	2	44	21	141	31	309
01:00		4	43			3	31				
01:15		2	36			1	47				
01:30		2	30			1	31				
01:45		3	31	11	140	2	31	7	140	18	280
02:00		2	42			0	32				
02:15		5	34			1	31				
02:30		4	43			3	49				
02:45		3	47	14	166	2	52	6	164	20	330
03:00		3	69			3	60				
03:15		3	58			0	54				
03:30		4	64			2	45				
03:45		2	45	12	236	2	48	7	207	19	443
04:00		4	72			1	37				
04:15		8	65			1	33				
04:30		11	41			5	51				
04:45		14	70	37	248	10	46	17	167	54	415
05:00		13	73			10	38				
05:15		17	67			12	47				
05:30		11	49			21	39				
05:45		17	45	58	234	21	30	64	154	122	388
06:00		15	28			16	27				
06:15		19	35			28	31				
06:30		29	21			32	33				
06:45		45	37	108	121	50	28	126	119	234	240
07:00		27	32			61	30				
07:15		24	22			68	28				
07:30		42	23			52	19				
07:45		41	31	134	108	52	29	233	106	367	214
08:00		27	20			58	26				
08:15		24	20			52	21				
08:30		22	14			46	10				
08:45		20	23	93	77	47	22	203	79	296	156
09:00		19	20			35	18				
09:15		27	10			32	21				
09:30		24	15			24	12				
09:45		29	15	99	60	33	7	124	58	223	118
10:00		35	7			25	12				
10:15		15	12			28	17				
10:30		23	13			24	32				
10:45		28	5	101	37	32	17	109	78	210	115
11:00		36	20			36	19				
11:15		35	7			30	7				
11:30		32	9			41	8				
11:45		33	8	136	44	27	10	134	44	270	88
Total		813	1639			1051	1457			1864	3096
Percent		33.2%	66.8%			41.9%	58.1%			37.6%	62.4%

Accurate Counts
978-664-2565

Location : Perimeter Road North of
Location : Brown Avenue
City/State: Manchester, NH
Counter : 13866

Site Code: 17266001
17266001

Start Time	22-Oct-09 Thu	NB Morning	NB Afternoon	Hour Totals Morning	Hour Totals Afternoon	SB Morning	SB Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		2	43			6	43				
12:15		6	31			9	32				
12:30		3	29			17	26				
12:45		7	32	18	135	9	37	41	138	59	273
01:00		1	35			1	21				
01:15		2	52			2	56				
01:30		1	49			1	49				
01:45		2	27	6	163	3	40	7	166	13	329
02:00		1	46			2	31				
02:15		6	42			1	43				
02:30		5	38			1	37				
02:45		2	48	14	174	2	44	6	155	20	329
03:00		2	48			2	35				
03:15		4	48			0	42				
03:30		4	51			4	62				
03:45		5	38	15	185	3	49	9	188	24	373
04:00		8	48			1	50				
04:15		6	51			3	62				
04:30		12	58			3	53				
04:45		13	82	39	239	12	40	19	205	58	444
05:00		16	55			13	34				
05:15		13	58			11	33				
05:30		16	73			16	36				
05:45		18	69	63	255	26	38	66	141	129	396
06:00		21	60			21	43				
06:15		24	48			29	27				
06:30		26	48			43	30				
06:45		32	28	103	184	49	29	142	129	245	313
07:00		31	25			62	24				
07:15		29	28			81	26				
07:30		24	32			63	26				
07:45		36	22	120	107	72	24	278	100	398	207
08:00		41	28			57	25				
08:15		42	20			62	23				
08:30		26	25			39	29				
08:45		21	20	130	93	31	25	189	102	319	195
09:00		19	19			41	8				
09:15		21	24			26	16				
09:30		23	16			21	12				
09:45		21	13	84	72	24	14	112	50	196	122
10:00		19	7			32	5				
10:15		36	9			29	13				
10:30		29	17			31	7				
10:45		34	9	118	42	43	18	135	43	253	85
11:00		42	10			31	21				
11:15		36	12			26	17				
11:30		24	8			27	18				
11:45		44	9	146	39	31	11	115	67	261	106
Total		856	1688			1119	1484			1975	3172
Percent		33.6%	66.4%			43.0%	57.0%			38.4%	61.6%
Grand Total		2511	4935			3291	4433			5802	9368
Percent		33.7%	66.3%			42.6%	57.4%			38.2%	61.8%

ADT ADT 5,057 AADT 5,057

Accurate Counts
978-664-2565

Location : S. Perimeter Road North of
Location : Woodlawn Avenue
City/State: Manchester, NH
Counter : 192

Site Code: 17266011
17266011

Start	19-Oct-09		Tue		Wed		Thu		Fri		Sat		Sun		Week Average	
Time	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
12:00 AM	*	*	40	14	40	18	46	23	*	*	*	*	*	*	42	18
01:00	*	*	16	15	30	19	25	17	*	*	*	*	*	*	24	17
02:00	*	*	18	18	7	14	10	14	*	*	*	*	*	*	12	15
03:00	*	*	20	31	22	35	27	30	*	*	*	*	*	*	23	32
04:00	*	*	42	83	43	101	43	99	*	*	*	*	*	*	43	94
05:00	*	*	107	181	76	159	97	165	*	*	*	*	*	*	93	168
06:00	*	*	161	**283**	186	**290**	165	280	*	*	*	*	*	*	171	284
07:00	*	*	**251**	276	**239**	288	219	**290**	*	*	*	*	*	*	**236**	**285**
08:00	*	*	229	219	228	209	**231**	231	*	*	*	*	*	*	229	220
09:00	*	*	212	180	161	132	144	122	*	*	*	*	*	*	172	145
10:00	*	*	145	117	173	136	153	128	*	*	*	*	*	*	157	127
11:00	*	*	153	151	166	148	180	173	*	*	*	*	*	*	166	157
12:00 PM	*	*	189	176	182	164	207	208	*	*	*	*	*	*	193	183
01:00	*	*	148	180	170	205	155	163	*	*	*	*	*	*	158	183
02:00	*	*	208	**213**	188	184	193	193	*	*	*	*	*	*	196	197
03:00	*	*	280	178	281	207	**306**	**230**	*	*	*	*	*	*	289	205
04:00	*	*	297	169	**314**	215	299	192	*	*	*	*	*	*	**303**	192
05:00	*	*	**306**	202	313	**217**	289	230	*	*	*	*	*	*	303	**216**
06:00	*	*	139	167	170	191	162	173	*	*	*	*	*	*	157	177
07:00	*	*	152	135	133	138	110	159	*	*	*	*	*	*	132	144
08:00	*	*	141	136	150	135	154	123	*	*	*	*	*	*	148	131
09:00	*	*	106	56	101	60	124	77	*	*	*	*	*	*	110	64
10:00	*	*	79	46	98	51	89	64	*	*	*	*	*	*	89	54
11:00	*	*	42	36	36	30	51	34	*	*	*	*	*	*	43	33
Lane	0	0	3481	3262	3507	3346	3479	3418	0	0	0	0	0	0	3489	3341
Day	0		6743		6853		6897		0		0		0		6830	
AM Peak			07:00	06:00	07:00	06:00	08:00	07:00							07:00	07:00
Vol.			251	283	239	290	231	290							236	285
PM Peak			17:00	14:00	16:00	17:00	15:00	15:00							16:00	17:00
Vol.			306	213	314	217	306	230							303	216

Comb. Total	0	6743	6853	6897	0	0	0	6830

ADT ADT 6,831 AADT 6,831

Accurate Counts
978-664-2565

Location : Industrial Drive South of
Location : S. Perimeter Road
City/State: Manchester, NH
Counter : 955

Site Code: 17266012
17266012

Start	20-Oct-09	NB		Hour Totals		SB		Hour Totals		Combined Totals	
Time	Tue	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		3	38			3	22				
12:15		0	33			0	35				
12:30		2	32			3	27				
12:45		0	35	5	138	3	34	9	118	14	256
01:00		2	24			2	31				
01:15		2	22			1	30				
01:30		1	31			4	30				
01:45		2	23	7	100	2	32	9	123	16	223
02:00		1	37			1	46				
02:15		1	19			3	48				
02:30		3	23			1	32				
02:45		6	34	11	113	2	47	7	173	18	286
03:00		4	33			3	35				
03:15		3	45			0	37				
03:30		12	57			1	45				
03:45		5	37	24	172	2	38	6	155	30	327
04:00		3	47			4	32				
04:15		6	38			3	32				
04:30		14	57			8	36				
04:45		18	54	41	196	7	46	22	146	63	342
05:00		12	85			8	38				
05:15		24	44			16	36				
05:30		18	54			18	34				
05:45		23	25	77	208	28	32	70	140	147	348
06:00		27	28			22	28				
06:15		23	24			23	26				
06:30		39	17			30	25				
06:45		22	22	111	91	43	20	118	99	229	190
07:00		33	29			26	16				
07:15		51	19			35	17				
07:30		60	20			49	10				
07:45		45	5	189	73	64	10	174	53	363	126
08:00		34	17			54	10				
08:15		42	12			47	15				
08:30		35	13			47	9				
08:45		23	3	134	45	45	8	193	42	327	87
09:00		31	8			34	7				
09:15		20	4			54	10				
09:30		18	4			20	18				
09:45		31	12	100	28	25	18	133	53	233	81
10:00		18	6			17	11				
10:15		31	10			15	11				
10:30		27	5			30	16				
10:45		30	6	106	27	31	4	93	42	199	69
11:00		19	8			23	17				
11:15		26	0			25	7				
11:30		29	3			24	4				
11:45		23	5	97	16	38	2	110	30	207	46
Total		902	1207			944	1174			1846	2381
Percent		42.8%	57.2%			44.6%	55.4%			43.7%	56.3%

Accurate Counts
978-664-2565

Location : Industrial Drive South of
Location : S. Perimeter Road
City/State: Manchester, NH
Counter : 955

Site Code: 17266012
17266012

Start	21-Oct-09	NB		Hour Totals		SB		Hour Totals		Combined Totals	
Time	Wed	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		2	39			8	29				
12:15		0	36			6	32				
12:30		2	31			2	21				
12:45		1	30	5	136	0	36	16	118	21	254
01:00		3	30			4	38				
01:15		3	26			6	31				
01:30		2	29			1	29				
01:45		2	20	10	105	0	34	11	132	21	237
02:00		2	47			0	41				
02:15		0	29			2	26				
02:30		8	32			3	40				
02:45		1	34	11	142	0	26	5	133	16	275
03:00		4	33			3	40				
03:15		3	38			3	33				
03:30		4	52			2	47				
03:45		8	47	19	170	1	37	9	157	28	327
04:00		3	47			4	40				
04:15		12	51			3	28				
04:30		12	69			5	40				
04:45		17	57	44	224	11	49	23	157	67	381
05:00		13	68			6	44				
05:15		15	63			11	42				
05:30		14	41			22	40				
05:45		21	29	63	201	28	38	67	164	130	365
06:00		27	29			21	21				
06:15		34	27			20	28				
06:30		30	35			22	35				
06:45		34	23	125	114	51	21	114	105	239	219
07:00		42	22			51	17				
07:15		37	32			47	20				
07:30		53	13			36	16				
07:45		38	14	170	81	76	15	210	68	380	149
08:00		48	13			53	12				
08:15		43	6			54	17				
08:30		30	23			45	14				
08:45		11	15	132	57	23	15	175	58	307	115
09:00		31	14			20	10				
09:15		23	8			19	20				
09:30		26	5			19	11				
09:45		23	3	103	30	29	8	87	49	190	79
10:00		23	6			17	15				
10:15		17	5			29	12				
10:30		34	14			14	15				
10:45		26	6	100	31	17	12	77	54	177	85
11:00		28	7			25	9				
11:15		29	5			25	6				
11:30		39	9			25	9				
11:45		34	4	130	25	29	3	104	27	234	52
Total		912	1316			898	1222			1810	2538
Percent		40.9%	59.1%			42.4%	57.6%			41.6%	58.4%

Accurate Counts
978-664-2565

Location : Industrial Drive South of
Location : S. Perimeter Road
City/State: Manchester, NH
Counter : 955

Site Code: 17266012
17266012

Start	22-Oct-09	NB		Hour Totals		SB		Hour Totals		Combined Totals	
Time	Thu	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		3	48			4	40				
12:15		4	25			5	32				
12:30		2	40			4	26				
12:45		1	25	10	138	4	20	17	118	27	256
01:00		5	28			4	19				
01:15		3	18			2	28				
01:30		1	25			1	20				
01:45		3	30	12	101	1	29	8	96	20	197
02:00		2	30			1	28				
02:15		4	28			0	34				
02:30		3	24			3	29				
02:45		3	28	12	110	3	40	7	131	19	241
03:00		5	42			1	34				
03:15		4	58			3	39				
03:30		12	65			3	52				
03:45		11	46	32	211	1	44	8	169	40	380
04:00		2	42			5	41				
04:15		15	43			7	26				
04:30		15	57			4	29				
04:45		14	53	46	195	9	40	25	136	71	331
05:00		12	70			12	45				
05:15		16	54			16	39				
05:30		18	38			22	38				
05:45		25	26	71	188	23	48	73	170	144	358
06:00		24	42			20	21				
06:15		27	22			26	14				
06:30		34	27			39	23				
06:45		23	25	108	116	50	14	135	72	243	188
07:00		28	25			34	26				
07:15		39	8			44	22				
07:30		59	8			39	19				
07:45		54	17	180	58	77	17	194	84	374	142
08:00		36	15			50	7				
08:15		32	11			57	8				
08:30		42	18			60	15				
08:45		33	10	143	54	31	10	198	40	341	94
09:00		21	13			38	18				
09:15		22	11			16	14				
09:30		31	5			24	18				
09:45		21	14	95	43	28	13	106	63	201	106
10:00		18	8			29	17				
10:15		29	11			17	17				
10:30		24	6			21	16				
10:45		27	9	98	34	29	19	96	69	194	103
11:00		26	8			23	7				
11:15		18	6			28	4				
11:30		32	4			36	4				
11:45		39	7	115	25	29	3	116	18	231	43
Total		922	1273			983	1166			1905	2439
Percent		42.0%	58.0%			45.7%	54.3%			43.9%	56.1%
Grand Total			2736		3796		2825		3562		5561	7358
Percent			41.9%		58.1%		44.2%		55.8%		43.0%	57.0%

ADT ADT 4,306 AADT 4,306

Accurate Counts
978-664-2565

Location : Industrial Drive South of
Location : S. Perimeter Road
City/State: Manchester, NH
Counter : 955

Site Code: 17266012
17266012

Start	19-Oct-09		Tue		Wed		Thu		Fri		Sat		Sun		Week Average	
Time	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
12:00 AM	*	*	5	9	5	16	10	17	*	*	*	*	*	*	7	14
01:00	*	*	7	9	10	11	12	8	*	*	*	*	*	*	10	9
02:00	*	*	11	7	11	5	12	7	*	*	*	*	*	*	11	6
03:00	*	*	24	6	19	9	32	8	*	*	*	*	*	*	25	8
04:00	*	*	41	22	44	23	46	25	*	*	*	*	*	*	44	23
05:00	*	*	77	70	63	67	71	73	*	*	*	*	*	*	70	70
06:00	*	*	111	118	125	114	108	135	*	*	*	*	*	*	115	122
07:00	*	*	**189**	174	**170**	**210**	**180**	194	*	*	*	*	*	*	**180**	**193**
08:00	*	*	134	**193**	132	175	143	**198**	*	*	*	*	*	*	136	189
09:00	*	*	100	133	103	87	95	106	*	*	*	*	*	*	99	109
10:00	*	*	106	93	100	77	98	96	*	*	*	*	*	*	101	89
11:00	*	*	97	110	130	104	115	116	*	*	*	*	*	*	114	110
12:00 PM	*	*	138	118	136	118	138	118	*	*	*	*	*	*	137	118
01:00	*	*	100	123	105	132	101	96	*	*	*	*	*	*	102	117
02:00	*	*	113	**173**	142	133	110	131	*	*	*	*	*	*	122	146
03:00	*	*	172	155	170	157	**211**	169	*	*	*	*	*	*	184	**160**
04:00	*	*	196	146	**224**	157	195	136	*	*	*	*	*	*	**205**	146
05:00	*	*	**208**	140	201	**164**	188	**170**	*	*	*	*	*	*	199	158
06:00	*	*	91	99	114	105	116	72	*	*	*	*	*	*	107	92
07:00	*	*	73	53	81	68	58	84	*	*	*	*	*	*	71	68
08:00	*	*	45	42	57	58	54	40	*	*	*	*	*	*	52	47
09:00	*	*	28	53	30	49	43	63	*	*	*	*	*	*	34	55
10:00	*	*	27	42	31	54	34	69	*	*	*	*	*	*	31	55
11:00	*	*	16	30	25	27	25	18	*	*	*	*	*	*	22	25
Lane	0	0	2109	2118	2228	2120	2195	2149	0	0	0	0	0	0	2178	2129
Day	0		4227		4348		4344		0		0		0		4307	
AM Peak			07:00	08:00	07:00	07:00	07:00	08:00							07:00	07:00
Vol.			189	193	170	210	180	198							180	193
PM Peak			17:00	14:00	16:00	17:00	15:00	17:00							16:00	15:00
Vol.			208	173	224	164	211	170							205	160

Comb. Total	0	4227	4348	4344	0	0	0	4307

ADT ADT 4,306 AADT 4,306

Accurate Counts
978-664-2565

N/S Street : Brown Ave / Airport Rd
E/W Street: Perimeter Rd / Brown Ave
City/State : Manchester, NH
Weather : Clear

File Name : 17266001
Site Code : 17266001
Start Date : 10/22/2009

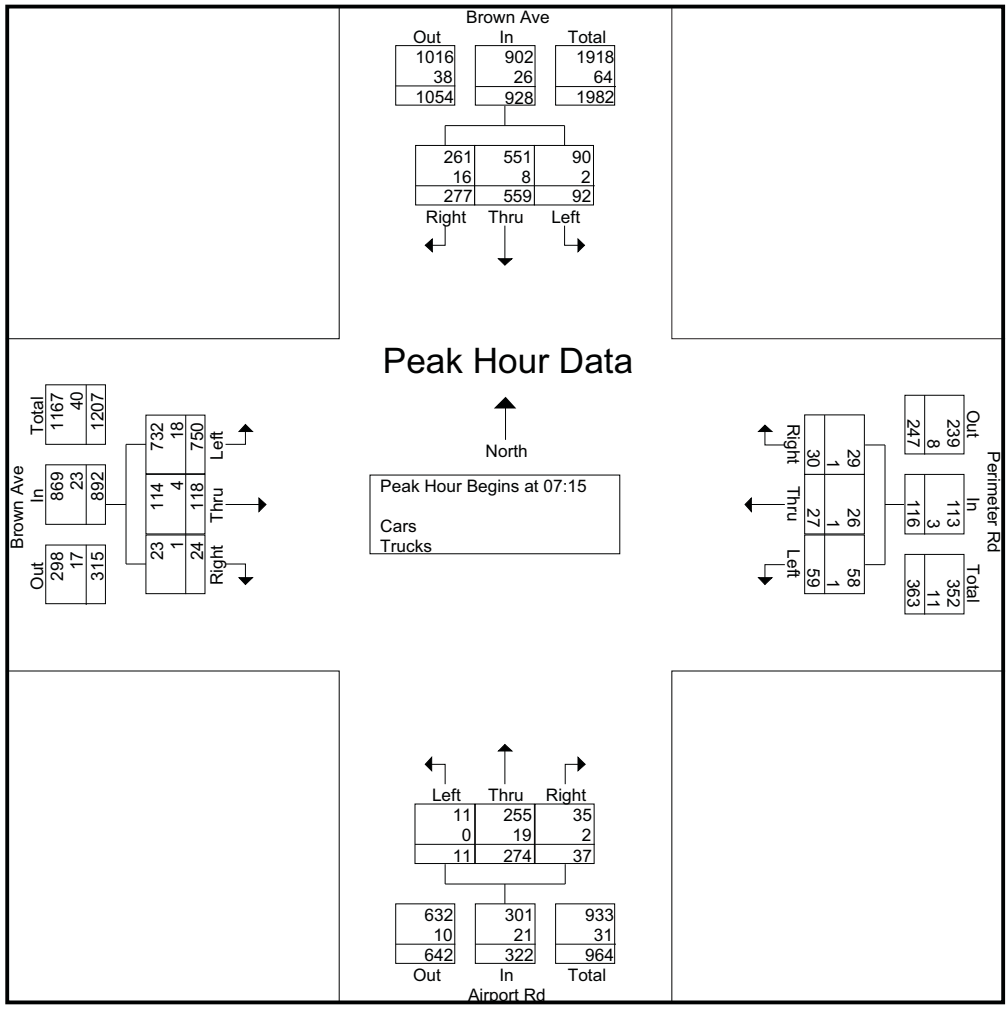
Groups Printed- Cars - Trucks

	Brown Ave From North				Perimeter Rd From East				Airport Rd From South				Brown Ave From West						
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Exclu. Total	Inclu. Total	Int. Total
06:00	9	130	21	0	12	0	3	0	1	39	8	1	40	5	2	0	1	270	271
06:15	9	144	42	0	16	4	7	0	0	54	7	0	84	11	4	0	0	382	382
06:30	15	161	48	2	17	2	2	0	3	49	6	1	116	13	6	0	3	438	441
06:45	36	183	60	0	26	5	3	0	2	80	6	0	118	12	10	0	0	541	541
Total	69	618	171	2	71	11	15	0	6	222	27	2	358	41	22	0	4	1631	1635
07:00	13	132	43	0	16	5	15	0	5	112	17	0	112	28	2	0	0	500	500
07:15	13	115	53	0	3	8	4	0	0	53	8	0	190	56	4	0	0	507	507
07:30	15	130	82	0	12	7	10	0	7	75	8	0	196	28	2	0	0	572	572
07:45	41	177	75	0	29	8	8	0	3	64	14	0	168	18	11	0	0	616	616
Total	82	554	253	0	60	28	37	0	15	304	47	0	666	130	19	0	0	2195	2195
08:00	23	137	67	0	15	4	8	0	1	82	7	0	196	16	7	0	0	563	563
08:15	36	138	55	0	7	3	6	0	1	77	10	0	148	16	5	0	0	502	502
08:30	31	142	52	0	13	9	12	0	5	84	14	0	112	10	5	0	0	489	489
08:45	16	122	53	0	21	3	9	0	3	91	8	0	125	9	2	0	0	462	462
Total	106	539	227	0	56	19	35	0	10	334	39	0	581	51	19	0	0	2016	2016
Grand Total	257	1711	651	2	187	58	87	0	31	860	113	2	1605	222	60	0	4	5842	5846
Apprch %	9.8	65.3	24.9		56.3	17.5	26.2		3.1	85.7	11.3		85.1	11.8	3.2				
Total %	4.4	29.3	11.1		3.2	1	1.5		0.5	14.7	1.9		27.5	3.8	1		0.1	99.9	
Cars	252	1676	605		184	57	83		28	764	106		1563	217	59		0	0	5598
% Cars	98.1	98	92.9	100	98.4	98.3	95.4	0	90.3	88.8	93.8	100	97.4	97.7	98.3	0	0	0	95.8
Trucks	5	35	46		3	1	4		3	96	7		42	5	1		0	0	248
% Trucks	1.9	2	7.1	0	1.6	1.7	4.6	0	9.7	11.2	6.2	0	2.6	2.3	1.7	0	0	0	4.2

	Brown Ave From North				Perimeter Rd From East				Airport Rd From South				Brown Ave From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:00 to 08:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15																	
07:15	13	115	53	181	3	8	4	15	0	53	8	61	190	56	4	250	507
07:30	15	130	82	227	12	7	10	29	7	75	8	90	196	28	2	226	572
07:45	41	177	75	293	29	8	8	45	3	64	14	81	168	18	11	197	616
08:00	23	137	67	227	15	4	8	27	1	82	7	90	196	16	7	219	563
Total Volume	92	559	277	928	59	27	30	116	11	274	37	322	750	118	24	892	2258
% App. Total	9.9	60.2	29.8		50.9	23.3	25.9		3.4	85.1	11.5		84.1	13.2	2.7		
PHF	.561	.790	.845	.792	.509	.844	.750	.644	.393	.835	.661	.894	.957	.527	.545	.892	.916
Cars	90	551	261	902	58	26	29	113	11	255	35	301	732	114	23	869	2185
% Cars	97.8	98.6	94.2	97.2	98.3	96.3	96.7	97.4	100	93.1	94.6	93.5	97.6	96.6	95.8	97.4	96.8
Trucks	2	8	16	26	1	1	1	3	0	19	2	21	18	4	1	23	73
% Trucks	2.2	1.4	5.8	2.8	1.7	3.7	3.3	2.6	0	6.9	5.4	6.5	2.4	3.4	4.2	2.6	3.2

Accurate Counts
978-664-2565

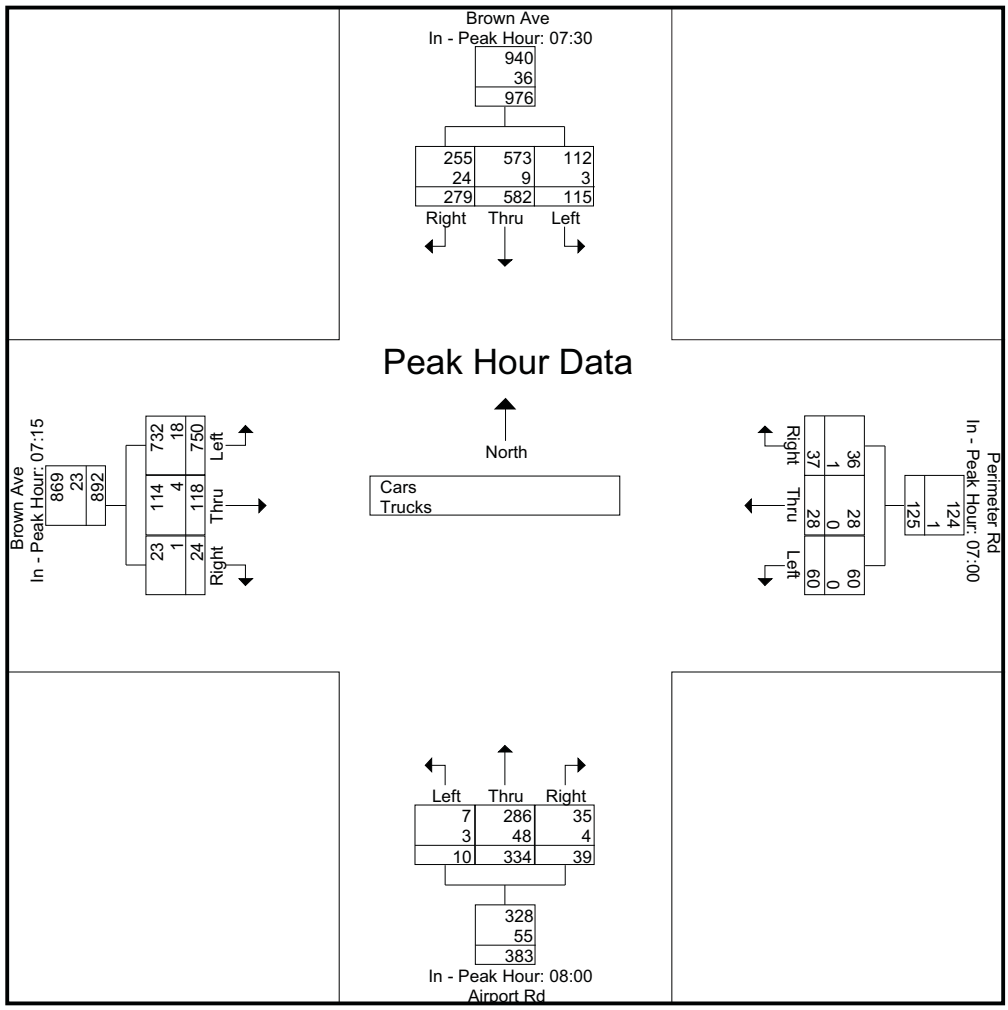
File Name : 17266001
Site Code : 17266001
Start Date : 10/22/2009
Page No : 2



Peak Hour Analysis From 06:00 to 08:45 - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30				07:00				08:00				07:15			
+0 mins.	15	130	82	227	16	5	15	36	1	82	7	90	190	56	4	250
+15 mins.	41	177	75	293	3	8	4	15	1	77	10	88	196	28	2	226
+30 mins.	23	137	67	227	12	7	10	29	5	84	14	103	168	18	11	197
+45 mins.	36	138	55	229	29	8	8	45	3	91	8	102	196	16	7	219
Total Volume	115	582	279	976	60	28	37	125	10	334	39	383	750	118	24	892
% App. Total	11.8	59.6	28.6		48	22.4	29.6		2.6	87.2	10.2		84.1	13.2	2.7	
PHF	.701	.822	.851	.833	.517	.875	.617	.694	.500	.918	.696	.930	.957	.527	.545	.892
Cars	112	573	255	940	60	28	36	124	7	286	35	328	732	114	23	869
% Cars	97.4	98.5	91.4	96.3	100	100	97.3	99.2	70	85.6	89.7	85.6	97.6	96.6	95.8	97.4
Trucks	3	9	24	36	0	0	1	1	3	48	4	55	18	4	1	23
% Trucks	2.6	1.5	8.6	3.7	0	0	2.7	0.8	30	14.4	10.3	14.4	2.4	3.4	4.2	2.6

File Name : 17266001
Site Code : 17266001
Start Date : 10/22/2009
Page No : 3



Accurate Counts
978-664-2565

N/S Street : Brown Ave / Airport Rd
E/W Street: Perimeter Rd / Brown Ave
City/State : Manchester, NH
Weather : Clear

File Name : 17266001
Site Code : 17266001
Start Date : 10/22/2009

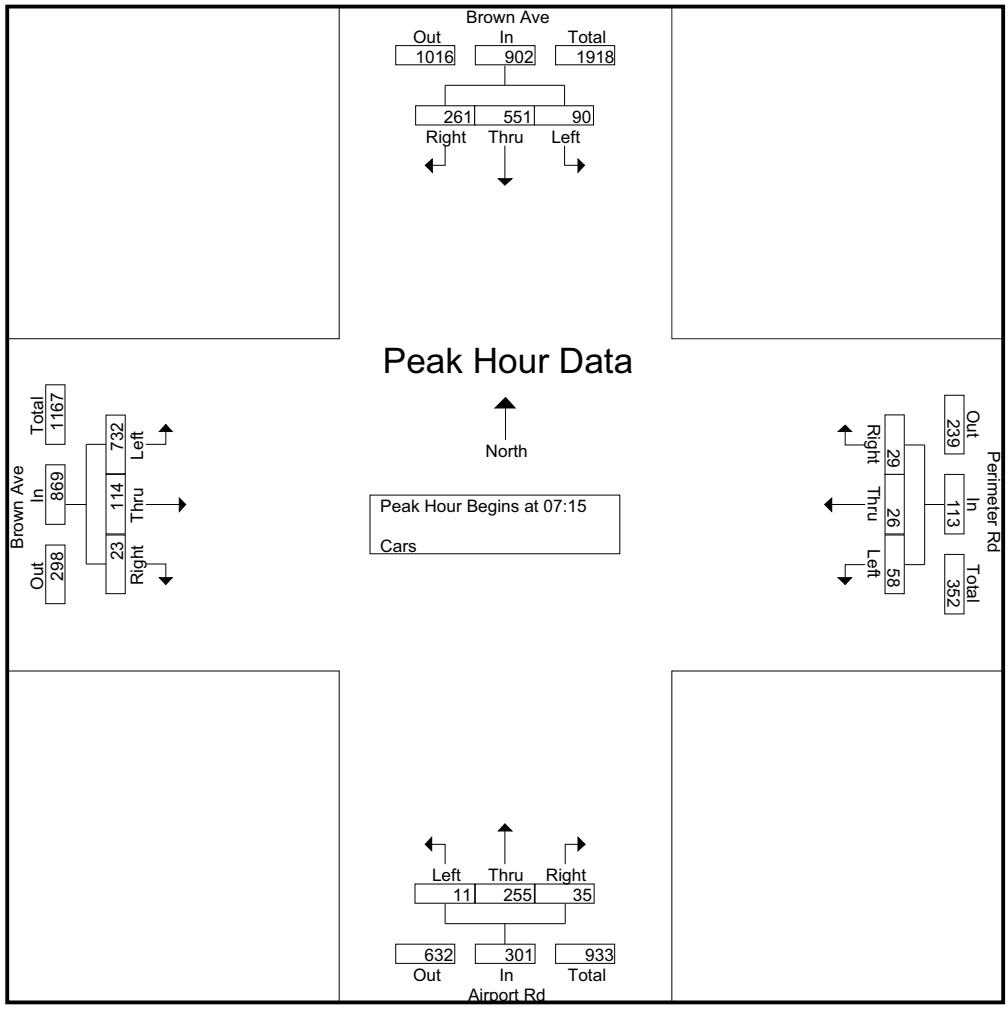
Groups Printed- Cars

	Brown Ave From North				Perimeter Rd From East				Airport Rd From South				Brown Ave From West						
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Exclu. Total	Inclu. Total	Int. Total
06:00	9	125	19	0	12	0	3	0	1	35	8	1	40	5	2	0	1	259	260
06:15	8	143	41	0	16	4	6	0	0	50	7	0	83	11	4	0	0	373	373
06:30	15	158	47	2	17	2	2	0	3	42	6	1	114	13	6	0	3	425	428
06:45	36	180	53	0	26	5	3	0	2	69	5	0	114	12	10	0	0	515	515
Total	68	606	160	2	71	11	14	0	6	196	26	2	351	41	22	0	4	1572	1576
07:00	12	127	41	0	16	5	15	0	5	103	17	0	108	27	2	0	0	478	478
07:15	13	114	52	0	3	8	4	0	0	48	7	0	188	56	4	0	0	497	497
07:30	15	125	74	0	12	7	10	0	7	72	8	0	193	26	2	0	0	551	551
07:45	40	175	70	0	29	8	7	0	3	59	13	0	166	17	11	0	0	598	598
Total	80	541	237	0	60	28	36	0	15	282	45	0	655	126	19	0	0	2124	2124
08:00	22	137	65	0	14	3	8	0	1	76	7	0	185	15	6	0	0	539	539
08:15	35	136	46	0	6	3	6	0	0	65	9	0	142	16	5	0	0	469	469
08:30	31	138	45	0	13	9	12	0	3	59	13	0	110	10	5	0	0	448	448
08:45	16	118	52	0	20	3	7	0	3	86	6	0	120	9	2	0	0	442	442
Total	104	529	208	0	53	18	33	0	7	286	35	0	557	50	18	0	0	1898	1898
Grand Total	252	1676	605	2	184	57	83	0	28	764	106	2	1563	217	59	0	4	5594	5598
Apprch %	9.9	66.2	23.9		56.8	17.6	25.6		3.1	85.1	11.8		85	11.8	3.2				
Total %	4.5	30	10.8		3.3	1	1.5		0.5	13.7	1.9		27.9	3.9	1.1		0.1	99.9	

	Brown Ave From North				Perimeter Rd From East				Airport Rd From South				Brown Ave From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:00 to 08:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15																	
07:15	13	114	52	179	3	8	4	15	0	48	7	55	188	56	4	248	497
07:30	15	125	74	214	12	7	10	29	7	72	8	87	193	26	2	221	551
07:45	40	175	70	285	29	8	7	44	3	59	13	75	166	17	11	194	598
08:00	22	137	65	224	14	3	8	25	1	76	7	84	185	15	6	206	539
Total Volume	90	551	261	902	58	26	29	113	11	255	35	301	732	114	23	869	2185
% App. Total	10	61.1	28.9		51.3	23	25.7		3.7	84.7	11.6		84.2	13.1	2.6		
PHF	.563	.787	.882	.791	.500	.813	.725	.642	.393	.839	.673	.865	.948	.509	.523	.876	.913

Accurate Counts
978-664-2565

File Name : 17266001
Site Code : 17266001
Start Date : 10/22/2009
Page No : 2

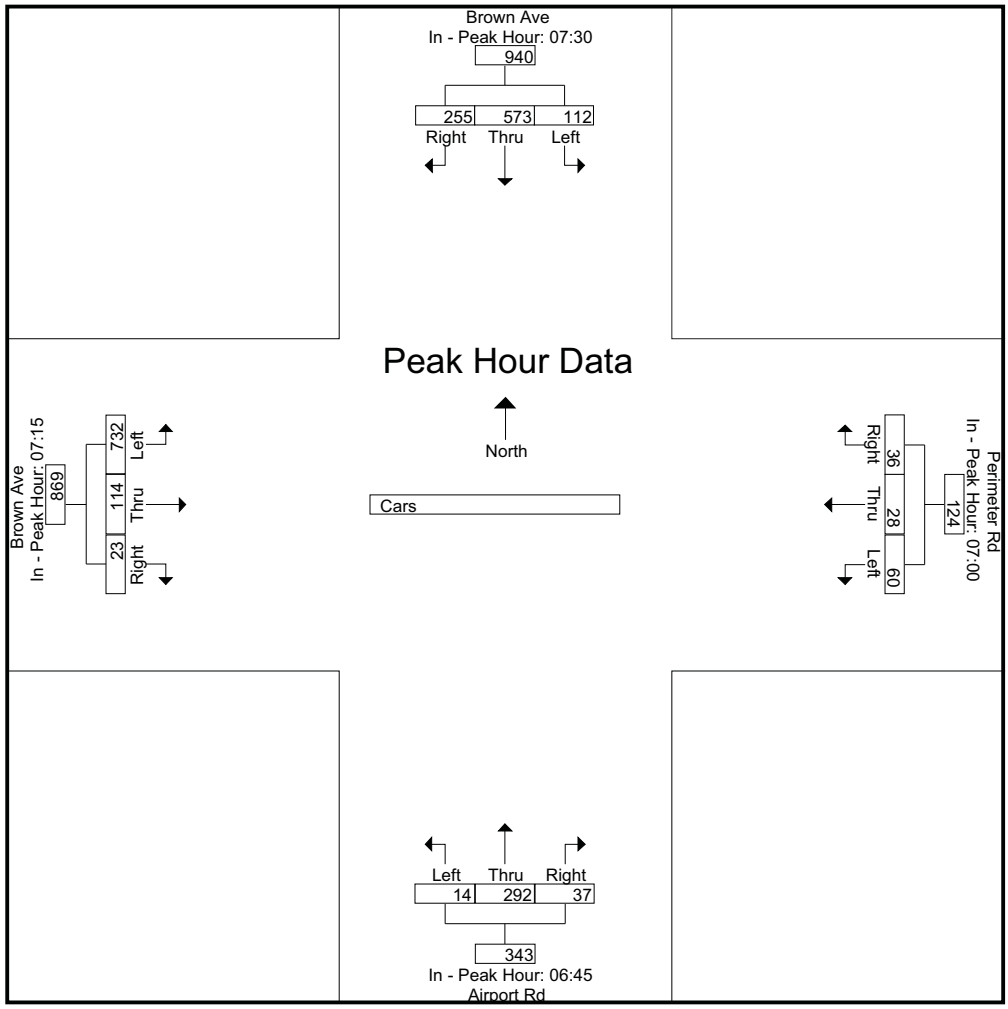


Peak Hour Analysis From 06:00 to 08:45 - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30				07:00				06:45				07:15			
+0 mins.	15	125	74	214	16	5	15	36	2	69	5	76	188	56	4	248
+15 mins.	40	175	70	285	3	8	4	15	5	103	17	125	193	26	2	221
+30 mins.	22	137	65	224	12	7	10	29	0	48	7	55	166	17	11	194
+45 mins.	35	136	46	217	29	8	7	44	7	72	8	87	185	15	6	206
Total Volume	112	573	255	940	60	28	36	124	14	292	37	343	732	114	23	869
% App. Total	11.9	61	27.1		48.4	22.6	29		4.1	85.1	10.8		84.2	13.1	2.6	
PHF	.700	.819	.861	.825	.517	.875	.600	.705	.500	.709	.544	.686	.948	.509	.523	.876

Accurate Counts
978-664-2565

File Name : 17266001
Site Code : 17266001
Start Date : 10/22/2009
Page No : 3



Accurate Counts
978-664-2565

N/S Street : Brown Ave / Airport Rd
E/W Street: Perimeter Rd / Brown Ave
City/State : Manchester, NH
Weather : Clear

File Name : 17266001
Site Code : 17266001
Start Date : 10/22/2009

Groups Printed- Trucks

	Brown Ave From North				Perimeter Rd From East				Airport Rd From South				Brown Ave From West						
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Exclu. Total	Inclu. Total	Int. Total
06:00	0	5	2	0	0	0	0	0	0	4	0	0	0	0	0	0	0	11	11
06:15	1	1	1	0	0	0	1	0	0	4	0	0	1	0	0	0	0	9	9
06:30	0	3	1	0	0	0	0	0	0	7	0	0	2	0	0	0	0	13	13
06:45	0	3	7	0	0	0	0	0	0	11	1	0	4	0	0	0	0	26	26
Total	1	12	11	0	0	0	1	0	0	26	1	0	7	0	0	0	0	59	59
07:00	1	5	2	0	0	0	0	0	0	9	0	0	4	1	0	0	0	22	22
07:15	0	1	1	0	0	0	0	0	0	5	1	0	2	0	0	0	0	10	10
07:30	0	5	8	0	0	0	0	0	0	3	0	0	3	2	0	0	0	21	21
07:45	1	2	5	0	0	0	1	0	0	5	1	0	2	1	0	0	0	18	18
Total	2	13	16	0	0	0	1	0	0	22	2	0	11	4	0	0	0	71	71
08:00	1	0	2	0	1	1	0	0	0	6	0	0	11	1	1	0	0	24	24
08:15	1	2	9	0	1	0	0	0	1	12	1	0	6	0	0	0	0	33	33
08:30	0	4	7	0	0	0	0	0	2	25	1	0	2	0	0	0	0	41	41
08:45	0	4	1	0	1	0	2	0	0	5	2	0	5	0	0	0	0	20	20
Total	2	10	19	0	3	1	2	0	3	48	4	0	24	1	1	0	0	118	118
Grand Total	5	35	46	0	3	1	4	0	3	96	7	0	42	5	1	0	0	248	248
Apprch %	5.8	40.7	53.5		37.5	12.5	50		2.8	90.6	6.6		87.5	10.4	2.1				
Total %	2	14.1	18.5		1.2	0.4	1.6		1.2	38.7	2.8		16.9	2	0.4		0	100	

	Brown Ave From North				Perimeter Rd From East				Airport Rd From South				Brown Ave From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:00 to 08:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00																	
08:00	1	0	2	3	1	1	0	2	0	6	0	6	11	1	1	13	24
08:15	1	2	9	12	1	0	0	1	1	12	1	14	6	0	0	6	33
08:30	0	4	7	11	0	0	0	0	2	25	1	28	2	0	0	2	41
08:45	0	4	1	5	1	0	2	3	0	5	2	7	5	0	0	5	20
Total Volume	2	10	19	31	3	1	2	6	3	48	4	55	24	1	1	26	118
% App. Total	6.5	32.3	61.3		50	16.7	33.3		5.5	87.3	7.3		92.3	3.8	3.8		
PHF	.500	.625	.528	.646	.750	.250	.250	.500	.375	.480	.500	.491	.545	.250	.250	.500	.720

Accurate Counts
978-664-2565

File Name : 17266001
Site Code : 17266001
Start Date : 10/22/2009
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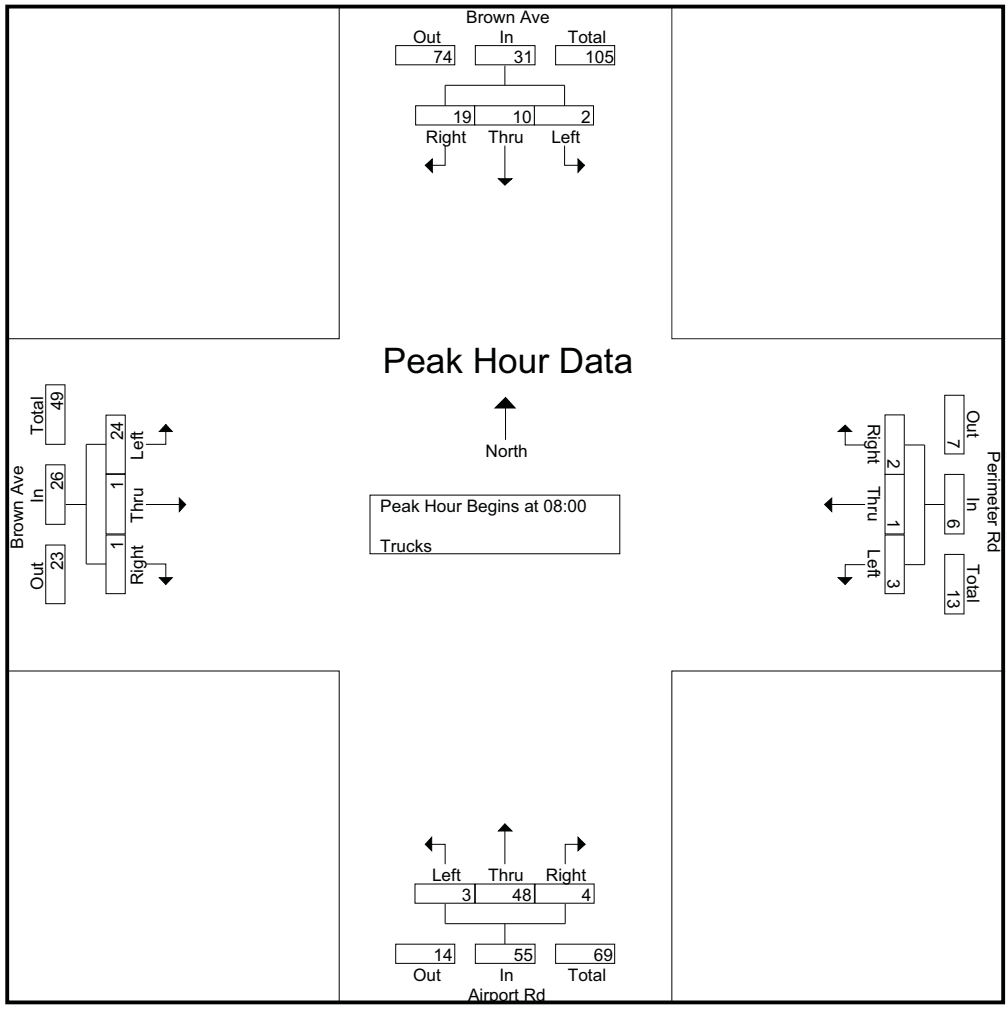

Peak Hour Analysis From 06:00 to 08:45 - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30				08:00				08:00				07:30			
+0 mins.	0	5	8	13	1	1	0	2	0	6	0	6	3	2	0	5
+15 mins.	1	2	5	8	1	0	0	1	1	12	1	14	2	1	0	3
+30 mins.	1	0	2	3	0	0	0	0	2	25	1	28	11	1	1	13
+45 mins.	1	2	9	12	1	0	2	3	0	5	2	7	6	0	0	6
Total Volume	3	9	24	36	3	1	2	6	3	48	4	55	22	4	1	27
% App. Total	8.3	25	66.7		50	16.7	33.3		5.5	87.3	7.3		81.5	14.8	3.7	
PHF	.750	.450	.667	.692	.750	.250	.250	.500	.375	.480	.500	.491	.500	.500	.250	.519

Accurate Counts
978-664-2565

File Name : 17266001
Site Code : 17266001
Start Date : 10/22/2009
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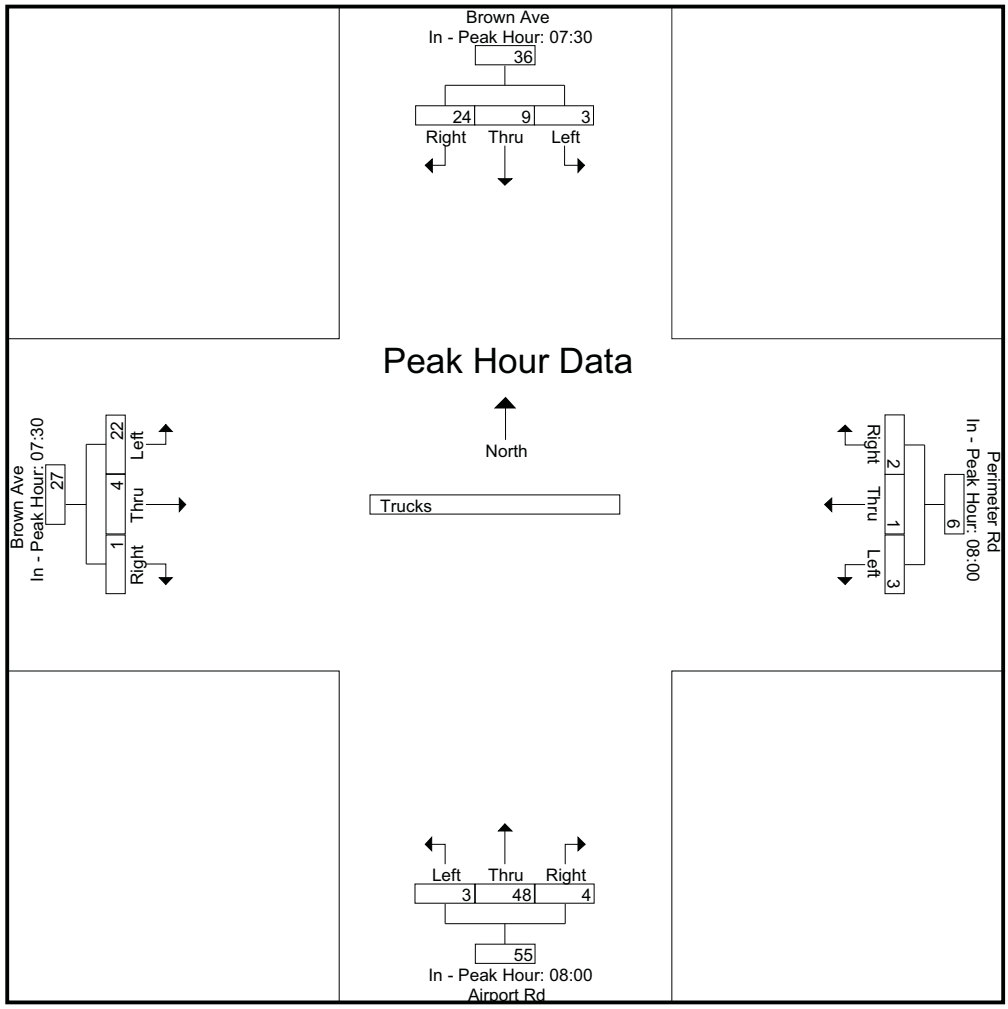

Accurate Counts
978-664-2565

N/S Street : Brown Ave / Airport Rd
E/W Street: Perimeter Rd / Brown Ave
City/State : Manchester, NH
Weather : Clear

File Name : 17266001
Site Code : 17266001
Start Date : 10/22/2009

Groups Printed- Cars - Trucks

	Brown Ave From North				Perimeter Rd From East				Airport Rd From South				Brown Ave From West						
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Exclu. Total	Inclu. Total	Int. Total
16:00	12	149	138	0	21	14	39	0	8	169	16	0	82	9	5	0	0	662	662
16:15	10	131	154	1	13	19	31	0	7	181	18	0	89	10	5	0	1	668	669
16:30	14	137	140	0	15	7	22	0	5	198	26	0	131	13	3	0	0	711	711
16:45	7	116	164	0	14	18	31	2	7	171	24	0	107	17	8	0	2	684	686
Total	43	533	596	1	63	58	123	2	27	719	84	0	409	49	21	0	3	2725	2728
17:00	3	96	148	0	13	17	40	0	10	249	18	0	105	13	4	0	0	716	716
17:15	8	92	197	0	12	27	32	0	12	193	32	0	95	10	5	1	1	715	716
17:30	9	88	161	0	11	19	22	0	8	169	16	0	91	16	4	0	0	614	614
17:45	7	98	160	0	13	17	13	0	3	81	12	0	94	11	4	0	0	513	513
Total	27	374	666	0	49	80	107	0	33	692	78	0	385	50	17	1	1	2558	2559
18:00	7	54	132	0	11	11	9	0	4	73	11	0	107	12	5	0	0	436	436
18:15	8	74	103	0	13	13	9	0	9	69	11	0	82	12	1	0	0	404	404
18:30	4	83	94	0	6	10	6	0	4	118	18	0	82	11	5	0	0	441	441
18:45	13	82	105	0	14	13	7	0	1	97	9	0	62	15	3	0	0	421	421
Total	32	293	434	0	44	47	31	0	18	357	49	0	333	50	14	0	0	1702	1702
Grand Total	102	1200	1696	1	156	185	261	2	78	1768	211	0	1127	149	52	1	4	6985	6989
Apprch %	3.4	40	56.6		25.9	30.7	43.4		3.8	86	10.3		84.9	11.2	3.9				
Total %	1.5	17.2	24.3		2.2	2.6	3.7		1.1	25.3	3		16.1	2.1	0.7		0.1	99.9	
Cars	101	1137	1669		151	185	259		77	1735	207		1105	148	47		0	0	6825
% Cars	99	94.8	98.4	100	96.8	100	99.2	100	98.7	98.1	98.1	0	98	99.3	90.4	100	0	0	97.7
Trucks	1	63	27		5	0	2		1	33	4		22	1	5		0	0	164
% Trucks	1	5.2	1.6	0	3.2	0	0.8	0	1.3	1.9	1.9	0	2	0.7	9.6	0	0	0	2.3

	Brown Ave From North				Perimeter Rd From East				Airport Rd From South				Brown Ave From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 18:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 16:30																	
16:30	14	137	140	291	15	7	22	44	5	198	26	229	131	13	3	147	711
16:45	7	116	164	287	14	18	31	63	7	171	24	202	107	17	8	132	684
17:00	3	96	148	247	13	17	40	70	10	249	18	277	105	13	4	122	716
17:15	8	92	197	297	12	27	32	71	12	193	32	237	95	10	5	110	715
Total Volume	32	441	649	1122	54	69	125	248	34	811	100	945	438	53	20	511	2826
% App. Total	2.9	39.3	57.8		21.8	27.8	50.4		3.6	85.8	10.6		85.7	10.4	3.9		
PHF	.571	.805	.824	.944	.900	.639	.781	.873	.708	.814	.781	.853	.836	.779	.625	.869	.987
Cars	31	421	636	1088	52	69	123	244	33	803	98	934	427	53	16	496	2762
% Cars	96.9	95.5	98.0	97.0	96.3	100	98.4	98.4	97.1	99.0	98.0	98.8	97.5	100	80.0	97.1	97.7
Trucks	1	20	13	34	2	0	2	4	1	8	2	11	11	0	4	15	64
% Trucks	3.1	4.5	2.0	3.0	3.7	0	1.6	1.6	2.9	1.0	2.0	1.2	2.5	0	20.0	2.9	2.3

File Name : 17266001
Site Code : 17266001
Start Date : 10/22/2009
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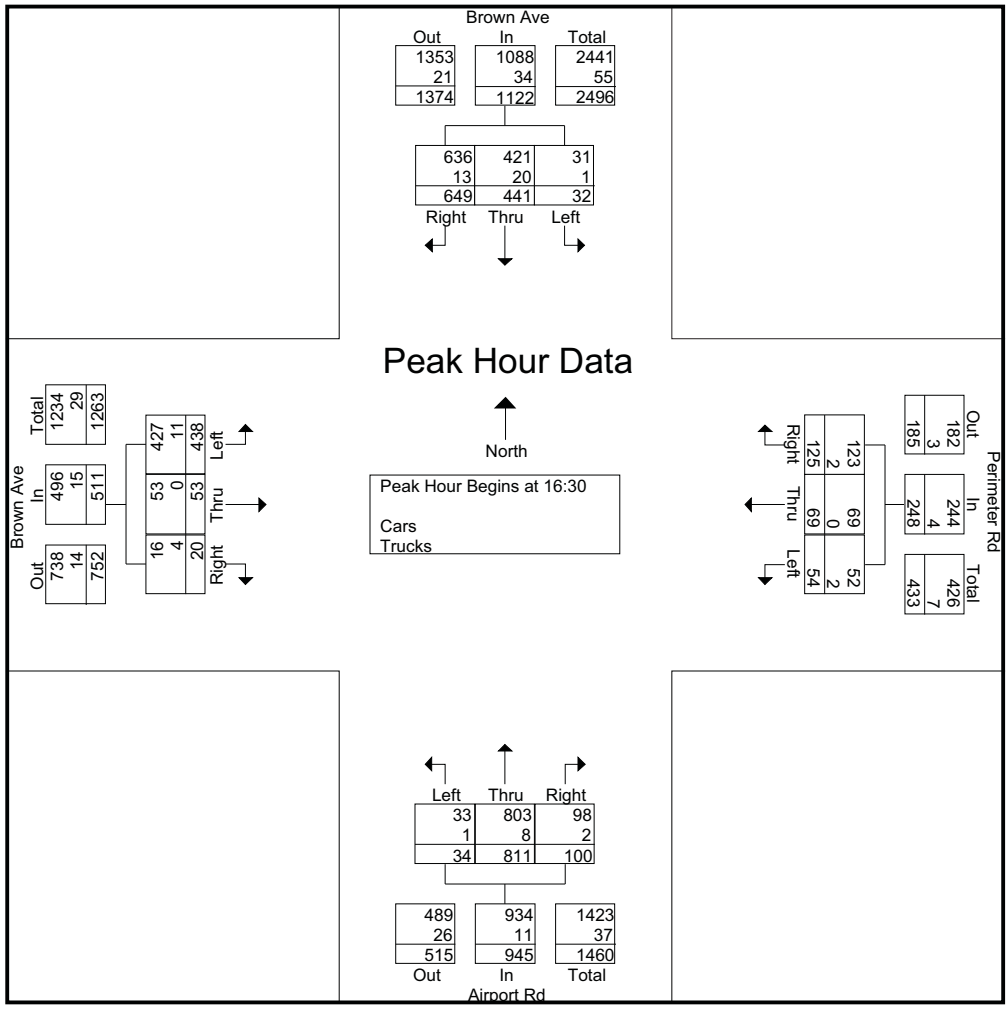

Peak Hour Analysis From 16:00 to 18:45 - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	16:00				16:45				16:30				16:30			
+0 mins.	12	149	138	299	14	18	31	63	5	198	26	229	131	13	3	147
+15 mins.	10	131	154	295	13	17	40	70	7	171	24	202	107	17	8	132
+30 mins.	14	137	140	291	12	27	32	71	10	249	18	277	105	13	4	122
+45 mins.	7	116	164	287	11	19	22	52	12	193	32	237	95	10	5	110
Total Volume	43	533	596	1172	50	81	125	256	34	811	100	945	438	53	20	511
% App. Total	3.7	45.5	50.9		19.5	31.6	48.8		3.6	85.8	10.6		85.7	10.4	3.9	
PHF	.768	.894	.909	.980	.893	.750	.781	.901	.708	.814	.781	.853	.836	.779	.625	.869
Cars	42	511	583	1136	48	81	124	253	33	803	98	934	427	53	16	496
% Cars	97.7	95.9	97.8	96.9	96	100	99.2	98.8	97.1	99	98	98.8	97.5	100	80	97.1
Trucks	1	22	13	36	2	0	1	3	1	8	2	11	11	0	4	15
% Trucks	2.3	4.1	2.2	3.1	4	0	0.8	1.2	2.9	1	2	1.2	2.5	0	20	2.9

Accurate Counts
978-664-2565

File Name : 17266001
Site Code : 17266001
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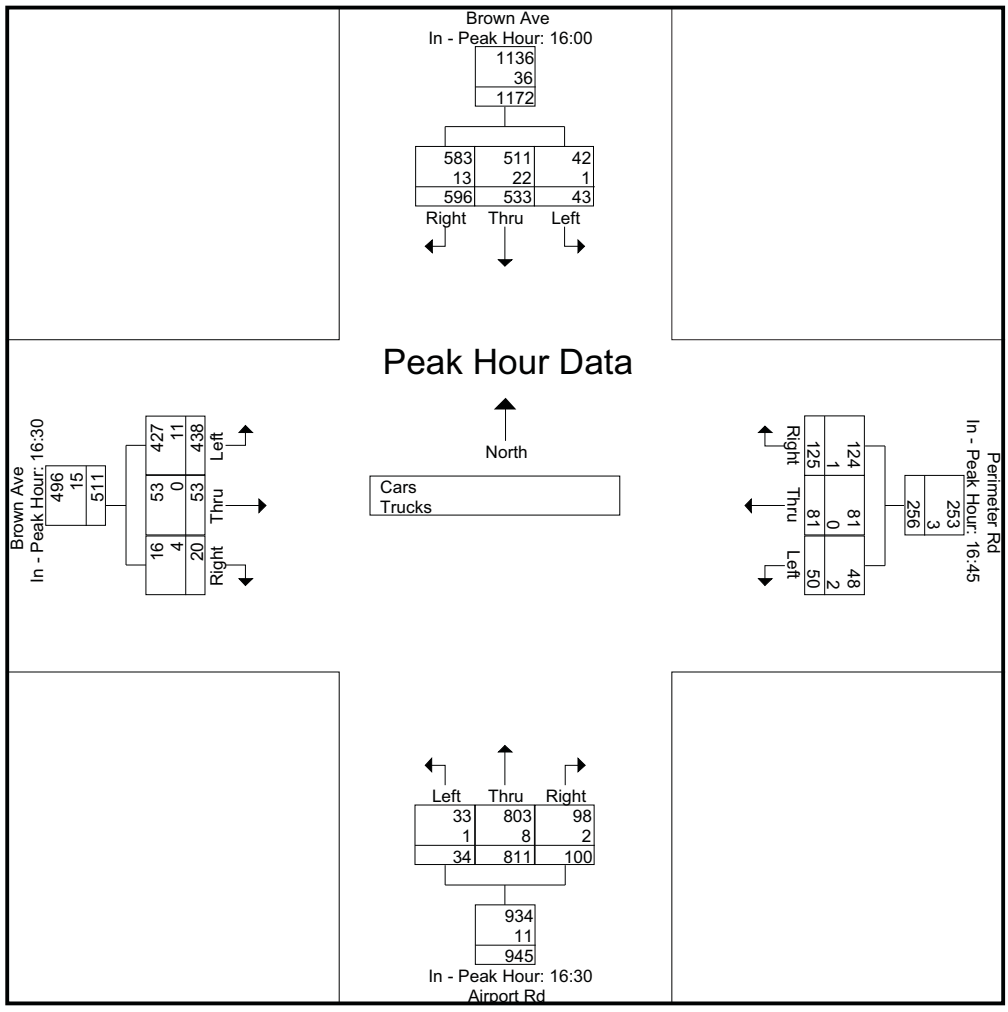

Accurate Counts
978-664-2565

N/S Street : Brown Ave / Airport Rd
E/W Street: Perimeter Rd / Brown Ave
City/State : Manchester, NH
Weather : Clear

File Name : 17266001
Site Code : 17266001
Start Date : 10/22/2009

Groups Printed- Cars

	Brown Ave From North				Perimeter Rd From East				Airport Rd From South				Brown Ave From West						
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Exclu. Total	Inclu. Total	Int. Total
16:00	12	145	133	0	19	14	39	0	8	166	16	0	81	9	5	0	0	647	647
16:15	10	124	152	1	13	19	31	0	7	176	17	0	87	10	5	0	1	651	652
16:30	14	132	136	0	14	7	21	0	4	195	26	0	129	13	1	0	0	692	692
16:45	6	110	162	0	14	18	30	2	7	170	22	0	103	17	7	0	2	666	668
Total	42	511	583	1	60	58	121	2	26	707	81	0	400	49	18	0	3	2656	2659
17:00	3	90	143	0	12	17	40	0	10	247	18	0	100	13	4	0	0	697	697
17:15	8	89	195	0	12	27	32	0	12	191	32	0	95	10	4	1	1	707	708
17:30	9	85	158	0	10	19	22	0	8	163	16	0	89	16	4	0	0	599	599
17:45	7	89	158	0	13	17	13	0	3	80	11	0	93	11	4	0	0	499	499
Total	27	353	654	0	47	80	107	0	33	681	77	0	377	50	16	1	1	2502	2503
18:00	7	49	131	0	11	11	9	0	4	70	11	0	107	11	5	0	0	426	426
18:15	8	70	102	0	13	13	9	0	9	68	11	0	82	12	1	0	0	398	398
18:30	4	75	94	0	6	10	6	0	4	117	18	0	80	11	4	0	0	429	429
18:45	13	79	105	0	14	13	7	0	1	92	9	0	59	15	3	0	0	410	410
Total	32	273	432	0	44	47	31	0	18	347	49	0	328	49	13	0	0	1663	1663
Grand Total	101	1137	1669	1	151	185	259	2	77	1735	207	0	1105	148	47	1	4	6821	6825
Apprch %	3.5	39.1	57.4		25.4	31.1	43.5		3.8	85.9	10.3		85	11.4	3.6				
Total %	1.5	16.7	24.5		2.2	2.7	3.8		1.1	25.4	3		16.2	2.2	0.7		0.1	99.9	

	Brown Ave From North				Perimeter Rd From East				Airport Rd From South				Brown Ave From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 18:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 16:30																	
16:30	14	132	136	282	14	7	21	42	4	195	26	225	129	13	1	143	692
16:45	6	110	162	278	14	18	30	62	7	170	22	199	103	17	7	127	666
17:00	3	90	143	236	12	17	40	69	10	247	18	275	100	13	4	117	697
17:15	8	89	195	292	12	27	32	71	12	191	32	235	95	10	4	109	707
Total Volume	31	421	636	1088	52	69	123	244	33	803	98	934	427	53	16	496	2762
% App. Total	2.8	38.7	58.5		21.3	28.3	50.4		3.5	86	10.5		86.1	10.7	3.2		
PHF	.554	.797	.815	.932	.929	.639	.769	.859	.688	.813	.766	.849	.828	.779	.571	.867	.977

Accurate Counts
978-664-2565

File Name : 17266001
Site Code : 17266001
Start Date : 10/22/2009
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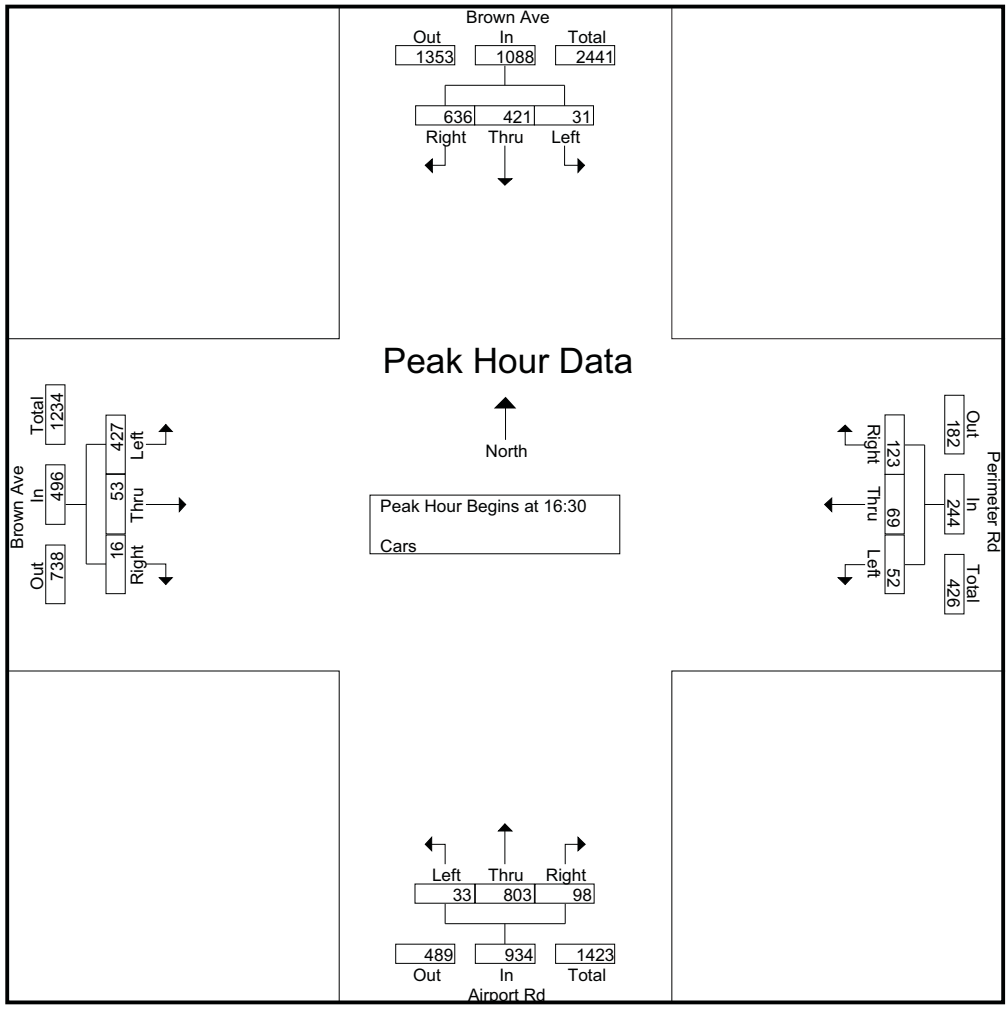

Peak Hour Analysis From 16:00 to 18:45 - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	16:00				16:45				16:30				16:30			
+0 mins.	12	145	133	290	14	18	30	62	4	195	26	225	129	13	1	143
+15 mins.	10	124	152	286	12	17	40	69	7	170	22	199	103	17	7	127
+30 mins.	14	132	136	282	12	27	32	71	10	247	18	275	100	13	4	117
+45 mins.	6	110	162	278	10	19	22	51	12	191	32	235	95	10	4	109
Total Volume	42	511	583	1136	48	81	124	253	33	803	98	934	427	53	16	496
% App. Total	3.7	45	51.3		19	32	49		3.5	86	10.5		86.1	10.7	3.2	
PHF	.750	.881	.900	.979	.857	.750	.775	.891	.688	.813	.766	.849	.828	.779	.571	.867

File Name : 17266001
Site Code : 17266001
Start Date : 10/22/2009
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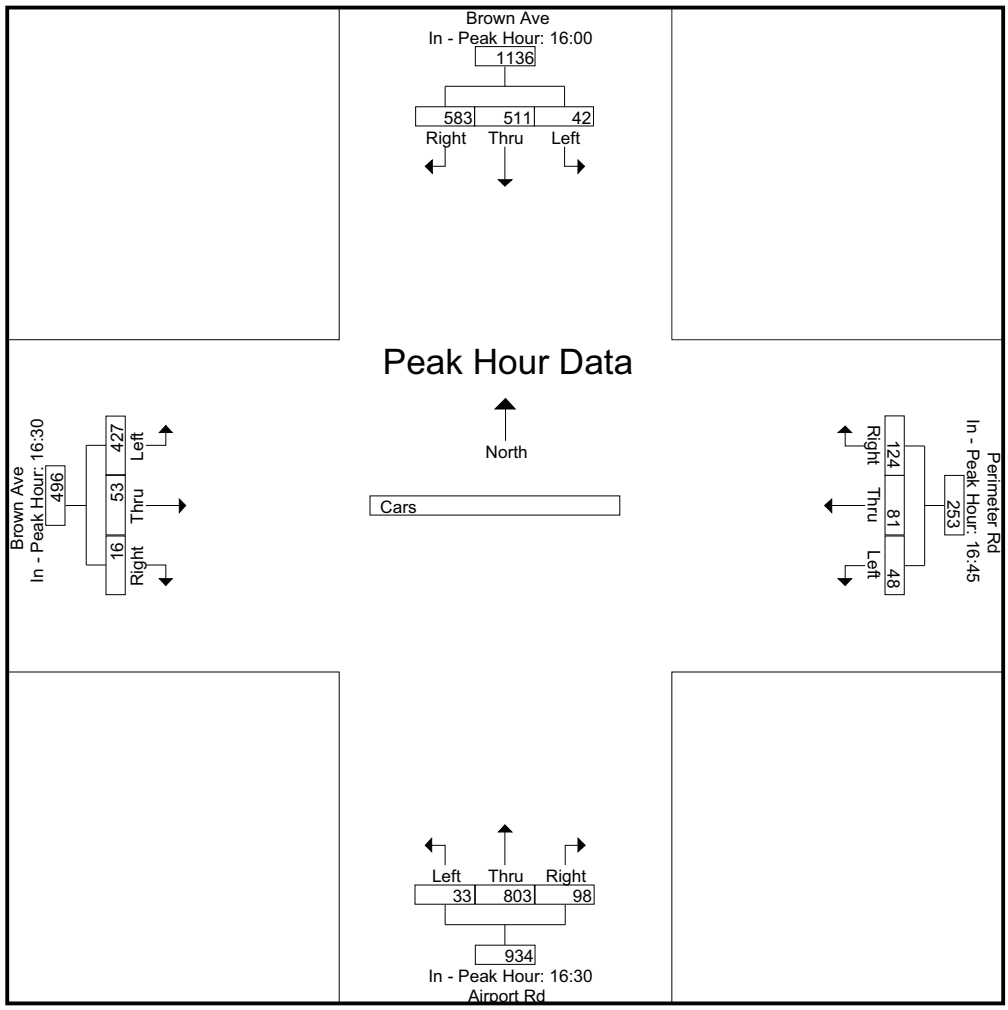

Accurate Counts
978-664-2565

N/S Street : Brown Ave / Airport Rd
E/W Street: Perimeter Rd / Brown Ave
City/State : Manchester, NH
Weather : Clear

File Name : 17266001
Site Code : 17266001
Start Date : 10/22/2009

Groups Printed- Trucks

	Brown Ave From North				Perimeter Rd From East				Airport Rd From South				Brown Ave From West						
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Exclu. Total	Inclu. Total	Int. Total
16:00	0	4	5	0	2	0	0	0	0	3	0	0	1	0	0	0	0	15	15
16:15	0	7	2	0	0	0	0	0	0	5	1	0	2	0	0	0	0	17	17
16:30	0	5	4	0	1	0	1	0	1	3	0	0	2	0	2	0	0	19	19
16:45	1	6	2	0	0	0	1	0	0	1	2	0	4	0	1	0	0	18	18
Total	1	22	13	0	3	0	2	0	1	12	3	0	9	0	3	0	0	69	69
17:00	0	6	5	0	1	0	0	0	0	2	0	0	5	0	0	0	0	19	19
17:15	0	3	2	0	0	0	0	0	0	2	0	0	0	0	1	0	0	8	8
17:30	0	3	3	0	1	0	0	0	0	6	0	0	2	0	0	0	0	15	15
17:45	0	9	2	0	0	0	0	0	0	1	1	0	1	0	0	0	0	14	14
Total	0	21	12	0	2	0	0	0	0	11	1	0	8	0	1	0	0	56	56
18:00	0	5	1	0	0	0	0	0	0	3	0	0	0	1	0	0	0	10	10
18:15	0	4	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	6	6
18:30	0	8	0	0	0	0	0	0	0	1	0	0	2	0	1	0	0	12	12
18:45	0	3	0	0	0	0	0	0	0	5	0	0	3	0	0	0	0	11	11
Total	0	20	2	0	0	0	0	0	0	10	0	0	5	1	1	0	0	39	39
Grand Total	1	63	27	0	5	0	2	0	1	33	4	0	22	1	5	0	0	164	164
Apprch %	1.1	69.2	29.7		71.4	0	28.6		2.6	86.8	10.5		78.6	3.6	17.9				
Total %	0.6	38.4	16.5		3	0	1.2		0.6	20.1	2.4		13.4	0.6	3		0	100	

	Brown Ave From North				Perimeter Rd From East				Airport Rd From South				Brown Ave From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 18:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 16:15																	
16:15	0	7	2	9	0	0	0	0	0	5	1	6	2	0	0	2	17
16:30	0	5	4	9	1	0	1	2	1	3	0	4	2	0	2	4	19
16:45	1	6	2	9	0	0	1	1	0	1	2	3	4	0	1	5	18
17:00	0	6	5	11	1	0	0	1	0	2	0	2	5	0	0	5	19
Total Volume	1	24	13	38	2	0	2	4	1	11	3	15	13	0	3	16	73
% App. Total	2.6	63.2	34.2		50	0	50		6.7	73.3	20		81.2	0	18.8		
PHF	.250	.857	.650	.864	.500	.000	.500	.500	.250	.550	.375	.625	.650	.000	.375	.800	.961

File Name : 17266001
Site Code : 17266001
Start Date : 10/22/2009
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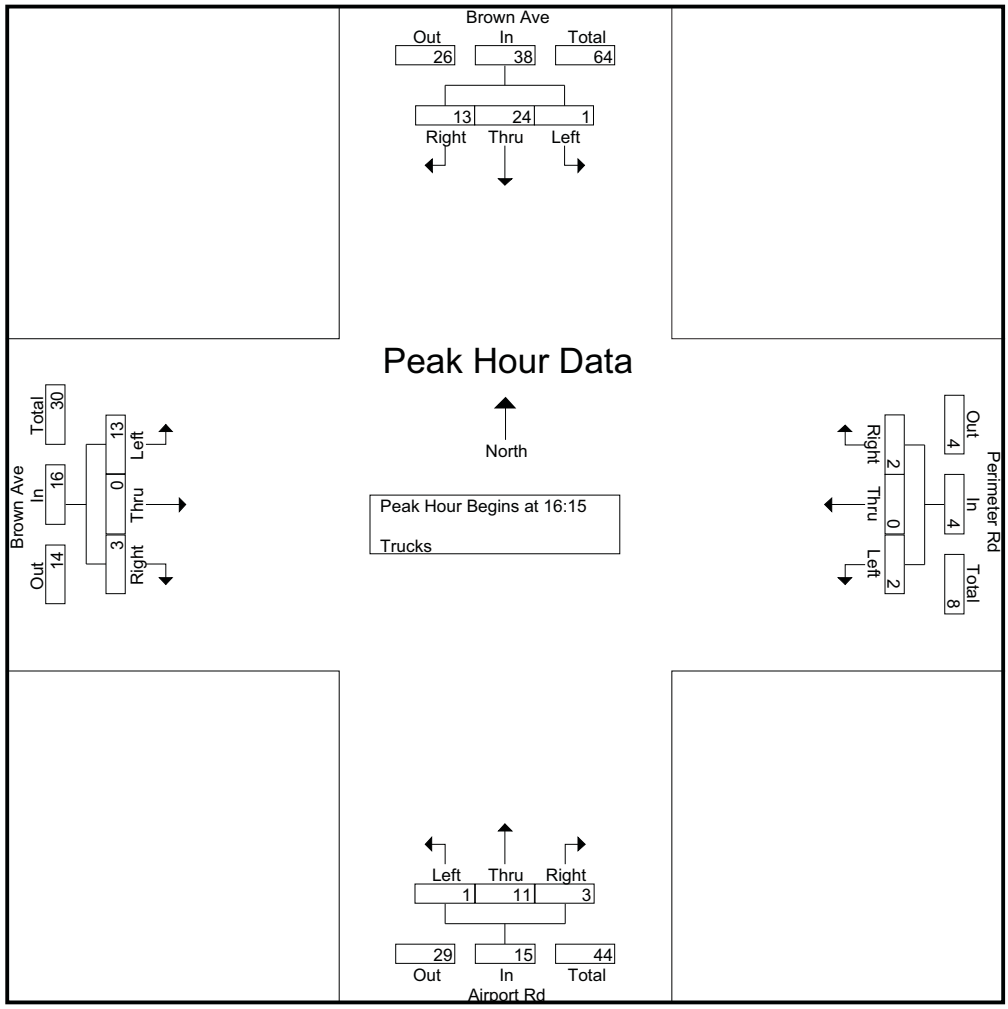

Peak Hour Analysis From 16:00 to 18:45 - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	16:15				16:00				16:00				16:15			
+0 mins.	0	7	2	9	2	0	0	2	0	3	0	3	2	0	0	2
+15 mins.	0	5	4	9	0	0	0	0	0	5	1	6	2	0	2	4
+30 mins.	1	6	2	9	1	0	1	2	1	3	0	4	4	0	1	5
+45 mins.	0	6	5	11	0	0	1	1	0	1	2	3	5	0	0	5
Total Volume	1	24	13	38	3	0	2	5	1	12	3	16	13	0	3	16
% App. Total	2.6	63.2	34.2		60	0	40		6.2	75	18.8		81.2	0	18.8	
PHF	.250	.857	.650	.864	.375	.000	.500	.625	.250	.600	.375	.667	.650	.000	.375	.800

Accurate Counts
978-664-2565

File Name : 17266001
Site Code : 17266001
Start Date : 10/22/2009
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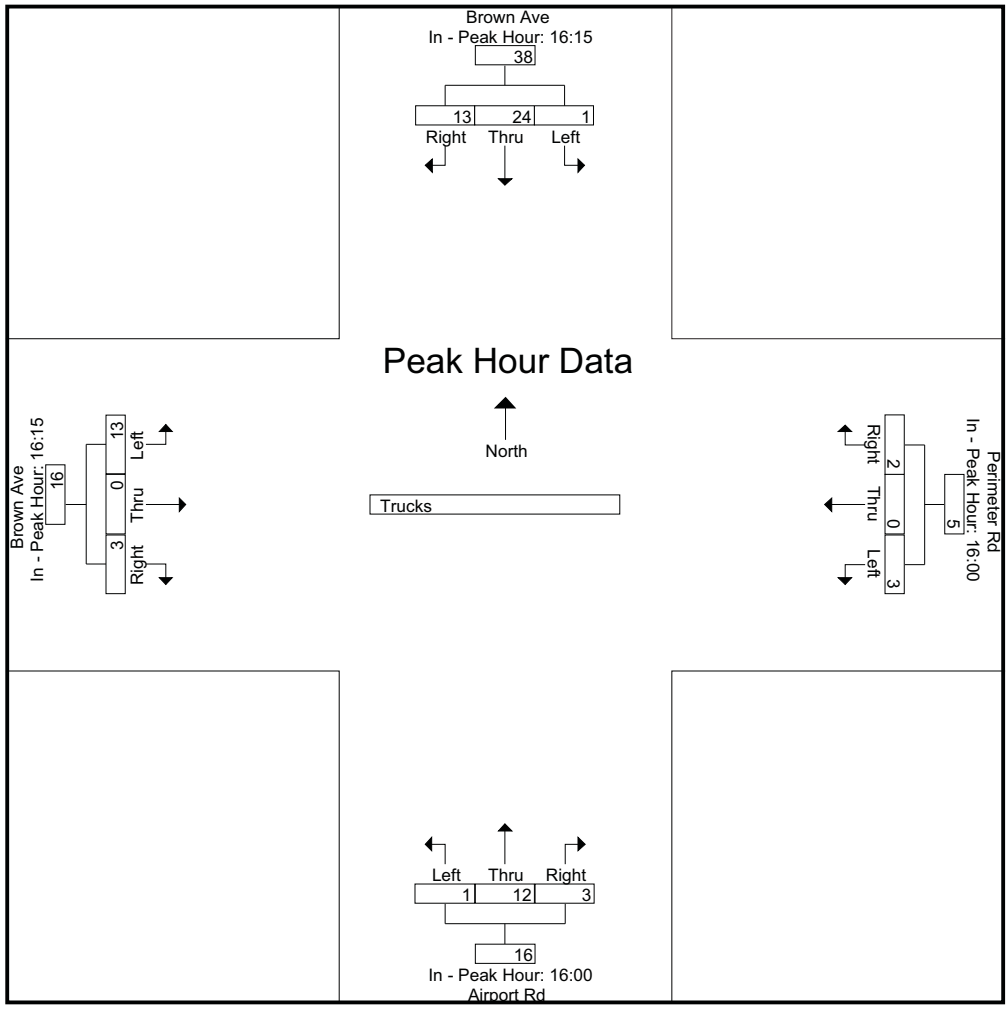

Accurate Counts
978-664-2565

N/S Street : South Perimeter Road
E/W Street: Airport Road
City/State : Manchester, NH
Weather : Clear

File Name : 17266002
Site Code : 17266002
Start Date : 10/22/2009

Groups Printed- Cars - Trucks

	Airport Rd From East			S. Perimeter Rd From South			Airport Rd From West					
Start Time	Left	Thru	Peds	Left	Right	Peds	Thru	Right	Peds	Exclu. Total	Inclu. Total	Int. Total
06:00	7	41	0	9	5	0	101	38	0	0	201	201
06:15	7	52	0	12	7	0	114	49	0	0	241	241
06:30	11	33	0	27	8	0	132	61	0	0	272	272
06:45	9	42	0	39	9	0	98	88	0	0	285	285
Total	34	168	0	87	29	0	445	236	0	0	999	999
07:00	12	80	0	53	8	0	89	50	0	0	292	292
07:15	13	33	0	22	13	0	73	47	0	0	201	201
07:30	12	34	0	49	10	0	81	66	0	0	252	252
07:45	10	36	0	39	13	0	83	95	0	0	276	276
Total	47	183	0	163	44	0	326	258	0	0	1021	1021
08:00	12	39	0	41	12	0	77	66	0	0	247	247
08:15	18	35	0	63	8	0	77	50	0	0	251	251
08:30	9	58	0	44	12	0	87	50	0	0	260	260
08:45	6	45	0	33	10	0	88	40	0	0	222	222
Total	45	177	0	181	42	0	329	206	0	0	980	980
Grand Total	126	528	0	431	115	0	1100	700	0	0	3000	3000
Apprch %	19.3	80.7		78.9	21.1		61.1	38.9				
Total %	4.2	17.6		14.4	3.8		36.7	23.3		0	100	
Cars	125	517		335	112		1089	665		0	0	2843
% Cars	99.2	97.9	0	77.7	97.4	0	99	95	0	0	0	94.8
Trucks	1	11		96	3		11	35		0	0	157
% Trucks	0.8	2.1	0	22.3	2.6	0	1	5	0	0	0	5.2

	Airport Rd From East			S. Perimeter Rd From South			Airport Rd From West			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:00 to 08:45 - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 06:15										
06:15	7	52	59	12	7	19	114	49	163	241
06:30	11	33	44	27	8	35	132	61	193	272
06:45	9	42	51	39	9	48	98	88	186	285
07:00	12	80	92	53	8	61	89	50	139	292
Total Volume	39	207	246	131	32	163	433	248	681	1090
% App. Total	15.9	84.1		80.4	19.6		63.6	36.4		
PHF	.813	.647	.668	.618	.889	.668	.820	.705	.882	.933
Cars	39	204	243	101	32	133	430	237	667	1043
% Cars	100	98.6	98.8	77.1	100	81.6	99.3	95.6	97.9	95.7
Trucks	0	3	3	30	0	30	3	11	14	47
% Trucks	0	1.4	1.2	22.9	0	18.4	0.7	4.4	2.1	4.3

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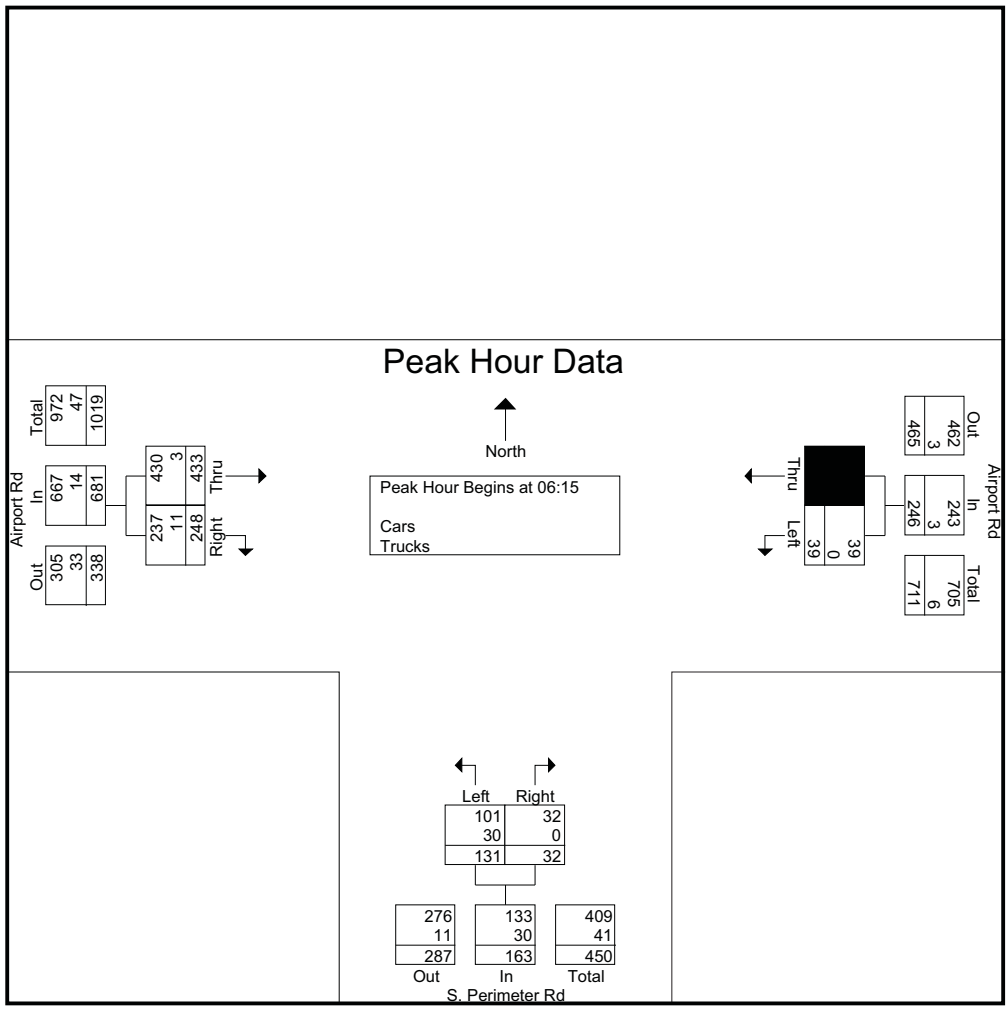

Peak Hour Analysis From 06:00 to 08:45 - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	06:15			07:30			06:00		
+0 mins.	7	52	59	49	10	59	101	38	139
+15 mins.	11	33	44	39	13	52	114	49	163
+30 mins.	9	42	51	41	12	53	132	61	193
+45 mins.	12	80	92	63	8	71	98	88	186
Total Volume	39	207	246	192	43	235	445	236	681
% App. Total	15.9	84.1		81.7	18.3		65.3	34.7	
PHF	.813	.647	.668	.762	.827	.827	.843	.670	.882
Cars	39	204	243	155	42	197	442	225	667
% Cars	100	98.6	98.8	80.7	97.7	83.8	99.3	95.3	97.9
Trucks	0	3	3	37	1	38	3	11	14
% Trucks	0	1.4	1.2	19.3	2.3	16.2	0.7	4.7	2.1

Accurate Counts
978-664-2565

File Name : 17266002
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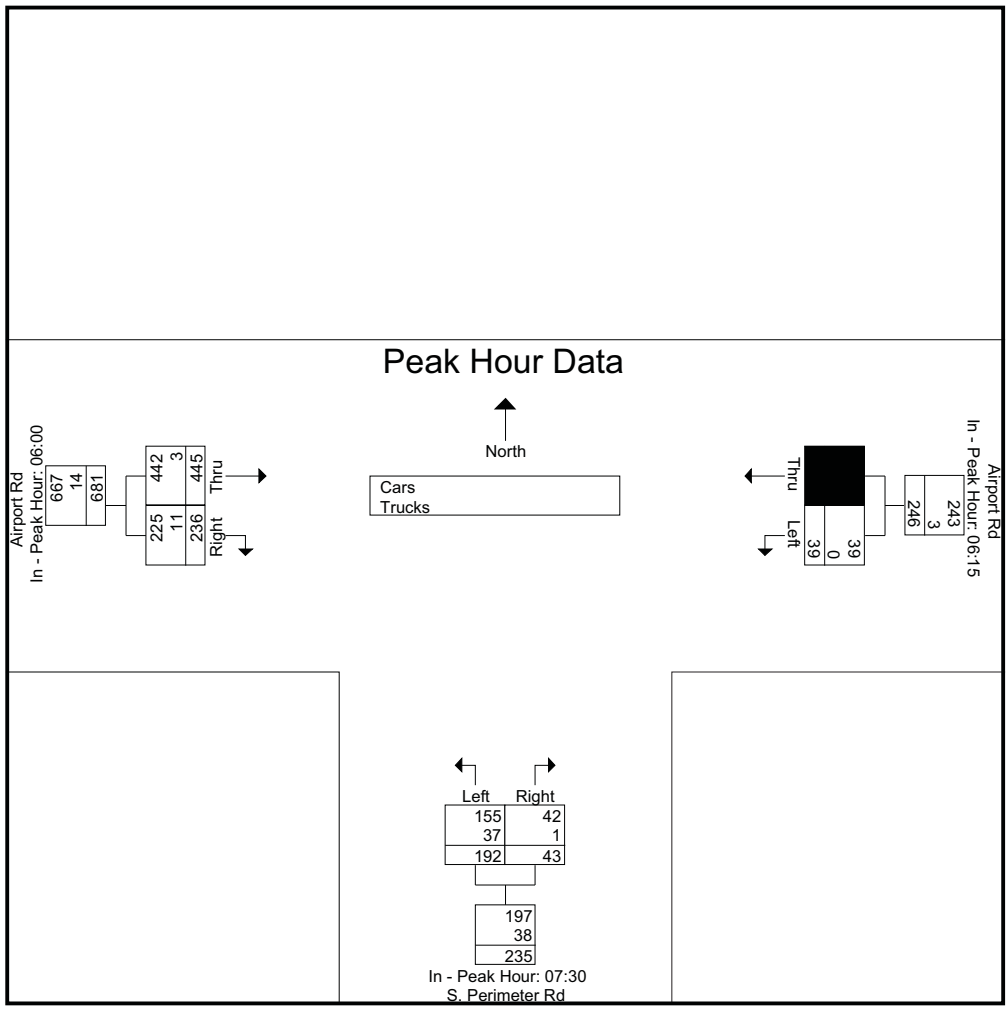

Accurate Counts
978-664-2565

N/S Street : South Perimeter Road
E/W Street: Airport Road
City/State : Manchester, NH
Weather : Clear

File Name : 17266002
Site Code : 17266002
Start Date : 10/22/2009
Page No : 1

Groups Printed- Cars

	Airport Rd From East			S. Perimeter Rd From South			Airport Rd From West					
Start Time	Left	Thru	Peds	Left	Right	Peds	Thru	Right	Peds	Exclu. Total	Inclu. Total	Int. Total
06:00	7	41	0	5	5	0	99	34	0	0	191	191
06:15	7	51	0	6	7	0	113	48	0	0	232	232
06:30	11	33	0	19	8	0	132	59	0	0	262	262
06:45	9	41	0	32	9	0	98	84	0	0	273	273
Total	34	166	0	62	29	0	442	225	0	0	958	958
07:00	12	79	0	44	8	0	87	46	0	0	276	276
07:15	13	32	0	20	12	0	72	46	0	0	195	195
07:30	12	32	0	47	9	0	80	60	0	0	240	240
07:45	10	34	0	34	13	0	82	94	0	0	267	267
Total	47	177	0	145	42	0	321	246	0	0	978	978
08:00	12	38	0	36	12	0	76	65	0	0	239	239
08:15	18	34	0	38	8	0	77	46	0	0	221	221
08:30	9	58	0	24	11	0	86	46	0	0	234	234
08:45	5	44	0	30	10	0	87	37	0	0	213	213
Total	44	174	0	128	41	0	326	194	0	0	907	907
Grand Total	125	517	0	335	112	0	1089	665	0	0	2843	2843
Apprch %	19.5	80.5		74.9	25.1		62.1	37.9				
Total %	4.4	18.2		11.8	3.9		38.3	23.4		0	100	

	Airport Rd From East			S. Perimeter Rd From South			Airport Rd From West			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:00 to 08:45 - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 06:15										
06:15	7	51	58	6	7	13	113	48	161	232
06:30	11	33	44	19	8	27	132	59	191	262
06:45	9	41	50	32	9	41	98	84	182	273
07:00	12	79	91	44	8	52	87	46	133	276
Total Volume	39	204	243	101	32	133	430	237	667	1043
% App. Total	16	84		75.9	24.1		64.5	35.5		
PHF	.813	.646	.668	.574	.889	.639	.814	.705	.873	.945

Accurate Counts
978-664-2565

File Name : 17266002
Site Code : 17266002
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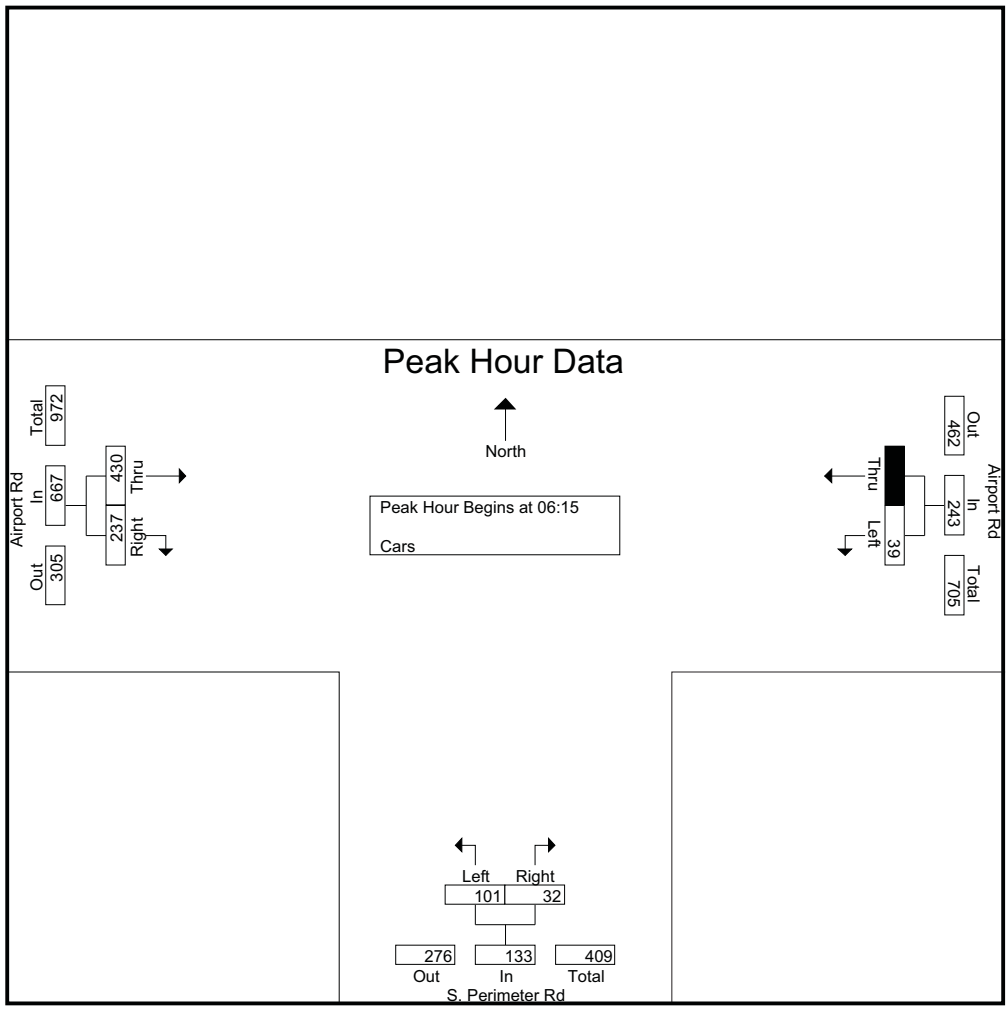

Peak Hour Analysis From 06:00 to 08:45 - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	06:15			07:30			06:00		
+0 mins.	7	51	58	47	9	56	99	34	133
+15 mins.	11	33	44	34	13	47	113	48	161
+30 mins.	9	41	50	36	12	48	132	59	191
+45 mins.	12	79	91	38	8	46	98	84	182
Total Volume	39	204	243	155	42	197	442	225	667
% App. Total	16	84		78.7	21.3		66.3	33.7	
PHF	.813	.646	.668	.824	.808	.879	.837	.670	.873

Accurate Counts
978-664-2565

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Site Code : 17266002
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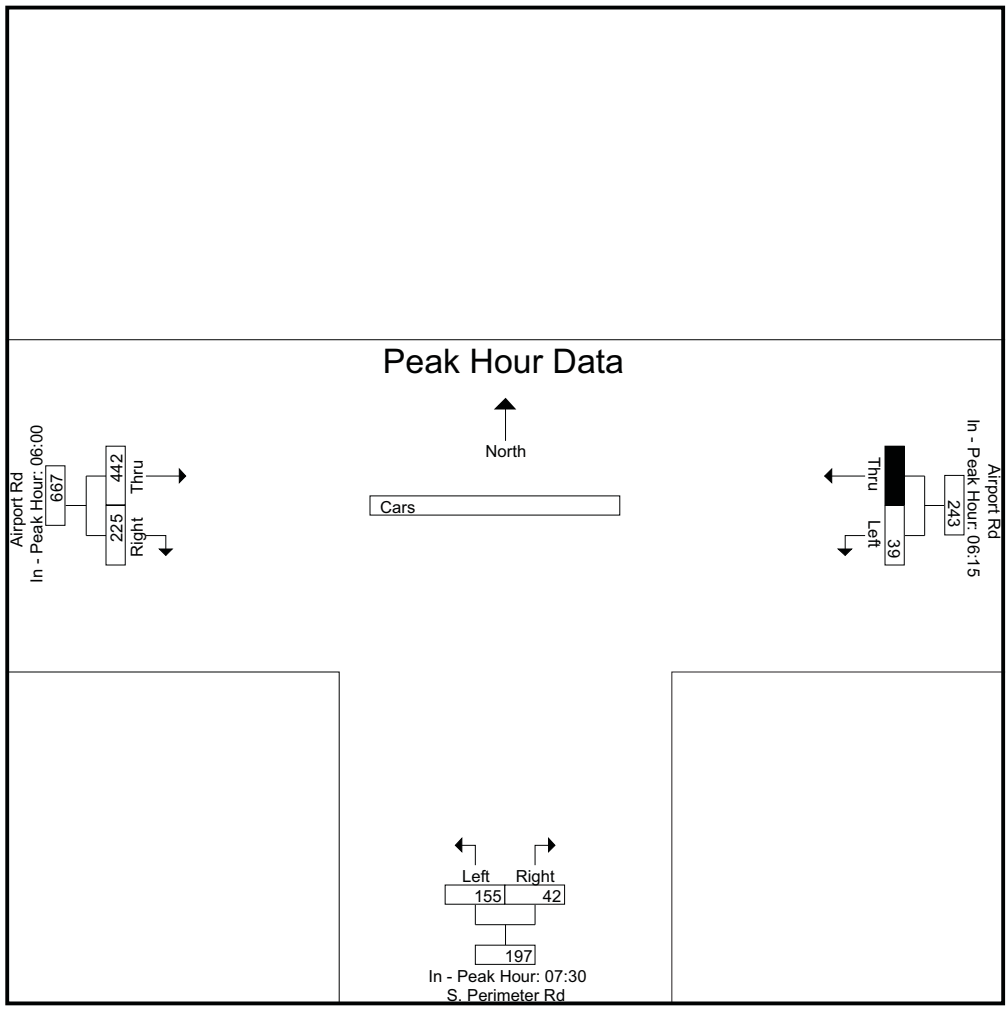

Accurate Counts
978-664-2565

N/S Street : South Perimeter Road
E/W Street: Airport Road
City/State : Manchester, NH
Weather : Clear

File Name : 17266002
Site Code : 17266002
Start Date : 10/22/2009
Page No : 1

Groups Printed- Trucks

	Airport Rd From East			S. Perimeter Rd From South			Airport Rd From West					
Start Time	Left	Thru	Peds	Left	Right	Peds	Thru	Right	Peds	Exclu. Total	Inclu. Total	Int. Total
06:00	0	0	0	4	0	0	2	4	0	0	10	10
06:15	0	1	0	6	0	0	1	1	0	0	9	9
06:30	0	0	0	8	0	0	0	2	0	0	10	10
06:45	0	1	0	7	0	0	0	4	0	0	12	12
Total	0	2	0	25	0	0	3	11	0	0	41	41
07:00	0	1	0	9	0	0	2	4	0	0	16	16
07:15	0	1	0	2	1	0	1	1	0	0	6	6
07:30	0	2	0	2	1	0	1	6	0	0	12	12
07:45	0	2	0	5	0	0	1	1	0	0	9	9
Total	0	6	0	18	2	0	5	12	0	0	43	43
08:00	0	1	0	5	0	0	1	1	0	0	8	8
08:15	0	1	0	25	0	0	0	4	0	0	30	30
08:30	0	0	0	20	1	0	1	4	0	0	26	26
08:45	1	1	0	3	0	0	1	3	0	0	9	9
Total	1	3	0	53	1	0	3	12	0	0	73	73
Grand Total	1	11	0	96	3	0	11	35	0	0	157	157
Apprch %	8.3	91.7		97	3		23.9	76.1				
Total %	0.6	7		61.1	1.9		7	22.3		0	100	

	Airport Rd From East			S. Perimeter Rd From South			Airport Rd From West			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:00 to 08:45 - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:45										
07:45	0	2	2	5	0	5	1	1	2	9
08:00	0	1	1	5	0	5	1	1	2	8
08:15	0	1	1	25	0	25	0	4	4	30
08:30	0	0	0	20	1	21	1	4	5	26
Total Volume	0	4	4	55	1	56	3	10	13	73
% App. Total	0	100		98.2	1.8		23.1	76.9		
PHF	.000	.500	.500	.550	.250	.560	.750	.625	.650	.608

Accurate Counts
978-664-2565

File Name : 17266002
Site Code : 17266002
Start Date : 10/22/2009
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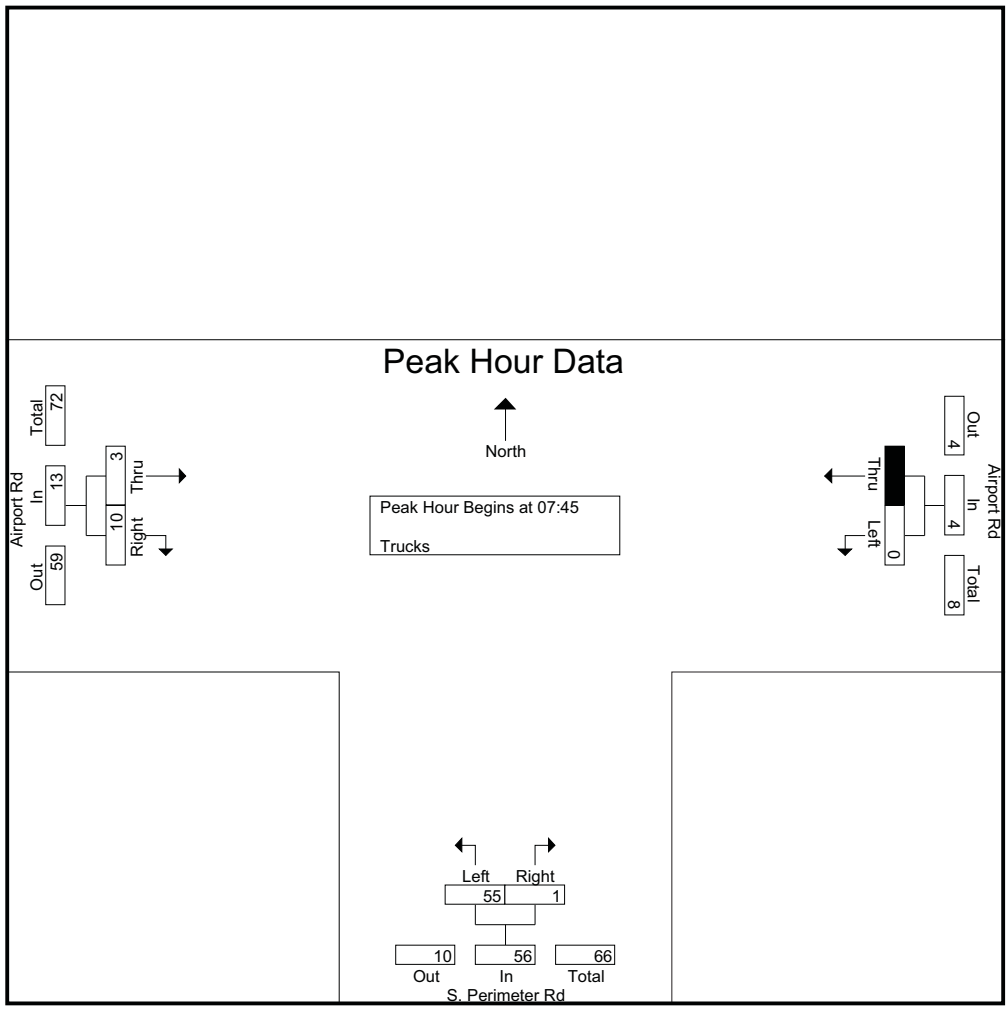

Peak Hour Analysis From 06:00 to 08:45 - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00			07:45			06:45		
+0 mins.	0	1	1	5	0	5	0	4	4
+15 mins.	0	1	1	5	0	5	2	4	6
+30 mins.	0	2	2	25	0	25	1	1	2
+45 mins.	0	2	2	20	1	21	1	6	7
Total Volume	0	6	6	55	1	56	4	15	19
% App. Total	0	100		98.2	1.8		21.1	78.9	
PHF	.000	.750	.750	.550	.250	.560	.500	.625	.679

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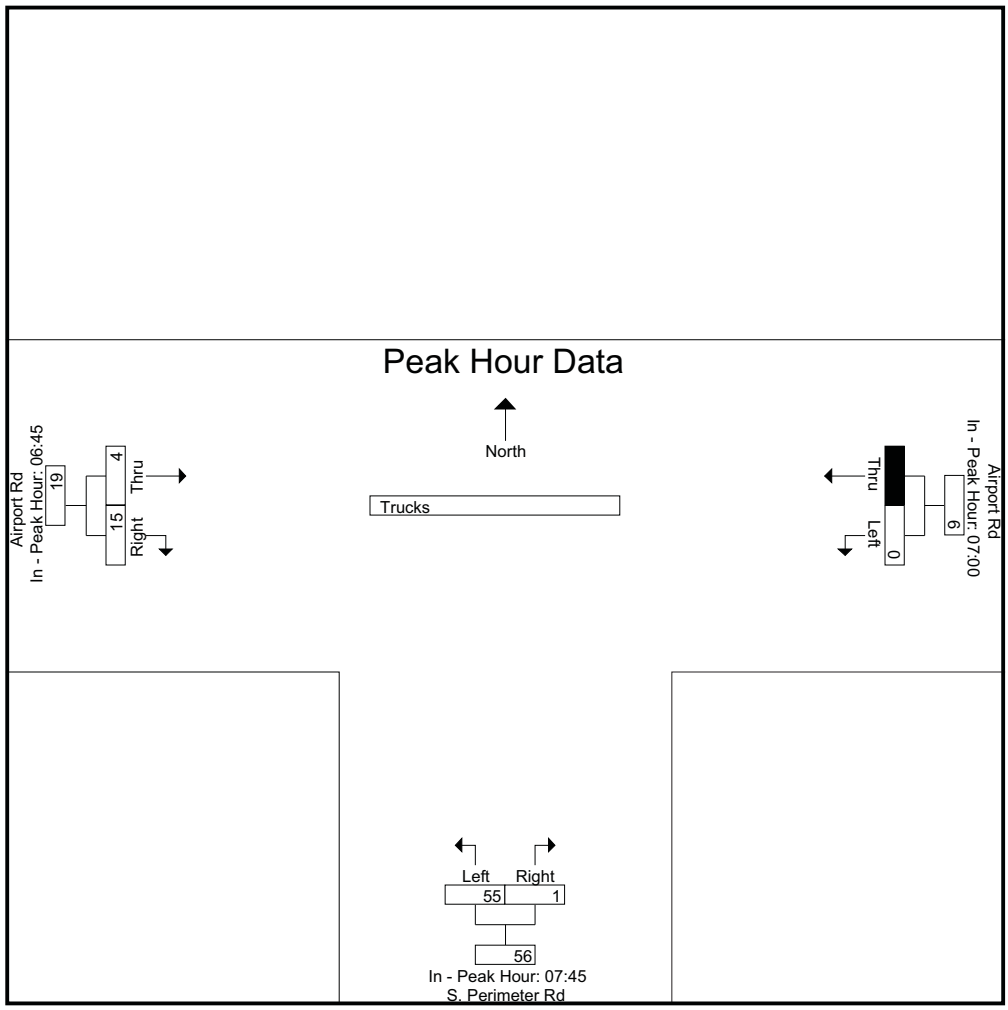

Accurate Counts
978-664-2565

N/S Street : South Perimeter Road
E/W Street: Airport Road
City/State : Manchester, NH
Weather : Clear

File Name : 17266002
Site Code : 17266002
Start Date : 10/22/2009

Groups Printed- Cars - Trucks

	Airport Rd From East			S. Perimeter Rd From South			Airport Rd From West					
Start Time	Left	Thru	Peds	Left	Right	Peds	Thru	Right	Peds	Exclu. Total	Inclu. Total	Int. Total
16:00	18	136	0	57	19	0	129	36	0	0	395	395
16:15	26	145	0	48	17	0	104	20	0	0	360	360
16:30	16	148	0	69	17	0	92	34	0	0	376	376
16:45	24	129	0	64	15	0	72	23	0	0	327	327
Total	84	558	0	238	68	0	397	113	0	0	1458	1458
17:00	17	163	0	55	8	0	65	30	0	0	338	338
17:15	15	159	0	73	18	0	56	27	0	0	348	348
17:30	15	99	0	62	10	0	47	36	0	0	269	269
17:45	10	32	0	34	6	0	38	45	0	0	165	165
Total	57	453	0	224	42	0	206	138	0	0	1120	1120
18:00	7	56	0	43	9	0	39	26	0	0	180	180
18:15	7	91	0	34	17	0	24	22	0	0	195	195
18:30	16	58	0	31	17	0	34	52	1	1	208	209
18:45	11	59	0	20	6	0	29	22	0	0	147	147
Total	41	264	0	128	49	0	126	122	1	1	730	731
Grand Total	182	1275	0	590	159	0	729	373	1	1	3308	3309
Apprch %	12.5	87.5		78.8	21.2		66.2	33.8				
Total %	5.5	38.5		17.8	4.8		22	11.3		0	100	
Cars	181	1271		571	158		725	337		0	0	3244
% Cars	99.5	99.7	0	96.8	99.4	0	99.5	90.3	100	0	0	98
Trucks	1	4		19	1		4	36		0	0	65
% Trucks	0.5	0.3	0	3.2	0.6	0	0.5	9.7	0	0	0	2

	Airport Rd From East			S. Perimeter Rd From South			Airport Rd From West			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 18:45 - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 16:00										
16:00	18	136	154	57	19	76	129	36	165	395
16:15	26	145	171	48	17	65	104	20	124	360
16:30	16	148	164	69	17	86	92	34	126	376
16:45	24	129	153	64	15	79	72	23	95	327
Total Volume	84	558	642	238	68	306	397	113	510	1458
% App. Total	13.1	86.9		77.8	22.2		77.8	22.2		
PHF	.808	.943	.939	.862	.895	.890	.769	.785	.773	.923
Cars	84	554	638	230	67	297	394	99	493	1428
% Cars	100	99.3	99.4	96.6	98.5	97.1	99.2	87.6	96.7	97.9
Trucks	0	4	4	8	1	9	3	14	17	30
% Trucks	0	0.7	0.6	3.4	1.5	2.9	0.8	12.4	3.3	2.1

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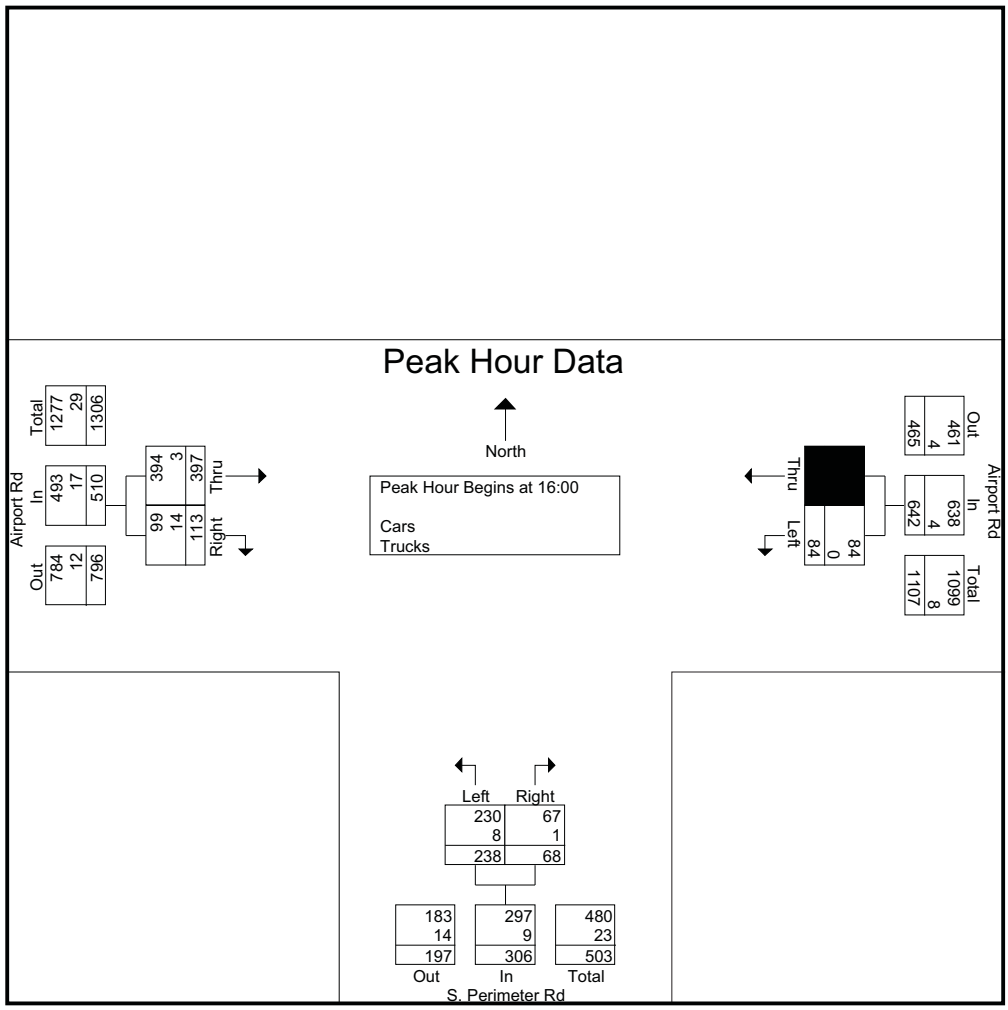

Peak Hour Analysis From 16:00 to 18:45 - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	16:30			16:30			16:00		
+0 mins.	16	148	164	69	17	86	129	36	165
+15 mins.	24	129	153	64	15	79	104	20	124
+30 mins.	17	163	180	55	8	63	92	34	126
+45 mins.	15	159	174	73	18	91	72	23	95
Total Volume	72	599	671	261	58	319	397	113	510
% App. Total	10.7	89.3		81.8	18.2		77.8	22.2	
PHF	.750	.919	.932	.894	.806	.876	.769	.785	.773
Cars	72	597	669	254	57	311	394	99	493
% Cars	100	99.7	99.7	97.3	98.3	97.5	99.2	87.6	96.7
Trucks	0	2	2	7	1	8	3	14	17
% Trucks	0	0.3	0.3	2.7	1.7	2.5	0.8	12.4	3.3

Accurate Counts
978-664-2565

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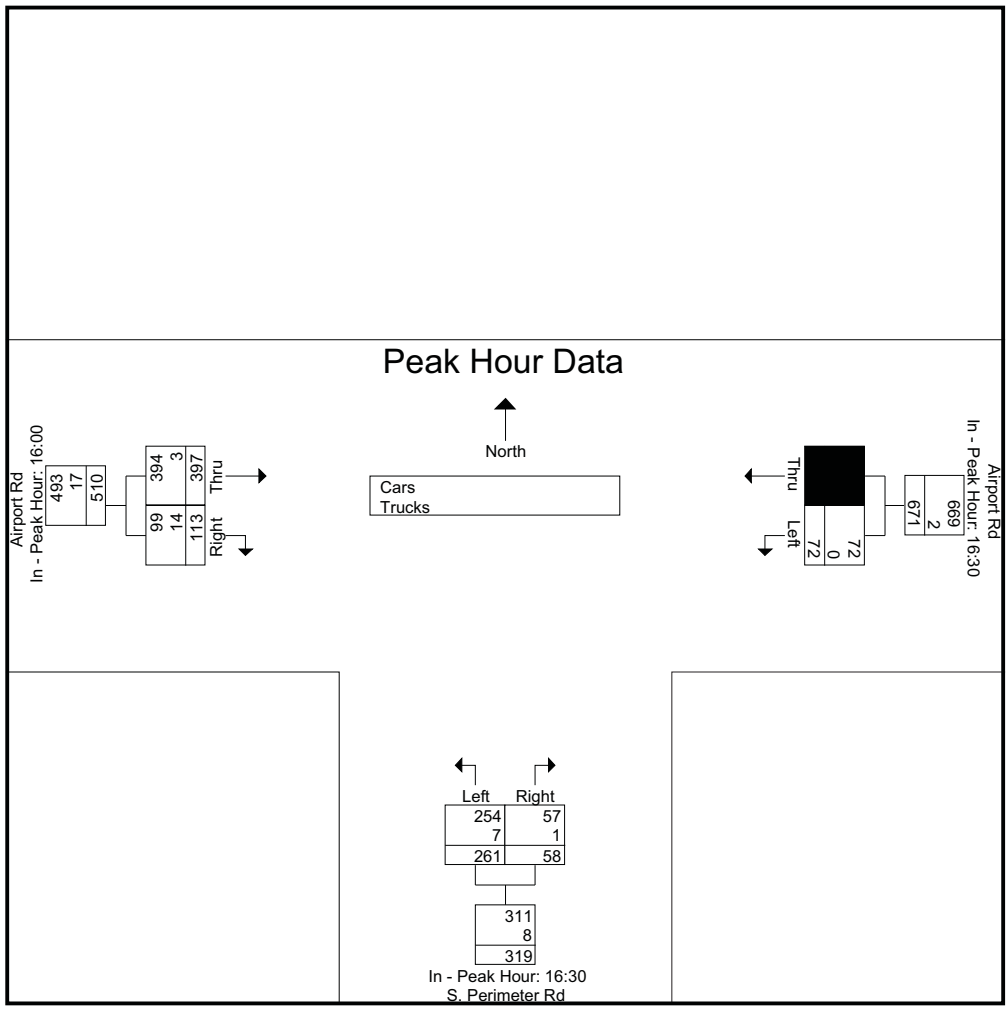

Accurate Counts
978-664-2565

N/S Street : South Perimeter Road
E/W Street: Airport Road
City/State : Manchester, NH
Weather : Clear

File Name : 17266002
Site Code : 17266002
Start Date : 10/22/2009
Page No : 1

Groups Printed- Cars

	Airport Rd From East			S. Perimeter Rd From South			Airport Rd From West					
Start Time	Left	Thru	Peds	Left	Right	Peds	Thru	Right	Peds	Exclu. Total	Inclu. Total	Int. Total
16:00	18	135	0	56	19	0	129	28	0	0	385	385
16:15	26	144	0	48	17	0	103	20	0	0	358	358
16:30	16	147	0	62	16	0	91	28	0	0	360	360
16:45	24	128	0	64	15	0	71	23	0	0	325	325
Total	84	554	0	230	67	0	394	99	0	0	1428	1428
17:00	17	163	0	55	8	0	65	23	0	0	331	331
17:15	15	159	0	73	18	0	56	27	0	0	348	348
17:30	15	99	0	57	10	0	46	34	0	0	261	261
17:45	10	32	0	34	6	0	38	45	0	0	165	165
Total	57	453	0	219	42	0	205	129	0	0	1105	1105
18:00	6	56	0	40	9	0	39	20	0	0	170	170
18:15	7	91	0	34	17	0	24	22	0	0	195	195
18:30	16	58	0	28	17	0	34	45	1	1	198	199
18:45	11	59	0	20	6	0	29	22	0	0	147	147
Total	40	264	0	122	49	0	126	109	1	1	710	711
Grand Total	181	1271	0	571	158	0	725	337	1	1	3243	3244
Apprch %	12.5	87.5		78.3	21.7		68.3	31.7				
Total %	5.6	39.2		17.6	4.9		22.4	10.4		0	100	

	Airport Rd From East			S. Perimeter Rd From South			Airport Rd From West			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 18:45 - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 16:00										
16:00	18	135	153	56	19	75	129	28	157	385
16:15	26	144	170	48	17	65	103	20	123	358
16:30	16	147	163	62	16	78	91	28	119	360
16:45	24	128	152	64	15	79	71	23	94	325
Total Volume	84	554	638	230	67	297	394	99	493	1428
% App. Total	13.2	86.8		77.4	22.6		79.9	20.1		
PHF	.808	.942	.938	.898	.882	.940	.764	.884	.785	.927

File Name : 17266002
Site Code : 17266002
Start Date : 10/22/2009
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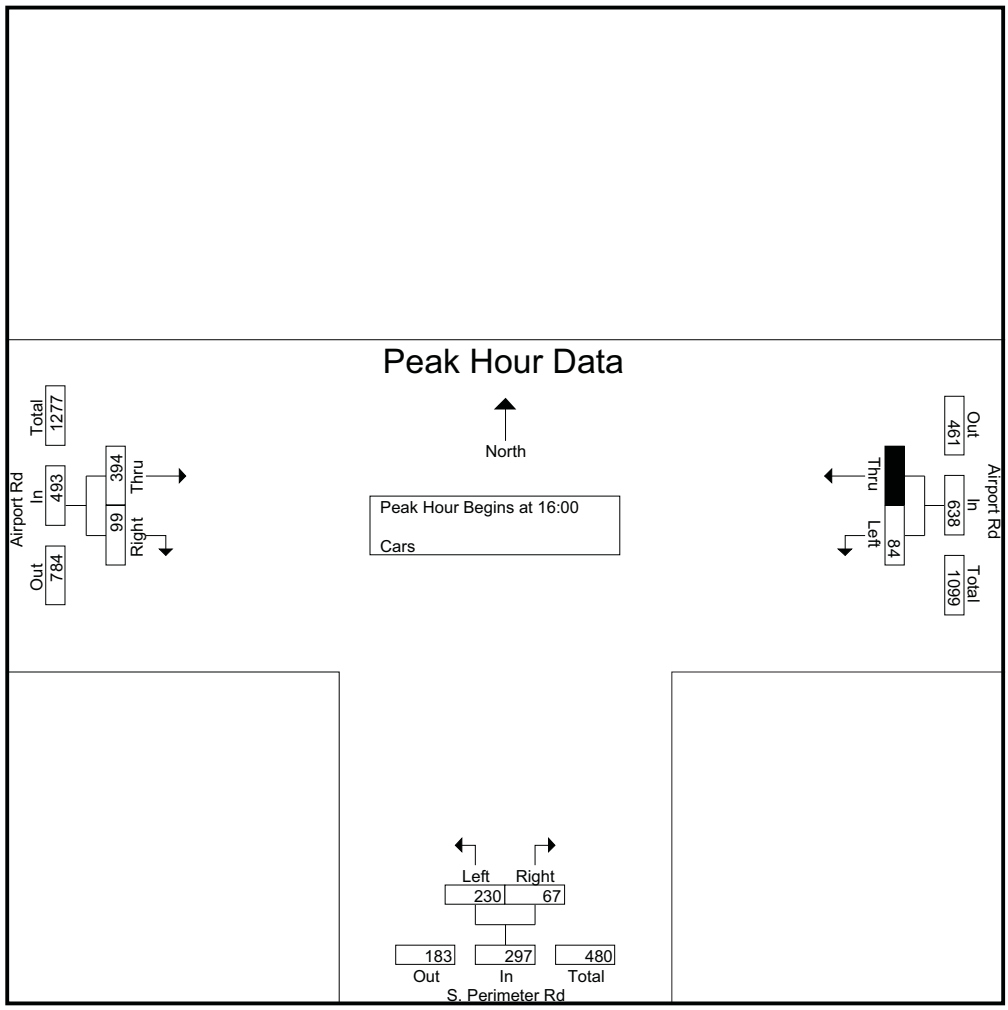
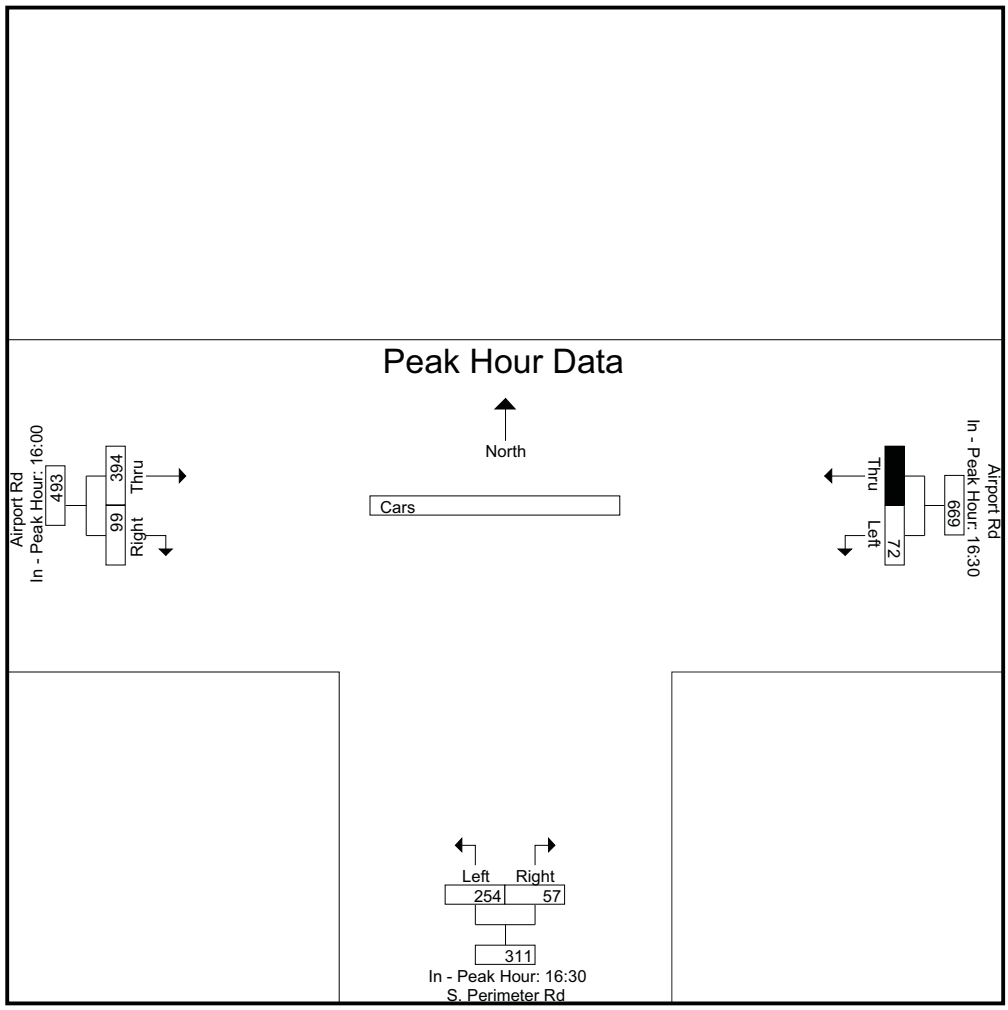


Peak Hour Analysis From 16:00 to 18:45 - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	16:30			16:30			16:00		
+0 mins.	16	147	163	62	16	78	129	28	157
+15 mins.	24	128	152	64	15	79	103	20	123
+30 mins.	17	163	180	55	8	63	91	28	119
+45 mins.	15	159	174	73	18	91	71	23	94
Total Volume	72	597	669	254	57	311	394	99	493
% App. Total	10.8	89.2		81.7	18.3		79.9	20.1	
PHF	.750	.916	.929	.870	.792	.854	.764	.884	.785

Accurate Counts
978-664-2565

File Name : 17266002
Site Code : 17266002
Start Date : 10/22/2009
Page No : 3



Accurate Counts
978-664-2565

N/S Street : South Perimeter Road
E/W Street: Airport Road
City/State : Manchester, NH
Weather : Clear

File Name : 17266002
Site Code : 17266002
Start Date : 10/22/2009
Page No : 1

Groups Printed- Trucks

	Airport Rd From East			S. Perimeter Rd From South			Airport Rd From West					
Start Time	Left	Thru	Peds	Left	Right	Peds	Thru	Right	Peds	Exclu. Total	Inclu. Total	Int. Total
16:00	0	1	0	1	0	0	0	8	0	0	10	10
16:15	0	1	0	0	0	0	1	0	0	0	2	2
16:30	0	1	0	7	1	0	1	6	0	0	16	16
16:45	0	1	0	0	0	0	1	0	0	0	2	2
Total	0	4	0	8	1	0	3	14	0	0	30	30
17:00	0	0	0	0	0	0	0	7	0	0	7	7
17:15	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	5	0	0	1	2	0	0	8	8
17:45	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	5	0	0	1	9	0	0	15	15
18:00	1	0	0	3	0	0	0	6	0	0	10	10
18:15	0	0	0	0	0	0	0	0	0	0	0	0
18:30	0	0	0	3	0	0	0	7	0	0	10	10
18:45	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	0	0	6	0	0	0	13	0	0	20	20
Grand Total	1	4	0	19	1	0	4	36	0	0	65	65
Apprch %	20	80		95	5		10	90				
Total %	1.5	6.2		29.2	1.5		6.2	55.4		0	100	

	Airport Rd From East			S. Perimeter Rd From South			Airport Rd From West			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 18:45 - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 16:00										
16:00	0	1	1	1	0	1	0	8	8	10
16:15	0	1	1	0	0	0	1	0	1	2
16:30	0	1	1	7	1	8	1	6	7	16
16:45	0	1	1	0	0	0	1	0	1	2
Total Volume	0	4	4	8	1	9	3	14	17	30
% App. Total	0	100		88.9	11.1		17.6	82.4		
PHF	.000	1.000	1.000	.286	.250	.281	.750	.438	.531	.469

File Name : 17266002
Site Code : 17266002
Start Date : 10/22/2009
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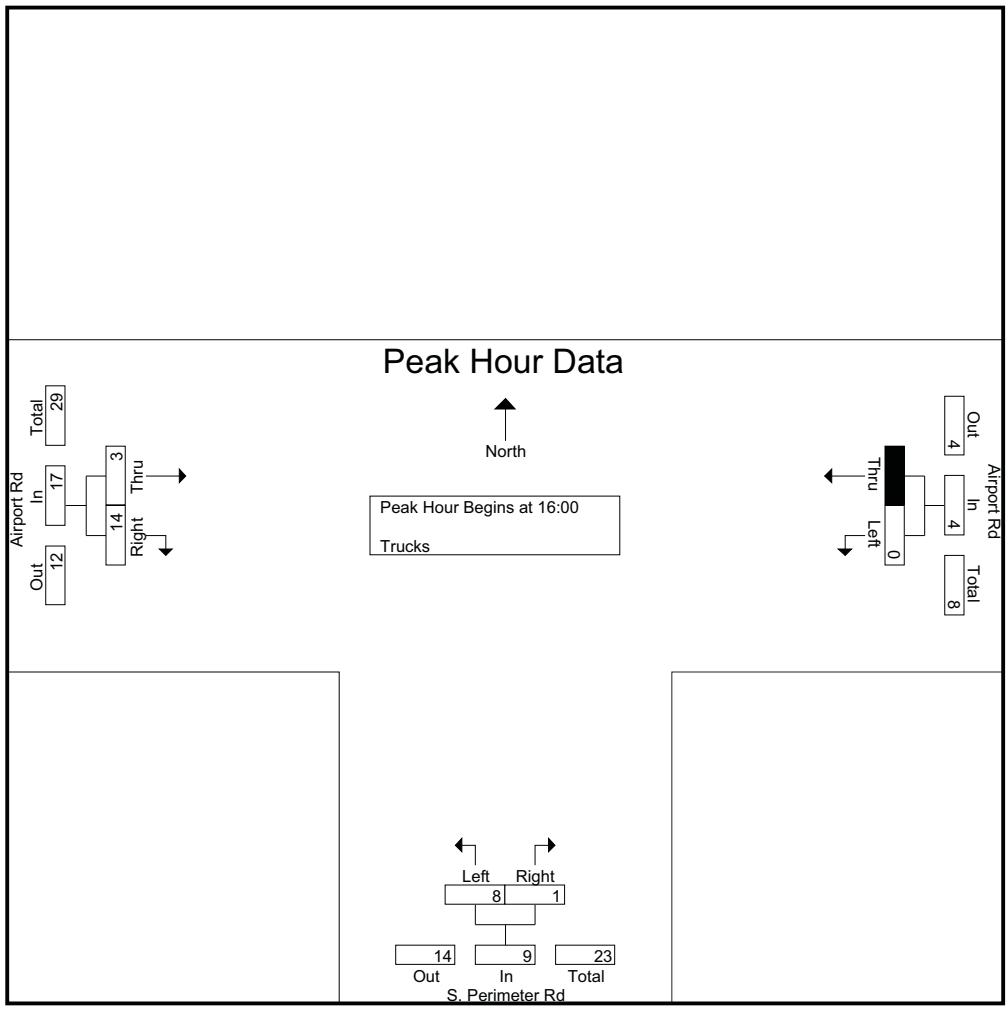
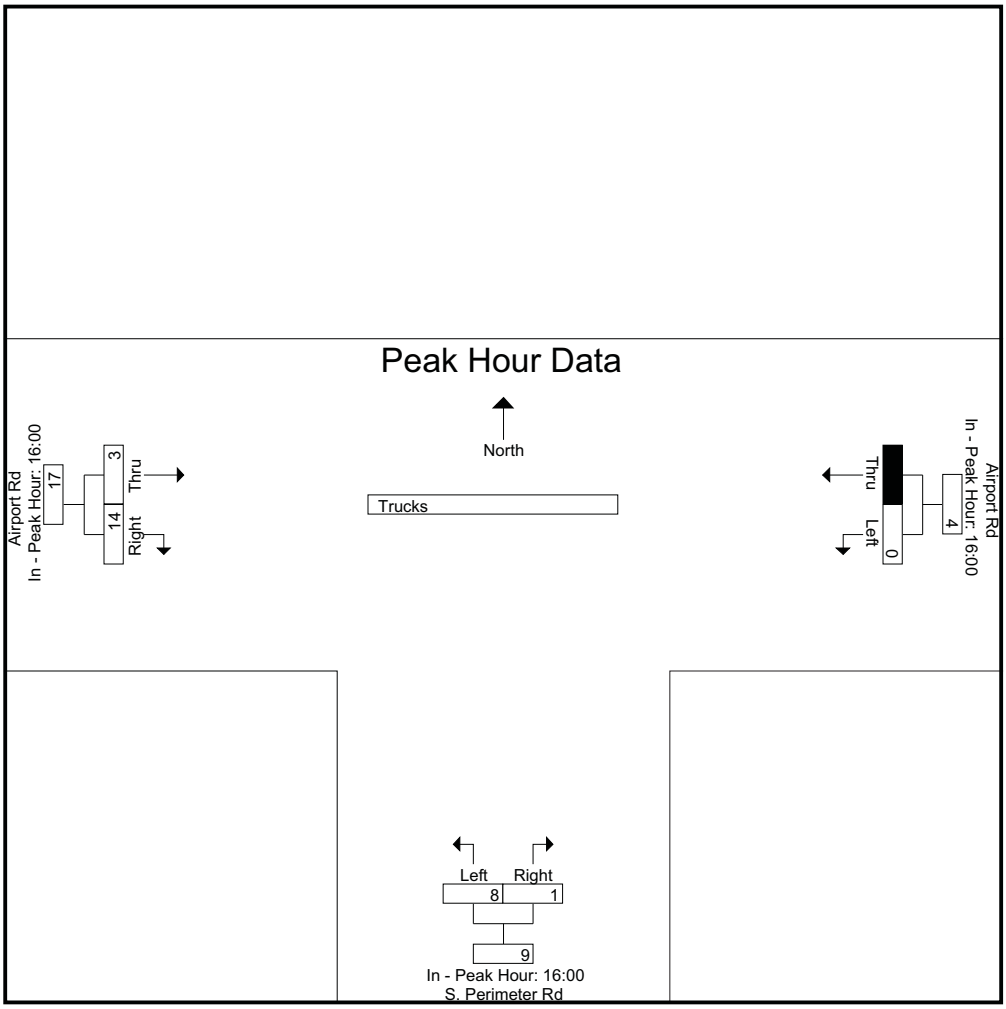


Peak Hour Analysis From 16:00 to 18:45 - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	16:00			16:00			16:00		
+0 mins.	0	1	1	1	0	1	0	8	8
+15 mins.	0	1	1	0	0	0	1	0	1
+30 mins.	0	1	1	7	1	8	1	6	7
+45 mins.	0	1	1	0	0	0	1	0	1
Total Volume	0	4	4	8	1	9	3	14	17
% App. Total	0	100		88.9	11.1		17.6	82.4	
PHF	.000	1.000	1.000	.286	.250	.281	.750	.438	.531

File Name : 17266002
Site Code : 17266002
Start Date : 10/22/2009
Page No : 3



Accurate Counts
978-664-2565

N/S Street : Parking Area
E/W Street: Airport Road
City/State : Manchester, NH
Weather : Clear

File Name : 17266003
Site Code : 17266003
Start Date : 10/22/2009
Page No : 1

Groups Printed- Cars - Trucks

	Parking Area From North			Airport Rd From East			Airport Rd From West					
Start Time	Left	Right	Peds	Thru	Right	Peds	Left	Thru	Peds	Exclu. Total	Inclu. Total	Int. Total
06:00	1	0	0	49	1	0	15	91	0	0	157	157
06:15	0	3	0	56	7	0	26	97	0	0	189	189
06:30	0	10	0	33	4	0	43	97	0	0	187	187
06:45	0	12	0	40	4	0	46	62	0	0	164	164
Total	1	25	0	178	16	0	130	347	0	0	697	697
07:00	0	40	0	49	8	0	27	69	0	0	193	193
07:15	0	8	0	40	13	0	23	61	0	0	145	145
07:30	0	5	0	42	5	0	27	64	0	0	143	143
07:45	0	6	0	41	5	0	33	63	0	0	148	148
Total	0	59	0	172	31	0	110	257	0	0	629	629
08:00	0	9	0	41	7	0	25	63	0	0	145	145
08:15	1	6	0	47	0	0	25	58	0	0	137	137
08:30	1	9	0	58	8	0	29	73	0	0	178	178
08:45	1	6	0	46	7	0	16	84	0	0	160	160
Total	3	30	0	192	22	0	95	278	0	0	620	620
Grand Total	4	114	0	542	69	0	335	882	0	0	1946	1946
Apprch %	3.4	96.6		88.7	11.3		27.5	72.5				
Total %	0.2	5.9		27.9	3.5		17.2	45.3		0	100	
Cars	4	104		540	69		324	879		0	0	1920
% Cars	100	91.2	0	99.6	100	0	96.7	99.7	0	0	0	98.7
Trucks	0	10		2	0		11	3		0	0	26
% Trucks	0	8.8	0	0.4	0	0	3.3	0.3	0	0	0	1.3

	Parking Area From North			Airport Rd From East			Airport Rd From West			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 06:00 to 08:45 - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 06:15										
06:15	0	3	3	56	7	63	26	97	123	189
06:30	0	10	10	33	4	37	43	97	140	187
06:45	0	12	12	40	4	44	46	62	108	164
07:00	0	40	40	49	8	57	27	69	96	193
Total Volume	0	65	65	178	23	201	142	325	467	733
% App. Total	0	100		88.6	11.4		30.4	69.6		
PHF	.000	.406	.406	.795	.719	.798	.772	.838	.834	.949
Cars	0	62	62	178	23	201	139	325	464	727
% Cars	0	95.4	95.4	100	100	100	97.9	100	99.4	99.2
Trucks	0	3	3	0	0	0	3	0	3	6
% Trucks	0	4.6	4.6	0	0	0	2.1	0	0.6	0.8

File Name : 17266003
Site Code : 17266003
Start Date : 10/22/2009
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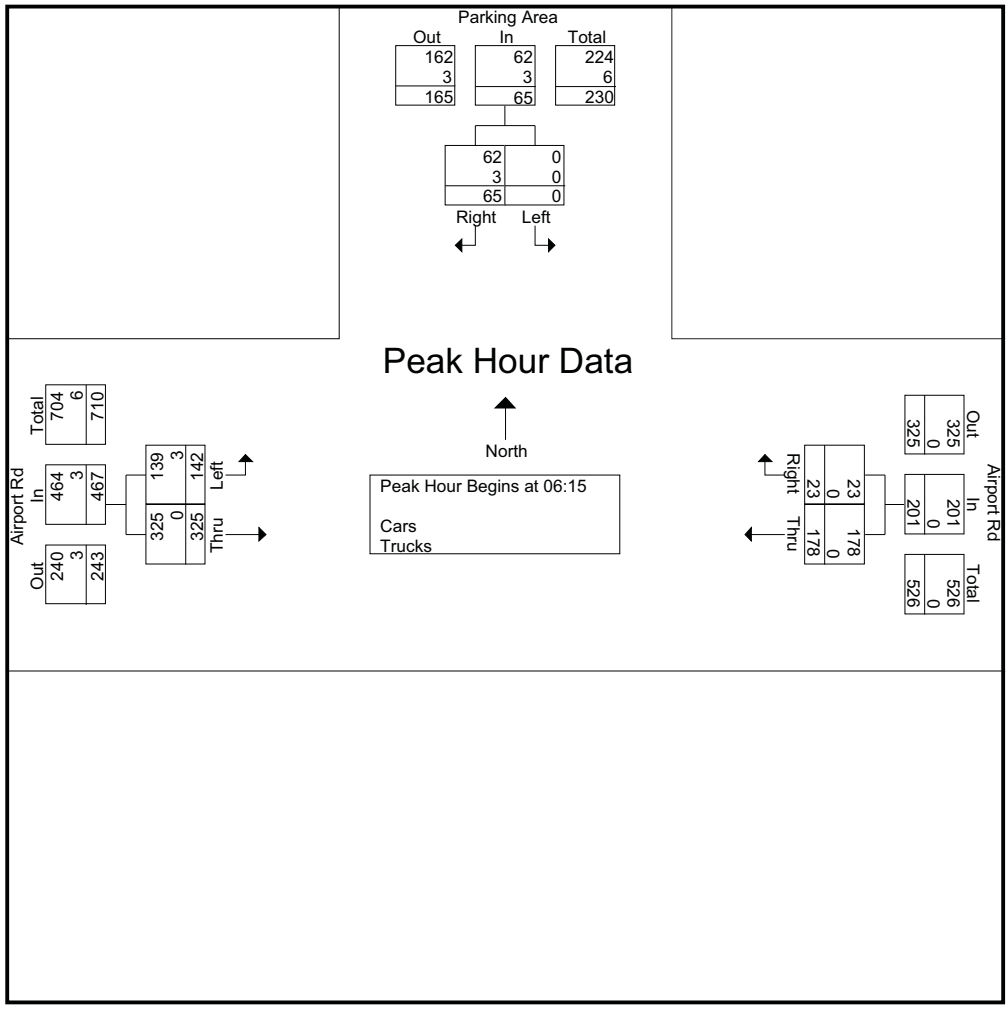
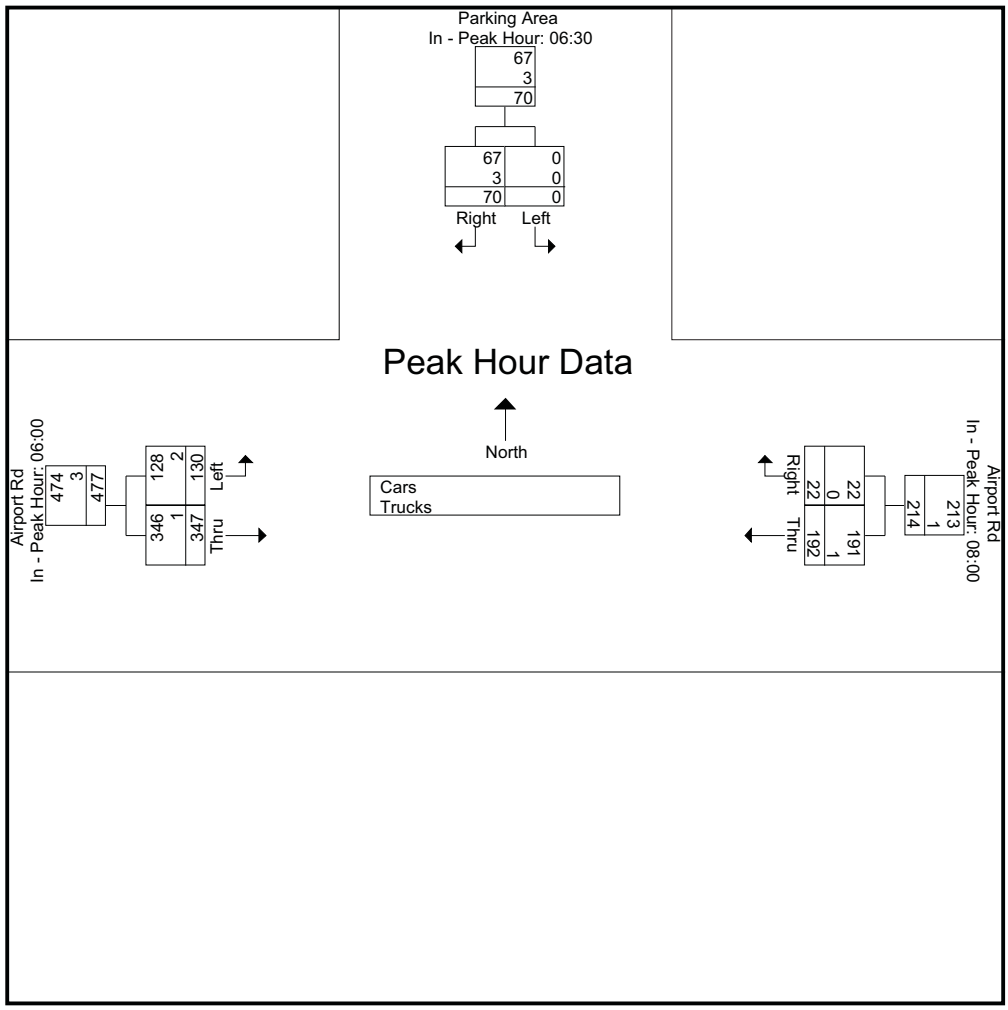


Peak Hour Analysis From 06:00 to 08:45 - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	06:30			08:00			06:00		
+0 mins.	0	10	10	41	7	48	15	91	106
+15 mins.	0	12	12	47	0	47	26	97	123
+30 mins.	0	40	40	58	8	66	43	97	140
+45 mins.	0	8	8	46	7	53	46	62	108
Total Volume	0	70	70	192	22	214	130	347	477
% App. Total	0	100		89.7	10.3		27.3	72.7	
PHF	.000	.438	.438	.828	.688	.811	.707	.894	.852
Cars	0	67	67	191	22	213	128	346	474
% Cars	0	95.7	95.7	99.5	100	99.5	98.5	99.7	99.4
Trucks	0	3	3	1	0	1	2	1	3
% Trucks	0	4.3	4.3	0.5	0	0.5	1.5	0.3	0.6

Accurate Counts
978-664-2565

File Name : 17266003
Site Code : 17266003
Start Date : 10/22/2009
Page No : 3



Accurate Counts
978-664-2565

N/S Street : Parking Area
E/W Street: Airport Road
City/State : Manchester, NH
Weather : Clear

File Name : 17266003
Site Code : 17266003
Start Date : 10/22/2009

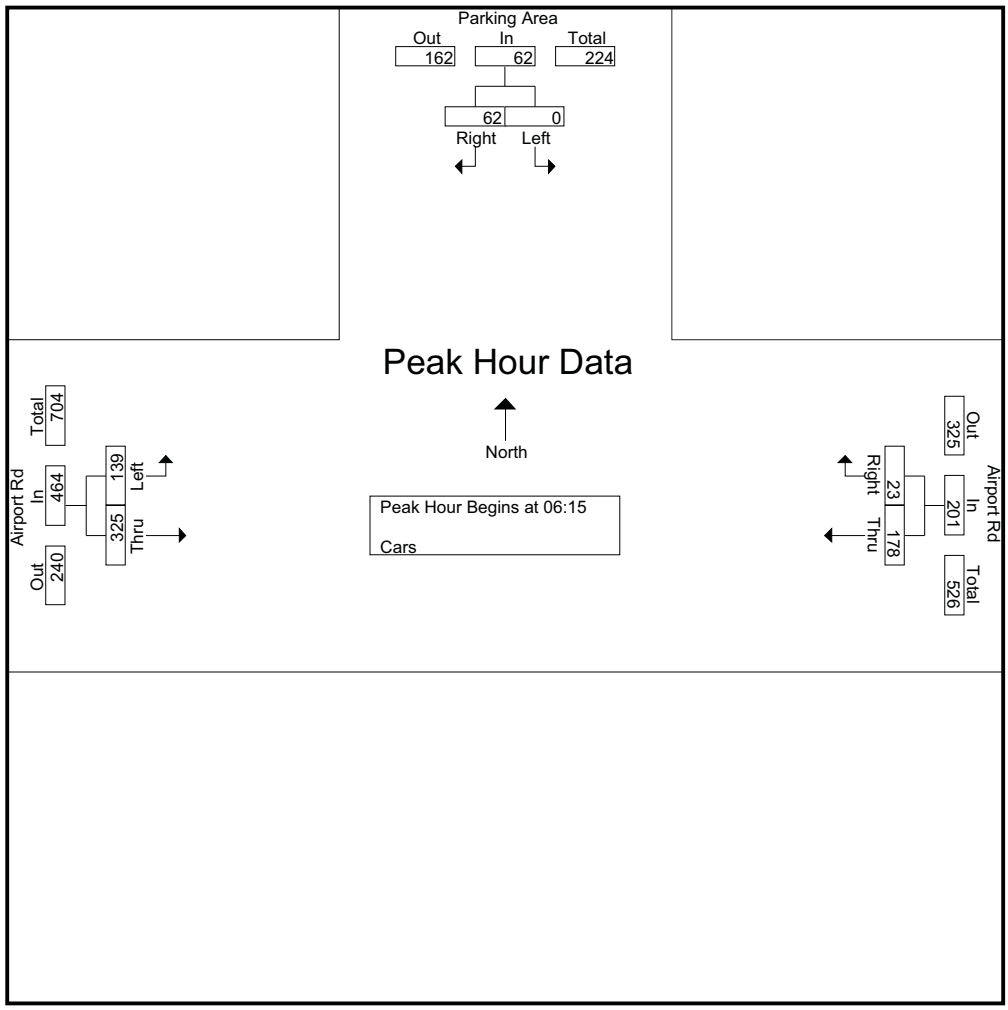
Groups Printed- Cars

	Parking Area From North			Airport Rd From East			Airport Rd From West					
Start Time	Left	Right	Peds	Thru	Right	Peds	Left	Thru	Peds	Exclu. Total	Inclu. Total	Int. Total
06:00	1	0	0	49	1	0	14	90	0	0	155	155
06:15	0	2	0	56	7	0	25	97	0	0	187	187
06:30	0	10	0	33	4	0	43	97	0	0	187	187
06:45	0	11	0	40	4	0	46	62	0	0	163	163
Total	1	23	0	178	16	0	128	346	0	0	692	692
07:00	0	39	0	49	8	0	25	69	0	0	190	190
07:15	0	7	0	40	13	0	21	61	0	0	142	142
07:30	0	3	0	42	5	0	25	64	0	0	139	139
07:45	0	5	0	40	5	0	33	62	0	0	145	145
Total	0	54	0	171	31	0	104	256	0	0	616	616
08:00	0	8	0	41	7	0	24	63	0	0	143	143
08:15	1	5	0	47	0	0	25	58	0	0	136	136
08:30	1	9	0	58	8	0	27	73	0	0	176	176
08:45	1	5	0	45	7	0	16	83	0	0	157	157
Total	3	27	0	191	22	0	92	277	0	0	612	612
Grand Total	4	104	0	540	69	0	324	879	0	0	1920	1920
Apprch %	3.7	96.3		88.7	11.3		26.9	73.1				
Total %	0.2	5.4		28.1	3.6		16.9	45.8		0	100	

	Parking Area From North			Airport Rd From East			Airport Rd From West			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 06:00 to 08:45 - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 06:15										
06:15	0	2	2	56	7	63	25	97	122	187
06:30	0	10	10	33	4	37	43	97	140	187
06:45	0	11	11	40	4	44	46	62	108	163
07:00	0	39	39	49	8	57	25	69	94	190
Total Volume	0	62	62	178	23	201	139	325	464	727
% App. Total	0	100		88.6	11.4		30	70		
PHF	.000	.397	.397	.795	.719	.798	.755	.838	.829	.957

Accurate Counts
978-664-2565

File Name : 17266003
Site Code : 17266003
Start Date : 10/22/2009
Page No : 2



Peak Hour Analysis From 06:00 to 08:45 - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	06:30			08:00			06:00		
+0 mins.	0	10	10	41	7	48	14	90	104
+15 mins.	0	11	11	47	0	47	25	97	122
+30 mins.	0	39	39	58	8	66	43	97	140
+45 mins.	0	7	7	45	7	52	46	62	108
Total Volume	0	67	67	191	22	213	128	346	474
% App. Total	0	100		89.7	10.3		27	73	
PHF	.000	.429	.429	.823	.688	.807	.696	.892	.846

File Name : 17266003
Site Code : 17266003
Start Date : 10/22/2009
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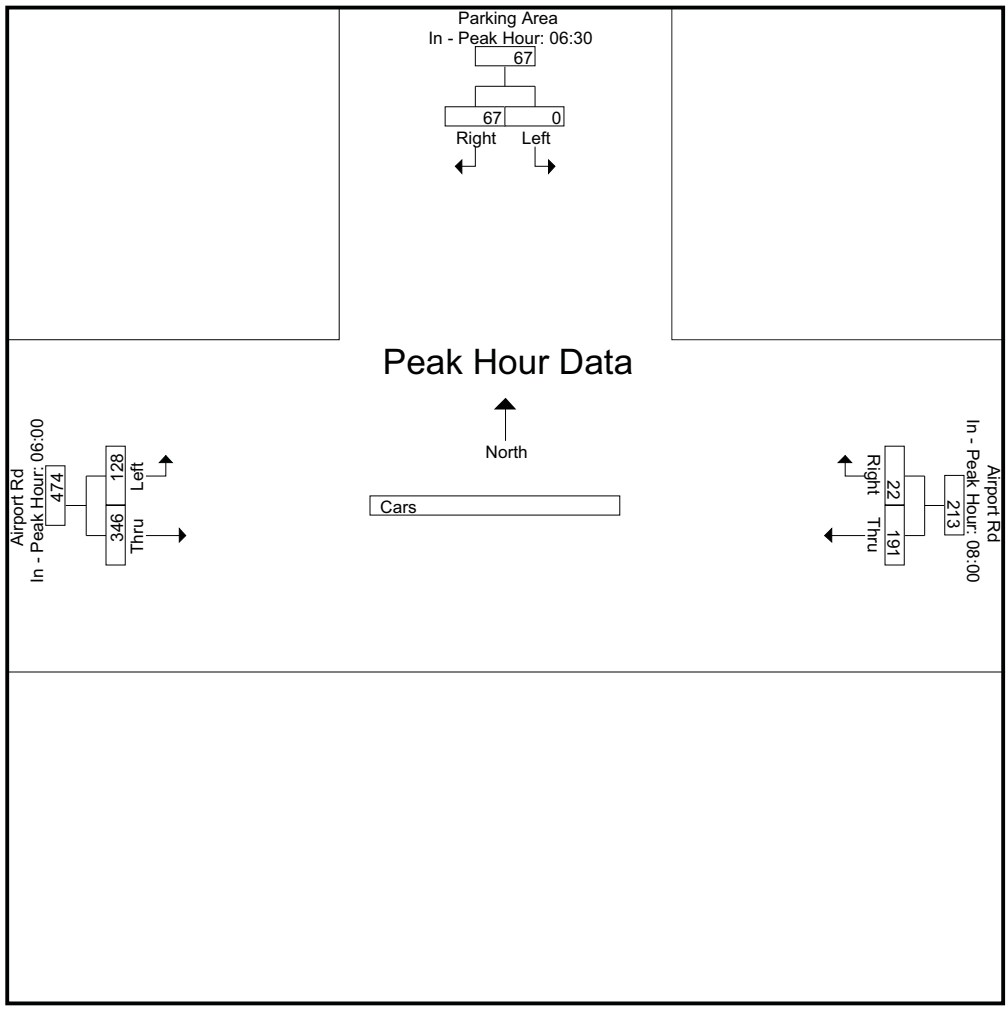

Accurate Counts
978-664-2565

N/S Street : Parking Area
E/W Street: Airport Road
City/State : Manchester, NH
Weather : Clear

File Name : 17266003
Site Code : 17266003
Start Date : 10/22/2009
Page No : 1

Groups Printed- Trucks

	Parking Area From North			Airport Rd From East			Airport Rd From West					
Start Time	Left	Right	Peds	Thru	Right	Peds	Left	Thru	Peds	Exclu. Total	Inclu. Total	Int. Total
06:00	0	0	0	0	0	0	1	1	0	0	2	2
06:15	0	1	0	0	0	0	1	0	0	0	2	2
06:30	0	0	0	0	0	0	0	0	0	0	0	0
06:45	0	1	0	0	0	0	0	0	0	0	1	1
Total	0	2	0	0	0	0	2	1	0	0	5	5
07:00	0	1	0	0	0	0	2	0	0	0	3	3
07:15	0	1	0	0	0	0	2	0	0	0	3	3
07:30	0	2	0	0	0	0	2	0	0	0	4	4
07:45	0	1	0	1	0	0	0	1	0	0	3	3
Total	0	5	0	1	0	0	6	1	0	0	13	13
08:00	0	1	0	0	0	0	1	0	0	0	2	2
08:15	0	1	0	0	0	0	0	0	0	0	1	1
08:30	0	0	0	0	0	0	2	0	0	0	2	2
08:45	0	1	0	1	0	0	0	1	0	0	3	3
Total	0	3	0	1	0	0	3	1	0	0	8	8
Grand Total	0	10	0	2	0	0	11	3	0	0	26	26
Apprch %	0	100		100	0		78.6	21.4				
Total %	0	38.5		7.7	0		42.3	11.5		0	100	

	Parking Area From North			Airport Rd From East			Airport Rd From West			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 06:00 to 08:45 - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00										
07:00	0	1	1	0	0	0	2	0	2	3
07:15	0	1	1	0	0	0	2	0	2	3
07:30	0	2	2	0	0	0	2	0	2	4
07:45	0	1	1	1	0	1	0	1	1	3
Total Volume	0	5	5	1	0	1	6	1	7	13
% App. Total	0	100		100	0		85.7	14.3		
PHF	.000	.625	.625	.250	.000	.250	.750	.250	.875	.813

File Name : 17266003
Site Code : 17266003
Start Date : 10/22/2009
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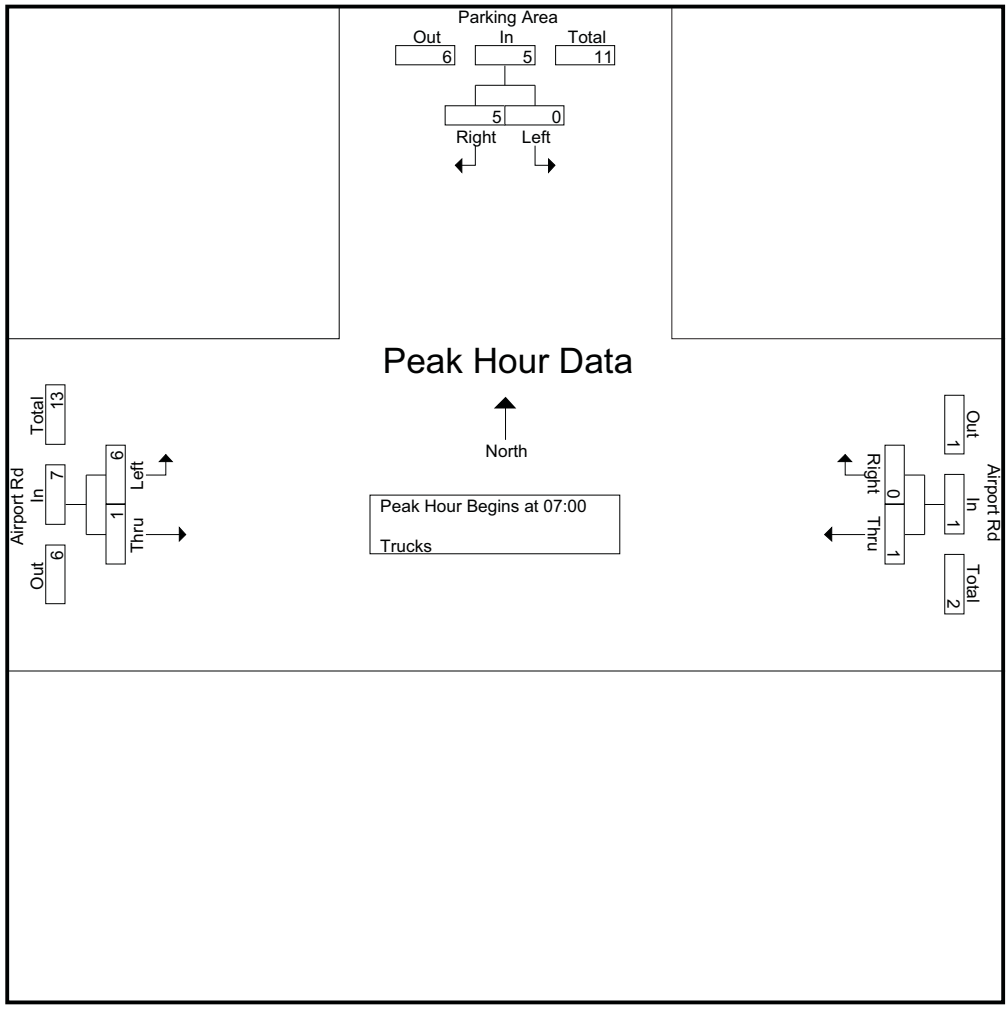

Peak Hour Analysis From 06:00 to 08:45 - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	06:45			07:00			07:00		
+0 mins.	0	1	1	0	0	0	2	0	2
+15 mins.	0	1	1	0	0	0	2	0	2
+30 mins.	0	1	1	0	0	0	2	0	2
+45 mins.	0	2	2	1	0	1	0	1	1
Total Volume	0	5	5	1	0	1	6	1	7
% App. Total	0	100		100	0		85.7	14.3	
PHF	.000	.625	.625	.250	.000	.250	.750	.250	.875

File Name : 17266003
Site Code : 17266003
Start Date : 10/22/2009
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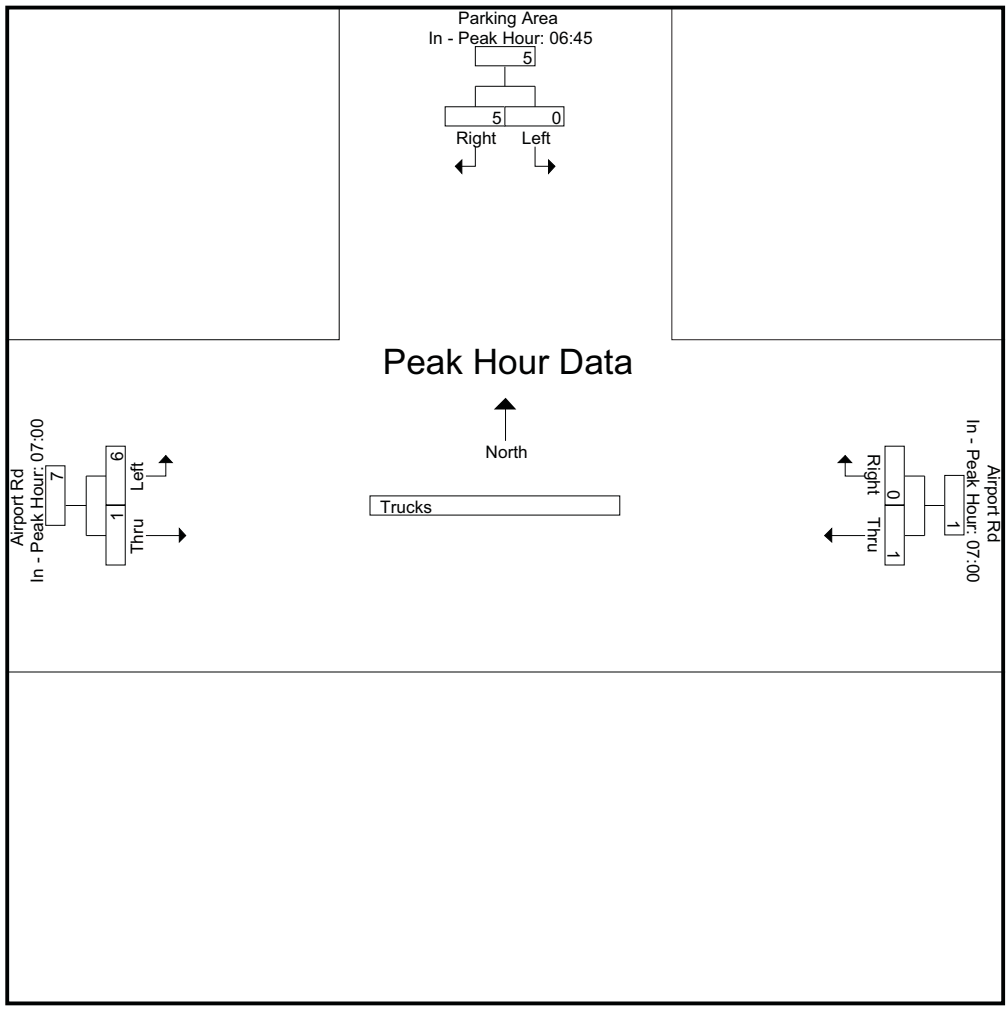


Accurate Counts
978-664-2565

N/S Street : Parking Area
E/W Street: Airport Road
City/State : Manchester, NH
Weather : Clear

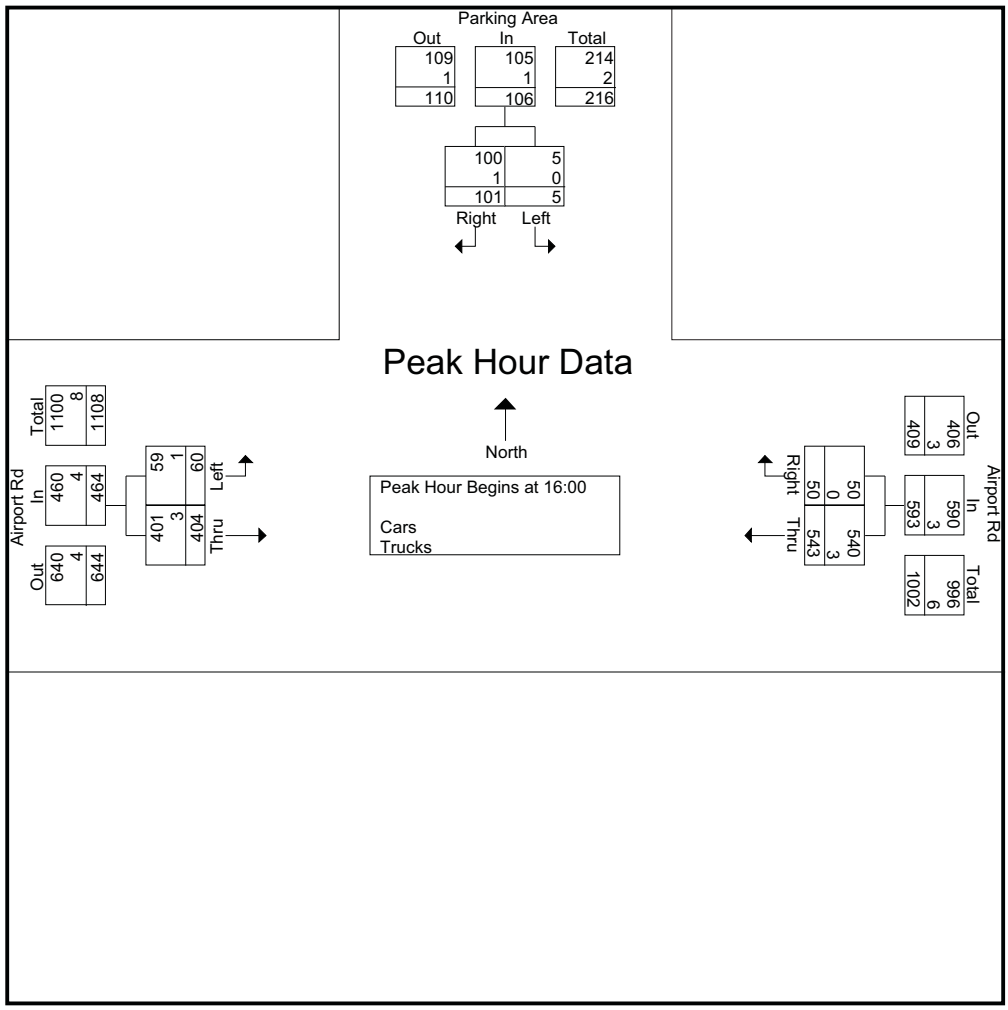
File Name : 17266003
Site Code : 17266003
Start Date : 10/22/2009
Page No : 1

Groups Printed- Cars - Trucks

	Parking Area From North			Airport Rd From East			Airport Rd From West					
Start Time	Left	Right	Peds	Thru	Right	Peds	Left	Thru	Peds	Exclu. Total	Inclu. Total	Int. Total
16:00	3	35	0	120	15	0	20	130	0	0	323	323
16:15	1	15	0	157	13	0	11	108	0	0	305	305
16:30	0	26	0	137	16	0	20	90	0	0	289	289
16:45	1	25	0	129	6	0	9	76	0	0	246	246
Total	5	101	0	543	50	0	60	404	0	0	1163	1163
17:00	4	30	0	148	13	0	11	62	0	0	268	268
17:15	0	27	0	146	7	0	12	62	0	0	254	254
17:30	1	15	0	101	6	0	13	43	0	0	179	179
17:45	0	16	0	24	12	0	5	38	0	0	95	95
Total	5	88	0	419	38	0	41	205	0	0	796	796
18:00	0	11	0	50	3	0	5	44	0	0	113	113
18:15	1	16	0	83	3	0	3	39	0	0	145	145
18:30	1	16	0	59	2	0	19	33	0	0	130	130
18:45	0	15	0	55	2	0	12	21	0	0	105	105
Total	2	58	0	247	10	0	39	137	0	0	493	493
Grand Total	12	247	0	1209	98	0	140	746	0	0	2452	2452
Apprch %	4.6	95.4		92.5	7.5		15.8	84.2				
Total %	0.5	10.1		49.3	4		5.7	30.4		0	100	
Cars	12	245		1206	98		138	743		0	0	2442
% Cars	100	99.2	0	99.8	100	0	98.6	99.6	0	0	0	99.6
Trucks	0	2		3	0		2	3		0	0	10
% Trucks	0	0.8	0	0.2	0	0	1.4	0.4	0	0	0	0.4

	Parking Area From North			Airport Rd From East			Airport Rd From West			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 18:45 - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 16:00										
16:00	3	35	38	120	15	135	20	130	150	323
16:15	1	15	16	157	13	170	11	108	119	305
16:30	0	26	26	137	16	153	20	90	110	289
16:45	1	25	26	129	6	135	9	76	85	246
Total Volume	5	101	106	543	50	593	60	404	464	1163
% App. Total	4.7	95.3		91.6	8.4		12.9	87.1		
PHF	.417	.721	.697	.865	.781	.872	.750	.777	.773	.900
Cars	5	100	105	540	50	590	59	401	460	1155
% Cars	100	99.0	99.1	99.4	100	99.5	98.3	99.3	99.1	99.3
Trucks	0	1	1	3	0	3	1	3	4	8
% Trucks	0	1.0	0.9	0.6	0	0.5	1.7	0.7	0.9	0.7

File Name : 17266003
Site Code : 17266003
Start Date : 10/22/2009
Page No : 2

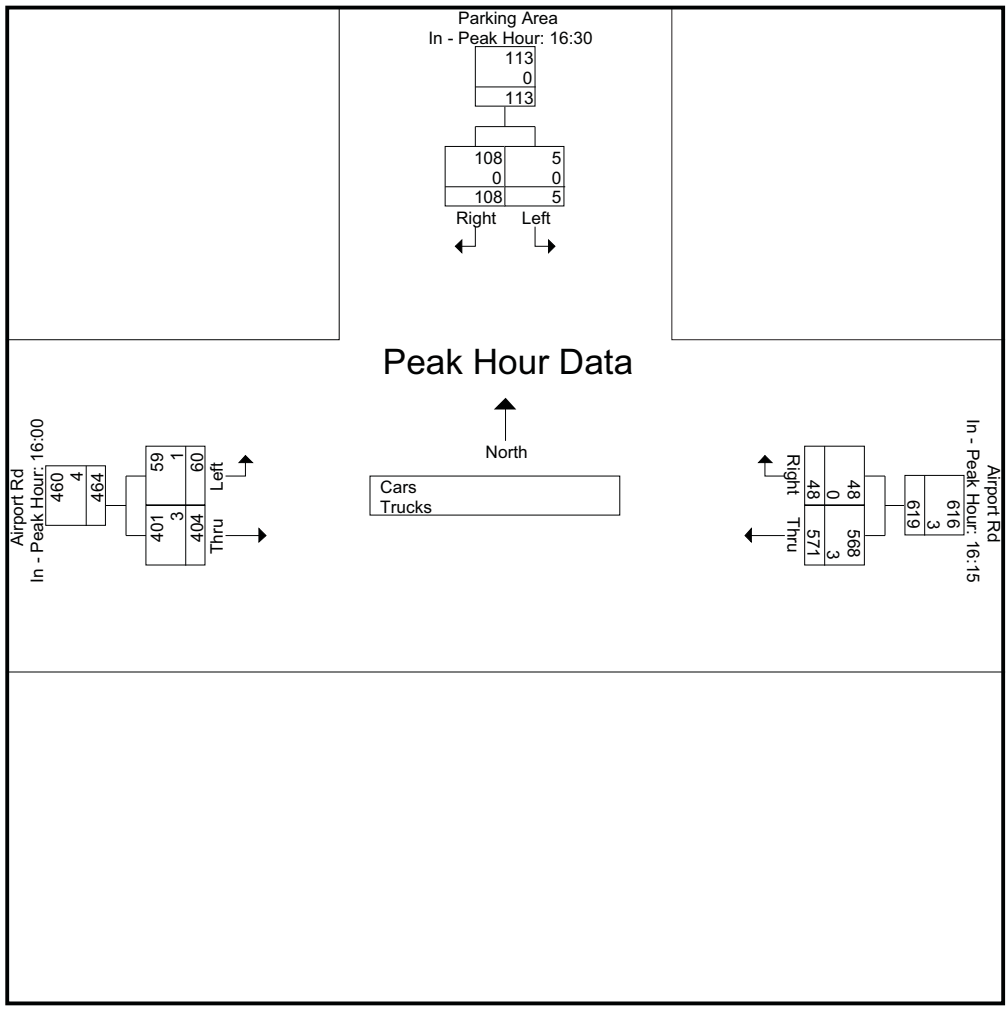


Peak Hour Analysis From 16:00 to 18:45 - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	16:30			16:15			16:00		
+0 mins.	0	26	26	157	13	170	20	130	150
+15 mins.	1	25	26	137	16	153	11	108	119
+30 mins.	4	30	34	129	6	135	20	90	110
+45 mins.	0	27	27	148	13	161	9	76	85
Total Volume	5	108	113	571	48	619	60	404	464
% App. Total	4.4	95.6		92.2	7.8		12.9	87.1	
PHF	.313	.900	.831	.909	.750	.910	.750	.777	.773
Cars	5	108	113	568	48	616	59	401	460
% Cars	100	100	100	99.5	100	99.5	98.3	99.3	99.1
Trucks	0	0	0	3	0	3	1	3	4
% Trucks	0	0	0	0.5	0	0.5	1.7	0.7	0.9

Accurate Counts
978-664-2565

File Name : 17266003
Site Code : 17266003
Start Date : 10/22/2009
Page No : 3



Accurate Counts
978-664-2565

N/S Street : Parking Area
E/W Street: Airport Road
City/State : Manchester, NH
Weather : Clear

File Name : 17266003
Site Code : 17266003
Start Date : 10/22/2009
Page No : 1

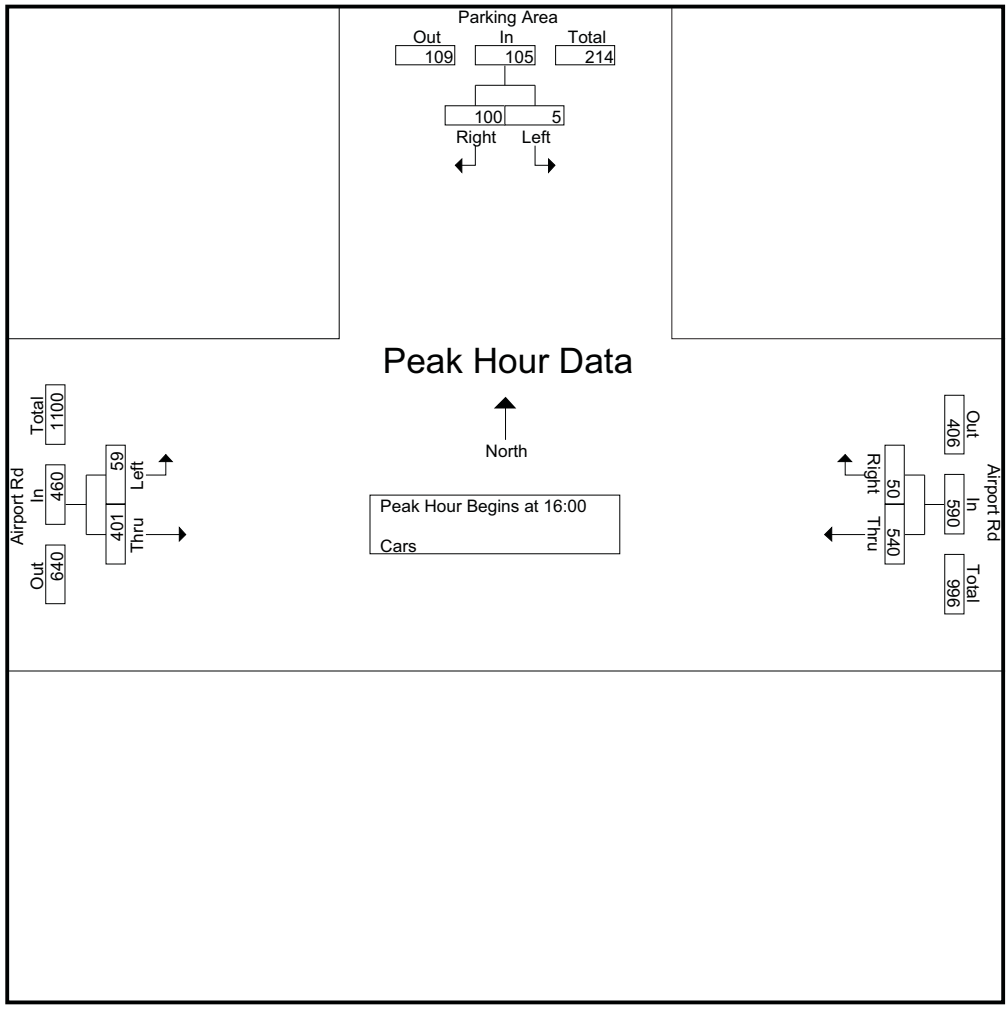
Groups Printed- Cars

	Parking Area From North			Airport Rd From East			Airport Rd From West					
Start Time	Left	Right	Peds	Thru	Right	Peds	Left	Thru	Peds	Exclu. Total	Inclu. Total	Int. Total
16:00	3	34	0	120	15	0	20	130	0	0	322	322
16:15	1	15	0	156	13	0	11	107	0	0	303	303
16:30	0	26	0	136	16	0	19	89	0	0	286	286
16:45	1	25	0	128	6	0	9	75	0	0	244	244
Total	5	100	0	540	50	0	59	401	0	0	1155	1155
17:00	4	30	0	148	13	0	11	62	0	0	268	268
17:15	0	27	0	146	7	0	12	62	0	0	254	254
17:30	1	15	0	101	6	0	12	43	0	0	178	178
17:45	0	16	0	24	12	0	5	38	0	0	95	95
Total	5	88	0	419	38	0	40	205	0	0	795	795
18:00	0	10	0	50	3	0	5	44	0	0	112	112
18:15	1	16	0	83	3	0	3	39	0	0	145	145
18:30	1	16	0	59	2	0	19	33	0	0	130	130
18:45	0	15	0	55	2	0	12	21	0	0	105	105
Total	2	57	0	247	10	0	39	137	0	0	492	492
Grand Total	12	245	0	1206	98	0	138	743	0	0	2442	2442
Apprch %	4.7	95.3		92.5	7.5		15.7	84.3				
Total %	0.5	10		49.4	4		5.7	30.4		0	100	

	Parking Area From North			Airport Rd From East			Airport Rd From West			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 18:45 - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 16:00										
16:00	3	34	37	120	15	135	20	130	150	322
16:15	1	15	16	156	13	169	11	107	118	303
16:30	0	26	26	136	16	152	19	89	108	286
16:45	1	25	26	128	6	134	9	75	84	244
Total Volume	5	100	105	540	50	590	59	401	460	1155
% App. Total	4.8	95.2		91.5	8.5		12.8	87.2		
PHF	.417	.735	.709	.865	.781	.873	.738	.771	.767	.897

Accurate Counts
978-664-2565

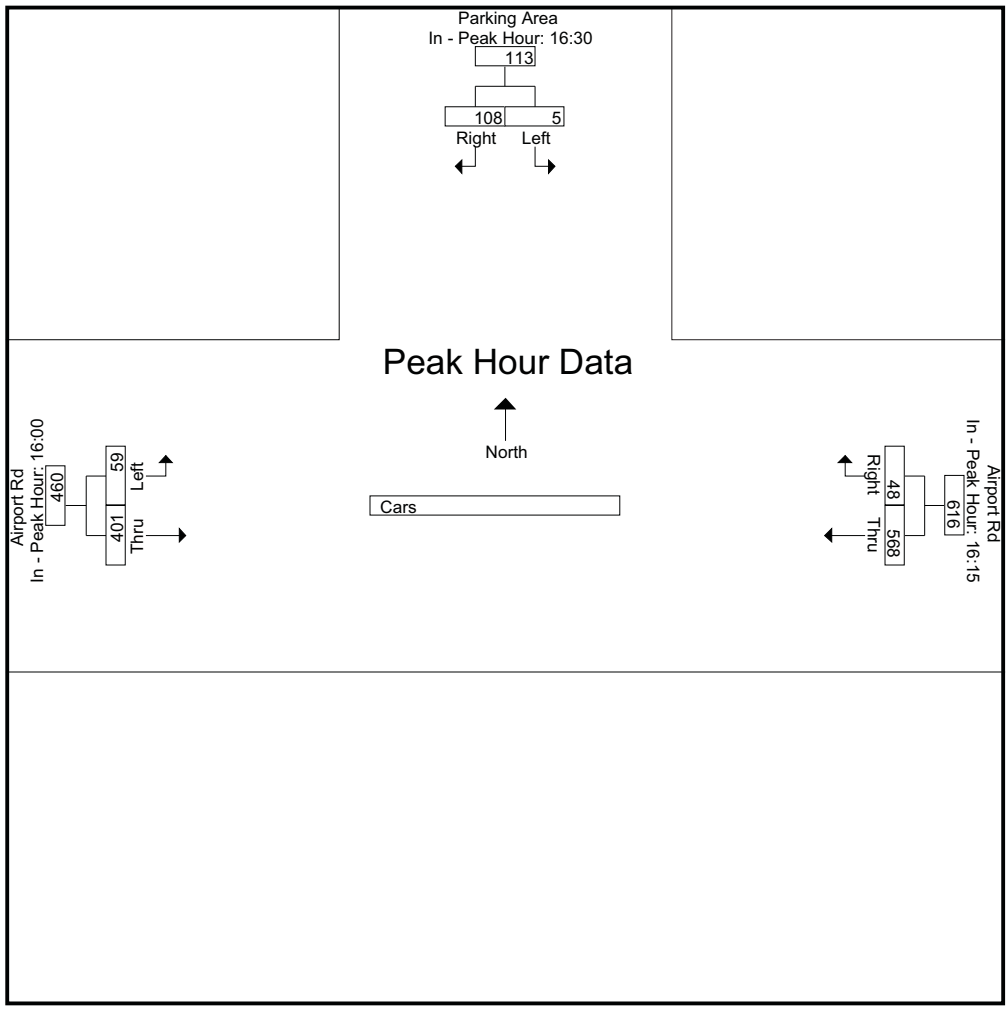
File Name : 17266003
Site Code : 17266003
Start Date : 10/22/2009
Page No : 2



Peak Hour Analysis From 16:00 to 18:45 - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	16:30			16:15			16:00		
+0 mins.	0	26	26	156	13	169	20	130	150
+15 mins.	1	25	26	136	16	152	11	107	118
+30 mins.	4	30	34	128	6	134	19	89	108
+45 mins.	0	27	27	148	13	161	9	75	84
Total Volume	5	108	113	568	48	616	59	401	460
% App. Total	4.4	95.6		92.2	7.8		12.8	87.2	
PHF	.313	.900	.831	.910	.750	.911	.738	.771	.767

File Name : 17266003
Site Code : 17266003
Start Date : 10/22/2009
Page No : 3



Accurate Counts
978-664-2565

N/S Street : Parking Area
E/W Street: Airport Road
City/State : Manchester, NH
Weather : Clear

File Name : 17266003
Site Code : 17266003
Start Date : 10/22/2009
Page No : 1

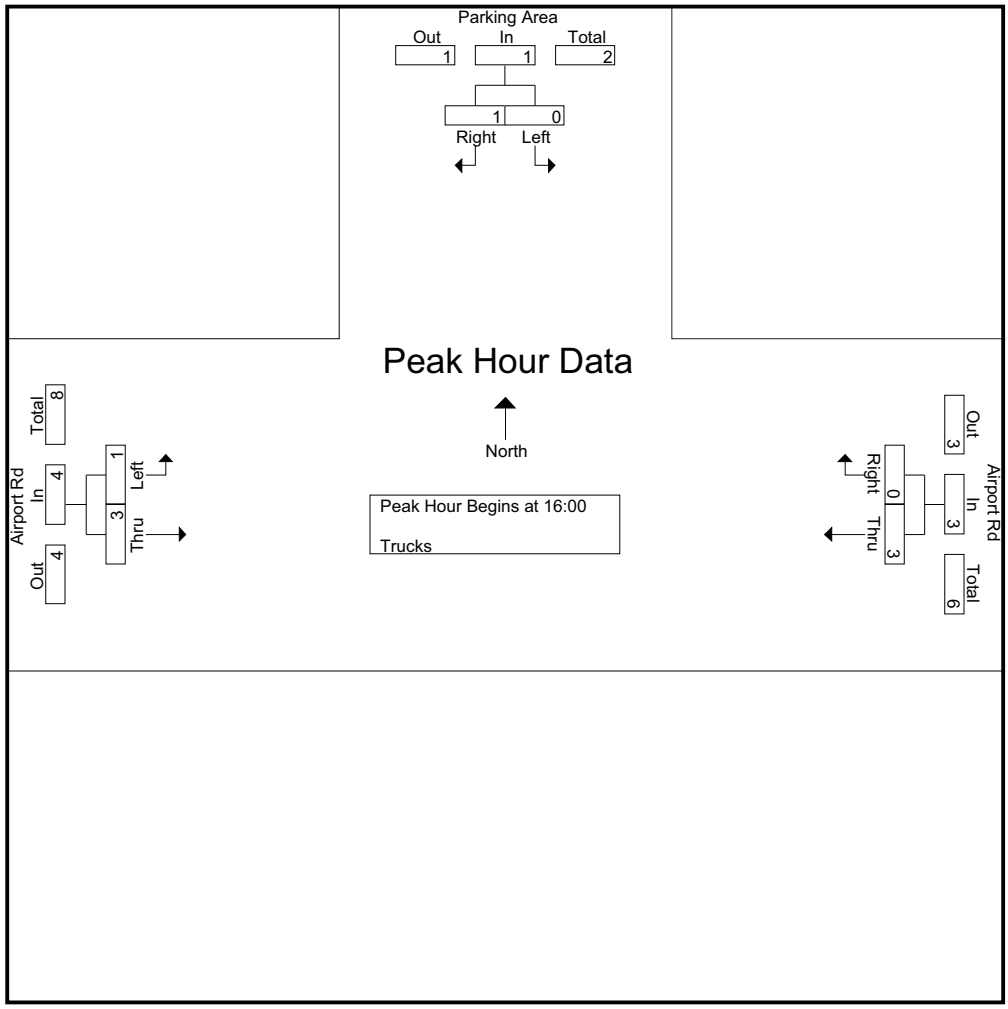
Groups Printed- Trucks

	Parking Area From North			Airport Rd From East			Airport Rd From West					
Start Time	Left	Right	Peds	Thru	Right	Peds	Left	Thru	Peds	Exclu. Total	Inclu. Total	Int. Total
16:00	0	1	0	0	0	0	0	0	0	0	1	1
16:15	0	0	0	1	0	0	0	1	0	0	2	2
16:30	0	0	0	1	0	0	1	1	0	0	3	3
16:45	0	0	0	1	0	0	0	1	0	0	2	2
Total	0	1	0	3	0	0	1	3	0	0	8	8
17:00	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	1	0	0	0	1	1
17:45	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	1	0	0	0	1	1
18:00	0	1	0	0	0	0	0	0	0	0	1	1
18:15	0	0	0	0	0	0	0	0	0	0	0	0
18:30	0	0	0	0	0	0	0	0	0	0	0	0
18:45	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	0	0	0	0	0	0	0	1	1
Grand Total	0	2	0	3	0	0	2	3	0	0	10	10
Apprch %	0	100		100	0		40	60				
Total %	0	20		30	0		20	30		0	100	

	Parking Area From North			Airport Rd From East			Airport Rd From West			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 18:45 - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 16:00										
16:00	0	1	1	0	0	0	0	0	0	1
16:15	0	0	0	1	0	1	0	1	1	2
16:30	0	0	0	1	0	1	1	1	2	3
16:45	0	0	0	1	0	1	0	1	1	2
Total Volume	0	1	1	3	0	3	1	3	4	8
% App. Total	0	100		100	0		25	75		
PHF	.000	.250	.250	.750	.000	.750	.250	.750	.500	.667

Accurate Counts
978-664-2565

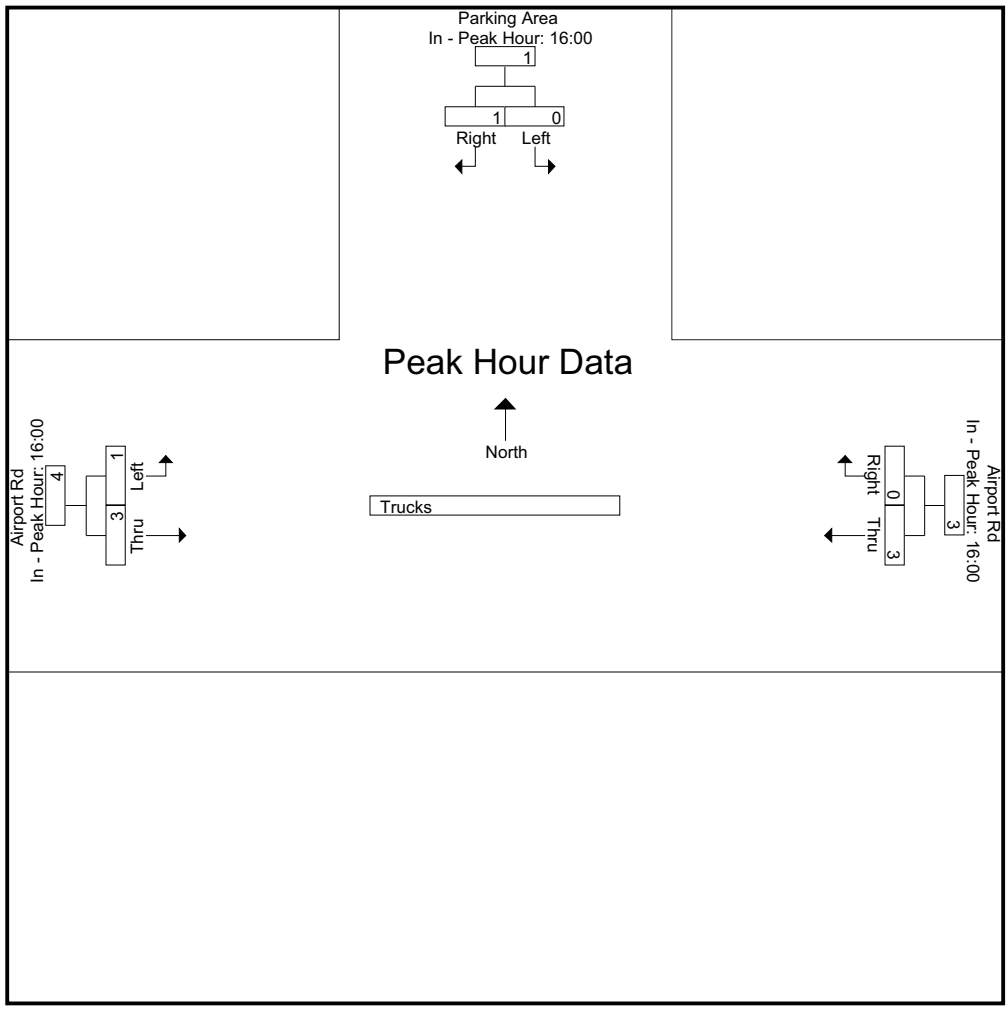
File Name : 17266003
Site Code : 17266003
Start Date : 10/22/2009
Page No : 2



Peak Hour Analysis From 16:00 to 18:45 - Peak 1 of 1
Peak Hour for Each Approach Begins at:

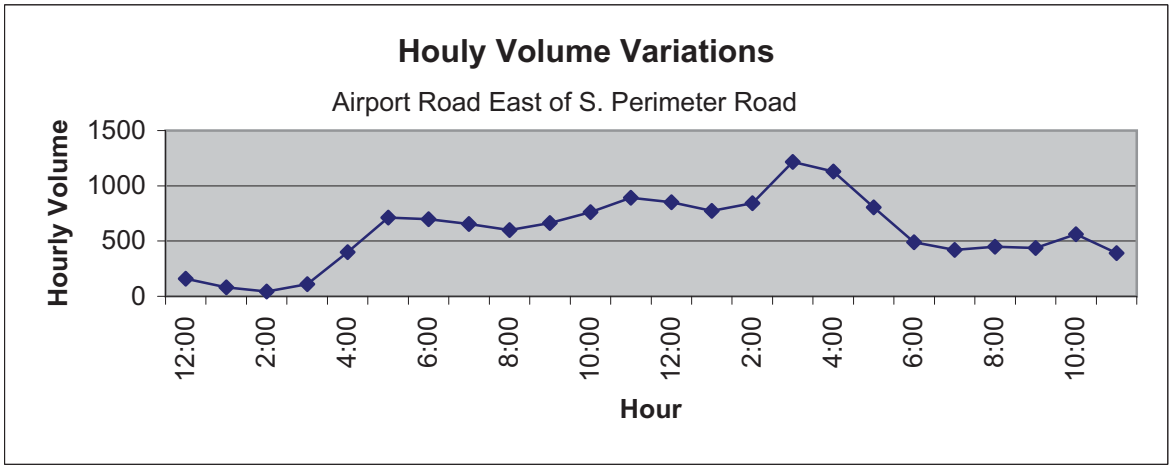
	16:00			16:00			16:00		
+0 mins.	0	1	1	0	0	0	0	0	0
+15 mins.	0	0	0	1	0	1	0	1	1
+30 mins.	0	0	0	1	0	1	1	1	2
+45 mins.	0	0	0	1	0	1	0	1	1
Total Volume	0	1	1	3	0	3	1	3	4
% App. Total	0	100		100	0		25	75	
PHF	.000	.250	.250	.750	.000	.750	.250	.750	.500

File Name : 17266003
Site Code : 17266003
Start Date : 10/22/2009
Page No : 3



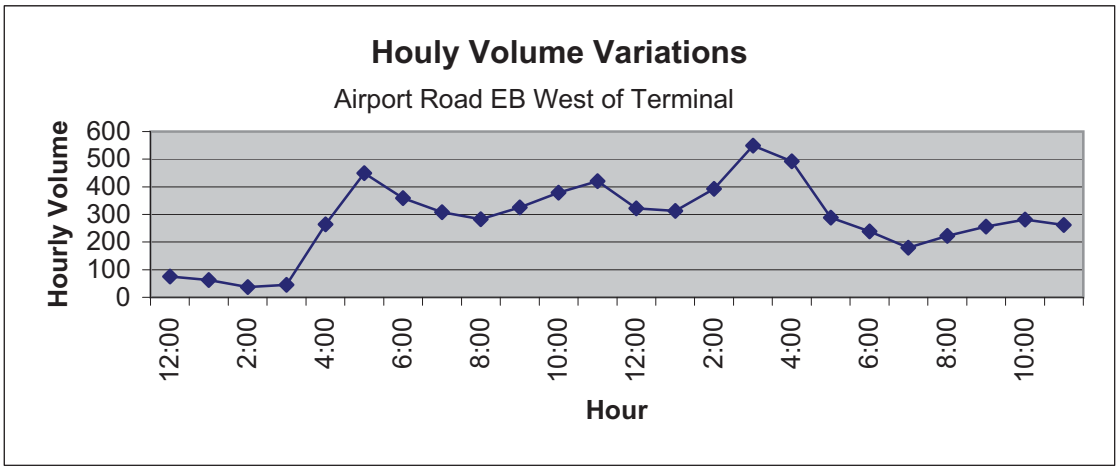
Airport Road East of S. Perimeter Road

From	To		Hour	Houly Volume
12:00 AM	1:00 AM	127	12:00 AM-1:00 AM	160
1:00 AM	2:00 AM	65	1:00 AM-2:00 AM	80
2:00 AM	3:00 AM	18	2:00 AM-3:00 AM	43
3:00 AM	4:00 AM	24	3:00 AM-4:00 AM	111
4:00 AM	5:00 AM	96	4:00 AM-5:00 AM	401
5:00 AM	6:00 AM	225	5:00 AM-6:00 AM	711
6:00 AM	7:00 AM	209	6:00 AM-7:00 AM	699
7:00 AM	8:00 AM	240	7:00 AM-8:00 AM	655
8:00 AM	9:00 AM	229	8:00 AM-9:00 AM	598
9:00 AM	10:00 AM	276	9:00 AM-10:00 AM	662
10:00 AM	11:00 AM	317	10:00 AM-11:00 AM	763
11:00 AM	12:00 PM	430	11:00 AM-12:00 PM	892
12:00 PM	1:00 PM	453	12:00 PM-1:00 PM	852
1:00 PM	2:00 PM	351	1:00 PM-2:00 PM	773
2:00 PM	3:00 PM	330	2:00 PM-3:00 PM	844
3:00 PM	4:00 PM	640	3:00 PM-4:00 PM	1216
4:00 PM	5:00 PM	655	4:00 PM-5:00 PM	1130
5:00 PM	6:00 PM	520	5:00 PM-6:00 PM	806
6:00 PM	7:00 PM	301	6:00 PM-7:00 PM	490
7:00 PM	8:00 PM	277	7:00 PM-8:00 PM	421
8:00 PM	9:00 PM	289	8:00 PM-9:00 PM	450
9:00 PM	10:00 PM	262	9:00 PM-10:00 PM	437
10:00 PM	11:00 PM	384	10:00 PM-11:00 PM	563
11:00 PM	12:00 AM	281	11:00 PM-12:00 AM	391
				14148



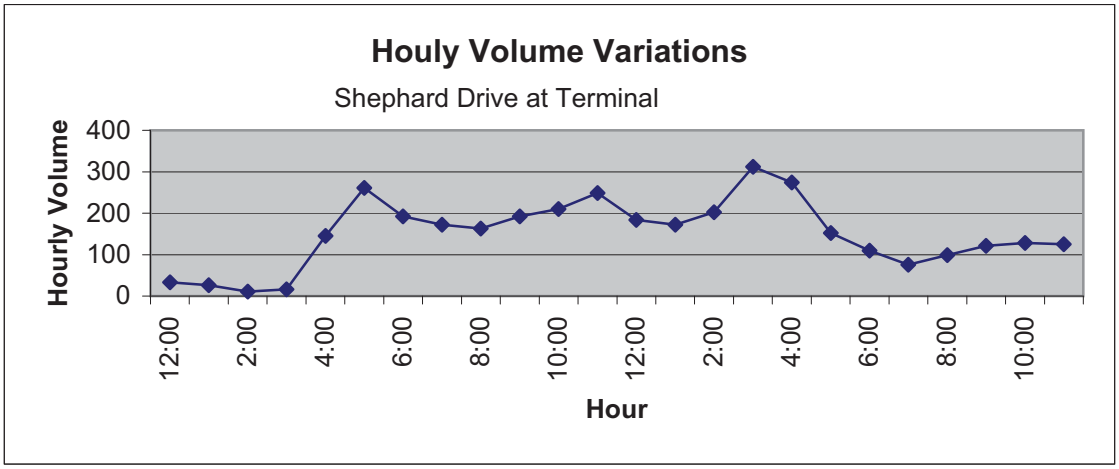
Airport Road EB West of Terminal

From	To	Hour	Houly Volume
12:00 AM	1:00 AM	12:00 AM-1:00 AM	75
1:00 AM	2:00 AM	1:00 AM-2:00 AM	62
2:00 AM	3:00 AM	2:00 AM-3:00 AM	37
3:00 AM	4:00 AM	3:00 AM-4:00 AM	45
4:00 AM	5:00 AM	4:00 AM-5:00 AM	264
5:00 AM	6:00 AM	5:00 AM-6:00 AM	450
6:00 AM	7:00 AM	6:00 AM-7:00 AM	359
7:00 AM	8:00 AM	7:00 AM-8:00 AM	308
8:00 AM	9:00 AM	8:00 AM-9:00 AM	283
9:00 AM	10:00 AM	9:00 AM-10:00 AM	326
10:00 AM	11:00 AM	10:00 AM-11:00 AM	379
11:00 AM	12:00 PM	11:00 AM-12:00 PM	420
12:00 PM	1:00 PM	12:00 PM-1:00 PM	322
1:00 PM	2:00 PM	1:00 PM-2:00 PM	313
2:00 PM	3:00 PM	2:00 PM-3:00 PM	393
3:00 PM	4:00 PM	3:00 PM-4:00 PM	549
4:00 PM	5:00 PM	4:00 PM-5:00 PM	492
5:00 PM	6:00 PM	5:00 PM-6:00 PM	288
6:00 PM	7:00 PM	6:00 PM-7:00 PM	239
7:00 PM	8:00 PM	7:00 PM-8:00 PM	179
8:00 PM	9:00 PM	8:00 PM-9:00 PM	222
9:00 PM	10:00 PM	9:00 PM-10:00 PM	256
10:00 PM	11:00 PM	10:00 PM-11:00 PM	281
11:00 PM	12:00 AM	11:00 PM-12:00 AM	262
			6804



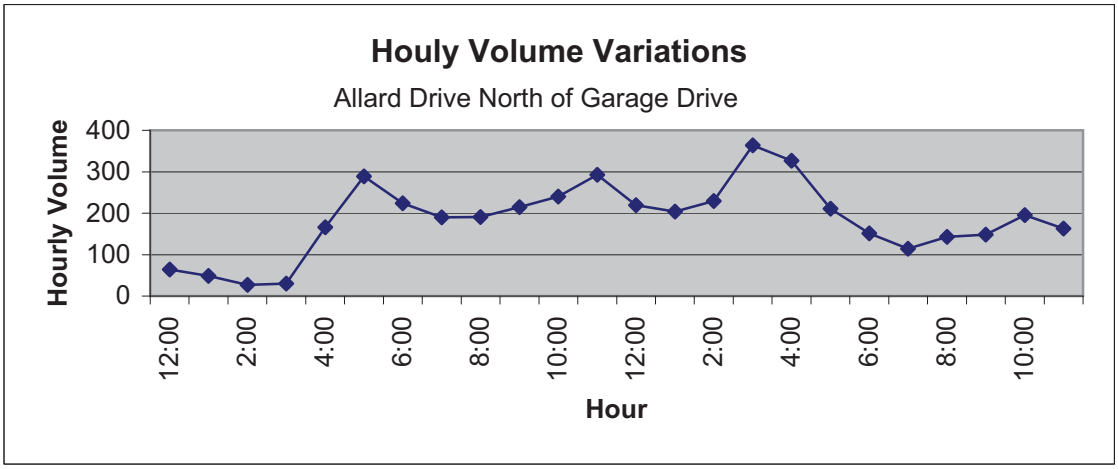
Shephard Drive at Terminal

From	To	Hour	Houly Volume
12:00 AM	1:00 AM	12:00 AM-1:00 AM	33
1:00 AM	2:00 AM	1:00 AM-2:00 AM	26
2:00 AM	3:00 AM	2:00 AM-3:00 AM	11
3:00 AM	4:00 AM	3:00 AM-4:00 AM	16
4:00 AM	5:00 AM	4:00 AM-5:00 AM	145
5:00 AM	6:00 AM	5:00 AM-6:00 AM	261
6:00 AM	7:00 AM	6:00 AM-7:00 AM	192
7:00 AM	8:00 AM	7:00 AM-8:00 AM	172
8:00 AM	9:00 AM	8:00 AM-9:00 AM	163
9:00 AM	10:00 AM	9:00 AM-10:00 AM	192
10:00 AM	11:00 AM	10:00 AM-11:00 AM	210
11:00 AM	12:00 PM	11:00 AM-12:00 PM	249
12:00 PM	1:00 PM	12:00 PM-1:00 PM	184
1:00 PM	2:00 PM	1:00 PM-2:00 PM	172
2:00 PM	3:00 PM	2:00 PM-3:00 PM	202
3:00 PM	4:00 PM	3:00 PM-4:00 PM	312
4:00 PM	5:00 PM	4:00 PM-5:00 PM	274
5:00 PM	6:00 PM	5:00 PM-6:00 PM	152
6:00 PM	7:00 PM	6:00 PM-7:00 PM	110
7:00 PM	8:00 PM	7:00 PM-8:00 PM	76
8:00 PM	9:00 PM	8:00 PM-9:00 PM	99
9:00 PM	10:00 PM	9:00 PM-10:00 PM	121
10:00 PM	11:00 PM	10:00 PM-11:00 PM	128
11:00 PM	12:00 AM	11:00 PM-12:00 AM	125
			3625



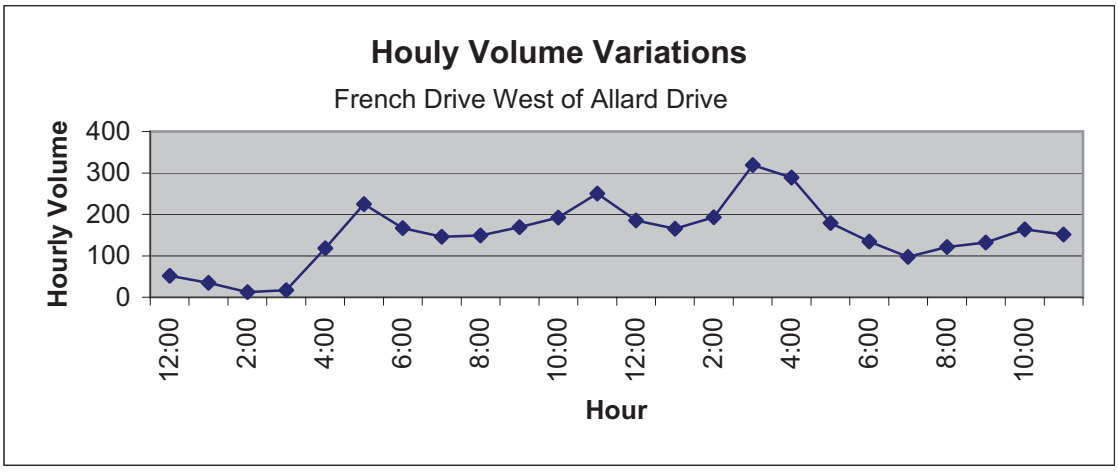
Allard Drive North of Garage Drive

From	To	Hour	Houly Volume
12:00 AM	1:00 AM	12:00 AM-1:00 AM	64
1:00 AM	2:00 AM	1:00 AM-2:00 AM	49
2:00 AM	3:00 AM	2:00 AM-3:00 AM	27
3:00 AM	4:00 AM	3:00 AM-4:00 AM	30
4:00 AM	5:00 AM	4:00 AM-5:00 AM	166
5:00 AM	6:00 AM	5:00 AM-6:00 AM	289
6:00 AM	7:00 AM	6:00 AM-7:00 AM	224
7:00 AM	8:00 AM	7:00 AM-8:00 AM	190
8:00 AM	9:00 AM	8:00 AM-9:00 AM	191
9:00 AM	10:00 AM	9:00 AM-10:00 AM	215
10:00 AM	11:00 AM	10:00 AM-11:00 AM	240
11:00 AM	12:00 PM	11:00 AM-12:00 PM	293
12:00 PM	1:00 PM	12:00 PM-1:00 PM	219
1:00 PM	2:00 PM	1:00 PM-2:00 PM	204
2:00 PM	3:00 PM	2:00 PM-3:00 PM	229
3:00 PM	4:00 PM	3:00 PM-4:00 PM	364
4:00 PM	5:00 PM	4:00 PM-5:00 PM	327
5:00 PM	6:00 PM	5:00 PM-6:00 PM	211
6:00 PM	7:00 PM	6:00 PM-7:00 PM	151
7:00 PM	8:00 PM	7:00 PM-8:00 PM	114
8:00 PM	9:00 PM	8:00 PM-9:00 PM	143
9:00 PM	10:00 PM	9:00 PM-10:00 PM	148
10:00 PM	11:00 PM	10:00 PM-11:00 PM	195
11:00 PM	12:00 AM	11:00 PM-12:00 AM	163
			4446



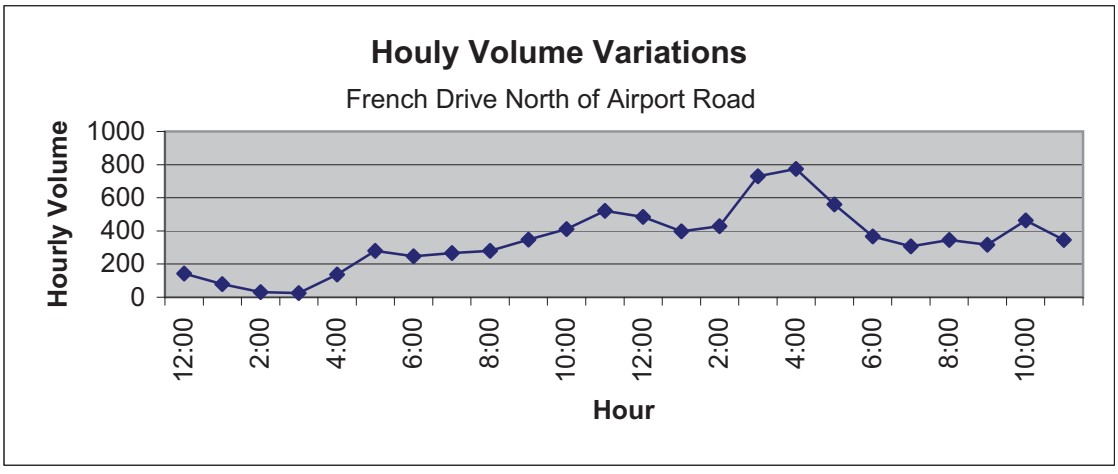
French Drive West of Allard Drive

From	To	Hour	Houly Volume
12:00 AM	1:00 AM	12:00 AM-1:00 AM	52
1:00 AM	2:00 AM	1:00 AM-2:00 AM	35
2:00 AM	3:00 AM	2:00 AM-3:00 AM	12
3:00 AM	4:00 AM	3:00 AM-4:00 AM	17
4:00 AM	5:00 AM	4:00 AM-5:00 AM	118
5:00 AM	6:00 AM	5:00 AM-6:00 AM	225
6:00 AM	7:00 AM	6:00 AM-7:00 AM	167
7:00 AM	8:00 AM	7:00 AM-8:00 AM	146
8:00 AM	9:00 AM	8:00 AM-9:00 AM	149
9:00 AM	10:00 AM	9:00 AM-10:00 AM	169
10:00 AM	11:00 AM	10:00 AM-11:00 AM	192
11:00 AM	12:00 PM	11:00 AM-12:00 PM	250
12:00 PM	1:00 PM	12:00 PM-1:00 PM	185
1:00 PM	2:00 PM	1:00 PM-2:00 PM	165
2:00 PM	3:00 PM	2:00 PM-3:00 PM	193
3:00 PM	4:00 PM	3:00 PM-4:00 PM	319
4:00 PM	5:00 PM	4:00 PM-5:00 PM	289
5:00 PM	6:00 PM	5:00 PM-6:00 PM	179
6:00 PM	7:00 PM	6:00 PM-7:00 PM	134
7:00 PM	8:00 PM	7:00 PM-8:00 PM	97
8:00 PM	9:00 PM	8:00 PM-9:00 PM	121
9:00 PM	10:00 PM	9:00 PM-10:00 PM	132
10:00 PM	11:00 PM	10:00 PM-11:00 PM	164
11:00 PM	12:00 AM	11:00 PM-12:00 AM	151
			3661



French Drive North of Airport Road

From	To	Hour	Houly Volume
12:00 AM	1:00 AM	12:00 AM-1:00 AM	143
1:00 AM	2:00 AM	1:00 AM-2:00 AM	79
2:00 AM	3:00 AM	2:00 AM-3:00 AM	31
3:00 AM	4:00 AM	3:00 AM-4:00 AM	25
4:00 AM	5:00 AM	4:00 AM-5:00 AM	138
5:00 AM	6:00 AM	5:00 AM-6:00 AM	279
6:00 AM	7:00 AM	6:00 AM-7:00 AM	247
7:00 AM	8:00 AM	7:00 AM-8:00 AM	266
8:00 AM	9:00 AM	8:00 AM-9:00 AM	280
9:00 AM	10:00 AM	9:00 AM-10:00 AM	348
10:00 AM	11:00 AM	10:00 AM-11:00 AM	412
11:00 AM	12:00 PM	11:00 AM-12:00 PM	521
12:00 PM	1:00 PM	12:00 PM-1:00 PM	484
1:00 PM	2:00 PM	1:00 PM-2:00 PM	397
2:00 PM	3:00 PM	2:00 PM-3:00 PM	429
3:00 PM	4:00 PM	3:00 PM-4:00 PM	730
4:00 PM	5:00 PM	4:00 PM-5:00 PM	775
5:00 PM	6:00 PM	5:00 PM-6:00 PM	560
6:00 PM	7:00 PM	6:00 PM-7:00 PM	366
7:00 PM	8:00 PM	7:00 PM-8:00 PM	306
8:00 PM	9:00 PM	8:00 PM-9:00 PM	346
9:00 PM	10:00 PM	9:00 PM-10:00 PM	316
10:00 PM	11:00 PM	10:00 PM-11:00 PM	463
11:00 PM	12:00 AM	11:00 PM-12:00 AM	345
			8286



Appendix F2

Curbfront Dwell Time Collection

Trip Type: ARRIVALS
Date: 9/30/2009
Video Time: 1:08:30
Start Time: 3:25 PM
End Time: 4:33 PM

Passenger							Taxi / Shuttle Van							
TRIP TYPE	START TIME		MIN	SEC	TOTAL SECONDS	DWELL TIME IN SECOND	TRIP TYPE	START TIME		MIN	SEC	TOTAL SECONDS	DWELL TIME IN SECOND	
	In	3:33:29 PM	8	29	509			In	4:05:45 PM	40	45	2445		
A	Out	3:34:06 PM	9	6	546		A	Out	4:06:22 PM	41	22	2482		
	Subtotal					**37**		Subtotal					**37**	1
	In	3:34:30 PM	9	30	570			In				0		
A	Out	3:34:50 PM	9	50	590		A	Out				0		
	Subtotal					**20**		Subtotal					**0**	1
	In	3:34:54 PM	9	54	594			In				0		
A	Out	3:35:32 PM	10	32	632		A	Out				0		
	Subtotal					**38**		Subtotal					**0**	1
	In	3:35:27 PM	10	27	627			In				0		
A	Out	3:35:54 PM	10	54	654		A	Out				0		
	Subtotal					**27**		Subtotal					**0**	1
	In	3:40:00 PM	15	0	900			In				0		
A	Out	3:41:00 PM	16	0	960		A	Out				0		
	Subtotal					**60**		Subtotal					**0**	1
	In	3:41:00 PM	16	0	960			In				0		
A	Out	3:47:00 PM	22	0	1320		A	Out				0		
	Subtotal					**360**		Subtotal					**0**	1
	In	3:41:31 PM	16	31	991			In				0		
A	Out	3:44:57 PM	19	57	1197		A	Out				0		
	Subtotal					**206**		Subtotal					**0**	1
	In	3:43:30 PM	18	30	1110			In				0		
A	Out	3:45:00 PM	20	0	1200		A	Out				0		
	Subtotal					**90**		Subtotal					**0**	1
	In	3:46:00 PM	21	0	1260			In				0		
A	Out	3:48:00 PM	23	0	1380			Out				0		
	Subtotal					**120**		Subtotal					**0**	1
	In	3:46:00 PM	21	0	1260			In				0		
A	Out	3:50:00 PM	25	0	1500			Out				0		
	Subtotal					**240**		Subtotal					**0**	1
	In	3:47:00 PM	22	0	1320			In				0		
A	Out	3:47:45 PM	22	45	1365			Out				0		
	Subtotal					**45**		Subtotal					**0**	1
	In	3:47:55 PM	22	55	1375			In				0		
A	Out	3:48:47 PM	23	47	1427			Out				0		
	Subtotal					**52**		Subtotal					**0**	1
	In	3:48:43 PM	23	43	1423			In				0		
A	Out	3:49:23 PM	24	23	1463			Out				0		
	Subtotal					**40**		Subtotal					**0**	1
	In	3:48:51 PM	23	51	1431			In				0		
A	Out	3:49:31 PM	24	31	1471			Out				0		
	Subtotal					**40**		Subtotal					**0**	1
	In	3:50:00 PM	25	0	1500			In				0		
A	Out	3:51:00 PM	26	0	1560			Out				0		
	Subtotal					**60**		Subtotal					**0**	1
	In	3:51:00 PM	26	0	1560			In				0		
A	Out	3:52:00 PM	27	0	1620			Out				0		
	Subtotal					**60**		Subtotal					**0**	1
	In	3:51:04 PM	26	4	1564			In				0		
A	Out	3:52:15 PM	27	15	1635			Out				0		
	Subtotal					**71**		Subtotal					**0**	1
	In	3:51:13 PM	26	13	1573			In				0		
A	Out	3:51:25 PM	26	25	1585			Out				0		
	Subtotal					**12**		Subtotal					**0**	1
	In	3:51:16 PM	26	16	1576			In				0		
A	Out	3:58:41 PM	33	41	2021			Out				0		
	Subtotal					**445**		Subtotal					**0**	1
	In	3:54:05 PM	29	5	1745			In				0		
A	Out	3:55:37 PM	30	37	1837			Out				0		
	Subtotal					**92**		Subtotal					**0**	1
	In	3:55:00 PM	30	0	1800			In				0		
A	Out	3:57:00 PM	32	0	1920			Out				0		
	Subtotal					**120**		Subtotal					**0**	1
	In	3:56:00 PM	31	0	1860			In				0		
A	Out	3:59:00 PM	34	0	2040			Out				0		
	Subtotal					**180**		Subtotal					**0**	1
	In	3:56:41 PM	31	41	1901			In				0		
A	Out	3:59:44 PM	34	44	2084			Out				0		

Trip Type: ARRIVALS
Date: 9/30/2009
Video Time: 1:08:30
Start Time: 3:25 PM

	Subtotal					**183**	Subtotal	**0**		1
	In	3:58:17 PM	32	77	1997		In	0		
A	Out	3:58:45 PM	33	45	2025		Out	0		
	Subtotal					**28**	Subtotal	**0**		1
	In	3:57:50 PM	32	50	1970		In	0		
A	Out	3:57:59 PM	32	59	1979		Out	0		
	Subtotal					**9**	Subtotal	**0**		1
	In	3:57:54 PM	32	54	1974		In	0		
A	Out	3:59:54 PM	34	54	2094		Out	0		
	Subtotal					**120**	Subtotal	**0**		1
	In	3:58:28 PM	33	28	2008		In	0		
A	Out	4:00:21 PM	35	21	2121		Out	0		
	Subtotal					**113**	Subtotal	**0**		1
	In	3:58:47 PM	33	47	2027		In	0		
A	Out	4:00:42 PM	35	42	2142		Out	0		
	Subtotal					**115**	Subtotal	**0**		1
	In	3:59:50 PM	34	50	2090		In	0		
A	Out	4:01:33 PM	36	33	2193		Out	0		
	Subtotal					**103**	Subtotal	**0**		1
	In	4:03:48 PM	38	48	2328		In	0		
A	Out	4:04:31 PM	39	31	2371		Out	0		
	Subtotal					**43**	Subtotal	**0**		1
	In	4:10:45 PM	45	45	2745		In	0		
A	Out	4:15:26 PM	50	26	3026		Out	0		
	Subtotal					**281**	Subtotal	**0**		1
	In	4:14:00 PM	49	0	2940		In	0		
A	Out	4:18:00 PM	53	0	3180		Out	0		
	Subtotal					**240**	Subtotal	**0**		1
	In	4:15:00 PM	50	0	3000		In	0		
A	Out	4:17:00 PM	52	0	3120		Out	0		
	Subtotal					**120**	Subtotal	**0**		1
	In	4:15:00 PM	50	0	3000		In	0		
A	Out	4:20:00 PM	55	0	3300		Out	0		
	Subtotal					**300**	Subtotal	**0**		1
	In	4:15:30 PM	50	30	3030		In	0		
A	Out	4:18:00 PM	53	0	3180		Out	0		
	Subtotal					**150**	Subtotal	**0**		1
	In	4:24:15 PM	59	15	3555		In	0		
A	Out	4:31:17 PM	66	17	3977		Out	0		
	Subtotal					**422**	Subtotal	**0**		1

TOTAL DWELLING TIME IN SECONDS	**4642**	**TOTAL DWELLING TIME IN SECONDS**	**37**
TOTAL VEHICLES	**36**	**TOTAL VEHICLES**	**1**
AVERAGE DWELLING TIME PER VEHICLE	**129**	**AVERAGE DWELLING TIME PER VEHICLE**	**37**

Trip Type: ARRIVALS
Date: 10/1/2009
Video Time: 0:57:00
Start Time: 9:07 AM
End Time: 10:04 AM

Passenger							
TRIP TYPE	START TIME		MIN	SEC	TOTAL SECONDS	DWELL TIME IN SECOND	
	In	9:07:00 AM	0	0	0		
A	Out	9:09:00 AM	2	0	120		
	Subtotal					**120**	1
	In	9:41:42 AM	34	42	2082		
A	Out	9:42:00 AM	35	0	2100		
	Subtotal					**18**	1
	In	10:03:13 AM	56	13	3373		
A	Out	10:03:43 AM	56	43	3403		
	Subtotal					**30**	1
	TOTAL DWELLING TIME IN SECONDS					**168**	
	TOTAL VEHICLES					**3**	
	AVERAGE DWELLING TIME PER VEHICLE					**56**	

MANCHESTER AIRPORT
CURBSIDE DATA COLLECTION

Trip Type: DEPARTURES
Date: 9/30/2009
Video Time Length: 1:08:30
Start Time: 3:25 PM
End Time: 4:33 PM

Passenger							Taxi / Shuttle Van							
TRIP TYPE	START TIME		MIN	SEC	TOTAL SECONDS	DWELL TIME IN SECOND	TRIP TYPE	START TIME		MIN	SEC	TOTAL SECONDS	DWELL TIME IN SECOND	
	In	3:25:00 PM	0	0	0			In	3:42:00 PM	17	0	1020		
D	Out	3:27:32 PM	2	32	152		D	Out	3:44:34 PM	19	34	1174		
	Subtotal					**152**		Subtotal					**154**	1
	In	3:25:00 PM	0	0	0			In	3:42:10 PM	17	10	1030		
D	Out	3:29:26 PM	4	26	266		D	Out	3:44:38 PM	19	38	1178		
	Subtotal					**266**		Subtotal					**148**	1
	In	3:25:00 PM	0	0	0			In	3:46:22 PM	21	22	1282		
D	Out	3:26:06 PM	1	6	66		D	Out	3:46:57 PM	21	57	1317		
	Subtotal					**66**		Subtotal					**35**	1
	In	3:26:27 PM	1	27	87			In	3:52:54 PM	27	54	1674		
D	Out	3:27:25 PM	2	25	145		D	Out	3:53:41 PM	28	41	1721		
	Subtotal					**58**		Subtotal					**47**	1
	In	3:26:52 PM	1	52	112			In	3:57:27 PM	32	27	1947		
D	Out	3:33:01 PM	8	1	481		D	Out	3:58:41 PM	33	41	2021		
	Subtotal					**369**		Subtotal					**74**	1
	In	3:27:23 PM	2	23	143		D	In	4:08:00 PM	43	0	2580		
D	Out	3:27:50 PM	2	50	170			Out	4:08:47 PM	43	47	2627		
	Subtotal					**27**		Subtotal					**47**	1
	In	3:27:55 PM	2	55	175		D	In	4:12:35 PM	47	35	2855		
D	Out	3:29:29 PM	4	29	269			Out	4:13:01 PM	48	1	2881		
	Subtotal					**94**		Subtotal					**26**	1
	In	3:28:09 PM	3	9	189		D	In	4:25:12 PM	60	12	3612		
D	Out	3:31:00 PM	6	0	360			Out	4:26:04 PM	61	4	3664		
	Subtotal					**171**		Subtotal					**52**	1
	In	3:28:12 PM	3	12	192			In	4:28:26 PM	63	26	3806		
D	Out	3:29:10 PM	4	10	250		D	Out	4:28:59 PM	63	59	3839		
	Subtotal					**58**		Subtotal					**33**	1
	In	3:28:12 PM	3	12	192			In				0		
D	Out	3:30:12 PM	5	12	312			Out				0		
	Subtotal					**120**		Subtotal					**0**	1
	In	3:29:29 PM	4	29	269			In				0		
D	Out	3:31:27 PM	6	27	387			Out				0		
	Subtotal					**118**		Subtotal					**0**	1
	In	3:30:02 PM	5	2	302			In				0		
D	Out	3:32:38 PM	7	38	458			Out				0		
	Subtotal					**156**		Subtotal					**0**	1
	In	3:32:38 PM	7	38	458			In				0		
D	Out	3:35:05 PM	10	5	605			Out				0		
	Subtotal					**147**		Subtotal					**0**	1
	In	3:32:50 PM	7	50	470			In				0		
D	Out	3:35:43 PM	10	43	643			Out				0		
	Subtotal					**173**		Subtotal					**0**	1
	In	3:36:07 PM	11	7	667			In				0		
D	Out	3:36:49 PM	11	49	709			Out				0		
	Subtotal					**42**		Subtotal					**0**	1
	In	3:38:09 PM	13	9	789			In				0		
D	Out	3:39:35 PM	14	35	875			Out				0		
	Subtotal					**86**		Subtotal					**0**	1
	In	3:38:44 PM	13	44	824			In				0		
D	Out	3:40:35 PM	15	35	935			Out				0		
	Subtotal					**111**		Subtotal					**0**	1
	In	3:39:33 PM	14	33	873			In				0		
D	Out	3:49:01 PM	24	1	1441			Out				0		
	Subtotal					**568**		Subtotal					**0**	1
	In	3:40:00 PM	15	0	900			In				0		
D	Out	3:41:00 PM	16	0	960			Out				0		
	Subtotal					**60**		Subtotal					**0**	1
	In	3:40:35 PM	15	35	935			In				0		
D	Out	3:41:35 PM	16	35	995			Out				0		
	Subtotal					**60**		Subtotal					**0**	1
	In	3:41:47 PM	16	47	1007			In				0		
D	Out	3:42:32 PM	17	32	1052			Out				0		
	Subtotal					**45**		Subtotal					**0**	1
	In	3:42:00 PM	17	0	1020			In				0		
D	Out	3:44:00 PM	19	0	1140			Out				0		
	Subtotal					**120**		Subtotal					**0**	1
	In	3:43:00 PM	18	0	1080			In				0		
D	Out	3:43:30 PM	18	30	1110			Out				0		
	Subtotal					**30**		Subtotal					**0**	1
	In	3:43:02 PM	18	2	1082			In				0		
D	Out	3:44:17 PM	19	17	1157			Out				0		

MANCHESTER AIRPORT
CURBSIDE DATA COLLECTION

Trip Type: DEPARTURES
Date: 9/30/2009
Video Time Length: 1:08:30
Start Time: 3:25 PM
End Time: 4:33 PM

Passenger							Taxi / Shuttle Van							
TRIP TYPE	START TIME		MIN	SEC	TOTAL SECONDS	DWELL TIME IN SECOND	TRIP TYPE	START TIME		MIN	SEC	TOTAL SECONDS	DWELL TIME IN SECOND	
	Subtotal					**75**		Subtotal					**0**	1
	In	3:43:15 PM	18	15	1095			In				0		
D	Out	3:44:50 PM	19	50	1190			Out				0		
	Subtotal					**95**		Subtotal					**0**	1
	In	3:45:09 PM	20	9	1209			In				0		
D	Out	3:45:45 PM	20	45	1245			Out				0		
	Subtotal					**36**		Subtotal					**0**	1
	In	3:45:09 PM	20	9	1209			In				0		
D	Out	3:45:51 PM	20	51	1251			Out				0		
	Subtotal					**42**		Subtotal					**0**	1
	In	3:46:45 PM	21	45	1305			In				0		
D	Out	3:47:27 PM	22	27	1347			Out				0		
	Subtotal					**42**		Subtotal					**0**	1
	In	3:47:49 PM	22	49	1369			In				0		
D	Out	3:48:13 PM	23	13	1393			Out				0		
	Subtotal					**24**		Subtotal					**0**	1
	In	3:49:38 PM	24	38	1478			In				0		
D	Out	3:51:36 PM	26	36	1596			Out				0		
	Subtotal					**118**		Subtotal					**0**	1
	In	3:49:45 PM	24	45	1485			In				0		
D	Out	3:53:48 PM	28	48	1728			Out				0		
	Subtotal					**243**		Subtotal					**0**	1
	In	3:49:50 PM	24	50	1490			In				0		
D	Out	3:50:22 PM	25	22	1522			Out				0		
	Subtotal					**32**		Subtotal					**0**	1
	In	3:51:16 PM	26	16	1576			In				0		
D	Out	3:52:31 PM	27	31	1651			Out				0		
	Subtotal					**75**		Subtotal					**0**	1
	In	3:52:00 PM	27	0	1620			In				0		
D	Out	3:53:45 PM	28	45	1725			Out				0		
	Subtotal					**105**		Subtotal					**0**	1
	In	3:52:00 PM	27	0	1620			In				0		
D	Out	3:54:00 PM	29	0	1740			Out				0		
	Subtotal					**120**		Subtotal					**0**	1
	In	3:52:04 PM	27	4	1624			In				0		
D	Out	3:52:50 PM	27	50	1670			Out				0		
	Subtotal					**46**		Subtotal					**0**	1
	In	3:52:30 PM	27	30	1650			In				0		
D	Out	3:54:25 PM	29	25	1765			Out				0		
	Subtotal					**115**		Subtotal					**0**	1
	In	3:53:53 PM	28	53	1733			In				0		
D	Out	3:54:37 PM	29	37	1777			Out				0		
	Subtotal					**44**		Subtotal					**0**	1
	In	3:54:00 PM	29	0	1740			In				0		
D	Out	3:55:00 PM	30	0	1800			Out				0		
	Subtotal					**60**		Subtotal					**0**	1
	In	3:54:00 PM	29	0	1740			In				0		
D	Out	3:56:00 PM	31	0	1860			Out				0		
	Subtotal					**120**		Subtotal					**0**	1
	In	3:55:00 PM	30	0	1800			In				0		
D	Out	3:59:00 PM	34	0	2040			Out				0		
	Subtotal					**240**		Subtotal					**0**	1
	In	3:55:27 PM	30	27	1827			In				0		
D	Out	3:55:53 PM	30	53	1853			Out				0		
	Subtotal					**26**		Subtotal					**0**	1
	In	3:58:47 PM	33	47	2027			In				0		
D	Out	4:00:03 PM	35	3	2103			Out				0		
	Subtotal					**76**		Subtotal					**0**	1
	In	3:59:01 PM	34	1	2041			In				0		
D	Out	4:01:27 PM	36	27	2187			Out				0		
	Subtotal					**146**		Subtotal					**0**	1
	In	3:59:01 PM	34	1	2041			In				0		
D	Out	4:01:33 PM	36	33	2193			Out				0		
	Subtotal					**152**		Subtotal					**0**	1
	In	4:00:00 PM	35	0	2100			In				0		
D	Out	4:00:45 PM	35	45	2145			Out				0		
	Subtotal					**45**		Subtotal					**0**	1
	In	4:00:00 PM	35	0	2100			In				0		
D	Out	4:01:00 PM	36	0	2160			Out				0		
	Subtotal					**60**		Subtotal					**0**	1
	In	4:00:30 PM	35	30	2130			In				0		

MANCHESTER AIRPORT
CURBSIDE DATA COLLECTION

Trip Type: DEPARTURES
Date: 9/30/2009
Video Time Length: 1:08:30
Start Time: 3:25 PM
End Time: 4:33 PM

Passenger							Taxi / Shuttle Van						
TRIP TYPE	START TIME		MIN	SEC	TOTAL SECONDS	DWELL TIME IN SECOND	TRIP TYPE	START TIME		MIN	SEC	TOTAL SECONDS	DWELL TIME IN SECOND
D	Out	4:02:00 PM	37	0	2220			Out				0	
	Subtotal					**90**		Subtotal					**0** 1
	In	4:00:30 PM	35	30	2130			In				0	
D	Out	4:03:00 PM	38	0	2280			Out				0	
	Subtotal					**150**		Subtotal					**0** 1
	In	4:00:15 PM	35	15	2115			In				0	
D	Out	4:02:13 PM	37	13	2233			Out				0	
	Subtotal					**118**		Subtotal					**0** 1
	In	4:01:46 PM	36	46	2206			In				0	
D	Out	4:02:50 PM	37	50	2270			Out				0	
	Subtotal					**64**		Subtotal					**0** 1
	In	4:02:50 PM	37	50	2270			In				0	
D	Out	4:05:28 PM	40	28	2428			Out				0	
	Subtotal					**158**		Subtotal					**0** 1
	In	4:03:00 PM	38	0	2280			In				0	
D	Out	4:04:00 PM	39	0	2340			Out				0	
	Subtotal					**60**		Subtotal					**0** 1
	In	4:04:00 PM	39	0	2340			In				0	
D	Out	4:05:30 PM	40	30	2430			Out				0	
	Subtotal					**90**		Subtotal					**0** 1
	In	4:04:17 PM	39	17	2357			In				0	
D	Out	4:05:26 PM	40	26	2426			Out				0	
	Subtotal					**69**		Subtotal					**0** 1
	In	4:04:17 PM	39	17	2357			In				0	
D	Out	4:05:45 PM	40	45	2445			Out				0	
	Subtotal					**88**		Subtotal					**0** 1
	In	4:04:25 PM	39	25	2365			In				0	
D	Out	4:05:45 PM	40	45	2445			Out				0	
	Subtotal					**80**		Subtotal					**0** 1
	In	4:05:50 PM	40	50	2450			In				0	
D	Out	4:06:22 PM	41	22	2482			Out				0	
	Subtotal					**32**		Subtotal					**0** 1
	In	4:06:00 PM	41	0	2460			In				0	
D	Out	4:07:45 PM	42	45	2565			Out				0	
	Subtotal					**105**		Subtotal					**0** 1
	In	4:06:29 PM	41	29	2489			In				0	
D	Out	4:08:10 PM	43	10	2590			Out				0	
	Subtotal					**101**		Subtotal					**0** 1
	In	4:06:30 PM	41	30	2490			In				0	
D	Out	4:07:10 PM	42	10	2530			Out				0	
	Subtotal					**40**		Subtotal					**0** 1
	In	4:07:10 PM	42	10	2530			In				0	
D	Out	4:08:10 PM	43	10	2590			Out				0	
	Subtotal					**60**		Subtotal					**0** 1
	In	4:09:43 PM	44	43	2683			In				0	
D	Out	4:12:09 PM	47	9	2829			Out				0	
	Subtotal					**146**		Subtotal					**0** 1
	In	4:11:35 PM	46	35	2795			In				0	
D	Out	4:13:29 PM	48	29	2909			Out				0	
	Subtotal					**114**		Subtotal					**0** 1
	In	4:12:10 PM	47	10	2830			In				0	
D	Out	4:12:42 PM	47	42	2862			Out				0	
	Subtotal					**32**		Subtotal					**0** 1
	In	4:14:04 PM	49	4	2944			In				0	
D	Out	4:25:00 PM	60	0	3600			Out				0	
	Subtotal					**656**		Subtotal					**0** 1
	In	4:14:18 PM	49	18	2958			In				0	
D	Out	4:15:55 PM	50	55	3055			Out				0	
	Subtotal					**97**		Subtotal					**0** 1
	In	4:14:27 PM	49	27	2967			In				0	
D	Out	4:15:55 PM	50	55	3055			Out				0	
	Subtotal					**88**		Subtotal					**0** 1
	In	4:15:00 PM	50	0	3000			In				0	
D	Out	4:16:00 PM	51	0	3060			Out				0	
	Subtotal					**60**		Subtotal					**0** 1
	In	4:16:00 PM	51	0	3060			In				0	
D	Out	4:17:04 PM	52	4	3124			Out				0	
	Subtotal					**64**		Subtotal					**0** 1
	In	4:16:25 PM	51	25	3085			In				0	
D	Out	4:18:19 PM	53	19	3199			Out				0	
	Subtotal					**114**		Subtotal					**0** 1

MANCHESTER AIRPORT
CURBSIDE DATA COLLECTION

Trip Type: DEPARTURES
Date: 9/30/2009
Video Time Length: 1:08:30
Start Time: 3:25 PM
End Time: 4:33 PM

Passenger							Taxi / Shuttle Van						
TRIP TYPE	START TIME		MIN	SEC	TOTAL SECONDS	DWELL TIME IN SECOND	TRIP TYPE	START TIME	MIN	SEC	TOTAL SECONDS	DWELL TIME IN SECOND	
	In	4:17:25 PM	52	25	3145			In			0		
D	Out	4:18:28 PM	53	28	3208			Out			0		
	Subtotal					**63**		Subtotal				**0**	1
	In	4:17:29 PM	52	29	3149			In			0		
D	Out	4:19:14 PM	54	14	3254			Out			0		
	Subtotal					**105**		Subtotal				**0**	1
	In	4:18:00 PM	53	0	3180			In			0		
D	Out	4:18:45 PM	53	45	3225			Out			0		
	Subtotal					**45**		Subtotal				**0**	1
	In	4:19:16 PM	54	16	3256			In			0		
D	Out	4:20:04 PM	55	4	3304			Out			0		
	Subtotal					**48**		Subtotal				**0**	1
	In	4:20:30 PM	55	30	3330			In			0		
D	Out	4:22:02 PM	57	2	3422			Out			0		
	Subtotal					**92**		Subtotal				**0**	1
	In	4:21:47 PM	56	47	3407			In			0		
D	Out	4:22:13 PM	57	13	3433			Out			0		
	Subtotal					**26**		Subtotal				**0**	1
	In	4:22:30 PM	57	30	3450			In			0		
D	Out	4:29:35 PM	64	35	3875			Out			0		
	Subtotal					**425**		Subtotal				**0**	1
	In	4:25:43 PM	60	43	3643			In			0		
D	Out	4:27:31 PM	62	31	3751			Out			0		
	Subtotal					**108**		Subtotal				**0**	1
	In	4:25:53 PM	60	53	3653			In			0		
D	Out	4:28:26 PM	63	26	3806			Out			0		
	Subtotal					**153**		Subtotal				**0**	1
	In	4:26:38 PM	61	38	3698			In			0		
D	Out	4:27:36 PM	62	36	3756			Out			0		
	Subtotal					**58**		Subtotal				**0**	1
	In	4:27:46 PM	62	46	3766			In			0		
D	Out	4:30:07 PM	65	7	3907			Out			0		
	Subtotal					**141**		Subtotal				**0**	1
	In	4:28:05 PM	63	5	3785			In			0		
D	Out	4:30:21 PM	65	21	3921			Out			0		
	Subtotal					**136**		Subtotal				**0**	1
	In	4:29:32 PM	64	32	3872			In			0		
D	Out	4:29:49 PM	64	49	3889			Out			0		
	Subtotal					**17**		Subtotal				**0**	1
	In	4:30:09 PM	65	9	3909			In			0		
D	Out	4:31:42 PM	66	42	4002			Out			0		
	Subtotal					**93**		Subtotal				**0**	1

	TOTAL DWELLING TIME IN SECONDS	**9420**	**SHUTTLE VANS** **TOTAL DWELLING TIME IN SECONDS**	**468**
	TOTAL VEHICLES	**85**	**TOTAL VEHICLES**	**8**
	AVERAGE DWELLING TIME PER VEHICLE	**111**	**AVERAGE DWELLING TIME PER VEHICLE**	**59**
			TAXIS **TOTAL DWELLING TIME IN SECONDS**	**148**
			TOTAL VEHICLES	**1**
			AVERAGE DWELLING TIME PER VEHICLE	**148**

Trip Type: DEPARTURES
Date: 10/1/2009
Video Time: 2:05:00
Start Time: 7:04 AM
End Time: 9:09 AM

Passenger							Taxi / Shuttle Van							
TRIP TYPE	START TIME		MIN	SEC	TOTAL SECONDS	DWELL TIME IN SECOND	TRIP TYPE	START TIME		MIN	SEC	TOTAL SECONDS	DWELL TIME IN SECOND	
	In	7:04:00 AM	0	0	0			In	7:05:35 AM	1	35	95		
D	Out	7:04:25 AM	0	25	25		D	Out	7:06:19 AM	2	19	139		
	Subtotal					**25**		Subtotal					**44**	1
	In	7:04:02 AM	0	2	2			In	7:06:30 AM	2	30	150		
D	Out	7:04:33 AM	0	33	33		D	Out	7:07:45 AM	3	45	225		
	Subtotal					**31**		Subtotal					**75**	1
	In	7:04:00 AM	0	0	0			In	7:08:41 AM	4	41	281		
D	Out	7:04:45 AM	0	45	45		D	Out	7:10:58 AM	6	58	418		
	Subtotal					**45**		Subtotal					**137**	1
	In	7:04:00 AM	0	0	0			In	7:20:32 AM	16	32	992		
D	Out	7:04:50 AM	0	50	50		D	Out	7:21:20 AM	17	20	1040		
	Subtotal					**50**		Subtotal					**48**	1
	In	7:04:00 AM	0	0	0			In	7:22:54 AM	18	54	1134		
D	Out	7:05:32 AM	1	32	92		D	Out	7:24:45 AM	20	45	1245		
	Subtotal					**92**		Subtotal					**111**	1 TAXI
	In	7:06:58 AM	2	58	178			In	7:23:34 AM	19	34	1174		
D	Out	7:09:07 AM	5	7	307		D	Out	7:24:18 AM	20	18	1218		
	Subtotal					**129**		Subtotal					**44**	1
	In	7:07:20 AM	3	20	200			In	7:33:21 AM	29	21	1761		
D	Out	7:08:32 AM	4	32	272		D	Out	7:34:17 AM	30	17	1817		
	Subtotal					**72**		Subtotal					**56**	1
	In	7:07:23 AM	3	23	203			In	7:36:30 AM	32	30	1950		
D	Out	7:08:15 AM	4	15	255		D	Out	7:37:23 AM	33	23	2003		
	Subtotal					**52**		Subtotal					**53**	1
	In	7:07:29 AM	3	29	209			In	7:38:52 AM	34	52	2092		
D	Out	7:08:43 AM	4	43	283		D	Out	7:40:34 AM	36	34	2194		
	Subtotal					**74**		Subtotal					**102**	1
	In	7:09:05 AM	5	5	305			In	7:39:02 AM	35	2	2102		
D	Out	7:10:20 AM	6	20	380		D	Out	7:39:58 AM	35	58	2158		
	Subtotal					**75**		Subtotal					**56**	1
	In	7:10:08 AM	6	8	368			In	7:50:12 AM	46	12	2772		
D	Out	7:14:13 AM	10	13	613		D	Out	7:51:09 AM	47	9	2829		
	Subtotal					**245**		Subtotal					**57**	1
	In	7:12:30 AM	8	30	510			In	7:55:30 AM	51	30	3090		
D	Out	7:16:45 AM	12	45	765		D	Out	7:56:47 AM	52	47	3167		
	Subtotal					**255**		Subtotal					**77**	1
	In	7:12:55 AM	8	55	535			In	7:56:24 AM	52	24	3144		
D	Out	7:16:50 AM	12	50	770		D	Out	7:57:37 AM	53	37	3217		
	Subtotal					**235**		Subtotal					**73**	1
	In	7:13:50 AM	9	50	590			In	7:56:55 AM	52	55	3175		
D	Out	7:17:51 AM	13	51	831		D	Out	7:59:32 AM	55	32	3332		
	Subtotal					**241**		Subtotal					**157**	1
	In	7:14:35 AM	10	35	635			In	7:59:50 AM	55	50	3350		
D	Out	7:19:08 AM	15	8	908		D	Out	8:00:40 AM	56	40	3400		
	Subtotal					**273**		Subtotal					**50**	1
	In	7:15:40 AM	11	40	700			In	8:05:40 AM	61	40	3700		
D	Out	7:17:31 AM	13	31	811		D	Out	8:07:13 AM	63	13	3793		
	Subtotal					**111**		Subtotal					**93**	1
	In	7:17:42 AM	13	42	822			In	8:07:36 AM	63	36	3816		
D	Out	7:18:41 AM	14	41	881		D	Out	8:09:47 AM	65	47	3947		
	Subtotal					**59**		Subtotal					**131**	1
	In	7:17:43 AM	13	43	823			In	8:08:00 AM	64	0	3840		
D	Out	7:19:00 AM	15	0	900		D	Out	8:10:00 AM	66	0	3960		
	Subtotal					**77**		Subtotal					**120**	1 TAXI
	In	7:17:54 AM	13	54	834			In	8:10:00 AM	66	0	3960		
D	Out	7:19:08 AM	15	8	908		D	Out	8:11:00 AM	67	0	4020		
	Subtotal					**74**		Subtotal					**60**	1
	In	7:18:41 AM	14	41	881			In	8:10:00 AM	66	0	3960		
D	Out	7:19:13 AM	15	13	913		D	Out	8:12:00 AM	68	0	4080		
	Subtotal					**32**		Subtotal					**120**	1
	In	7:19:31 AM	15	31	931			In	8:16:00 AM	72	0	4320		
D	Out	7:27:23 AM	23	23	1403		D	Out	8:17:00 AM	73	0	4380		
	Subtotal					**472**		Subtotal					**60**	1
	In	7:24:06 AM	20	6	1206			In	8:18:31 AM	74	31	4471		
D	Out	7:25:15 AM	21	15	1275		D	Out	8:19:00 AM	75	0	4500		
	Subtotal					**69**		Subtotal					**29**	1
	In	7:24:15 AM	20	15	1215			In	8:25:02 AM	81	2	4862		
D	Out	7:27:56 AM	23	56	1436		D	Out	8:26:13 AM	82	13	4933		
	Subtotal					**221**		Subtotal					**71**	1
	In	7:24:34 AM	20	34	1234			In	8:28:56 AM	84	56	5096		
D	Out	7:26:09 AM	22	9	1329		D	Out	8:30:34 AM	86	34	5194		

Trip Type: DEPARTURES
Date: 10/1/2009
Video Time: 2:05:00
Start Time: 7:04 AM

	Subtotal					**95**		Subtotal					**98**	1
	In	7:25:49 AM	21	49	1309			In	8:31:00 AM	87	0	5220		
D	Out	7:27:25 AM	23	25	1405		D	Out	8:31:30 AM	87	30	5250		
	Subtotal					**96**		Subtotal					**30**	1
	In	7:28:43 AM	24	43	1483			In	8:32:01 AM	88	1	5281		
D	Out	7:30:17 AM	26	17	1577		D	Out	8:32:19 AM	88	19	5299		
	Subtotal					**94**		Subtotal					**18**	1
	In	7:28:43 AM	24	43	1483			In	8:34:02 AM	90	2	5402		
D	Out	7:31:27 AM	27	27	1647		D	Out	8:34:31 AM	90	31	5431		
	Subtotal					**164**		Subtotal					**29**	1
	In	7:28:53 AM	24	53	1493			In	8:35:49 AM	91	49	5509		
D	Out	7:29:57 AM	25	57	1557		D	Out	8:37:11 AM	93	11	5591		
	Subtotal					**64**		Subtotal					**82**	1
	In	7:29:00 AM	25	0	1500			In	8:45:56 AM	101	56	6116		
D	Out	7:30:00 AM	26	0	1560		D	Out	8:46:37 AM	102	37	6157		
	Subtotal					**60**		Subtotal					**41**	1
	In	7:29:14 AM	25	14	1514			In	8:53:00 AM	109	0	6540		
D	Out	7:33:50 AM	29	50	1790		D	Out	8:53:30 AM	109	30	6570		
	Subtotal					**276**		Subtotal					**30**	1
	In	7:30:00 AM	26	0	1560			In	8:56:44 AM	112	44	6764		
D	Out	7:31:00 AM	27	0	1620		D	Out	8:57:50 AM	113	50	6830		
	Subtotal					**60**		Subtotal					**66**	1
	In	7:31:05 AM	27	5	1625			In	8:59:16 AM	115	16	6916		
D	Out	7:31:45 AM	27	45	1665		D	Out	9:00:10 AM	116	10	6970		
	Subtotal					**40**		Subtotal					**54**	1
	In	7:33:00 AM	29	0	1740			In	9:03:00 AM	119	0	7140		
D	Out	7:34:00 AM	30	0	1800		D	Out	9:04:00 AM	120	0	7200		
	Subtotal					**60**		Subtotal					**60**	1
	In	7:34:00 AM	30	0	1800			In				0		
D	Out	7:35:00 AM	31	0	1860			Out				0		
	Subtotal					**60**		Subtotal					**0**	1
	In	7:34:00 AM	30	0	1800			In				0		
D	Out	7:36:00 AM	32	0	1920			Out				0		
	Subtotal					**120**		Subtotal					**0**	1
	In	7:35:00 AM	31	0	1860			In				0		
D	Out	7:36:00 AM	32	0	1920			Out				0		
	Subtotal					**60**		Subtotal					**0**	1
	In	7:35:49 AM	31	49	1909			In				0		
D	Out	7:36:42 AM	32	42	1962			Out				0		
	Subtotal					**53**		Subtotal					**0**	1
	In	7:36:00 AM	32	0	1920			In				0		
D	Out	7:36:30 AM	32	30	1950			Out				0		
	Subtotal					**30**		Subtotal					**0**	1
	In	7:36:00 AM	32	0	1920			In				0		
D	Out	7:37:00 AM	33	0	1980			Out				0		
	Subtotal					**60**		Subtotal					**0**	1
	In	7:37:26 AM	33	26	2006			In				0		
D	Out	7:38:17 AM	34	17	2057			Out				0		
	Subtotal					**51**		Subtotal					**0**	1
	In	7:37:35 AM	33	35	2015			In				0		
D	Out	7:38:26 AM	34	26	2066			Out				0		
	Subtotal					**51**		Subtotal					**0**	1
	In	7:37:37 AM	33	37	2017			In				0		
D	Out	7:39:02 AM	35	2	2102			Out				0		
	Subtotal					**85**		Subtotal					**0**	1
	In	7:38:00 AM	34	0	2040			In				0		
D	Out	7:40:00 AM	36	0	2160			Out				0		
	Subtotal					**120**		Subtotal					**0**	1
	In	7:38:11 AM	34	11	2051			In				0		
D	Out	7:40:11 AM	36	11	2171			Out				0		
	Subtotal					**120**		Subtotal					**0**	1
	In	7:39:10 AM	35	10	2110			In				0		
D	Out	7:41:03 AM	37	3	2223			Out				0		
	Subtotal					**113**		Subtotal					**0**	1
	In	7:39:36 AM	35	36	2136			In				0		
D	Out	7:42:10 AM	38	10	2290			Out				0		
	Subtotal					**154**		Subtotal					**0**	1
	In	7:40:50 AM	36	50	2210			In				0		
D	Out	7:42:10 AM	38	10	2290			Out				0		
	Subtotal					**80**		Subtotal					**0**	1
	In	7:41:30 AM	37	30	2250			In				0		
D	Out	7:42:10 AM	38	10	2290			Out				0		
	Subtotal					**40**		Subtotal					**0**	1
	In	7:41:54 AM	37	54	2274			In				0		
D	Out	7:43:43 AM	39	43	2383			Out				0		
	Subtotal					**109**		Subtotal					**0**	1
	In	7:42:49 AM	38	49	2329			In				0		

Trip Type: DEPARTURES
Date: 10/1/2009
Video Time: 2:05:00
Start Time: 7:04 AM

D	Out	7:43:35 AM	39	35	2375		Out	0		
	Subtotal					**46**	Subtotal		**0**	1
	In	7:43:00 AM	39	0	2340		In	0		
D	Out	7:44:00 AM	40	0	2400		Out	0		
	Subtotal					**60**	Subtotal		**0**	1
	In	7:43:03 AM	39	3	2343		In	0		
D	Out	7:43:41 AM	39	41	2381		Out	0		
	Subtotal					**38**	Subtotal		**0**	1
	In	7:43:03 AM	39	3	2343		In	0		
D	Out	7:43:57 AM	39	57	2397		Out	0		
	Subtotal					**54**	Subtotal		**0**	1
	In	7:43:45 AM	39	45	2385		In	0		
D	Out	7:45:36 AM	41	36	2496		Out	0		
	Subtotal					**111**	Subtotal		**0**	1
	In	7:44:29 AM	40	29	2429		In	0		
D	Out	7:45:45 AM	41	45	2505		Out	0		
	Subtotal					**76**	Subtotal		**0**	1
	In	7:45:45 AM	41	45	2505		In	0		
D	Out	7:48:11 AM	44	11	2651		Out	0		
	Subtotal					**146**	Subtotal		**0**	1
	In	7:47:00 AM	43	0	2580		In	0		
D	Out	7:49:00 AM	45	0	2700		Out	0		
	Subtotal					**120**	Subtotal		**0**	1
	In	7:47:59 AM	43	59	2639		In	0		
D	Out	7:48:40 AM	44	40	2680		Out	0		
	Subtotal					**41**	Subtotal		**0**	1
	In	7:49:00 AM	45	0	2700		In	0		
D	Out	7:50:00 AM	46	0	2760		Out	0		
	Subtotal					**60**	Subtotal		**0**	1
	In	7:49:52 AM	45	52	2752		In	0		
D	Out	7:54:36 AM	50	36	3036		Out	0		
	Subtotal					**284**	Subtotal		**0**	1
	In	7:51:34 AM	47	34	2854		In	0		
D	Out	7:54:53 AM	50	53	3053		Out	0		
	Subtotal					**199**	Subtotal		**0**	1
	In	7:54:00 AM	50	0	3000		In	0		
D	Out	7:54:30 AM	50	30	3030		Out	0		
	Subtotal					**30**	Subtotal		**0**	1
	In	7:54:00 AM	50	0	3000		In	0		
D	Out	7:56:00 AM	52	0	3120		Out	0		
	Subtotal					**120**	Subtotal		**0**	1
	In	7:57:00 AM	53	0	3180		In	0		
D	Out	7:57:30 AM	53	30	3210		Out	0		
	Subtotal					**30**	Subtotal		**0**	1
	In	7:59:00 AM	55	0	3300		In	0		
D	Out	8:00:00 AM	56	0	3360		Out	0		
	Subtotal					**60**	Subtotal		**0**	1
	In	7:59:08 AM	55	8	3308		In	0		
D	Out	8:00:36 AM	56	36	3396		Out	0		
	Subtotal					**88**	Subtotal		**0**	1
	In	8:00:00 AM	56	0	3360		In	0		
D	Out	8:01:00 AM	57	0	3420		Out	0		
	Subtotal					**60**	Subtotal		**0**	1
	In	8:00:10 AM	56	10	3370		In	0		
D	Out	8:03:53 AM	59	53	3593		Out	0		
	Subtotal					**223**	Subtotal		**0**	1
	In	8:01:00 AM	57	0	3420		In	0		
D	Out	8:03:00 AM	59	0	3540		Out	0		
	Subtotal					**120**	Subtotal		**0**	1
	In	8:01:49 AM	57	49	3469		In	0		
D	Out	8:03:16 AM	59	16	3556		Out	0		
	Subtotal					**87**	Subtotal		**0**	1
	In	8:02:07 AM	58	7	3487		In	0		
D	Out	8:04:37 AM	60	37	3637		Out	0		
	Subtotal					**150**	Subtotal		**0**	1
	In	8:03:00 AM	59	0	3540		In	0		
D	Out	8:05:00 AM	61	0	3660		Out	0		
	Subtotal					**120**	Subtotal		**0**	1
	In	8:03:30 AM	59	30	3570		In	0		
D	Out	8:04:50 AM	60	50	3650		Out	0		
	Subtotal					**80**	Subtotal		**0**	1
	In	8:04:40 AM	60	40	3640		In	0		
D	Out	8:06:15 AM	62	15	3735		Out	0		
	Subtotal					**95**	Subtotal		**0**	1
	In	8:06:00 AM	62	0	3720		In	0		
D	Out	8:07:00 AM	63	0	3780		Out	0		
	Subtotal					**60**	Subtotal		**0**	1

Trip Type: DEPARTURES
Date: 10/1/2009
Video Time: 2:05:00
Start Time: 7:04 AM

	In	8:09:06 AM	65	6	3906		In	0		
D	Out	8:10:10 AM	66	10	3970		Out	0		
	Subtotal					**64**	Subtotal		**0**	1
	In	8:09:21 AM	65	21	3921		In	0		
D	Out	8:10:22 AM	66	22	3982		Out	0		
	Subtotal					**61**	Subtotal		**0**	1
	In	8:10:54 AM	66	54	4014		In	0		
D	Out	8:15:20 AM	71	20	4280		Out	0		
	Subtotal					**266**	Subtotal		**0**	1
	In	8:14:00 AM	70	0	4200		In	0		
D	Out	8:18:00 AM	74	0	4440		Out	0		
	Subtotal					**240**	Subtotal		**0**	1
	In	8:14:42 AM	70	42	4242		In	0		
D	Out	8:15:29 AM	71	29	4289		Out	0		
	Subtotal					**47**	Subtotal		**0**	1
	In	8:15:00 AM	71	0	4260		In	0		
D	Out	8:17:00 AM	73	0	4380		Out	0		
	Subtotal					**120**	Subtotal		**0**	1
	In	8:15:19 AM	71	19	4279		In	0		
D	Out	8:23:03 AM	79	3	4743		Out	0		
	Subtotal					**464**	Subtotal		**0**	1
	In	8:16:33 AM	72	33	4353		In	0		
D	Out	8:17:02 AM	73	2	4382		Out	0		
	Subtotal					**29**	Subtotal		**0**	1
	In	8:17:02 AM	73	2	4382		In	0		
D	Out	8:18:31 AM	74	31	4471		Out	0		
	Subtotal					**89**	Subtotal		**0**	1
	In	8:18:31 AM	74	31	4471		In	0		
D	Out	8:19:00 AM	75	0	4500		Out	0		
	Subtotal					**29**	Subtotal		**0**	1
	In	8:18:48 AM	74	48	4488		In	0		
D	Out	8:21:07 AM	77	7	4627		Out	0		
	Subtotal					**139**	Subtotal		**0**	1
	In	8:18:48 AM	74	48	4488		In	0		
D	Out	8:22:25 AM	78	25	4705		Out	0		
	Subtotal					**217**	Subtotal		**0**	1
	In	8:20:11 AM	76	11	4571		In	0		
D	Out	8:21:36 AM	77	36	4656		Out	0		
	Subtotal					**85**	Subtotal		**0**	1
	In	8:20:21 AM	76	21	4581		In	0		
D	Out	8:21:19 AM	77	19	4639		Out	0		
	Subtotal					**58**	Subtotal		**0**	1
	In	8:20:54 AM	76	54	4614		In	0		
D	Out	8:23:03 AM	79	3	4743		Out	0		
	Subtotal					**129**	Subtotal		**0**	1
	In	8:23:00 AM	79	0	4740		In	0		
D	Out	8:25:00 AM	81	0	4860		Out	0		
	Subtotal					**120**	Subtotal		**0**	1
	In	8:23:00 AM	79	0	4740		In	0		
D	Out	8:26:00 AM	82	0	4920		Out	0		
	Subtotal					**180**	Subtotal		**0**	1
	In	8:23:00 AM	79	0	4740		In	0		
D	Out	8:28:00 AM	84	0	5040		Out	0		
	Subtotal					**300**	Subtotal		**0**	1
	In	8:24:45 AM	80	45	4845		In	0		
D	Out	8:28:11 AM	84	11	5051		Out	0		
	Subtotal					**206**	Subtotal		**0**	1
	In	8:25:07 AM	81	7	4867		In	0		
D	Out	8:26:59 AM	82	59	4979		Out	0		
	Subtotal					**112**	Subtotal		**0**	1
	In	8:25:16 AM	81	16	4876		In	0		
D	Out	8:26:59 AM	82	59	4979		Out	0		
	Subtotal					**103**	Subtotal		**0**	1
	In	8:25:32 AM	81	32	4892		In	0		
D	Out	8:26:21 AM	82	21	4941		Out	0		
	Subtotal					**49**	Subtotal		**0**	1
	In	8:27:20 AM	83	20	5000		In	0		
D	Out	8:28:40 AM	84	40	5080		Out	0		
	Subtotal					**80**	Subtotal		**0**	1
	In	8:28:00 AM	84	0	5040		In	0		
D	Out	8:30:00 AM	86	0	5160		Out	0		
	Subtotal					**120**	Subtotal		**0**	1
	In	8:28:06 AM	84	6	5046		In	0		
D	Out	8:31:14 AM	87	14	5234		Out	0		
	Subtotal					**188**	Subtotal		**0**	1
	In	8:28:29 AM	84	29	5069		In	0		
D	Out	8:34:25 AM	90	25	5425		Out	0		

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	Subtotal					**356**	Subtotal	**0**	1
	In	8:31:00 AM	87	0	5220		In	0	
D	Out	8:33:00 AM	89	0	5340		Out	0	
	Subtotal					**120**	Subtotal	**0**	1
	In	8:31:00 AM	87	0	5220		In	0	
D	Out	8:33:00 AM	89	0	5340		Out	0	
	Subtotal					**120**	Subtotal	**0**	1
	In	8:31:30 AM	87	30	5250		In	0	
D	Out	8:33:02 AM	89	2	5342		Out	0	
	Subtotal					**92**	Subtotal	**0**	1
	In	8:34:25 AM	90	25	5425		In	0	
D	Out	8:35:36 AM	91	36	5496		Out	0	
	Subtotal					**71**	Subtotal	**0**	1
	In	8:34:50 AM	90	50	5450		In	0	
D	Out	8:35:18 AM	91	18	5478		Out	0	
	Subtotal					**28**	Subtotal	**0**	1
	In	8:35:00 AM	91	0	5460		In	0	
D	Out	8:36:00 AM	92	0	5520		Out	0	
	Subtotal					**60**	Subtotal	**0**	1
	In	8:35:28 AM	91	28	5488		In	0	
D	Out	8:36:53 AM	92	53	5573		Out	0	
	Subtotal					**85**	Subtotal	**0**	1
	In	8:36:00 AM	92	0	5520		In	0	
D	Out	8:38:00 AM	94	0	5640		Out	0	
	Subtotal					**120**	Subtotal	**0**	1
	In	8:36:33 AM	92	33	5553		In	0	
D	Out	8:37:47 AM	93	47	5627		Out	0	
	Subtotal					**74**	Subtotal	**0**	1
	In	8:38:17 AM	94	17	5657		In	0	
D	Out	8:40:09 AM	96	9	5769		Out	0	
	Subtotal					**112**	Subtotal	**0**	1
	In	8:38:26 AM	94	26	5666		In	0	
D	Out	8:41:50 AM	97	50	5870		Out	0	
	Subtotal					**204**	Subtotal	**0**	1
	In	8:38:42 AM	94	42	5682		In	0	
D	Out	8:40:50 AM	96	50	5810		Out	0	
	Subtotal					**128**	Subtotal	**0**	1
	In	8:38:42 AM	94	42	5682		In	0	
D	Out	8:41:12 AM	97	12	5832		Out	0	
	Subtotal					**150**	Subtotal	**0**	1
	In	8:41:35 AM	97	35	5855		In	0	
D	Out	8:43:14 AM	99	14	5954		Out	0	
	Subtotal					**99**	Subtotal	**0**	1
	In	8:42:33 AM	98	33	5913		In	0	
D	Out	8:46:05 AM	102	5	6125		Out	0	
	Subtotal					**212**	Subtotal	**0**	1
	In	8:42:45 AM	98	45	5925		In	0	
D	Out	8:44:19 AM	100	19	6019		Out	0	
	Subtotal					**94**	Subtotal	**0**	1
	In	8:43:35 AM	99	35	5975		In	0	
D	Out	8:44:47 AM	100	47	6047		Out	0	
	Subtotal					**72**	Subtotal	**0**	1
	In	8:44:07 AM	100	7	6007		In	0	
D	Out	8:45:31 AM	101	31	6091		Out	0	
	Subtotal					**84**	Subtotal	**0**	1
	In	8:44:12 AM	100	12	6012		In	0	
D	Out	8:45:09 AM	101	9	6069		Out	0	
	Subtotal					**57**	Subtotal	**0**	1
	In	8:45:00 AM	101	0	6060		In	0	
D	Out	8:47:00 AM	103	0	6180		Out	0	
	Subtotal					**120**	Subtotal	**0**	1
	In	8:46:00 AM	102	0	6120		In	0	
D	Out	8:50:00 AM	106	0	6360		Out	0	
	Subtotal					**240**	Subtotal	**0**	1
	In	8:46:00 AM	102	0	6120		In	0	
D	Out	8:47:00 AM	103	0	6180		Out	0	
	Subtotal					**60**	Subtotal	**0**	1
	In	8:46:45 AM	102	45	6165		In	0	
D	Out	8:47:24 AM	103	24	6204		Out	0	
	Subtotal					**39**	Subtotal	**0**	1
	In	8:47:00 AM	103	0	6180		In	0	
D	Out	8:48:00 AM	104	0	6240		Out	0	
	Subtotal					**60**	Subtotal	**0**	1
	In	8:47:13 AM	103	13	6193		In	0	
D	Out	8:48:13 AM	104	13	6253		Out	0	
	Subtotal					**60**	Subtotal	**0**	1
	In	8:47:28 AM	103	28	6208		In	0	

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D	Out	8:48:41 AM	104	41	6281		Out	0		
	Subtotal					**73**	Subtotal		**0**	1
	In	8:48:41 AM	104	41	6281		In	0		
D	Out	8:50:20 AM	106	20	6380		Out	0		
	Subtotal					**99**	Subtotal		**0**	1
	In	8:48:45 AM	104	45	6285		In	0		
D	Out	8:49:18 AM	105	18	6318		Out	0		
	Subtotal					**33**	Subtotal		**0**	1
	In	8:49:49 AM	105	49	6349		In	0		
D	Out	8:51:50 AM	107	50	6470		Out	0		
	Subtotal					**121**	Subtotal		**0**	1
	In	8:49:49 AM	105	49	6349		In	0		
D	Out	8:55:55 AM	111	55	6715		Out	0		
	Subtotal					**366**	Subtotal		**0**	1
	In	8:50:00 AM	106	0	6360		In	0		
D	Out	8:50:30 AM	106	30	6390		Out	0		
	Subtotal					**30**	Subtotal		**0**	1
	In	8:50:00 AM	106	0	6360		In	0		
D	Out	8:51:00 AM	107	0	6420		Out	0		
	Subtotal					**60**	Subtotal		**0**	1
	In	8:50:00 AM	106	0	6360		In	0		
D	Out	8:51:00 AM	107	0	6420		Out	0		
	Subtotal					**60**	Subtotal		**0**	1
	In	8:50:20 AM	106	20	6380		In	0		
D	Out	8:51:19 AM	107	19	6439		Out	0		
	Subtotal					**59**	Subtotal		**0**	1
	In	8:51:20 AM	107	20	6440		In	0		
D	Out	8:52:31 AM	108	31	6511		Out	0		
	Subtotal					**71**	Subtotal		**0**	1
	In	8:51:20 AM	107	20	6440		In	0		
D	Out	8:53:34 AM	109	34	6574		Out	0		
	Subtotal					**134**	Subtotal		**0**	1
	In	8:52:00 AM	108	0	6480		In	0		
D	Out	8:54:00 AM	110	0	6600		Out	0		
	Subtotal					**120**	Subtotal		**0**	1
	In	8:52:51 AM	108	51	6531		In	0		
D	Out	8:56:00 AM	112	0	6720		Out	0		
	Subtotal					**189**	Subtotal		**0**	1
	In	8:54:00 AM	110	0	6600		In	0		
D	Out	8:56:00 AM	112	0	6720		Out	0		
	Subtotal					**120**	Subtotal		**0**	1
	In	8:55:11 AM	111	11	6671		In	0		
D	Out	8:55:42 AM	111	42	6702		Out	0		
	Subtotal					**31**	Subtotal		**0**	1
	In	8:57:01 AM	113	1	6781		In	0		
D	Out	8:58:19 AM	114	19	6859		Out	0		
	Subtotal					**78**	Subtotal		**0**	1
	In	8:58:00 AM	114	0	6840		In	0		
D	Out	9:03:04 AM	119	4	7144		Out	0		
	Subtotal					**304**	Subtotal		**0**	1
	In	9:00:01 AM	116	1	6961		In	0		
D	Out	9:09:28 AM	125	28	7528		Out	0		
	Subtotal					**567**	Subtotal		**0**	1
	In	9:01:55 AM	117	55	7075		In	0		
D	Out	9:06:06 AM	122	6	7326		Out	0		
	Subtotal					**251**	Subtotal		**0**	1
	In	9:02:00 AM	118	0	7080		In	0		
D	Out	9:03:00 AM	119	0	7140		Out	0		
	Subtotal					**60**	Subtotal		**0**	1
	In	9:02:00 AM	118	0	7080		In	0		
D	Out	9:04:00 AM	120	0	7200		Out	0		
	Subtotal					**120**	Subtotal		**0**	1
	In	9:03:40 AM	119	40	7180		In	0		
D	Out	9:07:21 AM	123	21	7401		Out	0		
	Subtotal					**221**	Subtotal		**0**	1
	In	9:03:47 AM	119	47	7187		In	0		
D	Out	9:04:39 AM	120	39	7239		Out	0		
	Subtotal					**52**	Subtotal		**0**	1
	In	9:05:25 AM	121	25	7285		In	0		
D	Out	9:09:28 AM	125	28	7528		Out	0		
	Subtotal					**243**	Subtotal		**0**	1
	In	9:07:00 AM	123	0	7380		In	0		
D	Out	9:09:00 AM	125	0	7500		Out	0		
	Subtotal					**120**	Subtotal		**0**	1
	In	9:07:56 AM	123	56	7436		In	0		
D	Out	9:09:12 AM	125	12	7512		Out	0		
	Subtotal					**76**	Subtotal		**0**	1

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	In	9:08:53 AM	124	53	7493			In	0	
D	Out	9:09:48 AM	125	48	7548			Out	0	
	Subtotal					**55**		Subtotal	**0**	1
	TOTAL DWELLING TIME IN SECONDS					**18007**		**SHUTTLE VANS** **TOTAL DWELLING TIME IN SECONDS**	**2101**	
	TOTAL VEHICLES					**153**		**TOTAL VEHICLES**	**31**	
	AVERAGE DWELLING TIME PER VEHICLE					**118**		**AVERAGE DWELLING TIME PER VEHICLE**	**68**	
								TAXIS **TOTAL DWELLING TIME IN SECONDS**	231	
								TOTAL VEHICLES	2	
								AVERAGE DWELLING TIME PER VEHICLE	**116**	

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Date: 10/1/2009
Video Time: 0:54:44
Start Time: 9:10 AM
End Time: 10:04 AM

Passenger							Taxi / Shuttle Van							
TRIP TYPE	START TIME		MIN	SEC	TOTAL SECONDS	DWELL TIME IN SECOND	TRIP TYPE	START TIME		MIN	SEC	TOTAL SECONDS	DWELL TIME IN SECOND	
	In	9:11:42 AM	1	42	102			In	9:10:58 AM	0	58	58		
D	Out	9:13:43 AM	3	43	223		D	Out	9:12:33 AM	2	33	153		
	Subtotal					**121**		Subtotal					**95**	1
	In	9:13:57 AM	3	57	237			In	9:13:17 AM	3	17	197		
D	Out	9:15:50 AM	5	50	350		D	Out	9:15:40 AM	5	40	340		
	Subtotal					**113**		Subtotal					**143**	1
	In	9:14:00 AM	4	0	240			In	9:21:11 AM	11	11	671		
D	Out	9:16:00 AM	6	0	360		D	Out	9:22:25 AM	12	25	745		
	Subtotal					**120**		Subtotal					**74**	1
	In	9:14:02 AM	4	2	242			In	9:24:00 AM	14	0	840		
D	Out	9:15:08 AM	5	8	308		D	Out	9:24:30 AM	14	30	870		
	Subtotal					**66**		Subtotal					**30**	1 **TAXI**
	In	9:14:28 AM	4	28	268			In	9:25:41 AM	15	41	941		
D	Out	9:17:41 AM	7	41	461		D	Out	9:26:29 AM	16	29	989		
	Subtotal					**193**		Subtotal					**48**	1
	In	9:16:00 AM	6	0	360			In	9:33:37 AM	23	37	1417		
D	Out	9:17:00 AM	7	0	420		D	Out	9:33:53 AM	23	53	1433		
	Subtotal					**60**		Subtotal					**16**	1
	In	9:16:00 AM	6	0	360			In	9:34:20 AM	24	20	1460		
D	Out	9:19:00 AM	9	0	540		D	Out	9:34:46 AM	24	46	1486		
	Subtotal					**180**		Subtotal					**26**	1
	In	9:16:20 AM	6	20	380			In	9:39:39 AM	29	39	1779		
D	Out	9:17:58 AM	7	58	478		D	Out	9:41:35 AM	31	35	1895		
	Subtotal					**98**		Subtotal					**116**	1
	In	9:20:00 AM	10	0	600			In	9:43:33 AM	33	33	2013		
D	Out	9:20:30 AM	10	30	630		D	Out	9:44:25 AM	34	25	2065		
	Subtotal					**30**		Subtotal					**52**	1
	In	9:21:00 AM	11	0	660			In	9:52:18 AM	42	18	2538		
D	Out	9:21:30 AM	11	30	690		D	Out	9:52:33 AM	42	33	2553		
	Subtotal					**30**		Subtotal					**15**	1 **TAXI**
	In	9:22:45 AM	12	45	765			In	9:55:56 AM	45	56	2756		
D	Out	9:23:15 AM	13	15	795		D	Out	9:57:05 AM	47	5	2825		
	Subtotal					**30**		Subtotal					**69**	1
	In	9:22:56 AM	12	56	776			In	9:56:00 AM	46	0	2760		
D	Out	9:25:29 AM	15	29	929		D	Out	9:56:48 AM	46	48	2808		
	Subtotal					**153**		Subtotal					**48**	1
	In	9:24:50 AM	14	50	890			In	9:58:48 AM	48	48	2928		
D	Out	9:25:30 AM	15	30	930		D	Out	10:00:00 AM	50	0	3000		
	Subtotal					**40**		Subtotal					**72**	1
	In	9:25:07 AM	15	7	907			In	10:02:50 AM	52	50	3170		
D	Out	9:25:23 AM	15	23	923		D	Out	10:04:44 AM	54	44	3284		
	Subtotal					**16**		Subtotal					**114**	1 **TAXI**
	In	9:25:55 AM	15	55	955			In	10:03:08 AM	53	8	3188		
D	Out	9:26:29 AM	16	29	989			Out	10:04:44 AM	54	44	3284		
	Subtotal					**34**		Subtotal					**96**	1 **TAXI**
	In	9:26:01 AM	16	1	961			In	10:04:05 AM	54	5	3245		
D	Out	9:27:21 AM	17	21	1041			Out	10:04:44 AM	54	44	3284		
	Subtotal					**80**		Subtotal					**39**	1
	In	9:26:11 AM	16	11	971			In				0		
D	Out	9:28:59 AM	18	59	1139			Out				0		
	Subtotal					**168**		Subtotal					**0**	1
	In	9:26:22 AM	16	22	982			In				0		
D	Out	9:26:29 AM	16	29	989			Out				0		
	Subtotal					**7**		Subtotal					**0**	1
	In	9:26:29 AM	16	29	989			In				0		
D	Out	9:27:46 AM	17	46	1066			Out				0		
	Subtotal					**77**		Subtotal					**0**	1
	In	9:27:00 AM	17	0	1020			In				0		
D	Out	9:29:00 AM	19	0	1140			Out				0		
	Subtotal					**120**		Subtotal					**0**	1
	In	9:27:02 AM	17	2	1022			In				0		
D	Out	9:30:30 AM	20	30	1230			Out				0		
	Subtotal					**208**		Subtotal					**0**	1
	In	9:28:15 AM	18	15	1095			In				0		
D	Out	9:29:25 AM	19	25	1165			Out				0		
	Subtotal					**70**		Subtotal					**0**	1
	In	9:29:10 AM	19	10	1150			In				0		
D	Out	9:31:56 AM	21	56	1316			Out				0		
	Subtotal					**166**		Subtotal					**0**	1
	In	9:29:33 AM	19	33	1173			In				0		
D	Out	9:32:29 AM	22	29	1349			Out				0		

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	Subtotal					**176**	Subtotal		**0**	1
	In	9:30:09 AM	20	9	1209		In	0		
D	Out	9:31:18 AM	21	18	1278		Out	0		
	Subtotal					**69**	Subtotal		**0**	1
	In	9:30:40 AM	20	40	1240		In	0		
D	Out	9:36:22 AM	26	22	1582		Out	0		
	Subtotal					**342**	Subtotal		**0**	1
	In	9:31:56 AM	21	56	1316		In	0		
D	Out	9:38:15 AM	28	15	1695		Out	0		
	Subtotal					**379**	Subtotal		**0**	1
	In	9:33:04 AM	23	4	1384		In	0		
D	Out	9:34:04 AM	24	4	1444		Out	0		
	Subtotal					**60**	Subtotal		**0**	1
	In	9:34:04 AM	24	4	1444		In	0		
D	Out	9:35:53 AM	25	53	1553		Out	0		
	Subtotal					**109**	Subtotal		**0**	1
	In	9:35:46 AM	25	46	1546		In	0		
D	Out	9:41:43 AM	31	43	1903		Out	0		
	Subtotal					**357**	Subtotal		**0**	1
	In	9:35:53 AM	25	53	1553		In	0		
D	Out	9:36:31 AM	26	31	1591		Out	0		
	Subtotal					**38**	Subtotal		**0**	1
	In	9:39:31 AM	29	31	1771		In	0		
D	Out	9:40:39 AM	30	39	1839		Out	0		
	Subtotal					**68**	Subtotal		**0**	1
	In	9:39:36 AM	29	36	1776		In	0		
D	Out	9:41:21 AM	31	21	1881		Out	0		
	Subtotal					**105**	Subtotal		**0**	1
	In	9:39:59 AM	29	59	1799		In	0		
D	Out	9:44:18 AM	34	18	2058		Out	0		
	Subtotal					**259**	Subtotal		**0**	1
	In	9:40:13 AM	30	13	1813		In	0		
D	Out	9:42:40 AM	32	40	1960		Out	0		
	Subtotal					**147**	Subtotal		**0**	1
	In	9:42:15 AM	32	15	1935		In	0		
D	Out	9:44:07 AM	34	7	2047		Out	0		
	Subtotal					**112**	Subtotal		**0**	1
	In	9:43:14 AM	33	14	1994		In	0		
D	Out	9:46:18 AM	36	18	2178		Out	0		
	Subtotal					**184**	Subtotal		**0**	1
	In	9:45:33 AM	35	33	2133		In	0		
D	Out	9:45:54 AM	35	54	2154		Out	0		
	Subtotal					**21**	Subtotal		**0**	1
	In	9:46:11 AM	36	11	2171		In	0		
D	Out	9:46:40 AM	36	40	2200		Out	0		
	Subtotal					**29**	Subtotal		**0**	1
	In	9:46:27 AM	36	27	2187		In	0		
D	Out	9:46:45 AM	36	45	2205		Out	0		
	Subtotal					**18**	Subtotal		**0**	1
	In	9:46:27 AM	36	27	2187		In	0		
D	Out	9:47:27 AM	37	27	2247		Out	0		
	Subtotal					**60**	Subtotal		**0**	1
	In	9:46:31 AM	36	31	2191		In	0		
D	Out	9:51:51 AM	41	51	2511		Out	0		
	Subtotal					**320**	Subtotal		**0**	1
	In	9:46:31 AM	36	31	2191		In	0		
D	Out	9:48:14 AM	38	14	2294		Out	0		
	Subtotal					**103**	Subtotal		**0**	1
	In	9:46:35 AM	36	35	2195		In	0		
D	Out	9:48:39 AM	38	39	2319		Out	0		
	Subtotal					**124**	Subtotal		**0**	1
	In	9:47:40 AM	37	40	2260		In	0		
D	Out	9:51:44 AM	41	44	2504		Out	0		
	Subtotal					**244**	Subtotal		**0**	1
	In	9:48:36 AM	38	36	2316		In	0		
D	Out	9:50:25 AM	40	25	2425		Out	0		
	Subtotal					**109**	Subtotal		**0**	1
	In	9:49:32 AM	39	32	2372		In	0		
D	Out	9:52:58 AM	42	58	2578		Out	0		
	Subtotal					**206**	Subtotal		**0**	1
	In	9:51:03 AM	41	3	2463		In	0		
D	Out	9:52:44 AM	42	44	2564		Out	0		
	Subtotal					**101**	Subtotal		**0**	1
	In	9:52:04 AM	42	4	2524		In	0		
D	Out	9:53:21 AM	43	21	2601		Out	0		
	Subtotal					**77**	Subtotal		**0**	1
	In	9:53:47 AM	43	47	2627		In	0		

Trip Type: DEPARTURES
Date: 10/1/2009
Video Time: 0:54:44
Start Time: 9:10 AM

D	Out	9:55:04 AM	45	4	2704		Out	0		
	Subtotal					**77**	Subtotal		**0**	1
	In	9:54:43 AM	44	43	2683		In	0		
D	Out	9:54:57 AM	44	57	2697		Out	0		
	Subtotal					**14**	Subtotal		**0**	1
	In	9:55:31 AM	45	31	2731		In	0		
D	Out	9:58:12 AM	48	12	2892		Out	0		
	Subtotal					**161**	Subtotal		**0**	1
	In	9:55:58 AM	45	58	2758		In	0		
D	Out	10:00:17 AM	50	17	3017		Out	0		
	Subtotal					**259**	Subtotal		**0**	1
	In	9:57:37 AM	47	37	2857		In	0		
D	Out	9:58:30 AM	48	30	2910		Out	0		
	Subtotal					**53**	Subtotal		**0**	1
	In	9:59:38 AM	49	38	2978		In	0		
D	Out	10:01:38 AM	51	38	3098		Out	0		
	Subtotal					**120**	Subtotal		**0**	1
	In	9:59:52 AM	49	52	2992		In	0		
D	Out	10:02:30 AM	52	30	3150		Out	0		
	Subtotal					**158**	Subtotal		**0**	1
	In	10:02:10 AM	52	10	3130		In	0		
D	Out	10:04:40 AM	54	40	3280		Out	0		
	Subtotal					**150**	Subtotal		**0**	1
	In	10:03:08 AM	53	8	3188		In	0		
D	Out	10:04:20 AM	54	20	3260		Out	0		
	Subtotal					**72**	Subtotal		**0**	1
	In	10:03:13 AM	53	13	3193		In	0		
D	Out	10:03:43 AM	53	43	3223		Out	0		
	Subtotal					**30**	Subtotal		**0**	1

TOTAL DWELLING TIME IN SECONDS	**7091**	**TOTAL DWELLING TIME IN SECONDS**	**798**
TOTAL VEHICLES	**59**	**TOTAL VEHICLES**	**12**
AVERAGE DWELLING TIME PER VEHICLE	**120**	**AVERAGE DWELLING TIME PER VEHICLE**	**67**

TAXIS	
TOTAL DWELLING TIME IN SECONDS	**255**
TOTAL VEHICLES	**4**
AVERAGE DWELLING TIME PER VEHICLE	**64**

Appendix F3

CURB_PLAN

CURB_PLAN **Version 1.2 (February 25, 2000)**

Airport Curbside Frontage Analysis, by URS Corp

WORKSHEET No 1 **INPUTS**

GO TO WORKSHEET 1
USER GUIDE

Project Description

User Name:	*URS Corporation*
Date:	*November 1, 2009*
Airport:	*Manchester-Boston Regional Airport*
Location:	*Shephard Road at Terminal*
Project # :	
Scenario:	*2009 (Existing) AM Peak Hour*
User Notes:	*Fifteen (15) Minute Peak Arrival Factor*

Step 1: Enter Peak Hour Volumes (vph) *

Vehicle Types	Pk Hr Vols	Mode	%	Vols	PEAK HR VOLS
Autos	*0*		*82%*	227	227
Vans	*0*		*17%*	47	47
Buses	*0*		*0%*	0	0
Taxis	*0*		*1%*	3	3
Other	*0*		*0%*	0	0
TOTAL (vph)	0		100%	*277*	277

* Enter either actual volumes in the peak hour volume columns
OR mode split % AND total volume in the mode columns.
CURB_PLAN will use the column with the greater total volume.

Step 2: Enter Average Dwell Time (sec/veh)

Autos	*117.0*
Vans	*65.0*
Buses	*0.0*
Taxis	*91.0*
Other	*0.0*

Step 3: Enter Average Veh Berth Space (feet)

Autos	*25*
Vans	*36*
Buses	*0*
Taxis	*25*
Other	*0*

Step 4: Enter Peak Surge/Arrival Factor

Autos	*1.10*
Vans	*1.10*
Buses	*0.00*
Taxis	*1.10*
Other	*0.00*

Step 5: Enter Usable Frontage (feet)

	Linear Frontage:	*1015*	
Unusable Frontage:	Crosswalks	*60*	
	Doors	*0*	
	Other	*223*	
	Gate Concentration Factor**	*0.55*	range 0.5 to 0.9
	Total Effective Frontage (ft):	275	** Default = 0.8

Step 6: Enter Curbfront Usage

	Select Number of Lanes:	*3*	
Select Usage:	2 Lanes Usage		
L = Load/Unload	3 Lanes Usage	*L,C,T*	<Enter Usage Here
C = Circulation	4 Lanes Usage		
T = Through	5 Lanes Usage		
	6 Lanes Usage		

CALCULATE CURBFRONT LOS | CALCULATE VOLUME | CALCULATE FRONTAGE | CALCULATE QUEUES | CALCULATE CIRCULATION LOS

CURB_PLAN Version 1.2 (February 25, 2000)

Airport Curbside Frontage Analysis, by URS Corp

WORKSHEET 2

FIND CURB FRONT LEVEL OF SERVICE - GIVEN VOLUMES AND FRONTAGE LENGTH

GO TO WORKSHEET 2 USER GUIDE

INPUTS FROM WORKSHEET 1

PEAK HOUR VOLUMES (vph)	
Autos	227
Vans	47
Buses	0
Taxi	3
Other	0
TOTAL	277

AVERAGE DWELL TIME (sec/veh)	
Autos	117
Vans	65
Buses	0
Taxis	91
Other	0

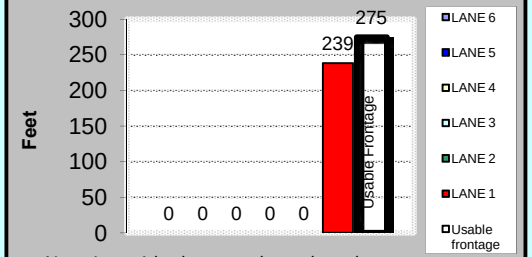
Average Vehicle Berth Space (feet)	
Autos	25
Vans	36
Buses	0
Taxis	25
Other	0

Peak Surge/Arrival Factor	
Autos	1.10
Vans	1.10
Buses	0.00
Taxis	1.10
Other	0.00

Frontage needed: (feet)	
203	Autos
34	Vans
0	Buses
2	Taxis
0	Other
239	Total

Usable frontage	275

ESTIMATED CURB FRONT OCCUPANCY



Note: Lane 1 is closest to the main curb

OUTPUT RESULTS:

Frontage Needed(ft):	239
Total Load/Unload Frontage (ft):	275
Effective/Usable Curb Length Ratio:	0.87
CURB FRONT LOS :	A
Density [pc/100ft](Range 0-4):	
Lane 1:	3.47
Lane 2:	0.00
Lane 3:	0.00
Lane 4:	0.00
Lane 5:	0.00
Lane 6:	0.00

Effective/Usable Curb Length Ratio	LOS
0.0 - 1.0	A
1.0 - 1.1	B
1.1 - 1.3	C
1.3 - 1.7	D
1.7 - 2.0	E
2.0 - 999	F

RETURN TO INPUTS

CURB_PLAN **Version 1.2 (February 25, 2000)**

Airport Curbside Frontage Analysis, by URS Corp

WORKSHEET 3

FIND MAX VOLUMES FOR GIVEN FRONTAGE AND LEVEL OF SERVICE

GO TO WORKSHEET 3 USER GUIDE

INPUTS FROM WORKSHEET 1

PEAK HOUR VOLUMES (vph)	
Autos	227.1
Vans	47.09
Buses	0
Taxis	2.77
Other	0
TOTAL	277

Usable frontage	275

AVERAGE DWELL TIME (sec/veh)	
Autos	117
Vans	65
Buses	0
Taxis	91
Other	0

Desired (future) Usable frontage	500

Average Vehicle Berth Space (feet)	
Autos	25
Vans	36
Buses	0
Taxis	25
Other	0

Peak Surge/Arrival Factor	
Autos	1.10
Vans	1.10
Buses	0
Taxis	1.1
Other	0

Frontage needed: (feet)	
203	Autos
34	Vans
0	Buses
2	Taxis
0	Other
239	Total

Effective/Usable Curb Length Ratio		LOS
0.0	- 1.0	A
1.0	- 1.1	B
1.1	- 1.3	C
1.3	- 1.7	D
1.7	- 2.0	E
2.0	- 999	F

OUTPUT RESULTS:

Desired LOS :	C
Desired Effective Curb Length Ratio:	1.30
Desired Frontage:	500
Frontage Needed(ft):	650

Maximum Volumes* for Desired LOS & Desired Frontage

Autos:	514
Vans:	106
Buses:	0
Taxis:	6
Other:	0
TOTAL:	626

RETURN TO INPUTS

CURB_PLAN **Version 1.2 (February 25, 2000)**

Airport Curbside Frontage Analysis, by URS Corp

WORKSHEET 4

FIND REQUIRED FRONTAGE GIVEN VOLUMES AND LEVEL OF SERVICE

GO TO WORKSHEET 4
USER GUIDE

INPUTS FROM WORKSHEET 1

PEAK HOUR VOLUMES (vph)	
Autos	227
Vans	47.1
Buses	0
Taxis	2.77
Other	0
TOTAL	277

AVERAGE DWELL TIME (sec/veh)	
Autos	117
Vans	65
Buses	0
Taxis	91
Other	0

Average Vehicle Berth Space (feet)	
Autos	25
Vans	36
Buses	0
Taxis	25
Other	0

Peak Surge/Arrival Factor	
Autos	1.10
Vans	1.10
Buses	0
Taxis	1.1
Other	0

Frontage needed : (feet)	
203	Autos
34	Vans
0	Buses
2	Taxis
0	Other
239	Total

Usable frontage	275

Input Desired Level of Service (A-E): C

OUTPUT RESULTS:

Desired Effective Curb Length Ratio: 1.30

Frontage (ft) Required for Desired LOS : 184

Effective/Usable Curb Length Ratio	LOS
0.0 - 1.0	A
1.0 - 1.1	B
1.1 - 1.3	C
1.3 - 1.7	D
1.7 - 2.0	E
2.0 - 999	F

RETURN TO INPUTS

CURB_PLAN Version 1.2 (February 25, 2000)

Airport Curbside Frontage Analysis, by URS Corp

WORKSHEET 5
95th PERCENTILE QUEUE LENGTHS

GO TO WORKSHEET 5 USER GUIDE

INPUTS FROM WORKSHEET 1

PEAK HOUR VOLUMES (vph)	
Autos	227.1
Vans	47.09
Buses	0
Taxis	2.77
Other	0
TOTAL	277

AVERAGE DWELL TIME (sec/veh)	
Autos	117
Vans	65
Buses	0
Taxis	91
Other	0

Average Vehicle Berth Space (feet)	
Autos	25
Vans	36
Buses	0
Taxis	25
Other	0

Average Arrivals per second	
Autos	0.063
Vans	0.013
Buses	0.000
Taxis	0.001
Other	0.000
TOTAL	0.077

Net Average Arrivals	
Autos	7.382
Vans	0.850
Buses	0.000
Taxis	0.070
Other	0.000
TOTAL	8.302

Input Number of Approach Lanes	2

OUTPUT RESULTS:

	95th Percentile Queue Length (ft)
Autos	300
Vans	108
Buses	0
Taxis	0
Other	0
Total Frontage Needed (Using Poisson)	408
Minus total available frontage parking	-413
TOTAL QUEUE per Lane	0

RETURN TO INPUTS

CURB_PLAN **Version 1.2 (February 25, 2000)**

Airport Curbside Frontage Analysis, by URS Corp

WORKSHEET 6
CIRCULATION LOS (By Row)

GO TO WORKSHEET 6 USER GUIDE

INPUTS FROM WORKSHEET 1

PEAK HOUR VOLUMES (vph)	
Autos	227
Vans	47
Buses	0
Taxis	2.77
Other	0
TOTAL	277

Lane Usage	
Lane 1	L
Lane 2	C
Lane 3	T
Lane 4	
Lane 5	
Lane 6	

LOS E Circulation Capacity (vph)	
Lane 1	0
Lane 2	300
Lane 3	600
Lane 4	0
Lane 5	0
Lane 6	0
Row Capacity:	900

Volume to Capacity Ratio	
TOTAL	0.308

Volume/Capacity Ratio	LOS
N/A	A
N/A	B
0.00 - 0.28	C
0.28 - 0.92	D
0.92 - 1.00	E
1.00 - 999	F

OUTPUT RESULTS:

Circulation LOS:

D

RETURN TO INPUTS

CURB_PLAN **Version 1.2 (February 25, 2000)**

Airport Curbside Frontage Analysis, by URS Corp

WORKSHEET No 1 **INPUTS**

GO TO WORKSHEET 1
USER GUIDE

Project Description

User Name:	*URS Corporation*
Date:	*November 1, 2009*
Airport:	*Manchester-Boston Regional Airport*
Location:	*Shephard Road at Terminal*
Project # :	
Scenario:	*2009 (Existing) PM Peak Hour*
User Notes:	*Fifteen (15) Minute Peak Arrival Factor*

Step 1: Enter Peak Hour Volumes (vph) *

Vehicle Types	Pk Hr Vols	Mode %	Mode Vols	PEAK HR VOLS
Autos	*0*	*86%*	286	286
Vans	*0*	*12%*	40	40
Buses	*0*	*0%*	0	0
Taxis	*0*	*2%*	7	7
Other	*0*	*0%*	0	0
TOTAL (vph)	0	100%	333	333

* Enter either actual volumes in the peak hour volume columns
OR mode split % AND total volume in the mode columns.
CURB_PLAN will use the column with the greater total volume.

Step 2: Enter Average Dwell Time (sec/veh)

Autos	*117.0*
Vans	*65.0*
Buses	*0.0*
Taxis	*91.0*
Other	*0.0*

Step 3: Enter Average Veh Berth Space (feet)

Autos	*25*
Vans	*36*
Buses	*0*
Taxis	*25*
Other	*0*

Step 4: Enter Peak Surge/Arrival Factor

Autos	*1.10*
Vans	*1.10*
Buses	*0.00*
Taxis	*1.10*
Other	*0.00*

Step 5: Enter Usable Frontage (feet)

	Linear Frontage:	*1015*
Unusable Frontage:	Crosswalks	*60*
	Doors	*0*
	Other	*223*
	Gate Concentration Factor**	*0.55* range 0.5 to 0.9
	Total Effective Frontage (ft):	275 ** Default = 0.8

Step 6: Enter Curbfront Usage

	Select Number of Lanes:	*3*
Select Usage:	2 Lanes Usage	
L = Load/Unload	3 Lanes Usage	*L,C,T* <Enter Usage Here
C = Circulation	4 Lanes Usage	
T = Through	5 Lanes Usage	
	6 Lanes Usage	

CALCULATE CURBFRONT LOS

CALCULATE VOLUME

CALCULATE FRONTAGE

CALCULATE QUEUES

CALCULATE CIRCULATION LOS

CURB_PLAN Version 1.2 (February 25, 2000)

Airport Curbside Frontage Analysis, by URS Corp

WORKSHEET 2

FIND CURB FRONT LEVEL OF SERVICE - GIVEN VOLUMES AND FRONTAGE LENGTH

GO TO WORKSHEET 2 USER GUIDE

INPUTS FROM WORKSHEET 1

PEAK HOUR VOLUMES (vph)	
Autos	286
Vans	40
Buses	0
Taxis	7
Other	0
TOTAL	333

AVERAGE DWELL TIME (sec/veh)	
Autos	117
Vans	65
Buses	0
Taxis	91
Other	0

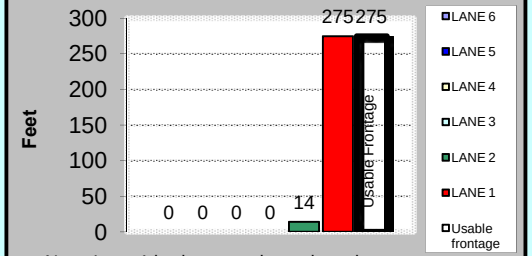
Average Vehicle Berth Space (feet)	
Autos	25
Vans	36
Buses	0
Taxis	25
Other	0

Peak Surge/Arrival Factor	
Autos	1.10
Vans	1.10
Buses	0.00
Taxis	1.10
Other	0.00

Frontage needed: (feet)	
256	Autos
29	Vans
0	Buses
5	Taxis
0	Other
289	Total

Usable frontage	275

ESTIMATED CURB FRONT OCCUPANCY



Note: Lane 1 is closest to the main curb

OUTPUT RESULTS:

Frontage Needed(ft):	289
Total Load/Unload Frontage (ft):	275
Effective/Usable Curb Length Ratio:	1.05
CURB FRONT LOS :	B
Density [pc/100ft](Range 0-4):	
Lane 1:	4.00
Lane 2:	0.21
Lane 3:	0.00
Lane 4:	0.00
Lane 5:	0.00
Lane 6:	0.00

Effective/Usable Curb Length Ratio	LOS
0.0 - 1.0	A
1.0 - 1.1	B
1.1 - 1.3	C
1.3 - 1.7	D
1.7 - 2.0	E
2.0 - 999	F

RETURN TO INPUTS

CURB_PLAN **Version 1.2 (February 25, 2000)**

Airport Curbside Frontage Analysis, by URS Corp

WORKSHEET 3

FIND MAX VOLUMES FOR GIVEN FRONTAGE AND LEVEL OF SERVICE

GO TO WORKSHEET 3 USER GUIDE

INPUTS FROM WORKSHEET 1

PEAK HOUR VOLUMES (vph)	
Autos	286.4
Vans	39.96
Buses	0
Taxis	7
Other	0
TOTAL	333

Usable frontage	275

AVERAGE DWELL TIME (sec/veh)	
Autos	117
Vans	65
Buses	0
Taxis	91
Other	0

Desired (future) Usable frontage	500

Average Vehicle Berth Space (feet)	
Autos	25
Vans	36
Buses	0
Taxis	25
Other	0

Peak Surge/Arrival Factor	
Autos	1.10
Vans	1.10
Buses	0
Taxis	1.1
Other	0

Frontage needed: (feet)	
256	Autos
29	Vans
0	Buses
5	Taxis
0	Other
289	Total

Effective/Usable Curb Length Ratio	LOS
0.0 - 1.0	A
1.0 - 1.1	B
1.1 - 1.3	C
1.3 - 1.7	D
1.7 - 2.0	E
2.0 - 999	F

OUTPUT RESULTS:

Desired LOS :	C
Desired Effective Curb Length Ratio:	1.30
Desired Frontage:	500
Frontage Needed(ft):	650

Maximum Volumes* for Desired LOS & Desired Frontage

Autos:	567
Vans:	79
Buses:	0
Taxis:	13
Other:	0
TOTAL:	659

RETURN TO INPUTS

CURB_PLAN **Version 1.2 (February 25, 2000)**

Airport Curbside Frontage Analysis, by URS Corp

WORKSHEET 4

FIND REQUIRED FRONTAGE GIVEN VOLUMES AND LEVEL OF SERVICE

GO TO WORKSHEET 4
USER GUIDE

INPUTS FROM WORKSHEET 1

PEAK HOUR VOLUMES (vph)	
Autos	286
Vans	40
Buses	0
Taxis	6.66
Other	0
TOTAL	333

AVERAGE DWELL TIME (sec/veh)	
Autos	117
Vans	65
Buses	0
Taxis	91
Other	0

Average Vehicle Berth Space (feet)	
Autos	25
Vans	36
Buses	0
Taxis	25
Other	0

Peak Surge/Arrival Factor	
Autos	1.10
Vans	1.10
Buses	0
Taxis	1.1
Other	0

Frontage needed : (feet)	
256	Autos
29	Vans
0	Buses
5	Taxis
0	Other
289	Total

Usable frontage	275

Input Desired Level of Service (A-E): C

OUTPUT RESULTS:

Desired Effective Curb Length Ratio: 1.30

Frontage (ft) Required for Desired LOS : 222

Effective/Usable Curb Length Ratio			LOS
0.0	-	1.0	A
1.0	-	1.1	B
1.1	-	1.3	C
1.3	-	1.7	D
1.7	-	2.0	E
2.0	-	999	F

RETURN TO INPUTS

CURB_PLAN Version 1.2 (February 25, 2000)

Airport Curbside Frontage Analysis, by URS Corp

WORKSHEET 5
95th PERCENTILE QUEUE LENGTHS

GO TO WORKSHEET 5 USER GUIDE

INPUTS FROM WORKSHEET 1

PEAK HOUR VOLUMES (vph)	
Autos	286.4
Vans	39.96
Buses	0
Taxis	7
Other	0
TOTAL	333

AVERAGE DWELL TIME (sec/veh)	
Autos	117
Vans	65
Buses	0
Taxis	91
Other	0

Average Vehicle Berth Space (feet)	
Autos	25
Vans	36
Buses	0
Taxis	25
Other	0

Average Arrivals per second	
Autos	0.080
Vans	0.011
Buses	0.000
Taxis	0.002
Other	0.000
TOTAL	0.093

Net Average Arrivals	
Autos	9.307
Vans	0.722
Buses	0.000
Taxis	0.168
Other	0.000
TOTAL	10.197

Input Number of Approach Lanes	2

OUTPUT RESULTS:

	95th Percentile Queue Length (ft)
Autos	375
Vans	72
Buses	0
Taxis	0
Other	0
Total Frontage Needed (Using Poisson)	447
Minus total available frontage parking	-413
TOTAL QUEUE per Lane	17

RETURN TO INPUTS

CURB_PLAN **Version 1.2 (February 25, 2000)**

Airport Curbside Frontage Analysis, by URS Corp

WORKSHEET 6
CIRCULATION LOS (By Row)

GO TO WORKSHEET 6 USER GUIDE

INPUTS FROM WORKSHEET 1

PEAK HOUR VOLUMES (vph)	
Autos	286
Vans	40
Buses	0
Taxis	7
Other	0
TOTAL	333

Lane Usage	
Lane 1	L
Lane 2	C
Lane 3	T
Lane 4	
Lane 5	
Lane 6	

LOS E Circulation Capacity (vph)	
Lane 1	0
Lane 2	300
Lane 3	600
Lane 4	0
Lane 5	0
Lane 6	0
Row Capacity:	900

Volume to Capacity Ratio	
TOTAL	0.370

Volume/Capacity Ratio	LOS
N/A	A
N/A	B
0.00 - 0.28	C
0.28 - 0.92	D
0.92 - 1.00	E
1.00 - 999	F

OUTPUT RESULTS:

Circulation LOS:

D

RETURN TO INPUTS

Appendix F4

Peak Passenger Base Scenario Forecast

PEAK PERIOD - TOTAL, ENPLANED, AND DEPLANED PASSENGERS
BASE SCENARIO
MANCHESTER-BOSTON REGIONAL AIRPORT
(calendar years)

	2004	2005	2006	2007	2008	2009E	2010F	2015	2020	2025	2030
Total Passengers	**4,003,307**	**4,332,707**	**3,896,532**	**3,892,630**	**3,716,393**	**3,140,000**	**2,988,000**	**3,336,000**	**3,702,000**	**4,108,000**	**4,556,000**
Peak Month	402,573	430,358	371,478	390,870	348,747	307,391	292,511	326,579	362,408	402,154	446,011
% of Total	10.1%	9.9%	9.5%	10.0%	9.4%	9.8%	9.8%	9.8%	9.8%	9.8%	9.8%
Average Day	12,986	13,883	11,983	12,609	11,250	9,916	9,436	10,535	11,691	12,973	14,387
Peak Hour				1,342	1,084	1,011	959	1,070	1,188	1,318	1,462
Enplaned Passengers	**2,004,122**	**2,168,258**	**1,952,277**	**1,948,313**	**1,861,695**	**1,570,000**	**1,494,000**	**1,668,000**	**1,851,000**	**2,054,000**	**2,278,000**
Peak Month	206,250	215,073	189,407	199,009	177,458	155,929	148,380	165,662	183,837	203,998	226,245
% of Total	10.3%	9.9%	9.7%	10.2%	9.5%	9.9%	9.9%	9.9%	9.9%	9.9%	9.9%
Average Day	6,653	6,938	6,110	6,420	5,724	5,030	4,786	5,344	5,930	6,581	7,298
Peak Hour				714	632	551	528	590	654	726	805
Deplaned Passengers	**1,999,185**	**2,164,449**	**1,944,255**	**1,944,317**	**1,854,698**	**1,570,000**	**1,494,000**	**1,668,000**	**1,851,000**	**2,054,000**	**2,278,000**
Peak Month	200,383	216,895	182,962	191,861	179,810	153,914	146,463	163,521	181,461	201,362	223,322
% of Total	10.0%	10.0%	9.4%	9.9%	9.7%	9.8%	9.8%	9.8%	9.8%	9.8%	9.8%
Average Day	6,464	6,997	5,902	6,189	5,800	4,965	4,725	5,275	5,854	6,496	7,204
Peak Hour				883	871	686	679	758	841	933	1,035

PEAK HOUR SEAT FACTORS	2004	2005	2006	2007	2008	2009E	2010F	2015	2020	2025	2030
Total Seats				10.6%	9.6%	10.2%	10.2%	10.2%	10.2%	10.2%	10.2%
Enplaned Seats				11.1%	11.0%	10.9%	11.0%	11.0%	11.0%	11.0%	11.0%
Deplaned Seats				14.3%	15.0%	13.8%	14.4%	14.4%	14.4%	14.4%	14.4%

Notes: E=Estimate; F=Forecast.
Peak Month Factors are based on MHT enplaned passenger data for CY2004 through CY2008.
Peak Hour Factors are based on scheduled seats from the *Official Airline Guide.*
Peak Hour Factors projected for CY2010 through CY2030 represent the average of peak hour factors for the month of August in CY2007, 2008 and 2009.

Sources: Historical—City of Manchester Department of Aviation; *Official Airline Guide.*
Forecast—Jacobs Consultancy.

Prepared by Jacobs Consultancy,
November 19, 2009

Appendix F5

Airport Trip Generation

Airport Trip Generation

THE AUTHORS MAIL-SURVEYED 253 COMMERCIAL SERVICE AND GENERAL AVIATION AIRPORTS IN THE UNITED STATES TO OBTAIN CURRENT INFORMATION AND COLLECT DATA ON ADDITIONAL PREDICTOR VARIABLES.

BY TERRY A. RUHL AND BORIS TRNAVSKIS

IN 1994, THE AIRPORTS COUNCIL International-North America (ACI-NA) conducted a survey of the critical issues and capital needs related to airport surface access. This study found that on a typical busy day at 73 percent of the airports surveyed, passengers experienced greater delays or congestion on the airport access and circulation roadways compared to only 20 percent on the airfield. The ACI-NA survey revealed the following to be major concerns to the airports responding to the 1994 survey.[1]

- **Off-airport access roadway congestion—**79 percent of responding large-hub airports, 63 percent of medium-hub airports and 41 percent of small-hub airports.
- **On-airport roadway congestion—**68 percent of the large hubs, 69 percent of medium hubs and 34 percent of small hubs.
- **Airport curbside congestion—**89 percent of the large hubs, 92 percent of medium hubs and 72 percent of the small-hub airports.

All of these congestion concerns relate to the vehicular demand generated by commercial service airport facilities. Thus, a detailed understanding of the trip-generation potential of these airports is required to develop practical solutions that can mitigate airport-related traffic congestion, both on and off airport property.

STUDY SCOPE AND OUTLINE

The existing Institute of Transportation Engineers' (ITE) trip-generation models for commercial service airports are based on two California studies performed in 1975 and one in 1983.[2] Trip-generation characteristics for a broad range of airports were not included, and the predictor variables used in the current manual may be insufficient to predict landside traffic at air carrier airports.

During the summer of 1996, the authors mail-surveyed numerous commercial service and general aviation airports in the United States. The purpose of the survey was to obtain current information and collect data on additional predictor variables that could be used to develop a general model suitable for a wide range of applications. This study also reviewed data obtained from the California Aviation System Plan,[3] existing airport master plans and individual airport ground access studies and traffic counts. A complete data set was prepared to analyze airport trip generation and mode-split characteristics for 39 commercial service airports. All of the trip-generation information contained in this data set represents recent study information obtained during the 1990s.

Data provided by many of the general aviation airports (no commercial service) contained in the survey provided incomplete or inconsistent information. Thus, rigorous statistical analysis for this study was primarily limited to commercial service airports. As a consequence, the analyses associated with the commercial service airports are based on larger sample sizes and produced statistically more reliable results. The reader is referred to the *National Cooperative Highway Research Program (NCHRP) Report 187*[4] for a more descriptive presentation of trip generation at general aviation airports.

CHARACTERISTICS OF THE AIRPORT GROUND TRIP

During the past three decades, most air passengers have depended almost exclusively upon the automobile as their primary source of transportation to and from the airport; airport employees also rely on the automobile. However, at airports where a mature transit system exists, such as Newark or LaGuardia, as many as 10 to 20 percent of the employees can be expected to use transit instead of an automobile.[5]

Modal preferences of central business district (CBD) passengers are shared somewhat among the various modes, including taxis, limousines and public transit. Taxicab usage is more popular when the CBD is close to the airport. Also, airports that primarily serve tourists often have a higher use of taxicabs than other airports,[5] and trips originating from hotels display the greatest use of high-occupancy modes.[6] The low proportion of passengers from CBDs or other concentrated areas is one reason why high-speed rail has not yet been overly successful serving airports in the United States. While this may change in the future, continual growth of population and business in expanding suburban areas may make it even tougher for this mode to provide attractive airport access transportation.[7]

Other variables that influence mode choice include the amount of baggage and the time of day. Time of day is important because factors such as the availability of a friend to take the passenger to or from the airport, availability of taxis, amount of highway congestion, public transit schedule and the safety of the passenger are all influenced by the time of day.[8] In addition, a survey of air passengers performed at the Cleveland-Hopkins Airport[8] suggested that land use at the origin or destination of the trip is the variable most highly related to mode of travel.

MODELING AIRPORT TRIP GENERATION

Typically, airport planners use a series of multipliers when determining trip generation. As early as 1969, Munds used a simple formula based on annual passenger levels to derive the number of vehicles entering an airport during the peak hour.[9] More elaborate methods of forecasting vehicular volumes that primarily involve some type of regression analysis have been developed. When choosing variables for a regression model, care must be taken to ensure that the variables can be measured reliably and can be forecast easily.

Studies by Dunlay and Wiersig,[10] Bevan and Meadows[11] and Manning et al.[12] have developed detailed trip-generation and mode-split models. All of these approaches require detailed, location-specific data on the socioeconomic characteristics of the travelers and the specific modes of transportation or alternatives available. While these models proved to be very reliable, they are usually only applicable to the area for which they were calibrated.

For airport landside analyses, trip-generation and mode-split estimates are the most important procedures in estimating airport traffic volumes since the internal airport trip distribution and traffic assignment are predetermined almost by the resultant trip-generation and mode-split analyses. For example, if we can estimate the number of taxicabs generated by the airport's passengers, we can determine fairly easily where they will go in the airport—the trip distribution and traffic assignment steps. For many practical airport planning situations (or even when traffic impact studies are required for a development adjacent to the airport where airport traffic volumes must be known), general models, which are easy to use and apply to a broad range of airports, may be preferred over site-specific models, which require large, detailed, current and survey-based data for calibration.

RESEARCH METHOD

Total airport trip generation is the sum of the trips generated by individual aviation facilities that comprise a commercial service airport. Person and vehicle trips can be associated with the passenger terminal area (including facilities for passengers and employees, as well as commercial deliveries), ancillary site development (such as air cargo areas and other commercial and industrial developments that oftentimes are located on or adjacent to airport property), general aviation areas (which are usually separated from the commercial aviation areas at most airports for operational and safety reasons), and off-airport terminal facilities (such as private parking or rental car facilities where passengers park off of airport property and are shuttled to the airport terminal).

To illustrate the potential difference between the traffic volumes associated with the terminal area component as opposed to the total airport traffic volume, consider that Dallas-Fort Worth International Airport generates approximately 215,000 daily trips (4.33 trips per origin-destination passenger) in and out of all of the facilities within the property boundary, while only 80,000 of these daily trips (1.62 trips per passenger) are terminal related. In other words, only 37 percent of the total trips are related to the terminal area. This proportion can vary significantly between airports. For example, Sacramento's and Washington-Dulles' terminal area traffic represents as much as 88 percent and 69 percent of the total airport traffic, respectively.

The authors did not approach the total airport trip-generation issue by assessing the impacts of ancillary site facilities since each airport development situation is unique and each distinct land use type should be evaluated separately. As a result, this study concentrates on airport trips associated with the airport passenger terminal area.

TRIP-GENERATION MODEL RESULTS

Numerous regression models were tested to find the most robust forecasting model that is able to estimate trip generation in terms of vehicle-trip ends (due to the lack of other available data such as person-trip ends) using passenger activity levels, mode split, parking availability and other independent variables obtained from the airport survey. The statistical validity of each model was evaluated using standard statistical tests, such as the standard error, r squared, F test and the t test for significance of individual regression coefficients at the 95 percent level of significance.

The only statistically significant relationships that could be developed from the data set of 39 commercial service airports were derived from measuring vehicle-trip ends (in terms of the average daily traffic [ADT] entering and exiting the airport) and the number of daily origin-destination passengers. Figure 1 illustrates this general relationship. This causal relationship emulates the results of an earlier study by Ellis[13] who tried to develop relationships between trip-generation/mode split and about 14 independent variables that ranged from passenger activity (general aviation and airline service) to service area population and the number of airport employees.

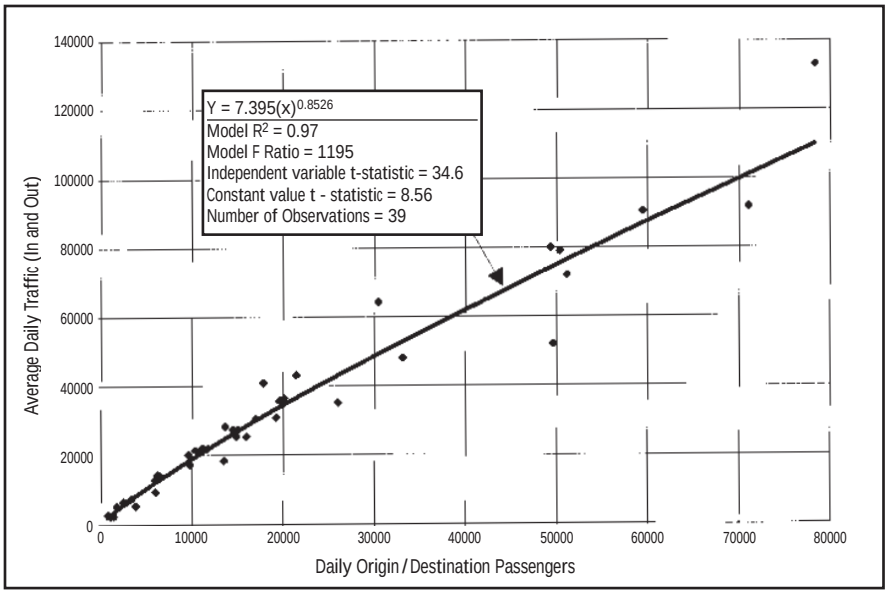


Figure 1. Relationship between terminal related average daily traffic and daily origin / destination passengers.

Table 1. Actual airport trip generation by passenger activity level.

Annualized Origin-Destination Passengers	Average Trip Rate (ADT per Daily O/D Passenger)[1]	Low-High Trip Rate (ADT per Daily O/D Passenger)	% Automobile Mode Split	
			Arithmetic Mean	Range
<1.0 Million	2.67–2.74	1.72–3.73	91.3%	90%–94%
1.0 Million–10.0 Million	1.78–1.89	1.35–2.35	82.8%	69%–95%
>10.0 Million	1.50–1.53	1.05–2.11	72.8%	60%–84%

Note:
1. The ranges in the average trip rates are based on two methodologies. The low value represents the slope of a linear regression model of the subset data (or a weighted average) and the high value simply represents the arithmetic mean of the subset data.

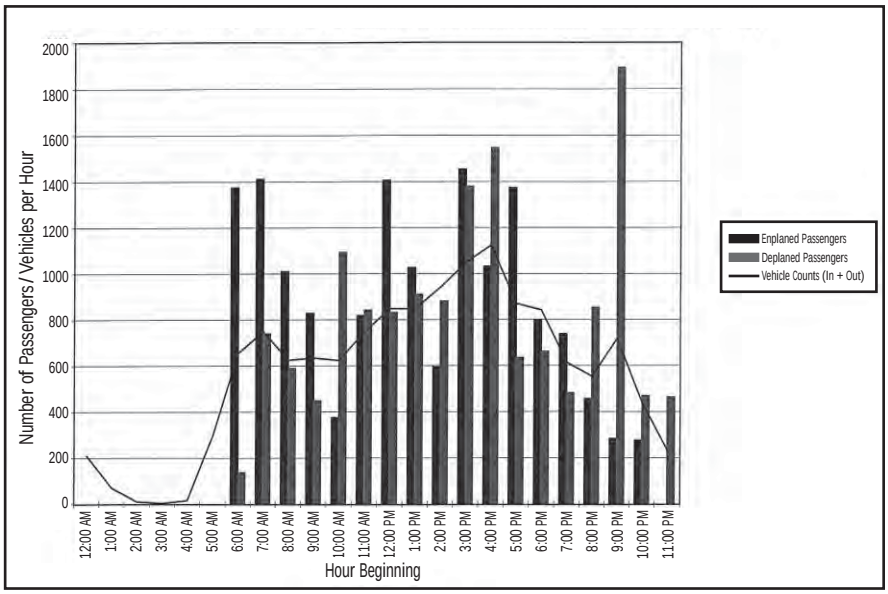


Figure 2. Hourly enplanements, deplanements and main entrance / exit traffic counts in Austin, Texas (AUS), USA.

Table 1 provides additional trip-generation analysis results when further separating the traffic into incremental annual passenger levels. Even though the logarithmic aggregate model provides an excellent fit to the data, there can be significant differences in trip-generation rates at similar sized airports as shown in Table 1.

No mathematical relationship could be developed to include mode split in the trip-generation models, nor could any other independent variable provide a significant model relationship to terminal related ADT. Figure 1 and Table 1, however, illustrate some intuitive relationships (or trends). As the number of daily origin-destination passengers increases, the trip-generation rate and corresponding percentage of automobile use (private automobiles and rental cars) decreases. Besides an increased availability of high-occupancy vehicle modes at larger airports, the presence of off-airport terminals, such as private parking or offsite rental car areas, also tends to increase the amount of shuttle vans (or buses) and decrease the percentage of private automobiles entering the terminal area.

For smaller airport facilities (less than one-million annual origin-destination passengers), the high trip-generation rate is indicative of the fact that the private automobile is the primary mode of transportation. Also, at smaller facilities, traffic for ancillary services tends to share roadway facilities with airport-related traffic. For example, air cargo and even general aviation-related traffic may be required to use the main terminal roadway at smaller airports. In this case, the terminal building may provide a larger variety of services, whereas at larger airports, such distinct service areas are typically separated, and thus the traffic destined for these areas are separated.

PEAKING CHARACTERISTICS

Landside traffic demands at commercial service airports tend to follow the peaking characteristics of passenger enplanements and passenger deplanements, as illustrated by a typical activity chart shown in Figure 2. Of the airports surveyed, complete peak-

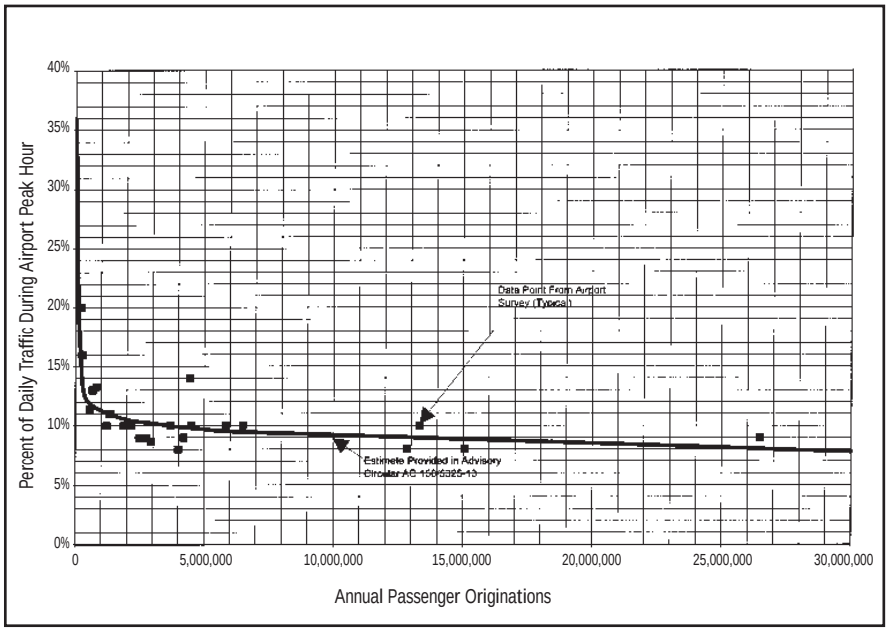


Figure 3. Relationship between peak hour and daily traffic.

Table 2. ADT and peak-hour trip-generation estimates (all airports).

Terminal Related ADT per Daily Origin/Destination Passenger	Percent of ADT During Peak Hour of Generator (Airport)	Percent Inbound in Peak Hour (Average/Range)	Percent Outbound in Peak Hour (Average/Range)
Arithmetic Mean = 1.91 Range = 1.05–3.73 (See Figure 1 and Table 1 for a more detailed breakdown)	See Figure 3	Arithmetic Mean = 47% Range = 40%–52%	Arithmetic Mean = 53% Range = 48%–60%

Table 3. Airport mode splits by passenger activity level.

Annual Origin/Destination Passengers	Percent Automobile (Arithmetic Mean/Range)	Percent Taxicab/Limousine (Arithmetic Mean/Range)	Percent Shuttle Van (Arithmetic Mean/Range)	Percent Public Transportation/ Other (Arithmetic Mean/Range)
<1.0 Million	91.3% 90–94%	4.3% 3–5%	4.3% 1–7%	0.1% 0–1%
1.0 Million–10.0 Million	82.8% 69–95%	7.0% 2–17%	9.1% 1–25%	1.1% 0–4%
>10.0 Million	72.8% 60–84%	12.1% 4–22%	12.1% 6–18%	3.0% 0–10%

ing information was obtained from 24 airports. Seventy-one percent of the airports in the survey had peak hours that tend to coincide with typical peak-hour, non-airport traffic conditions (6 a.m. to 9 a.m. and 3 p.m. to 6 p.m.).

Figure 3 illustrates a scatter diagram plot of the relationship between the peak-hour percentage of the airport-generated traffic (vehicle trips) for varying passenger activity levels. At smaller airports, a larger percentage of the daily traffic occurs during the peak hour, as opposed to larger airports where traffic tends to be more evenly distributed throughout the day. Note that the vehicular traffic data points from the airport survey fit very well with the typical passenger-related, peak-hour percentages of daily passenger traffic volumes provided in AC 150/5325-13, *Planning and Design of Passenger Terminal Facilities*.[14] Thus, it is recommended that this graph be used to establish peak-hour traffic conditions from ADT information when site-specific data are not available.

Peak-hour traffic among the airports surveyed ranged from 8 percent of the daily traffic at the larger airports to 20 percent of the daily traffic at smaller, non-hub airports. The overall average peak-hour percentage of the daily traffic that occurs during the airport peak hour was approximately 11 percent.

Table 2 provides typical peak-hour landside traffic conditions at commercial service airports.

AIRPORT MODE SPLIT

While there is a distinct trip-generation difference in the airport activity level subsets (less than one-million annual passengers, between one-million and 10-million annual passengers, and greater than 10-million annual passengers), there is also a significant range in the trip-generation rates within each subset. Experience has indicated that while mode split can help determine the trip-generation rate, it also can be a misleading factor since it has been found that airports with similar mode splits can have varying trip-generation rates. This is typically a result of the number of passengers dropped off and picked up by relatives or friends (this trip-making process typically accounts for the

highest number of vehicle trips per passenger); the vehicle occupancy conditions; the amount of off-airport parking and rental car activity; the service orientation of the airport (i.e., whether it serves largely business- or pleasure-oriented traffic); and the trip-making characteristics and number of airport employees.

A summary of the average and range of mode-split percentage, by airport activity level, is presented in Table 3. Classifications have been made for automobiles, limousines/taxicabs, shuttle vans and public transportation or "other" categories. These mode-split classifications are based upon the most representative classifications obtained from the airport survey.

SUMMARY AND CONCLUSIONS

A new trip-generation model, which should serve as an update to the existing ITE trip-generation models for commercial service airports, has been developed based on traffic and mode split data obtained from a variety of commercial service airports. It is intended to provide a generalized model to be used primarily by traffic engineers to address airport landside design issues based on minimal input data.

The research presented herein indicates that the number of daily origin-destination passengers provides an excellent indication of the number of daily vehicle trips related to the airport terminal. Also, as the number of annual origin-destination passengers increases, the average daily vehicle trip rate (per origin-destination passenger), the percentage use of the private automobile and the peak-hour percentage of daily traffic all decrease.

Each individual airport has unique landside operational features; and as with any forecasting model, there will be some level of variance between actual and predicted values. The model contained herein should provide a reasonable basis for determining the landside impacts of airport passenger terminal facilities, when more detailed, site-specific data are not available. ■

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Appendix F6

Forecast Years CURB_PLAN Analysis

CURB_PLAN **Version 1.2 (February 25, 2000)**

Airport Curbside Frontage Analysis, by URS Corp

WORKSHEET No 1 **INPUTS**

GO TO WORKSHEET 1
USER GUIDE

Project Description

User Name:	*URS Corporation*
Date:	*November 1, 2009*
Airport:	*Manchester-Boston Regional Airport*
Location:	*Shephard Road at Terminal*
Project # :	
Scenario:	*Forecast 2015 (3.3 MAP) - Peak Hour*
User Notes:	*Fifteen (15) Minute Peak Arrival Factor*

Step 1: Enter Peak Hour Volumes (vph) *

Vehicle Types	Pk Hr Vols	Mode %	Mode Vols	PEAK HR VOLS
Autos	*0*	*86%*	301	301
Vans	*0*	*12%*	42	42
Buses	*0*	*0%*	0	0
Taxis	*0*	*2%*	7	7
Other	*0*	*0%*	0	0
TOTAL (vph)	0	100%	*350*	350

* Enter either actual volumes in the peak hour volume columns
OR mode split % AND total volume in the mode columns.
CURB_PLAN will use the column with the greater total volume.

Step 2: Enter Average Dwell Time (sec/veh)

Autos	*117.0*
Vans	*65.0*
Buses	*0.0*
Taxis	*91.0*
Other	*0.0*

Step 3: Enter Average Veh Berth Space (feet)

Autos	*25*
Vans	*36*
Buses	*0*
Taxis	*25*
Other	*0*

Step 4: Enter Peak Surge/Arrival Factor

Autos	*1.10*
Vans	*1.10*
Buses	*0.00*
Taxis	*1.10*
Other	*0.00*

Step 5: Enter Usable Frontage (feet)

	Linear Frontage:	*1015*	
Unusable Frontage:	Crosswalks	*60*	
	Doors	*0*	
	Other	*223*	
	Gate Concentration Factor**	*0.55*	range 0.5 to 0.9
	Total Effective Frontage (ft):	275	** Default = 0.8

Step 6: Enter Curbfront Usage

	Select Number of Lanes:	*3*	
Select Usage:	2 Lanes Usage		
L = Load/Unload	3 Lanes Usage	*L,C,T*	<Enter Usage Here
C = Circulation	4 Lanes Usage		
T = Through	5 Lanes Usage		
	6 Lanes Usage		

CALCULATE CURBFRONT LOS

CALCULATE VOLUME

CALCULATE FRONTAGE

CALCULATE QUEUES

CALCULATE CIRCULATION LOS

CURB_PLAN Version 1.2 (February 25, 2000)

Airport Curbside Frontage Analysis, by URS Corp

WORKSHEET 2

FIND CURB FRONT LEVEL OF SERVICE - GIVEN VOLUMES AND FRONTAGE LENGTH

GO TO WORKSHEET 2 USER GUIDE

INPUTS FROM WORKSHEET 1

PEAK HOUR VOLUMES (vph)	
Autos	301
Vans	42
Buses	0
Taxis	7
Other	0
TOTAL	350

AVERAGE DWELL TIME (sec/veh)	
Autos	117
Vans	65
Buses	0
Taxis	91
Other	0

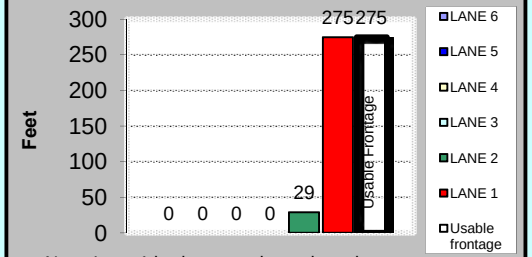
Average Vehicle Berth Space (feet)	
Autos	25
Vans	36
Buses	0
Taxis	25
Other	0

Peak Surge/Arrival Factor	
Autos	1.10
Vans	1.10
Buses	0.00
Taxis	1.10
Other	0.00

Frontage needed: (feet)	
269	Autos
30	Vans
0	Buses
5	Taxis
0	Other
304	Total

Usable frontage	275

ESTIMATED CURB FRONT OCCUPANCY



Note: Lane 1 is closest to the main curb

OUTPUT RESULTS:

Frontage Needed(ft):	304
Total Load/Unload Frontage (ft):	275
Effective/Usable Curb Length Ratio:	1.11
CURB FRONT LOS :	C
Density [pc/100ft](Range 0-4):	
Lane 1:	4.00
Lane 2:	0.42
Lane 3:	0.00
Lane 4:	0.00
Lane 5:	0.00
Lane 6:	0.00

Effective/Usable Curb Length Ratio	LOS
0.0 - 1.0	A
1.0 - 1.1	B
1.1 - 1.3	C
1.3 - 1.7	D
1.7 - 2.0	E
2.0 - 999	F

RETURN TO INPUTS

CURB_PLAN **Version 1.2 (February 25, 2000)**

Airport Curbside Frontage Analysis, by URS Corp

WORKSHEET 3

FIND MAX VOLUMES FOR GIVEN FRONTAGE AND LEVEL OF SERVICE

GO TO WORKSHEET 3 USER GUIDE

INPUTS FROM WORKSHEET 1

PEAK HOUR VOLUMES (vph)	
Autos	301
Vans	42
Buses	0
Taxis	7
Other	0
TOTAL	350

AVERAGE DWELL TIME (sec/veh)	
Autos	117
Vans	65
Buses	0
Taxis	91
Other	0

Average Vehicle Berth Space (feet)	
Autos	25
Vans	36
Buses	0
Taxis	25
Other	0

Peak Surge/Arrival Factor	
Autos	1.10
Vans	1.10
Buses	0
Taxis	1.1
Other	0

Frontage needed: (feet)	
269	Autos
30	Vans
0	Buses
5	Taxis
0	Other
304	Total

Usable frontage	275

Desired (future) Usable frontage	500

Effective/Usable Curb Length Ratio		LOS
0.0	- 1.0	A
1.0	- 1.1	B
1.1	- 1.3	C
1.3	- 1.7	D
1.7	- 2.0	E
2.0	- 999	F

OUTPUT RESULTS:

Desired LOS :	C
Desired Effective Curb Length Ratio:	1.30
Desired Frontage:	500
Frontage Needed(ft):	650

Maximum Volumes* for Desired LOS & Desired Frontage

Autos:	567
Vans:	79
Buses:	0
Taxis:	13
Other:	0
TOTAL:	659

RETURN TO INPUTS

CURB_PLAN **Version 1.2 (February 25, 2000)**

Airport Curbside Frontage Analysis, by URS Corp

WORKSHEET 4

FIND REQUIRED FRONTAGE GIVEN VOLUMES AND LEVEL OF SERVICE

GO TO WORKSHEET 4 USER GUIDE

INPUTS FROM WORKSHEET 1

PEAK HOUR VOLUMES (vph)	
Autos	301
Vans	42
Buses	0
Taxis	7
Other	0
TOTAL	350

AVERAGE DWELL TIME (sec/veh)	
Autos	117
Vans	65
Buses	0
Taxis	91
Other	0

Average Vehicle Berth Space (feet)	
Autos	25
Vans	36
Buses	0
Taxis	25
Other	0

Peak Surge/Arrival Factor	
Autos	1.10
Vans	1.10
Buses	0
Taxis	1.1
Other	0

Frontage needed : (feet)	
269	Autos
30	Vans
0	Buses
5	Taxis
0	Other
304	Total

Usable frontage	275

Input Desired Level of Service (A-E): C

OUTPUT RESULTS:

Desired Effective Curb Length Ratio: 1.30

Frontage (ft) Required for Desired LOS : 234

Effective/Usable Curb Length Ratio		LOS
0.0	- 1.0	A
1.0	- 1.1	B
1.1	- 1.3	C
1.3	- 1.7	D
1.7	- 2.0	E
2.0	- 999	F

RETURN TO INPUTS

CURB_PLAN Version 1.2 (February 25, 2000)

Airport Curbside Frontage Analysis, by URS Corp

WORKSHEET 5
95th PERCENTILE QUEUE LENGTHS

GO TO WORKSHEET 5 USER GUIDE

INPUTS FROM WORKSHEET 1

PEAK HOUR VOLUMES (vph)	
Autos	301
Vans	42
Buses	0
Taxis	7
Other	0
TOTAL	350

AVERAGE DWELL TIME (sec/veh)	
Autos	117
Vans	65
Buses	0
Taxis	91
Other	0

Average Vehicle Berth Space (feet)	
Autos	25
Vans	36
Buses	0
Taxis	25
Other	0

Average Arrivals per second	
Autos	0.084
Vans	0.012
Buses	0.000
Taxis	0.002
Other	0.000
TOTAL	0.097

Net Average Arrivals	
Autos	9.783
Vans	0.758
Buses	0.000
Taxis	0.177
Other	0.000
TOTAL	10.718

Input Number of Approach Lanes	2

OUTPUT RESULTS:

	95th Percentile Queue Length (ft)
Autos	375
Vans	72
Buses	0
Taxis	0
Other	0
Total Frontage Needed (Using Poisson)	447
Minus total available frontage parking	-413
TOTAL QUEUE per Lane	17

RETURN TO INPUTS

CURB_PLAN **Version 1.2 (February 25, 2000)**

Airport Curbside Frontage Analysis, by URS Corp

WORKSHEET 6
CIRCULATION LOS (By Row)

GO TO WORKSHEET 6 USER GUIDE

INPUTS FROM WORKSHEET 1

PEAK HOUR VOLUMES (vph)	
Autos	301
Vans	42
Buses	0
Taxis	7
Other	0
TOTAL	350

Lane Usage	
Lane 1	L
Lane 2	C
Lane 3	T
Lane 4	
Lane 5	
Lane 6	

LOS E Circulation Capacity (vph)	
Lane 1	0
Lane 2	300
Lane 3	600
Lane 4	0
Lane 5	0
Lane 6	0
Row Capacity:	900

Volume to Capacity Ratio	
TOTAL	0.389

Volume/Capacity Ratio	LOS
N/A	A
N/A	B
0.00 - 0.28	C
0.28 - 0.92	D
0.92 - 1.00	E
1.00 - 999	F

OUTPUT RESULTS:

Circulation LOS:

D

RETURN TO INPUTS

CURB_PLAN **Version 1.2 (February 25, 2000)**

Airport Curbside Frontage Analysis, by URS Corp

WORKSHEET No 1 **INPUTS**

GO TO WORKSHEET 1
USER GUIDE

Project Description

User Name:	*URS Corporation*
Date:	*February 2, 2010*
Airport:	*Manchester-Boston Regional Airport*
Location:	*Shephard Road at Terminal*
Project # :	
Scenario:	*Forecast 2020 (3.7 MAP) - Peak Hour*
User Notes:	*Fifteen (15) Minute Peak Arrival Factor*

Step 1: Enter Peak Hour Volumes (vph) *

Vehicle Types	Pk Hr Vols	Mode	%	Vols	PEAK HR VOLS
Autos	*0*		*86%*	335	335
Vans	*0*		*12%*	47	47
Buses	*0*		*0%*	0	0
Taxis	*0*		*2%*	8	8
Other	*0*		*0%*	0	0
TOTAL (vph)	0		100%	*390*	390

* Enter either actual volumes in the peak hour volume columns
OR mode split % AND total volume in the mode columns.
CURB_PLAN will use the column with the greater total volume.

Step 2: Enter Average Dwell Time (sec/veh)

Autos	*117.0*
Vans	*65.0*
Buses	*0.0*
Taxis	*91.0*
Other	*0.0*

Step 3: Enter Average Veh Berth Space (feet)

Autos	*25*
Vans	*36*
Buses	*0*
Taxis	*25*
Other	*0*

Step 4: Enter Peak Surge/Arrival Factor

Autos	*1.10*
Vans	*1.10*
Buses	*0.00*
Taxis	*1.10*
Other	*0.00*

Step 5: Enter Usable Frontage (feet)

	Linear Frontage:	*1015*
Unusable Frontage:	Crosswalks	*60*
	Doors	*0*
	Other	*223*
	Gate Concentration Factor**	*0.55* range 0.5 to 0.9
	Total Effective Frontage (ft):	275 ** Default = 0.8

Step 6: Enter Curbfront Usage

	Select Number of Lanes:	*3*
Select Usage:	2 Lanes Usage	
L = Load/Unload	3 Lanes Usage	*L,C,T* <Enter Usage Here
C = Circulation	4 Lanes Usage	
T = Through	5 Lanes Usage	
	6 Lanes Usage	

CALCULATE CURBFRONT LOS

CALCULATE VOLUME

CALCULATE FRONTAGE

CALCULATE QUEUES

CALCULATE CIRCULATION LOS

CURB_PLAN Version 1.2 (February 25, 2000)

Airport Curbside Frontage Analysis, by URS Corp

WORKSHEET 2

FIND CURB FRONT LEVEL OF SERVICE - GIVEN VOLUMES AND FRONTAGE LENGTH

GO TO WORKSHEET 2 USER GUIDE

INPUTS FROM WORKSHEET 1

PEAK HOUR VOLUMES (vph)	
Autos	335
Vans	47
Buses	0
Taxis	8
Other	0
TOTAL	390

AVERAGE DWELL TIME (sec/veh)	
Autos	117
Vans	65
Buses	0
Taxis	91
Other	0

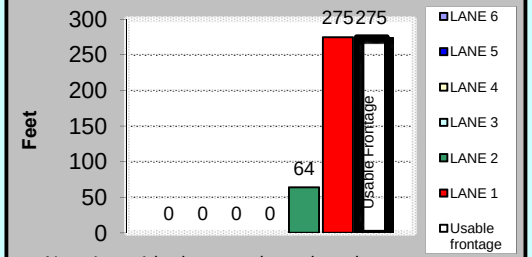
Average Vehicle Berth Space (feet)	
Autos	25
Vans	36
Buses	0
Taxis	25
Other	0

Peak Surge/Arrival Factor	
Autos	1.10
Vans	1.10
Buses	0.00
Taxis	1.10
Other	0.00

Frontage needed: (feet)	
300	Autos
33	Vans
0	Buses
5	Taxis
0	Other
339	Total

Usable frontage	275

ESTIMATED CURB FRONT OCCUPANCY



Note: Lane 1 is closest to the main curb

OUTPUT RESULTS:

Frontage Needed(ft):	339
Total Load/Unload Frontage (ft):	275
Effective/Usable Curb Length Ratio:	1.23
CURB FRONT LOS :	C
Density [pc/100ft](Range 0-4):	
Lane 1:	4.00
Lane 2:	0.93
Lane 3:	0.00
Lane 4:	0.00
Lane 5:	0.00
Lane 6:	0.00

Effective/Usable Curb Length Ratio	LOS
0.0 - 1.0	A
1.0 - 1.1	B
1.1 - 1.3	C
1.3 - 1.7	D
1.7 - 2.0	E
2.0 - 999	F

RETURN TO INPUTS

CURB_PLAN **Version 1.2 (February 25, 2000)**

Airport Curbside Frontage Analysis, by URS Corp

WORKSHEET 3

FIND MAX VOLUMES FOR GIVEN FRONTAGE AND LEVEL OF SERVICE

GO TO WORKSHEET 3 USER GUIDE

INPUTS FROM WORKSHEET 1

PEAK HOUR VOLUMES (vph)	
Autos	335.4
Vans	46.8
Buses	0
Taxis	8
Other	0
TOTAL	390

AVERAGE DWELL TIME (sec/veh)	
Autos	117
Vans	65
Buses	0
Taxis	91
Other	0

Average Vehicle Berth Space (feet)	
Autos	25
Vans	36
Buses	0
Taxis	25
Other	0

Peak Surge/Arrival Factor	
Autos	1.10
Vans	1.10
Buses	0
Taxis	1.1
Other	0

Frontage needed: (feet)	
300	Autos
33	Vans
0	Buses
5	Taxis
0	Other
339	Total

Usable frontage	275

Desired (future) Usable frontage	500

Effective/Usable Curb Length Ratio			LOS
0.0	-	1.0	A
1.0	-	1.1	B
1.1	-	1.3	C
1.3	-	1.7	D
1.7	-	2.0	E
2.0	-	999	F

OUTPUT RESULTS:

Desired LOS :	C
Desired Effective Curb Length Ratio:	1.30
Desired Frontage:	500
Frontage Needed(ft):	650

Maximum Volumes* for Desired LOS & Desired Frontage

Autos:	567
Vans:	79
Buses:	0
Taxis:	13
Other:	0
TOTAL:	659

RETURN TO INPUTS

CURB_PLAN **Version 1.2 (February 25, 2000)**

Airport Curbside Frontage Analysis, by URS Corp

WORKSHEET 4

FIND REQUIRED FRONTAGE GIVEN VOLUMES AND LEVEL OF SERVICE

GO TO WORKSHEET 4
USER GUIDE

INPUTS FROM WORKSHEET 1

PEAK HOUR VOLUMES (vph)	
Autos	335
Vans	46.8
Buses	0
Taxis	7.8
Other	0
TOTAL	390

AVERAGE DWELL TIME (sec/veh)	
Autos	117
Vans	65
Buses	0
Taxis	91
Other	0

Average Vehicle Berth Space (feet)	
Autos	25
Vans	36
Buses	0
Taxis	25
Other	0

Peak Surge/Arrival Factor	
Autos	1.10
Vans	1.10
Buses	0
Taxis	1.1
Other	0

Frontage needed : (feet)	
300	Autos
33	Vans
0	Buses
5	Taxis
0	Other
339	Total

Usable frontage	275

Input Desired Level of Service (A-E): C

OUTPUT RESULTS:

Desired Effective Curb Length Ratio: 1.30
Frontage (ft) Required for Desired LOS : 260

Effective/Usable Curb Length Ratio			LOS
0.0	-	1.0	A
1.0	-	1.1	B
1.1	-	1.3	C
1.3	-	1.7	D
1.7	-	2.0	E
2.0	-	999	F

RETURN TO INPUTS

CURB_PLAN Version 1.2 (February 25, 2000)

Airport Curbside Frontage Analysis, by URS Corp

WORKSHEET 5
95th PERCENTILE QUEUE LENGTHS

GO TO WORKSHEET 5 USER GUIDE

INPUTS FROM WORKSHEET 1

PEAK HOUR VOLUMES (vph)	
Autos	335.4
Vans	46.8
Buses	0
Taxis	8
Other	0
TOTAL	390

AVERAGE DWELL TIME (sec/veh)	
Autos	117
Vans	65
Buses	0
Taxis	91
Other	0

Average Vehicle Berth Space (feet)	
Autos	25
Vans	36
Buses	0
Taxis	25
Other	0

Average Arrivals per second	
Autos	0.093
Vans	0.013
Buses	0.000
Taxis	0.002
Other	0.000
TOTAL	0.108

Net Average Arrivals	
Autos	10.901
Vans	0.845
Buses	0.000
Taxis	0.197
Other	0.000
TOTAL	11.943

Input Number of Approach Lanes	2

OUTPUT RESULTS:

	95th Percentile Queue Length (ft)
Autos	425
Vans	108
Buses	0
Taxis	0
Other	0
Total Frontage Needed (Using Poisson)	533
Minus total available frontage parking	-413
TOTAL QUEUE per Lane	60

RETURN TO INPUTS

CURB_PLAN **Version 1.2 (February 25, 2000)**

Airport Curbside Frontage Analysis, by URS Corp

WORKSHEET 6
CIRCULATION LOS (By Row)

GO TO WORKSHEET 6 USER GUIDE

INPUTS FROM WORKSHEET 1

PEAK HOUR VOLUMES (vph)	
Autos	335
Vans	47
Buses	0
Taxis	8
Other	0
TOTAL	390

Lane Usage	
Lane 1	L
Lane 2	C
Lane 3	T
Lane 4	
Lane 5	
Lane 6	

LOS E Circulation Capacity (vph)	
Lane 1	0
Lane 2	300
Lane 3	600
Lane 4	0
Lane 5	0
Lane 6	0
Row Capacity:	900

Volume to Capacity Ratio	
TOTAL	0.433

Volume/Capacity Ratio	LOS
N/A	A
N/A	B
0.00 - 0.28	C
0.28 - 0.92	D
0.92 - 1.00	E
1.00 - 999	F

OUTPUT RESULTS:

Circulation LOS:

D

RETURN TO INPUTS

CURB_PLAN **Version 1.2 (February 25, 2000)**

Airport Curbside Frontage Analysis, by URS Corp

WORKSHEET No 1 **INPUTS**

GO TO WORKSHEET 1
USER GUIDE

Project Description

User Name:	*URS Corporation*
Date:	*February 2, 2010*
Airport:	*Manchester-Boston Regional Airport*
Location:	*Shephard Road at Terminal*
Project # :	
Scenario:	*Forecast 2025 (4.1 MAP) - Peak Hour*
User Notes:	*Fifteen (15) Minute Peak Arrival Factor*

Step 1: Enter Peak Hour Volumes (vph) *

Vehicle Types	Pk Hr Vols	Mode %	Mode Vols	PEAK HR VOLS
Autos	*0*	*86%*	353	353
Vans	*0*	*12%*	49	49
Buses	*0*	*0%*	0	0
Taxis	*0*	*2%*	8	8
Other	*0*	*0%*	0	0
TOTAL (vph)	0	100%	*410*	410

* Enter either actual volumes in the peak hour volume columns
OR mode split % AND total volume in the mode columns.
CURB_PLAN will use the column with the greater total volume.

Step 2: Enter Average Dwell Time (sec/veh)	
Autos	*117.0*
Vans	*65.0*
Buses	*0.0*
Taxis	*91.0*
Other	*0.0*

Step 3: Enter Average Veh Berth Space (feet)	
Autos	*25*
Vans	*36*
Buses	*0*
Taxis	*25*
Other	*0*

Step 4: Enter Peak Surge/Arrival Factor	
Autos	*1.10*
Vans	*1.10*
Buses	*0.00*
Taxis	*1.10*
Other	*0.00*

Step 5: Enter Usable Frontage (feet)			
	Linear Frontage:	*1015*	
Unusable Frontage:	Crosswalks	*60*	
	Doors	*0*	
	Other	*223*	
	Gate Concentration Factor**	*0.55*	range 0.5 to 0.9
	Total Effective Frontage (ft):	275	** Default = 0.8

Step 6: Enter Curbfront Usage			
	Select Number of Lanes:	*3*	
	Select Usage: 2 Lanes Usage		
L = Load/Unload	3 Lanes Usage	*L,C,T*	<Enter Usage Here
C = Circulation	4 Lanes Usage		
T = Through	5 Lanes Usage		
	6 Lanes Usage		

CALCULATE CURBFRONT LOS

CALCULATE VOLUME

CALCULATE FRONTAGE

CALCULATE QUEUES

CALCULATE CIRCULATION LOS

CURB_PLAN Version 1.2 (February 25, 2000)

Airport Curbside Frontage Analysis, by URS Corp

WORKSHEET 2

FIND CURB FRONT LEVEL OF SERVICE - GIVEN VOLUMES AND FRONTAGE LENGTH

GO TO WORKSHEET 2 USER GUIDE

INPUTS FROM WORKSHEET 1

PEAK HOUR VOLUMES (vph)	
Autos	353
Vans	49
Buses	0
Taxis	8
Other	0
TOTAL	410

AVERAGE DWELL TIME (sec/veh)	
Autos	117
Vans	65
Buses	0
Taxis	91
Other	0

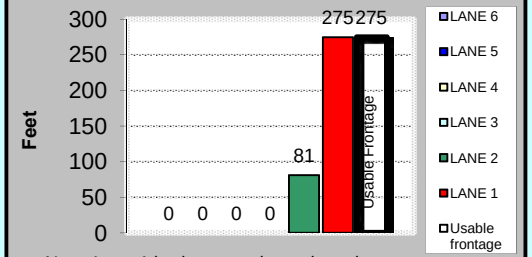
Average Vehicle Berth Space (feet)	
Autos	25
Vans	36
Buses	0
Taxis	25
Other	0

Peak Surge/Arrival Factor	
Autos	1.10
Vans	1.10
Buses	0.00
Taxis	1.10
Other	0.00

Frontage needed: (feet)	
315	Autos
35	Vans
0	Buses
6	Taxis
0	Other
356	Total

Usable frontage	275

ESTIMATED CURB FRONT OCCUPANCY



Note: Lane 1 is closest to the main curb

OUTPUT RESULTS:

Frontage Needed(ft):	356
Total Load/Unload Frontage (ft):	275
Effective/Usable Curb Length Ratio:	1.29
CURB FRONT LOS :	C
Density [pc/100ft](Range 0-4):	
Lane 1:	4.00
Lane 2:	1.18
Lane 3:	0.00
Lane 4:	0.00
Lane 5:	0.00
Lane 6:	0.00

Effective/Usable Curb Length Ratio	LOS
0.0 - 1.0	A
1.0 - 1.1	B
1.1 - 1.3	C
1.3 - 1.7	D
1.7 - 2.0	E
2.0 - 999	F

RETURN TO INPUTS

CURB_PLAN **Version 1.2 (February 25, 2000)**

Airport Curbside Frontage Analysis, by URS Corp

WORKSHEET 3

FIND MAX VOLUMES FOR GIVEN FRONTAGE AND LEVEL OF SERVICE

GO TO WORKSHEET 3 USER GUIDE

INPUTS FROM WORKSHEET 1

PEAK HOUR VOLUMES (vph)	
Autos	352.6
Vans	49.2
Buses	0
Taxis	8
Other	0
TOTAL	410

Usable frontage	275

AVERAGE DWELL TIME (sec/veh)	
Autos	117
Vans	65
Buses	0
Taxis	91
Other	0

Desired (future) Usable frontage	500

Average Vehicle Berth Space (feet)	
Autos	25
Vans	36
Buses	0
Taxis	25
Other	0

Peak Surge/Arrival Factor	
Autos	1.10
Vans	1.10
Buses	0
Taxis	1.1
Other	0

Frontage needed: (feet)	
315	Autos
35	Vans
0	Buses
6	Taxis
0	Other
356	Total

Effective/Usable Curb Length Ratio	LOS
0.0 - 1.0	A
1.0 - 1.1	B
1.1 - 1.3	C
1.3 - 1.7	D
1.7 - 2.0	E
2.0 - 999	F

OUTPUT RESULTS:

Desired LOS :	C
Desired Effective Curb Length Ratio:	1.30
Desired Frontage:	500
Frontage Needed(ft):	650

Maximum Volumes* for Desired LOS & Desired Frontage

Autos:	567
Vans:	79
Buses:	0
Taxis:	13
Other:	0
TOTAL:	659

RETURN TO INPUTS

CURB_PLAN **Version 1.2 (February 25, 2000)**

Airport Curbside Frontage Analysis, by URS Corp

GO TO WORKSHEET 4
USER GUIDE

WORKSHEET 4

FIND REQUIRED FRONTAGE GIVEN VOLUMES AND LEVEL OF SERVICE

INPUTS FROM WORKSHEET 1

PEAK HOUR VOLUMES (vph)	
Autos	353
Vans	49.2
Buses	0
Taxis	8.2
Other	0
TOTAL	410

AVERAGE DWELL TIME (sec/veh)	
Autos	117
Vans	65
Buses	0
Taxis	91
Other	0

Average Vehicle Berth Space (feet)	
Autos	25
Vans	36
Buses	0
Taxis	25
Other	0

Peak Surge/Arrival Factor	
Autos	1.10
Vans	1.10
Buses	0
Taxis	1.1
Other	0

Frontage needed : (feet)	
315	Autos
35	Vans
0	Buses
6	Taxis
0	Other
356	Total

Usable frontage	275

Input Desired Level of Service (A-E): C

OUTPUT RESULTS:

Desired Effective Curb Length Ratio: 1.30
Frontage (ft) Required for Desired LOS : 274

Effective/Usable Curb Length Ratio			LOS
0.0	-	1.0	A
1.0	-	1.1	B
1.1	-	1.3	C
1.3	-	1.7	D
1.7	-	2.0	E
2.0	-	999	F

RETURN TO INPUTS

CURB_PLAN Version 1.2 (February 25, 2000)

Airport Curbside Frontage Analysis, by URS Corp

WORKSHEET 5
95th PERCENTILE QUEUE LENGTHS

GO TO WORKSHEET 5 USER GUIDE

INPUTS FROM WORKSHEET 1

PEAK HOUR VOLUMES (vph)	
Autos	352.6
Vans	49.2
Buses	0
Taxis	8
Other	0
TOTAL	410

AVERAGE DWELL TIME (sec/veh)	
Autos	117
Vans	65
Buses	0
Taxis	91
Other	0

Average Vehicle Berth Space (feet)	
Autos	25
Vans	36
Buses	0
Taxis	25
Other	0

Average Arrivals per second	
Autos	0.098
Vans	0.014
Buses	0.000
Taxis	0.002
Other	0.000
TOTAL	0.114

Net Average Arrivals	
Autos	11.460
Vans	0.888
Buses	0.000
Taxis	0.207
Other	0.000
TOTAL	12.555

Input Number of Approach Lanes	2

OUTPUT RESULTS:

	95th Percentile Queue Length (ft)
Autos	425
Vans	108
Buses	0
Taxis	0
Other	0
Total Frontage Needed (Using Poisson)	533
Minus total available frontage parking	-413
TOTAL QUEUE per Lane	60

RETURN TO INPUTS

CURB_PLAN **Version 1.2 (February 25, 2000)**

Airport Curbside Frontage Analysis, by URS Corp

WORKSHEET 6
CIRCULATION LOS (By Row)

GO TO WORKSHEET 6 USER GUIDE

INPUTS FROM WORKSHEET 1

PEAK HOUR VOLUMES (vph)	
Autos	353
Vans	49
Buses	0
Taxis	8
Other	0
TOTAL	410

Lane Usage	
Lane 1	L
Lane 2	C
Lane 3	T
Lane 4	
Lane 5	
Lane 6	

LOS E Circulation Capacity (vph)	
Lane 1	0
Lane 2	300
Lane 3	600
Lane 4	0
Lane 5	0
Lane 6	0
Row Capacity:	900

Volume to Capacity Ratio	
TOTAL	0.456

Volume/Capacity Ratio	LOS
N/A	A
N/A	B
0.00 - 0.28	C
0.28 - 0.92	D
0.92 - 1.00	E
1.00 - 999	F

OUTPUT RESULTS:

Circulation LOS:

D

RETURN TO INPUTS

CURB_PLAN **Version 1.2 (February 25, 2000)**

Airport Curbside Frontage Analysis, by URS Corp

WORKSHEET No 1 **INPUTS**

GO TO WORKSHEET 1
USER GUIDE

Project Description

User Name:	*URS Corporation*
Date:	*February 2, 2010*
Airport:	*Manchester-Boston Regional Airport*
Location:	*Shephard Road at Terminal*
Project # :	
Scenario:	*Forecast 2030 (4.5 MAP) Peak Hour*
User Notes:	*Fifteen (15) Minute Peak Arrival Factor*

Step 1: Enter Peak Hour Volumes (vph) *

Vehicle Types	Pk Hr Vols	Mode %	Mode Vols	PEAK HR VOLS
Autos	*0*	*86%*	387	387
Vans	*0*	*12%*	54	54
Buses	*0*	*0%*	0	0
Taxis	*0*	*2%*	9	9
Other	*0*	*0%*	0	0
TOTAL (vph)	0	100%	*450*	450

* Enter either actual volumes in the peak hour volume columns
OR mode split % AND total volume in the mode columns.
CURB_PLAN will use the column with the greater total volume.

Step 2: Enter Average Dwell Time (sec/veh)

Autos	*117.0*
Vans	*65.0*
Buses	*0.0*
Taxis	*91.0*
Other	*0.0*

Step 3: Enter Average Veh Berth Space (feet)

Autos	*25*
Vans	*36*
Buses	*0*
Taxis	*25*
Other	*0*

Step 4: Enter Peak Surge/Arrival Factor

Autos	*1.10*
Vans	*1.10*
Buses	*0.00*
Taxis	*1.10*
Other	*0.00*

Step 5: Enter Usable Frontage (feet)

	Linear Frontage:	*1015*	
Unusable Frontage:	Crosswalks	*60*	
	Doors	*0*	
	Other	*223*	
	Gate Concentration Factor**	*0.55*	range 0.5 to 0.9
	Total Effective Frontage (ft):	275	** Default = 0.8

Step 6: Enter Curbfront Usage

	Select Number of Lanes:	*3*	
Select Usage:	2 Lanes Usage		
L = Load/Unload	3 Lanes Usage	*L,C,T*	<Enter Usage Here
C = Circulation	4 Lanes Usage		
T = Through	5 Lanes Usage		
	6 Lanes Usage		

CALCULATE CURBFRONT LOS | CALCULATE VOLUME | CALCULATE FRONTAGE | CALCULATE QUEUES | CALCULATE CIRCULATION LOS

CURB_PLAN **Version 1.2 (February 25, 2000)**

Airport Curbside Frontage Analysis, by URS Corp

WORKSHEET 2

FIND CURB FRONT LEVEL OF SERVICE - GIVEN VOLUMES AND FRONTAGE LENGTH

GO TO WORKSHEET 2 USER GUIDE

INPUTS FROM WORKSHEET 1

PEAK HOUR VOLUMES (vph)	
Autos	387
Vans	54
Buses	0
Taxis	9
Other	0
TOTAL	450

AVERAGE DWELL TIME (sec/veh)	
Autos	117
Vans	65
Buses	0
Taxis	91
Other	0

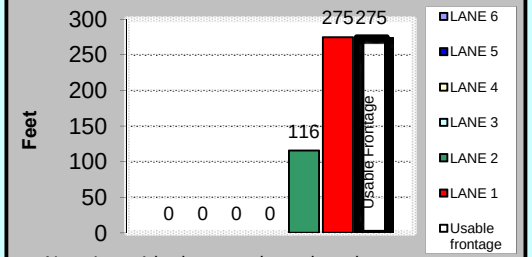
Average Vehicle Berth Space (feet)	
Autos	25
Vans	36
Buses	0
Taxis	25
Other	0

Peak Surge/Arrival Factor	
Autos	1.10
Vans	1.10
Buses	0.00
Taxis	1.10
Other	0.00

Frontage needed: (feet)	
346	Autos
39	Vans
0	Buses
6	Taxis
0	Other
391	Total

Usable frontage	275

ESTIMATED CURB FRONT OCCUPANCY



Note: Lane 1 is closest to the main curb

OUTPUT RESULTS:

Frontage Needed(ft):	391
Total Load/Unload Frontage (ft):	275
Effective/Usable Curb Length Ratio:	1.42
CURB FRONT LOS :	D
Density [pc/100ft](Range 0-4):	
Lane 1:	4.00
Lane 2:	1.68
Lane 3:	0.00
Lane 4:	0.00
Lane 5:	0.00
Lane 6:	0.00

Effective/Usable Curb Length Ratio			LOS
0.0	-	1.0	A
1.0	-	1.1	B
1.1	-	1.3	C
1.3	-	1.7	D
1.7	-	2.0	E
2.0	-	999	F

RETURN TO INPUTS

CURB_PLAN **Version 1.2 (February 25, 2000)**

Airport Curbside Frontage Analysis, by URS Corp

WORKSHEET 3

FIND MAX VOLUMES FOR GIVEN FRONTAGE AND LEVEL OF SERVICE

GO TO WORKSHEET 3 USER GUIDE

INPUTS FROM WORKSHEET 1

PEAK HOUR VOLUMES (vph)	
Autos	387
Vans	54
Buses	0
Taxis	9
Other	0
TOTAL	450

AVERAGE DWELL TIME (sec/veh)	
Autos	117
Vans	65
Buses	0
Taxis	91
Other	0

Average Vehicle Berth Space (feet)	
Autos	25
Vans	36
Buses	0
Taxis	25
Other	0

Peak Surge/Arrival Factor	
Autos	1.10
Vans	1.10
Buses	0
Taxis	1.1
Other	0

Frontage needed: (feet)	
346	Autos
39	Vans
0	Buses
6	Taxis
0	Other
391	Total

Usable frontage	275

Desired (future) Usable frontage	500

Effective/Usable Curb Length Ratio			LOS
0.0	-	1.0	A
1.0	-	1.1	B
1.1	-	1.3	C
1.3	-	1.7	D
1.7	-	2.0	E
2.0	-	999	F

OUTPUT RESULTS:

Desired LOS :	C
Desired Effective Curb Length Ratio:	1.30
Desired Frontage:	500
Frontage Needed(ft):	650
Maximum Volumes* for Desired LOS & Desired Frontage	
Autos:	567
Vans:	79
Buses:	0
Taxis:	13
Other:	0
TOTAL:	659

RETURN TO INPUTS

CURB_PLAN **Version 1.2 (February 25, 2000)**

Airport Curbside Frontage Analysis, by URS Corp

GO TO WORKSHEET 4
USER GUIDE

WORKSHEET 4

FIND REQUIRED FRONTAGE GIVEN VOLUMES AND LEVEL OF SERVICE

INPUTS FROM WORKSHEET 1

PEAK HOUR VOLUMES (vph)	
Autos	387
Vans	54
Buses	0
Taxis	9
Other	0
TOTAL	450

AVERAGE DWELL TIME (sec/veh)	
Autos	117
Vans	65
Buses	0
Taxis	91
Other	0

Average Vehicle Berth Space (feet)	
Autos	25
Vans	36
Buses	0
Taxis	25
Other	0

Peak Surge/Arrival Factor	
Autos	1.10
Vans	1.10
Buses	0
Taxis	1.1
Other	0

Frontage needed : (feet)	
346	Autos
39	Vans
0	Buses
6	Taxis
0	Other
391	Total

Usable frontage	275

Input Desired Level of Service (A-E): C

OUTPUT RESULTS:

Desired Effective Curb Length Ratio: 1.30
Frontage (ft) Required for Desired LOS : 301

Effective/Usable Curb Length Ratio	LOS
0.0 - 1.0	A
1.0 - 1.1	B
1.1 - 1.3	C
1.3 - 1.7	D
1.7 - 2.0	E
2.0 - 999	F

RETURN TO INPUTS

CURB_PLAN **Version 1.2 (February 25, 2000)**

Airport Curbside Frontage Analysis, by URS Corp

WORKSHEET 5
95th PERCENTILE QUEUE LENGTHS

GO TO WORKSHEET 5 USER GUIDE

INPUTS FROM WORKSHEET 1

PEAK HOUR VOLUMES (vph)	
Autos	387
Vans	54
Buses	0
Taxis	9
Other	0
TOTAL	450

AVERAGE DWELL TIME (sec/veh)	
Autos	117
Vans	65
Buses	0
Taxis	91
Other	0

Average Vehicle Berth Space (feet)	
Autos	25
Vans	36
Buses	0
Taxis	25
Other	0

Average Arrivals per second	
Autos	0.108
Vans	0.015
Buses	0.000
Taxis	0.003
Other	0.000
TOTAL	0.125

Net Average Arrivals	
Autos	12.578
Vans	0.975
Buses	0.000
Taxis	0.228
Other	0.000
TOTAL	13.780

Input Number of Approach Lanes	2

OUTPUT RESULTS:

	95th Percentile Queue Length (ft)
Autos	475
Vans	108
Buses	0
Taxis	0
Other	0
Total Frontage Needed (Using Poisson)	583
Minus total available frontage parking	-413
TOTAL QUEUE per Lane	85

RETURN TO INPUTS

CURB_PLAN **Version 1.2 (February 25, 2000)**

Airport Curbside Frontage Analysis, by URS Corp

WORKSHEET 6
CIRCULATION LOS (By Row)

GO TO WORKSHEET 6 USER GUIDE

INPUTS FROM WORKSHEET 1

PEAK HOUR VOLUMES (vph)	
Autos	387
Vans	54
Buses	0
Taxis	9
Other	0
TOTAL	450

Lane Usage	
Lane 1	L
Lane 2	C
Lane 3	T
Lane 4	
Lane 5	
Lane 6	

LOS E Circulation Capacity (vph)	
Lane 1	0
Lane 2	300
Lane 3	600
Lane 4	0
Lane 5	0
Lane 6	0
Row Capacity:	900

Volume to Capacity Ratio	
TOTAL	0.500

Volume/Capacity Ratio	LOS
N/A	A
N/A	B
0.00 - 0.28	C
0.28 - 0.92	D
0.92 - 1.00	E
1.00 - 999	F

OUTPUT RESULTS:

Circulation LOS:

D

RETURN TO INPUTS

MANCHESTER-BOSTON REGIONAL AIRPORT

Airport Master Plan Update

APPENDIX G

Flight Explorer™ Data

Calculation of Aircraft Fleet Mix
on the Basis of Flight Explorer Data for CY 2009

Aircraft Category	Aircraft	Operations		Percentage	
		Itinerant	Local	Itinerant	Local
Air Carrier	717200	1		0.00%	
	727200	343		0.49%	
	737300	8,118		11.51%	
	737400	1,364		1.93%	
	737500	732		1.04%	
	737700	14,833		21.02%	
	737800	17		0.02%	
	747400	2		0.00%	
	727EM1	5		0.01%	
	737N17	59		0.08%	
	757PW	2		0.00%	
	757RR	2		0.00%	
	767CF6	38		0.05%	
	A300-622R	2,170		3.08%	
	A319-131	811		1.15%	
	A320-211	528		0.75%	
	A320-232	947		1.34%	
	CL600	845		1.20%	
	CL601	887		1.26%	
	DC1010	235		0.33%	
	DC1030	17		0.02%	
	DC870	44		0.06%	
	DC910	2		0.00%	
	DC93LW	134		0.19%	
	DC95HW	415		0.59%	
	GV	3,892		5.52%	
	MD11GE	2		0.00%	
	MD81	7		0.01%	
	MD83	2		0.00%	
UPS	757PW	236		0.33%	
	757RR	236		0.33%	
Commuter / Air Taxi	1900D	1,508		2.14%	
	BEC58P	133		0.19%	
	CIT3	35		0.05%	
	CL600	52		0.07%	
	CL601	1,710		2.42%	
	CNA172	2		0.00%	
	CNA441	714		1.01%	
	CNA500	2		0.00%	
	CNA750	37		0.05%	
	DHC6	4,623		6.55%	
	DHC8	985		1.40%	
	EMB145	3,937		5.58%	
	EMB14L	1,107		1.57%	
	FAL20	6		0.01%	
	GASEPF	598		0.85%	
	GASEPV	3		0.00%	
	GII	2		0.00%	
	GIIB	2		0.00%	
	GIV	28		0.04%	
	GV	3,270		4.64%	
	IA1125	21		0.03%	
	LEAR25	5		0.01%	
	LEAR35	111		0.16%	
	MU3001	223		0.32%	
	PA31	6		0.01%	
	SF340	2,622		3.72%	
GA Jet	727200	29		0.04%	
	CIT3	43		0.06%	
	CL600	449		0.64%	
	CL601	34		0.05%	
	CNA500	449		0.64%	
	CNA510	31		0.04%	
	CNA750	34		0.05%	
	EMB145	9		0.01%	
	FAL20	46		0.06%	
	GIV	195		0.28%	
	GV	143		0.20%	
	IA1125	63		0.09%	
	LEAR25	94		0.13%	
	LEAR35	572		0.81%	
	MU3001	681		0.96%	
GA Turboprop	1900D	31		0.04%	
	CNA441	686		0.97%	
	DHC6	569		0.81%	
	DHC8	6		0.01%	
	HS748A	6		0.01%	
GA TEP	BEC58P	1,101	604	1.56%	18.95%
	PA30	17		0.02%	
	PA31	149		0.21%	
GA SEP	CNA172	1,536		2.18%	
	CNA206	752		1.07%	
	CNA20T	9		0.01%	
	GASEPF	458	2,584	0.65%	81.05%
	GASEPV	1,934		2.74%	
	PA28	912		1.29%	
	T34	9		0.01%	
Helo	A109	3		0.00%	
	B206L	20		0.03%	
	BO105	11		0.02%	
	H500D	3		0.00%	
	R22	37		0.05%	
	S76	17		0.02%	
	SA350D	3		0.00%	
Military	LEAR35	740		1.05%	
TOTAL		**70,549**	**3,188**		

Class of Aircraft	Number of Aircraft Operations	Percent of Aircraft Operations	3 times Class D
A & B	9,617	14%	
C	58,424	83%	
D	2,508	3.6%	11%
Mix Index =		93%	

Source: Flight Explorer©, 2009.
URS, 2009.

Notes: Based on Flight Plan Data from May 2008 through April 2009.

Aircraft types indicated are Integrated Noise Model (INM) codes.

MANCHESTER-BOSTON REGIONAL AIRPORT

Airport Master Plan Update

APPENDIX H

Data Supporting Terminal IT Direction

APPENDIX H
DATA SUPPORTING TERMINAL IT DIRECTION

H.1 ROUTING PROTOCOL

OSPF is utilized in the existing core switch as a means of routing traffic between VLANs. Moving to a dual core switch configuration means that both of the core switches will be in OSPF area zero. The Master Plan team recommends a multi-interface trunked and channeled link between the core switches to guard against failure of a single link. OSPF will fail if a condition known as "discontiguous area zero" exists. A simpler alternative might be to move to Cisco proprietary Enhanced Interior Gateway Routing Protocol (EIGRP) as it is simpler to configure than OSPF and has more forgiving network architecture.

H.2 NETWORK ADDRESSING MASTER PLAN

In small networks, addressing is not much of a problem and often devices are addressed in an arbitrary manner. As networks scale, there is a need to regionalize addressing and maintain structure between network regions, VLAN assignments, and associated addressing. A good addressing master plan makes the network and traffic flows easy to understand as networks grow in size.

The Master Plan team recommends the development of a network addressing master plan. This plan should subdivide the RFC 1918 10.0.0.0 private addressing space into eight segments. The first segment is reserved for legacy networks which are occupied by current switches and devices at MHT. The second segment (10.32.0.0 through 10.63.0.0) is reserved as regional address space for up to 32 regions on the MHT campus. The remaining six ranges should be reserved for future use outside MHT property, potentially at other City sites. Each of these eight ranges should be summarized in routing tables. For example, all of the MHT networks summarize to an address of 10.32.0.0 with an eleven bit mask. Summarization also occurs on each of the 32 regions internal to MHT with a sixteen bit mask. These regions could be the existing terminal; new terminal; north, south, east, and west campuses; and others.

Each of the 32 MHT regions is mapped into 254 usable VLANs. Each VLAN is provided with a network address, 254 usable host addresses and a broadcast address. The second octet address will identify the region in which the traffic originated. The third octet address matches the VLAN number. The fourth octet contains network, host, and broadcast addresses. This structure keeps the network addressing simple and easy to understand. As the network scales into a larger layer, three regionalized architecture, it also supports automatic summarization of addresses in much the same way as post offices use zip codes.

Refer to the tables at the end of this appendix for additional information on addressing Master Plan.

H.3 PHASE 2 IMPROVEMENTS

As the campus network continues to scale, there are increasing requirements for the amount of fiber needed between access layer switches and the network core. The solution is to move away from the

"collapsed core" configuration implemented in the Phase 1 improvements into a three-tiered core, distribution, and access layer configuration. An example of this three-tiered architecture is shown in the tables at the end of this appendix.

When this occurs, new core switches would be deployed either in the terminal or in two different buildings on site. Existing terminal switches would be re-tasked as "red" and "blue" distribution switches and uplinked to the new core switches, as shown in the diagram. Pairs of red and blue distribution switches would then be deployed at each new facility or region to aggregate traffic from the regional access layer switches and uplink this traffic to the core.

The use of distribution switches allows uplinks from distribution to core to become fairly static. If new access layer switches are added in a region or major facility, they only require uplinks to their local distribution switches and there is no need to do anything to the infrastructure from distribution to core. As bandwidth needs increase, core uplinks can be increased from 1 gigabits per second (gb/s) to 10 gb/s, and soon to either 40 gb/s or 100 gb/s without adding fiber.

Supervisor engines (Routers) in the distribution switches also provide another function. VLANs that extend from the distribution layer of the network to the core do not exist in the regions (make sure to clear these from the trunks in each region and allow only the core to distribution VLANs on the core to distribution links). This forces traffic exiting the region to be route at layer three. By definition, flooded broadcast traffic such as broadcast storms will not cross a router by default, isolating this type of anomaly to a particular network region.

Power supplies for core and distribution switches should be sized to allow for single redundant operation. Where both emergency (generator) power and UPS power is available, it is advisable to power one power supply from the emergency source and the second power supply through a UPS. This allows the switch to continue uninterrupted operation during UPS maintenance.

Regionalizing the network also has bandwidth benefits. High bandwidth users, such as close circuit television system (CCTV) archive servers, can be located within the same region as the cameras that stream video to them. This way CCTV traffic stays local to each region unless someone in another region is actively viewing live or stored CCTV video.

H.4 ACCESS LAYER SWITCH CONFIGURATIONS

Stability of the network begins at the edge. Access layer switch ports should be configured with storm control, limiting the ingress of broadcast and multicast traffic to two percent of port bandwidth. This configuration monitors the amount of broadcast and multicast traffic entering the network and shuts down offending ports that exceed these thresholds. Ports can be configured to return to service after the offending traffic ceases or to require the port to be manually returned to service.

Access layer switch ports should also be configured to limit the number of MAC addresses supported by the port to one or two MAC addresses. This parameter prevents tenants and other network users from using Ethernet hubs which have been proven to introduce bridging loops in the network resulting in

broadcast storms. Bridge Protocol Data Unit Guard or BPDU Guard is also recommended on access layer ports to shut ports down on receipt of BPDU packets as these ports should not be participating in spanning tree. These are simple, non-intrusive configurations; however, they add significant stability to the network.

H.5 MULTICAST ROUTING

Multicast routing is of little concern with the size of the current network and with the improvements implemented in the Phase 1 recommendations. As the network continues to scale and video becomes more prevalent, Multicast routing should be implemented. The recommended protocol is Sparse Mode Protocol Independent Multicast (PIM). Sparse Mode PIM utilizes either core switches or server farm distribution switches as a rendezvous point for multicast streams. These streams terminate at the rendezvous point and only traverse the network when one or more users join a particular multicast group.

H.6 QUALITY OF SERVICE

Quality of Service (QoS) architecture is becoming increasingly important in today's multi-media networks. Services such as VoIP and Video are latency and jitter sensitive, requiring prioritization of traffic over other services such as web browsing and email. This is easily accomplished and fairly simple if applied in a uniform manner across the network.

QoS begins by establishing a trust boundary for traffic as it enters the network. This is typically done at the access port or server port where traffic enters the network. QoS markings on traffic from end devices may be trusted as in the case of VoIP telephones or replaced on devices such as Windows workstations. These markings are placed in the Ethernet header on each frame in a field known as Differentiated Service Code Point (DSCP)

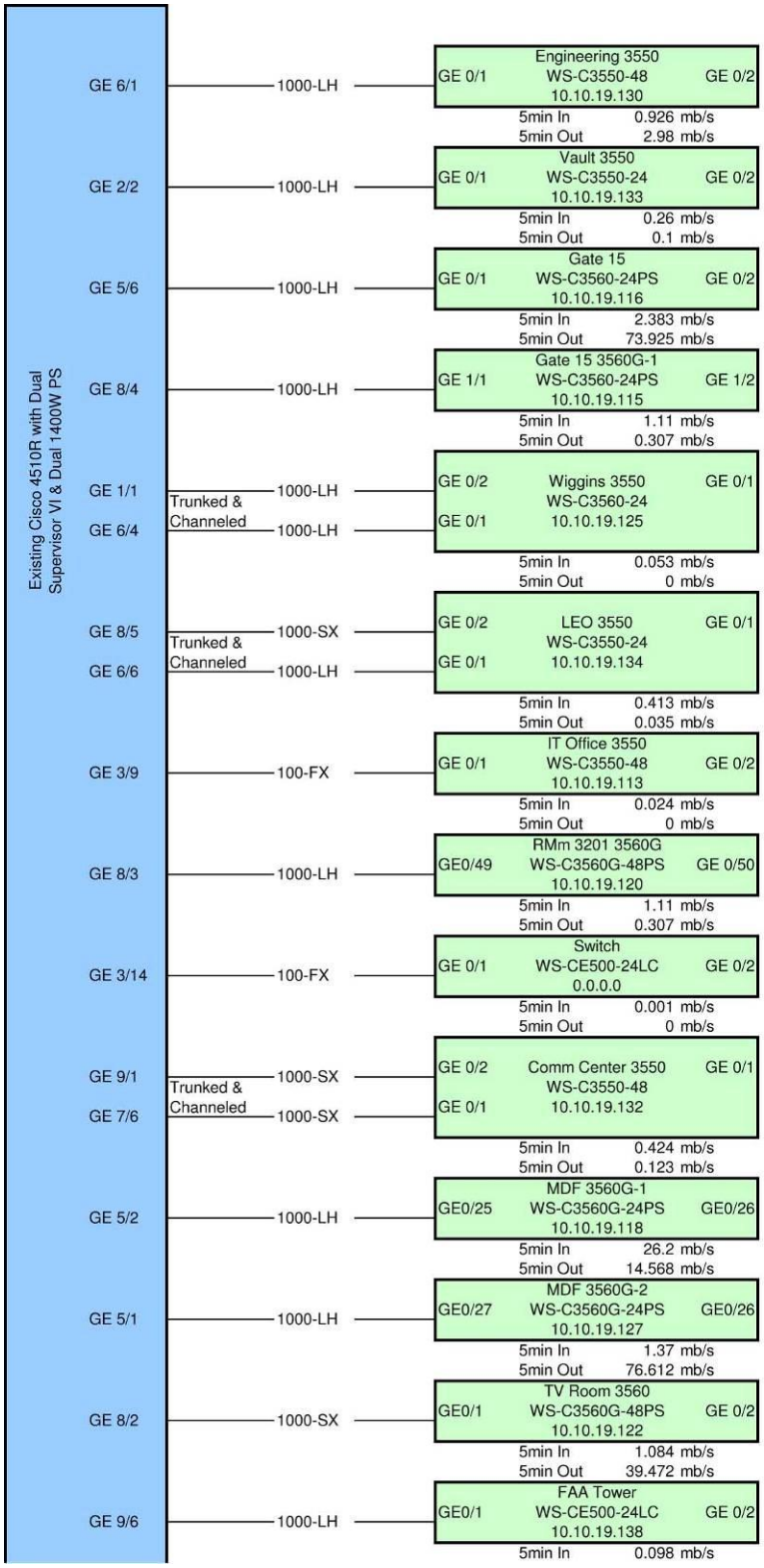
Recommended traffic markings are as following:

- VoIP Bearer Traffic: DSCP Value EF (Express Forwarding)
- Call Setup & Network Management Traffic: DSCP Value 31
- Video Traffic including CCTV, Internet Protocol Television (IPTV): DSCP Value 21
- All other Traffic: DSCP Value 0 (Best effort)

Output Queues on all switches should be configured with one priority queue for the express forwarding traffic. The remaining three classes of traffic are serviced using three weighted round robin queues which are serviced in DSCP priority. This arrangement provides front-of-the-line queuing for latency and jitter sensitive voice bearer traffic. The weighted round robin behavior of the remaining queues insures that all queues are serviced and that no traffic flow is starved.

The use of best effort delivery for all other traffic is often questioned. This type of traffic includes such things as web browser traffic, email, and moving files across the network. Most of this traffic is managed at a higher level by Transmission Control Protocol (TCP), which contains its own guaranteed delivery and re-send system.

EXISTING MHT NETWORK CONFIGURATION



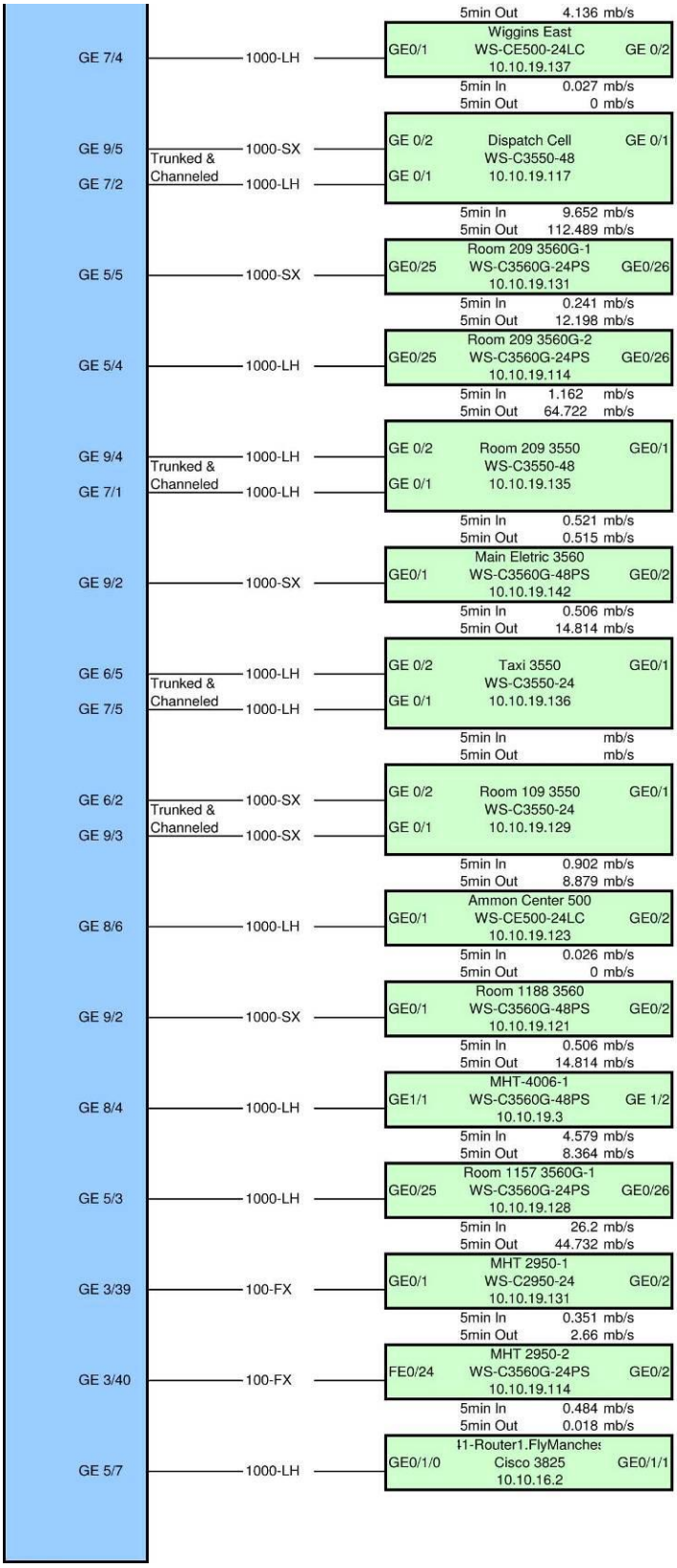
Existing VLAN Map

1	Default
2	Admin
3	FIDS
4	Security
5	Security Camera
6	Taxi
7	HVAC
8	Comcast - Passenger
9	WiFi Private
10	Comcast - Personnel
11	iLO
12	Conveyor
14	VMWare Vmotion
15	Wireless Infrastructure
20	MHT Desktops
22	MHT Users
24	MHT Accounting Users
25	Admin Users
26	MHT Wireless Authenticated Users
27	LEO Users
28	MHT Building Maintenance Users
29	MHT TSA Users
30	MHT Printers
31	MHT Security Users
32	MHT Fingerprint System
35	Guest
42	Southwest DMZ
45	Johnson Controls
55	Signs
60	Camera
65	City Unrouted
70	Power Related
85	Virtual Cluster Heartbeats
100	Milltown
101	Hudson-Manchester
102	Ben and Jerrys
103	Worldwide Flight Service
104	International RAM
105	Delta
118	Dunkin Donuts
121	Audax Technologies
709	VLAN709
998	City Network
999	External Network
1002	FDDI Default
1003	TRCRF Default
1004	FDDInet Default
1005	TRBF Default

Core Switch Configuration

1	WS-X4516	Supervisor V
2	WS-X4516	Supervisor V
3	WS-X4448-GB-RJ45	48-Port 10/100/1000-Base T
4	WS-X4448-GB-RJ45	48-Port 10/100/1000-Base T
5	WS-X4448-GB-SFP	48-Port 1000-Base-X (SFP)
6	WS-X4306	6-Port 1000-Base-X (GBIC)
7	WS-X4306-GB	6-Port 1000-Base-X (GBIC)
8	WS-X4306-GB	6-Port 1000-Base-X (GBIC)
9	WS-X4306-GB	6-Port 1000-Base-X (GBIC)
--	Fan Tray	
PS1	PWR-C45-1400AC	
PS2	PWR-C45-1400AC	

EXISTING MHT NETWORK CONFIGURATION (CONT.)



NETWORK ADDRESSING MASTER PLAN
MASTER NETWORKS

Subnet	Location	Network	Default Range	
			Subnets	Hosts/SN
0	Reserved Legacy	10.0.0.0	254	254
1	Reserved Legacy	10.1.0.0	254	254
2	Legacy Networks	10.2.0.0	254	254
3	Legacy Networks	10.3.0.0	254	254
4	Legacy Networks	10.4.0.0	254	254
5	Legacy Networks	10.5.0.0	254	254
6	Legacy Networks	10.6.0.0	254	254
7	Legacy Networks	10.7.0.0	254	254
8	Legacy Networks	10.8.0.0	254	254
9	Legacy Networks	10.9.0.0	254	254
10	Legacy Networks	10.10.0.0	254	254
11	Legacy Networks	10.11.0.0	254	254
12	Legacy Networks	10.12.0.0	254	254
13	Legacy Networks	10.13.0.0	254	254
14	Legacy Networks	10.14.0.0	254	254
15	Legacy Networks	10.15.0.0	254	254
16	Legacy Networks	10.16.0.0	254	254
17	Legacy Networks	10.17.0.0	254	254
18	Legacy Networks	10.18.0.0	254	254
19	Legacy Networks	10.19.0.0	254	254
20	Legacy Networks	10.20.0.0	254	254
21	Legacy Networks	10.21.0.0	254	254
22	Legacy Networks	10.22.0.0	254	254
23	Legacy Networks	10.23.0.0	254	254
24	Legacy Networks	10.24.0.0	254	254
25	Legacy Networks	10.25.0.0	254	254
26	Legacy Networks	10.26.0.0	254	254
27	Legacy Networks	10.27.0.0	254	254
28	Legacy Networks	10.28.0.0	254	254
29	Legacy Networks	10.29.0.0	254	254
30	Legacy Networks	10.30.0.0	254	254
31	Reserved Legacy	10.31.0.0	254	254
32	Existing Terminal	10.32.0.0	254	254
33	Future Terminal	10.33.0.0	254	254
34	North Campus	10.34.0.0	254	254
35	South Campus	10.35.0.0	254	254
36	East Campus	10.36.0.0	254	254
37	West Campus	10.37.0.0	254	254
38	Future Facility	10.38.0.0	254	254
39	Future Facility	10.39.0.0	254	254
40	Future Facility	10.40.0.0	254	254
41	Spare	10.41.0.0	254	254
42	Spare	10.42.0.0	254	254
43	Spare	10.43.0.0	254	254
44	Server Farm Term	10.44.0.0	254	254
45	Server Farm ARFF	10.45.0.0	254	254
46	Spare	10.46.0.0	254	254
47	Spare	10.47.0.0	254	254
48	Spare	10.48.0.0	254	254
49	Spare	10.49.0.0	254	254
50	Spare	10.50.0.0	254	254
51	Spare	10.51.0.0	254	254
52	Spare	10.52.0.0	254	254
53	Spare	10.53.0.0	254	254
54	Spare	10.54.0.0	254	254
55	Spare	10.55.0.0	254	254
56	Spare	10.56.0.0	254	254
57	Spare	10.57.0.0	254	254
58	Spare	10.58.0.0	254	254
59	Spare	10.59.0.0	254	254
60	Spare	10.60.0.0	254	254
61	Spare	10.61.0.0	254	254
62	Spare	10.62.0.0	254	254
63	Spare	10.63.0.0	254	254
64	Remote Site 1	10.64.0.0	254	254
65	Remote Site 1	10.65.0.0	254	254
66	Remote Site 1	10.66.0.0	254	254
67	Remote Site 1	10.67.0.0	254	254
68	Remote Site 1	10.68.0.0	254	254
69	Remote Site 1	10.69.0.0	254	254
70	Remote Site 1	10.70.0.0	254	254
71	Remote Site 1	10.71.0.0	254	254
72	Remote Site 1	10.72.0.0	254	254
73	Remote Site 1	10.73.0.0	254	254
74	Remote Site 1	10.74.0.0	254	254
75	Remote Site 1	10.75.0.0	254	254
76	Remote Site 1	10.76.0.0	254	254
77	Remote Site 1	10.77.0.0	254	254
78	Remote Site 1	10.78.0.0	254	254
79	Remote Site 1	10.79.0.0	254	254

Subnet	Location	Network	Default Range	
			Subnets	Hosts
80	Remote Site 1	10.80.0.0	254	254
81	Remote Site 1	10.81.0.0	254	254
82	Remote Site 1	10.82.0.0	254	254
83	Remote Site 1	10.83.0.0	254	254
84	Remote Site 1	10.84.0.0	254	254
85	Remote Site 1	10.85.0.0	254	254
86	Remote Site 1	10.86.0.0	254	254
87	Remote Site 1	10.87.0.0	254	254
88	Remote Site 1	10.88.0.0	254	254
89	Remote Site 1	10.89.0.0	254	254
90	Remote Site 1	10.90.0.0	254	254
91	Remote Site 1	10.91.0.0	254	254
92	Remote Site 1	10.92.0.0	254	254
93	Remote Site 1	10.93.0.0	254	254
94	Remote Site 1	10.94.0.0	254	254
95	Remote Site 1	10.95.0.0	254	254
96	Remote Site 2	10.96.0.0	254	254
97	Remote Site 2	10.97.0.0	254	254
98	Remote Site 2	10.98.0.0	254	254
99	Remote Site 2	10.99.0.0	254	254
100	Remote Site 2	10.100.0.0	254	254
101	Remote Site 2	10.101.0.0	254	254
102	Remote Site 2	10.102.0.0	254	254
103	Remote Site 2	10.103.0.0	254	254
104	Remote Site 2	10.104.0.0	254	254
105	Remote Site 2	10.105.0.0	254	254
106	Remote Site 2	10.106.0.0	254	254
107	Remote Site 2	10.107.0.0	254	254
108	Remote Site 2	10.108.0.0	254	254
109	Remote Site 2	10.109.0.0	254	254
110	Remote Site 2	10.110.0.0	254	254
111	Remote Site 2	10.111.0.0	254	254
112	Remote Site 2	10.112.0.0	254	254
113	Remote Site 2	10.113.0.0	254	254
114	Remote Site 2	10.114.0.0	254	254
115	Remote Site 2	10.115.0.0	254	254
116	Remote Site 2	10.116.0.0	254	254
117	Remote Site 2	10.117.0.0	254	254
118	Remote Site 2	10.118.0.0	254	254
119	Remote Site 2	10.119.0.0	254	254
120	Remote Site 2	10.120.0.0	254	254
121	Remote Site 2	10.121.0.0	254	254
122	Remote Site 2	10.122.0.0	254	254
123	Remote Site 2	10.123.0.0	254	254
124	Remote Site 2	10.124.0.0	254	254
125	Remote Site 2	10.125.0.0	254	254
126	Remote Site 2	10.126.0.0	254	254
127	Remote Site 2	10.127.0.0	254	254
128	Remote Site 3	10.128.0.0	254	254
129	Remote Site 3	10.129.0.0	254	254
130	Remote Site 3	10.130.0.0	254	254
131	Remote Site 3	10.131.0.0	254	254
132	Remote Site 3	10.132.0.0	254	254
133	Remote Site 3	10.133.0.0	254	254
134	Remote Site 3	10.134.0.0	254	254
135	Remote Site 3	10.135.0.0	254	254
136	Remote Site 3	10.136.0.0	254	254
137	Remote Site 3	10.137.0.0	254	254
138	Remote Site 3	10.138.0.0	254	254
139	Remote Site 3	10.139.0.0	254	254
140	Remote Site 3	10.140.0.0	254	254
141	Remote Site 3	10.141.0.0	254	254
142	Remote Site 3	10.142.0.0	254	254
143	Remote Site 3	10.143.0.0	254	254
144	Remote Site 3	10.144.0.0	254	254
145	Remote Site 3	10.145.0.0	254	254
146	Remote Site 3	10.146.0.0	254	254
147	Remote Site 3	10.147.0.0	254	254
148	Remote Site 3	10.148.0.0	254	254
149	Remote Site 3	10.149.0.0	254	254
150	Remote Site 3	10.150.0.0	254	254
151	Remote Site 3	10.151.0.0	254	254
152	Remote Site 3	10.152.0.0	254	254
153	Remote Site 3	10.153.0.0	254	254
154	Remote Site 3	10.154.0.0	254	254
155	Remote Site 3	10.155.0.0	254	254
156	Remote Site 3	10.156.0.0	254	254
157	Remote Site 3	10.157.0.0	254	254
158	Remote Site 3	10.158.0.0	254	254
159	Remote Site 3	10.159.0.0	254	254

Subnet	Location	Network	Default Range	
			Subnets	Hosts
160	Remote Site 4	10.160.0.0	254	254
161	Remote Site 4	10.161.0.0	254	254
162	Remote Site 4	10.162.0.0	254	254
163	Remote Site 4	10.163.0.0	254	254
164	Remote Site 4	10.164.0.0	254	254
165	Remote Site 4	10.165.0.0	254	254
166	Remote Site 4	10.166.0.0	254	254
167	Remote Site 4	10.167.0.0	254	254
168	Remote Site 4	10.168.0.0	254	254
169	Remote Site 4	10.169.0.0	254	254
170	Remote Site 4	10.170.0.0	254	254
171	Remote Site 4	10.171.0.0	254	254
172	Remote Site 4	10.172.0.0	254	254
173	Remote Site 4	10.173.0.0	254	254
174	Remote Site 4	10.174.0.0	254	254
175	Remote Site 4	10.175.0.0	254	254
176	Remote Site 4	10.176.0.0	254	254
177	Remote Site 4	10.177.0.0	254	254
178	Remote Site 4	10.178.0.0	254	254
179	Remote Site 4	10.179.0.0	254	254
180	Remote Site 4	10.180.0.0	254	254
181	Remote Site 4	10.181.0.0	254	254
182	Remote Site 4	10.182.0.0	254	254
183	Remote Site 4	10.183.0.0	254	254
184	Remote Site 4	10.184.0.0	254	254
185	Remote Site 4	10.185.0.0	254	254
186	Remote Site 4	10.186.0.0	254	254
187	Remote Site 4	10.187.0.0	254	254
188	Remote Site 4	10.188.0.0	254	254
189	Remote Site 4	10.189.0.0	254	254
190	Remote Site 4	10.190.0.0	254	254
191	Remote Site 4	10.191.0.0	254	254
192	Remote Site 5	10.192.0.0	254	254
193	Remote Site 5	10.193.0.0	254	254
194	Remote Site 5	10.194.0.0	254	254
195	Remote Site 5	10.195.0.0	254	254
196	Remote Site 5	10.196.0.0	254	254
197	Remote Site 5	10.197.0.0	254	254
198	Remote Site 5	10.198.0.0	254	254
199	Remote Site 5	10.199.0.0	254	254
200	Remote Site 5	10.200.0.0	254	254
201	Remote Site 5	10.201.0.0	254	254
202	Remote Site 5	10.202.0.0	254	254
203	Remote Site 5	10.203.0.0	254	254
204	Remote Site 5	10.204.0.0	254	254
205	Remote Site 5	10.205.0.0	254	254
206	Remote Site 5	10.206.0.0	254	254
207	Remote Site 5	10.207.0.0	254	254
208	Remote Site 5	10.208.0.0	254	254
209	Remote Site 5	10.209.0.0	254	254
210	Remote Site 5	10.210.0.0	254	254
211	Remote Site 5	10.211.0.0	254	254
212	Remote Site 5	10.212.0.0	254	254
213	Remote Site 5	10.213.0.0	254	254
214	Remote Site 5	10.214.0.0	254	254
215	Remote Site 5	10.215.0.0	254	254
216	Remote Site 5	10.216.0.0	254	254
217	Remote Site 5	10.217.0.0	254	254
218	Remote Site 5	10.218.0.0	254	254
219	Remote Site 5	10.219.0.0	254	254
220	Remote Site 5	10.220.0.0	254	254
221	Remote Site 5	10.221.0.0	254	254
222	Remote Site 5	10.222.0.0	254	254
223	Remote Site 5	10.223.0.0	254	254
224	Remote Site 6	10.224.0.0	254	254
225	Remote Site 6	10.225.0.0	254	254
226	Remote Site 6	10.226.0.0	254	254
227	Remote Site 6	10.227.0.0	254	254
228	Remote Site 6	10.228.0.0	254	254
229	Remote Site 6	10.229.0.0	254	254
230	Remote Site 6	10.230.0.0	254	254
231	Remote Site 6	10.231.0.0	254	254
232	Remote Site 6	10.232.0.0	254	254
233	Remote Site 6	10.233.0.0	254	254
234	Remote Site 6	10.234.0.0	254	254
235	Remote Site 6	10.235.0.0	254	254
236	Remote Site 6	10.236.0.0	254	254
237	Remote Site 6	10.237.0.0	254	254
238	Remote Site 6	10.238.0.0	254	254
239	Remote Site 6	10.239.0.0	254	254

Subnet	Location	Network	Default Range	
			Subnets	Hosts
240	Remote Site 6	10.240.0.0	254	254
241	Remote Site 6	10.241.0.0	254	254
242	Remote Site 6	10.242.0.0	254	254
243	Remote Site 6	10.243.0.0	254	254
244	Remote Site 6	10.244.0.0	254	254
245	Remote Site 6	10.245.0.0	254	254
246	Remote Site 6	10.246.0.0	254	254
247	Remote Site 6	10.247.0.0	254	254
248	Remote Site 6	10.248.0.0	254	254
249	Remote Site 6	10.249.0.0	254	254
250	Remote Site 6	10.250.0.0	254	254
251	Remote Site 6	10.251.0.0	254	254
252	Remote Site 6	10.252.0.0	254	254
253	Remote Site 6	10.253.0.0	254	254
254	Remote Site 6	10.254.0.0	254	254

EIGRP Summarization Notes:

All Addresses Summarize to 10.0.0.0 with an 8-bit mask

Each of eight major regions summarize to 10.x.0.0 with an 11-bit mask

1 10.0.0.0 / 11
2 10.32.0.0 / 11
3 10.64.0.0 / 11
4 10.96.0.0 / 11
5 10.128.0.0 / 11
6 10.160.0.0 / 11
7 10.192.0.0 / 11
8 10.224.0.0 / 11

Each of the 32 class B networks in a region will summarize with a 16-bit mask

Each of the 254 Class C networks in an area summarizes to 10.x.x.0 /24

Boston Manchester Regional Airport

Proposed IP Addressing Plan

Network Address: 10.0.0.0

SHEET 1 of 1

EXISTING TERM (32)

Existing Terminal | 10.32.0.0/24 | MHT IP Addressing Plan

VLAN	Function	Network	Hosts	Broadcast
	Core Uplinks	10.32.0.0	10.32.0.1 to 10.32.0.254	10.32.0.255
1	Default	10.32.1.0	10.32.1.1 to 10.32.1.254	10.32.1.255
2	Admin	10.32.2.0	10.32.2.1 to 10.32.2.254	10.32.2.255
3	FIDS	10.32.3.0	10.32.3.1 to 10.32.3.254	10.32.3.255
4	Security	10.32.4.0	10.32.4.1 to 10.32.4.254	10.32.4.255
5	Security Camera	10.32.5.0	10.32.5.1 to 10.32.5.254	10.32.5.255
6	Taxi	10.32.6.0	10.32.6.1 to 10.32.6.254	10.32.6.255
7	HVAC	10.32.7.0	10.32.7.1 to 10.32.7.254	10.32.7.255
8	Comcast - Passenger	10.32.8.0	10.32.8.1 to 10.32.8.254	10.32.8.255
9	WiFi Private	10.32.9.0	10.32.9.1 to 10.32.9.254	10.32.9.255
10	Comcast - Personnel	10.32.10.0	10.32.10.1 to 10.32.10.254	10.32.10.127
11	iLO	10.32.11.0	10.32.11.1 to 10.32.11.254	10.32.11.255
12	Conveyor	10.32.12.0	10.32.12.1 to 10.32.12.254	10.32.12.255
13	Future	10.32.13.0	10.32.13.1 to 10.32.13.254	10.32.13.255
14	VMWare Vmotion	10.32.14.0	10.32.14.1 to 10.32.14.254	10.32.14.255
15	Wireless Infrastructure	10.32.15.0	10.32.15.1 to 10.32.15.126	10.32.15.127
16	Future	10.32.16.0	10.32.16.1 to 10.32.16.254	10.32.16.255
17	Future	10.32.17.0	10.32.17.1 to 10.32.17.254	10.32.17.255
18	Future	10.32.18.0	10.32.18.1 to 10.32.18.254	10.32.18.255
19	Future	10.32.19.0	10.32.19.1 to 10.32.19.254	10.32.19.255
20	MHT Desktops	10.32.20.0	10.32.20.1 to 10.32.20.254	10.32.20.255
21	Future	10.32.21.0	10.32.21.1 to 10.32.21.254	10.32.21.255
22	MHT Users	10.32.22.0	10.32.22.1 to 10.32.22.126	10.32.22.127
23	Future	10.32.23.0	10.32.23.1 to 10.32.23.254	10.32.23.255
24	MHT Accounting Users	10.32.24.0	10.32.24.1 to 10.32.24.254	10.32.24.255
25	Admin Users	10.32.25.0	10.32.25.1 to 10.32.25.254	10.32.25.255
26	MHT Wireless Authenticated Users	10.32.26.0	10.32.26.1 to 10.32.26.254	10.32.26.255
27	LEO Users	10.32.27.0	10.32.27.1 to 10.32.27.254	10.32.27.255
28	MHT Building Maintenance Users	10.32.28.0	10.32.28.1 to 10.32.28.254	10.32.28.255
29	MHT TSA Users	10.32.29.0	10.32.29.1 to 10.32.29.254	10.32.29.255
30	MHT Printers	10.32.30.0	10.32.30.1 to 10.32.30.254	10.32.30.255
31	MHT Security Users	10.32.31.0	10.32.31.1 to 10.32.31.254	10.32.31.127
32	MHT Fingerprint System	10.32.32.0	10.32.32.1 to 10.32.32.254	10.32.32.127
33	Guest	10.32.33.0	10.32.33.1 to 10.32.33.254	10.32.33.127
34	Future	10.32.34.0	10.32.34.1 to 10.32.34.254	10.32.34.127
35	Future	10.32.35.0	10.32.35.1 to 10.32.35.254	10.32.35.127
36	Future	10.32.36.0	10.32.36.1 to 10.32.36.254	10.32.36.127
37	Future	10.32.37.0	10.32.37.1 to 10.32.37.254	10.32.37.127
38	Future	10.32.38.0	10.32.38.1 to 10.32.38.254	10.32.38.127
39	Future	10.32.39.0	10.32.39.1 to 10.32.39.254	10.32.39.127
40	Future	10.32.40.0	10.32.40.1 to 10.32.40.254	10.32.40.127
41	Future	10.32.41.0	10.32.41.1 to 10.32.41.254	10.32.41.255
42	Southwest DMZ	10.32.42.0	10.32.42.1 to 10.32.42.254	10.32.42.255
43	Future	10.32.43.0	10.32.43.1 to 10.32.43.254	10.32.43.255
44	Future	10.32.44.0	10.32.44.1 to 10.32.44.254	10.32.44.255
45	Johnson Controls	10.32.45.0	10.32.45.1 to 10.32.45.254	10.32.45.255
46	Future	10.32.46.0	10.32.46.1 to 10.32.46.254	10.32.46.255
47	Future	10.32.47.0	10.32.47.1 to 10.32.47.254	10.32.47.255
48	Future	10.32.48.0	10.32.48.1 to 10.32.48.254	10.32.48.255
49	Future	10.32.49.0	10.32.49.1 to 10.32.49.254	10.32.49.255
50	Future	10.32.50.0	10.32.50.1 to 10.32.50.254	10.32.50.255
51	Future	10.32.51.0	10.32.51.1 to 10.32.51.254	10.32.51.255
52	Future	10.32.52.0	10.32.52.1 to 10.32.52.254	10.32.52.255
53	Future	10.32.53.0	10.32.53.1 to 10.32.53.254	10.32.53.255
54	Future	10.32.54.0	10.32.54.1 to 10.32.54.254	10.32.54.255
55	Signs	10.32.55.0	10.32.55.1 to 10.32.55.254	10.32.55.255
56	Future	10.32.56.0	10.32.56.1 to 10.32.56.254	10.32.56.255
57	Future	10.32.57.0	10.32.57.1 to 10.32.57.254	10.32.57.255
58	Future	10.32.58.0	10.32.58.1 to 10.32.58.254	10.32.58.255
59	Future	10.32.59.0	10.32.59.1 to 10.32.59.254	10.32.59.255
60	Camera	10.32.60.0	10.32.60.1 to 10.32.60.254	10.32.60.255
61	Future	10.32.61.0	10.32.61.1 to 10.32.61.254	10.32.61.255
62	Future	10.32.62.0	10.32.62.1 to 10.32.62.254	10.32.62.255
63	Future	10.32.63.0	10.32.63.1 to 10.32.63.254	10.32.63.255
64	Core Uplinks	10.32.64.0	10.32.64.1 to 10.32.64.254	10.32.64.255
65	City Unrouted	10.32.65.0	10.32.65.1 to 10.32.65.254	10.32.65.255
66	Future	10.32.66.0	10.32.66.1 to 10.32.66.254	10.32.66.255
67	Future	10.32.67.0	10.32.67.1 to 10.32.67.254	10.32.67.255
68	Future	10.32.68.0	10.32.68.1 to 10.32.68.254	10.32.68.255
69	Future	10.32.69.0	10.32.69.1 to 10.32.69.254	10.32.69.255
70	Power Related	10.32.70.0	10.32.70.1 to 10.32.70.254	10.32.70.255
71	Future	10.32.71.0	10.32.71.1 to 10.32.71.254	10.32.71.255
72	Future	10.32.72.0	10.32.72.1 to 10.32.72.254	10.32.72.255
73	Future	10.32.73.0	10.32.73.1 to 10.32.73.254	10.32.73.255
74	Future	10.32.74.0	10.32.74.1 to 10.32.74.254	10.32.74.255
75	Future	10.32.75.0	10.32.75.1 to 10.32.75.254	10.32.75.255
76	Future	10.32.76.0	10.32.76.1 to 10.32.76.254	10.32.76.255
77	Future	10.32.77.0	10.32.77.1 to 10.32.77.254	10.32.77.255
78	Future	10.32.78.0	10.32.78.1 to 10.32.78.254	10.32.78.255
79	Future	10.32.79.0	10.32.79.1 to 10.32.79.254	10.32.79.255
80	Future	10.32.80.0	10.32.80.1 to 10.32.80.254	10.32.80.255
81	Future	10.32.81.0	10.32.81.1 to 10.32.81.254	10.32.81.255
82	Future	10.32.82.0	10.32.82.1 to 10.32.82.254	10.32.82.255
83	Future	10.32.83.0	10.32.83.1 to 10.32.83.254	10.32.83.255
84	Future	10.32.84.0	10.32.84.1 to 10.32.84.254	10.32.84.255
85	Virtual Cluster Heartbea	10.32.85.0	10.32.85.1 to 10.32.85.254	10.32.85.255
86	Future	10.32.86.0	10.32.86.1 to 10.32.86.254	10.32.86.255
87	Future	10.32.87.0	10.32.87.1 to 10.32.87.254	10.32.87.255
88	Future	10.32.88.0	10.32.88.1 to 10.32.88.254	10.32.88.255
89	Future	10.32.89.0	10.32.89.1 to 10.32.89.254	10.32.89.255
90	Future	10.32.90.0	10.32.90.1 to 10.32.90.254	10.32.90.255
91	Future	10.32.91.0	10.32.91.1 to 10.32.91.254	10.32.91.255
92	Future	10.32.92.0	10.32.92.1 to 10.32.92.254	10.32.92.255
93	Future	10.32.93.0	10.32.93.1 to 10.32.93.254	10.32.93.255
94	Future	10.32.94.0	10.32.94.1 to 10.32.94.254	10.32.94.255
95	Future	10.32.95.0	10.32.95.1 to 10.32.95.254	10.32.95.255
96	Future	10.32.96.0	10.32.96.1 to 10.32.96.254	10.32.96.255
97	Future	10.32.97.0	10.32.97.1 to 10.32.97.254	10.32.97.255
98	Future	10.32.98.0	10.32.98.1 to 10.32.98.254	10.32.98.255
99	Future	10.32.99.0	10.32.99.1 to 10.32.99.254	10.32.99.255
100	Milltown	10.32.100.0	10.32.100.1 to 10.32.100.254	10.32.100.255
101	Hudson-Manchester	10.32.101.0	10.32.101.1 to 10.32.101.254	10.32.101.255
102	Ben and Jerry`s	10.32.102.0	10.32.102.1 to 10.32.102.254	10.32.102.255
103	Worldwide Flight Svc	10.32.103.0	10.32.103.1 to 10.32.103.254	10.32.103.255
104	International RAM	10.32.104.0	10.32.104.1 to 10.32.104.254	10.32.104.255
105	Delta	10.32.105.0	10.32.105.1 to 10.32.105.254	10.32.105.255
106	Future	10.32.106.0	10.32.106.1 to 10.32.106.254	10.32.106.255
107	Future	10.32.107.0	10.32.107.1 to 10.32.107.254	10.32.107.255
108	Future	10.32.108.0	10.32.108.1 to 10.32.108.254	10.32.108.255
109	Future	10.32.109.0	10.32.109.1 to 10.32.109.254	10.32.109.255
110	Future	10.32.110.0	10.32.110.1 to 10.32.110.254	10.32.110.255
111	Future	10.32.111.0	10.32.111.1 to 10.32.111.254	10.32.111.255
112	Future	10.32.112.0	10.32.112.1 to 10.32.112.254	10.32.112.255
113	Future	10.32.113.0	10.32.113.1 to 10.32.113.254	10.32.113.255
114	Future	10.32.114.0	10.32.114.1 to 10.32.114.254	10.32.114.255
115	Future	10.32.115.0	10.32.115.1 to 10.32.115.254	10.32.115.255
116	Future	10.32.116.0	10.32.116.1 to 10.32.116.254	10.32.116.255
117	Future	10.32.117.0	10.32.117.1 to 10.32.117.254	10.32.117.255
118	Dunkin Donuts	10.32.118.0	10.32.118.1 to 10.32.118.254	10.32.118.255
119	Audax Technologies	10.32.119.0	10.32.119.1 to 10.32.119.254	10.32.119.255
120	VLAN 709	10.32.120.0	10.32.120.1 to 10.32.120.254	10.32.120.255
121	City Network	10.32.121.0	10.32.121.1 to 10.32.121.254	10.32.121.255
122	External Network	10.32.122.0	10.32.122.1 to 10.32.122.254	10.32.122.255
123	FDDI Default	10.32.123.0	10.32.123.1 to 10.32.123.254	10.32.123.255
124	FDDInet Default	10.32.124.0	10.32.124.1 to 10.32.124.254	10.32.124.255
125	TRBF Default	10.32.125.0	10.32.125.1 to 10.32.125.254	10.32.125.255
126	Future	10.32.126.0	10.32.126.1 to 10.32.126.254	10.32.126.255
127	Future	10.32.127.0	10.32.127.1 to 10.32.127.254	10.32.127.255
128	Core Uplinks	10.32.128.0	10.32.128.1 to 10.32.128.254	10.32.128.255
129	Future	10.32.129.0	10.32.129.1 to 10.32.129.254	10.32.129.255
130	Future	10.32.130.0	10.32.130.1 to 10.32.130.254	10.32.130.255
131	Future	10.32.131.0	10.32.131.1 to 10.32.131.254	10.32.131.255
132	Future	10.32.132.0	10.32.132.1 to 10.32.132.254	10.32.132.255
133	Future	10.32.133.0	10.32.133.1 to 10.32.133.254	10.32.133.255
134	Future	10.32.134.0	10.32.134.1 to 10.32.134.254	10.32.134.255
135	Future	10.32.135.0	10.32.135.1 to 10.32.135.254	10.32.135.255
136	Future	10.32.136.0	10.32.136.1 to 10.32.136.254	10.32.136.255
137	Future	10.32.137.0	10.32.137.1 to 10.32.137.254	10.32.137.255
138	Future	10.32.138.0	10.32.138.1 to 10.32.138.254	10.32.138.255
139	Future	10.32.139.0	10.32.139.1 to 10.32.139.254	10.32.139.255
140	Future	10.32.140.0	10.32.140.1 to 10.32.140.254	10.32.140.255
141	Future	10.32.141.0	10.32.141.1 to 10.32.141.254	10.32.141.255
142	Future	10.32.142.0	10.32.142.1 to 10.32.142.254	10.32.142.255
143	Future	10.32.143.0	10.32.143.1 to 10.32.143.254	10.32.143.255
144	Future	10.32.144.0	10.32.144.1 to 10.32.144.254	10.32.144.255
145	Future	10.32.145.0	10.32.145.1 to 10.32.145.254	10.32.145.255
146	Future	10.32.146.0	10.32.146.1 to 10.32.146.254	10.32.146.255
147	Future	10.32.147.0	10.32.147.1 to 10.32.147.254	10.32.147.255
148	Future	10.32.148.0	10.32.148.1 to 10.32.148.254	10.32.148.255
149	Future	10.32.149.0	10.32.149.1 to 10.32.149.254	10.32.149.255
150	Future	10.32.150.0	10.32.150.1 to 10.32.150.254	10.32.150.255
151	Future	10.32.151.0	10.32.151.1 to 10.32.151.254	10.32.151.255
152	Future	10.32.152.0	10.32.152.1 to 10.32.152.254	10.32.152.255
153	Future	10.32.153.0	10.32.153.1 to 10.32.153.254	10.32.153.255
154	Future	10.32.154.0	10.32.154.1 to 10.32.154.254	10.32.154.255
155	Future	10.32.155.0	10.32.155.1 to 10.32.155.254	10.32.155.255
156	Future	10.32.156.0	10.32.156.1 to 10.32.156.254	10.32.156.255
157	Future	10.32.157.0	10.32.157.1 to 10.32.157.254	10.32.157.255
158	Future	10.32.158.0	10.32.158.1 to 10.32.158.254	10.32.158.255
159	Future	10.32.159.0	10.32.159.1 to 10.32.159.254	10.32.159.255
160	Future	10.32.160.0	10.32.160.1 to 10.32.160.254	10.32.160.255
161	Future	10.32.161.0	10.32.161.1 to 10.32.161.254	10.32.161.255
162	Future	10.32.162.0	10.32.162.1 to 10.32.162.254	10.32.162.255
163	Future	10.32.163.0	10.32.163.1 to 10.32.163.254	10.32.163.255
164	Future	10.32.164.0	10.32.164.1 to 10.32.164.254	10.32.164.255
165	Future	10.32.165.0	10.32.165.1 to 10.32.165.254	10.32.165.255
166	Future	10.32.166.0	10.32.166.1 to 10.32.166.254	10.32.166.255
167	Future	10.32.167.0	10.32.167.1 to 10.32.167.254	10.32.167.255
168	Future	10.32.168.0	10.32.168.1 to 10.32.168.254	10.32.168.255
169	Future	10.32.169.0	10.32.169.1 to 10.32.169.254	10.32.169.255
170	Future	10.32.170.0	10.32.170.1 to 10.32.170.254	10.32.170.255
171	Future	10.32.171.0	10.32.171.1 to 10.32.171.254	10.32.171.255
172	Future	10.32.172.0	10.32.172.1 to 10.32.172.254	10.32.172.255
173	Future	10.32.173.0	10.32.173.1 to 10.32.173.254	10.32.173.255
174	Future	10.32.174.0	10.32.174.1 to 10.32.174.254	10.32.174.255
175	Future	10.32.175.0	10.32.175.1 to 10.32.175.254	10.32.175.255
176	Future	10.32.176.0	10.32.176.1 to 10.32.176.254	10.32.176.255
177	Future	10.32.177.0	10.32.177.1 to 10.32.177.254	10.32.177.255
178	Future	10.32.178.0	10.32.178.1 to 10.32.178.254	10.32.178.255
179	Future	10.32.179.0	10.32.179.1 to 10.32.179.254	10.32.179.255
180	Future	10.32.180.0	10.32.180.1 to 10.32.180.254	10.32.180.255
181	Future	10.32.181.0	10.32.181.1 to 10.32.181.254	10.32.181.255
182	Future	10.32.182.0	10.32.182.1 to 10.32.182.254	10.32.182.255
183	Future	10.32.183.0	10.32.183.1 to 10.32.183.254	10.32.183.255
184	Future	10.32.184.0	10.32.184.1 to 10.32.184.254	10.32.184.255
185	Future	10.32.185.0	10.32.185.1 to 10.32.185.254	10.32.185.255
186	Future	10.32.186.0	10.32.186.1 to 10.32.186.254	10.32.186.255
187	Future	10.32.187.0	10.32.187.1 to 10.32.187.254	10.32.187.255
188	Future	10.32.188.0	10.32.188.1 to 10.32.188.254	10.32.188.255
189	Future	10.32.189.0	10.32.189.1 to 10.32.189.254	10.32.189.255
190	Future	10.32.190.0	10.32.190.1 to 10.32.190.254	10.32.190.255
191	Future	10.32.191.0	10.32.191.1 to 10.32.191.254	10.32.191.255
192	Core Uplinks	10.32.192.0	10.32.192.1 to 10.32.192.254	10.32.192.255
193	Future	10.32.193.0	10.32.193.1 to 10.32.193.254	10.32.193.255
194	Future	10.32.194.0	10.32.194.1 to 10.32.194.254	10.32.194.255
195	Future	10.32.195.0	10.32.195.1 to 10.32.195.254	10.32.195.255
196	Future	10.32.196.0	10.32.196.1 to 10.32.196.254	10.32.196.255
197	Future	10.32.197.0	10.32.197.1 to 10.32.197.254	10.32.197.255
198	Future	10.32.198.0	10.32.198.1 to 10.32.198.254	10.32.198.255
199	Future	10.32.199.0	10.32.199.1 to 10.32.199.254	10.32.199.255
200	Future	10.32.200.0	10.32.200.1 to 10.32.200.254	10.32.200.255
201	Future	10.32.201.0	10.32.201.1 to 10.32.201.254	10.32.201.255
202	Future	10.32.202.0	10.32.202.1 to 10.32.202.254	10.32.202.255
203	Future	10.32.203.0	10.32.203.1 to 10.32.203.254	10.32.203.255
204	Future	10.32.204.0	10.32.204.1 to 10.32.204.254	10.32.204.255
205	Future	10.32.205.0	10.32.205.1 to 10.32.205.254	10.32.205.255
206	Future	10.32.206.0	10.32.206.1 to 10.32.206.254	10.32.206.255
207	Future	10.32.207.0	10.32.207.1 to 10.32.207.254	10.32.207.255
208	Future	10.32.208.0	10.32.208.1 to 10.32.208.254	10.32.208.255
209	Future	10.32.209.0	10.32.209.1 to 10.32.209.254	10.32.209.255
210	Future	10.32.210.0	10.32.210.1 to 10.32.210.254	10.32.210.255
211	Future	10.32.211.0	10.32.211.1 to 10.32.211.254	10.32.211.255
212	Future	10.32.212.0	10.32.212.1 to 10.32.212.254	10.32.212.255
213	Future	10.32.213.0	10.32.213.1 to 10.32.213.254	10.32.213.255
214	Future	10.32.214.0	10.32.214.1 to 10.32.214.254	10.32.214.255
215	Future	10.32.215.0	10.32.215.1 to 10.32.215.254	10.32.215.255
216	Future	10.32.216.0	10.32.216.1 to 10.32.216.254	10.32.216.255
217	Future	10.32.217.0	10.32.217.1 to 10.32.217.254	10.32.217.255
218	Future	10.32.218.0	10.32.218.1 to 10.32.218.254	10.32.218.255
219	Future	10.32.219.0	10.32.219.1 to 10.32.219.254	10.32.219.255
220	Future	10.32.220.0	10.32.220.1 to 10.32.220.254	10.32.220.255
221	Future	10.32.221.0	10.32.221.1 to 10.32.221.254	10.32.221.255
222	Future	10.32.222.0	10.32.222.1 to 10.32.222.254	10.32.222.255
223	Future	10.32.223.0	10.32.223.1 to 10.32.223.254	10.32.223.255
224	Future	10.32.224.0	10.32.224.1 to 10.32.224.254	10.32.224.255
225	Future	10.32.225.0	10.32.225.1 to 10.32.225.254	10.32.225.255
226	Future	10.32.226.0	10.32.226.1 to 10.32.226.254	10.32.226.255
227	Future	10.32.227.0	10.32.227.1 to 10.32.227.254	10.32.227.255
228	Future	10.32.228.0	10.32.228.1 to 10.32.228.254	10.32.228.255
229	Future	10.32.229.0	10.32.229.1 to 10.32.229.254	10.32.229.255
230	Future	10.32.230.0	10.32.230.1 to 10.32.230.254	10.32.230.255
231	Future	10.32.231.0	10.32.231.1 to 10.32.231.254	10.32.231.255
232	Future	10.32.232.0	10.32.232.1 to 10.32.232.254	10.32.232.255
233	Future	10.32.233.0	10.32.233.1 to 10.32.233.254	10.32.233.255
234	Future	10.32.234.0	10.32.234.1 to 10.32.234.254	10.32.234.255
235	Future	10.32.235.0	10.32.235.1 to 10.32.235.254	10.32.235.255
236	Future	10.32.236.0	10.32.236.1 to 10.32.236.254	10.32.236.255
237	Future	10.32.237.0	10.32.237.1 to 10.32.237.254	10.32.237.255
238	Future	10.32.238.0	10.32.238.1 to 10.32.238.254	10.32.238.255
239	Future	10.32.239.0	10.32.239.1 to 10.32.239.254	10.32.239.255
240	Future	10.32.240.0	10.32.240.1 to 10.32.240.254	10.32.240.255
241	Future	10.32.241.0	10.32.241.1 to 10.32.241.254	10.32.241.255
242	Future	10.32.242.0	10.32.242.1 to 10.32.242.254	10.32.242.255
243	Future	10.32.243.0	10.32.243.1 to 10.32.243.254	10.32.243.255
244	Future	10.32.244.0	10.32.244.1 to 10.32.244.254	10.32.244.255
245	Future	10.32.245.0	10.32.245.1 to 10.32.245.254	10.32.245.255
246	Future	10.32.246.0	10.32.246.1 to 10.32.246.254	10.32.246.255
247	Future	10.32.247.0	10.32.247.1 to 10.32.247.254	10.32.247.255
248	Future	10.32.248.0	10.32.248.1 to 10.32.248.254	10.32.248.255
249	Future	10.32.249.0	10.32.249.1 to 10.32.249.254	10.32.249.255
250	Future	10.32.250.0	10.32.250.1 to 10.32.250.254	10.32.250.255
251	Future	10.32.251.0	10.32.251.1 to 10.32.251.254	10.32.251.255
252	Future	10.32.252.0	10.32.252.1 to 10.32.252.254	10.32.252.255
253	Future	10.32.253.0	10.32.253.1 to 10.32.253.254	10.32.253.255
254	Network Management	10.32.254.0	10.32.254.1 to 10.32.254.254	10.32.254.255

FUTURE TERM (33)

Future Terminal				10.33.0.0/24	MHT IP Addressing Plan													
VLAN	Function	Network	Hosts	Broadcast	VLAN	Function	Network	Hosts	Broadcast	VLAN	Function	Network	Hosts	Broadcast	VLAN	Function	Network	Hosts	Broadcast
	Core Uplinks	10.33.0.0	10.33.0.1 to 10.33.0.254	10.33.0.255		Core Uplinks	10.33.64.0	10.33.64.1 to 10.33.64.254	10.33.64.255		Core Uplinks	10.33.128.0	10.33.128.1 to 10.33.128.254	10.33.128.255		Core Uplinks	10.33.192.0	10.33.192.1 to 10.33.192.254	10.33.192.255
1	Default	10.33.1.0	10.33.1.1 to 10.33.1.254	10.33.1.255	65	City Unrouted	10.33.65.0	10.33.65.1 to 10.33.65.254	10.33.65.255	129	Future	10.33.129.0	10.33.129.1 to 10.33.129.254	10.33.129.255	193	Future	10.33.193.0	10.33.193.1 to 10.33.193.254	10.33.193.255
2	Admin	10.33.2.0	10.33.2.1 to 10.33.2.254	10.33.2.255	66	Future	10.33.66.0	10.33.66.1 to 10.33.66.254	10.33.66.255	130	Future	10.33.130.0	10.33.130.1 to 10.33.130.254	10.33.130.255	194	Future	10.33.194.0	10.33.194.1 to 10.33.194.254	10.33.194.255
3	FIDS	10.33.3.0	10.33.3.1 to 10.33.3.254	10.33.3.255	67	Future	10.33.67.0	10.33.67.1 to 10.33.67.254	10.33.67.255	131	Future	10.33.131.0	10.33.131.1 to 10.33.131.254	10.33.131.255	195	Future	10.33.195.0	10.33.195.1 to 10.33.195.254	10.33.195.255
4	Security	10.33.4.0	10.33.4.1 to 10.33.4.254	10.33.4.255	68	Future	10.33.68.0	10.33.68.1 to 10.33.68.254	10.33.68.255	132	Future	10.33.132.0	10.33.132.1 to 10.33.132.254	10.33.132.255	196	Future	10.33.196.0	10.33.196.1 to 10.33.196.254	10.33.196.255
5	Security Camera	10.33.5.0	10.33.5.1 to 10.33.5.254	10.33.5.255	69	Future	10.33.69.0	10.33.69.1 to 10.33.69.254	10.33.69.255	133	Future	10.33.133.0	10.33.133.1 to 10.33.133.254	10.33.133.255	197	Future	10.33.197.0	10.33.197.1 to 10.33.197.254	10.33.197.255
6	Taxi	10.33.6.0	10.33.6.1 to 10.33.6.254	10.33.6.255	70	Power Related	10.33.70.0	10.33.70.1 to 10.33.70.254	10.33.70.255	134	Future	10.33.134.0	10.33.134.1 to 10.33.134.254	10.33.134.255	198	Future	10.33.198.0	10.33.198.1 to 10.33.198.254	10.33.198.255
7	HVAC	10.33.7.0	10.33.7.1 to 10.33.7.254	10.33.7.255	71	Future	10.33.71.0	10.33.71.1 to 10.33.71.254	10.33.71.255	135	Future	10.33.135.0	10.33.135.1 to 10.33.135.254	10.33.135.255	199	Future	10.33.199.0	10.33.199.1 to 10.33.199.254	10.33.199.255
8	Comcast - Passenger	10.33.8.0	10.33.8.1 to 10.33.8.254	10.33.8.255	72	Future	10.33.72.0	10.33.72.1 to 10.33.72.254	10.33.72.255	136	Future	10.33.136.0	10.33.136.1 to 10.33.136.254	10.33.136.255	200	Future	10.33.200.0	10.33.200.1 to 10.33.200.254	10.33.200.255
9	WiFi Private	10.33.9.0	10.33.9.1 to 10.33.9.254	10.33.9.255	73	Future	10.33.73.0	10.33.73.1 to 10.33.73.254	10.33.73.255	137	Future	10.33.137.0	10.33.137.1 to 10.33.137.254	10.33.137.255	201	Future	10.33.201.0	10.33.201.1 to 10.33.201.254	10.33.201.255
10	Comcast - Personnel	10.33.10.0	10.33.10.1 to 10.33.10.254	10.33.10.127	74	Future	10.33.74.0	10.33.74.1 to 10.33.74.254	10.33.74.255	138	Future	10.33.138.0	10.33.138.1 to 10.33.138.254	10.33.138.255	202	Future	10.33.202.0	10.33.202.1 to 10.33.202.254	10.33.202.255
11	LO	10.33.11.0	10.33.11.1 to 10.33.11.254	10.33.11.255	75	Future	10.33.75.0	10.33.75.1 to 10.33.75.254	10.33.75.255	139	Future	10.33.139.0	10.33.139.1 to 10.33.139.254	10.33.139.255	203	Future	10.33.203.0	10.33.203.1 to 10.33.203.254	10.33.203.255
12	Conveyor	10.33.12.0	10.33.12.1 to 10.33.12.254	10.33.12.255	76	Future	10.33.76.0	10.33.76.1 to 10.33.76.254	10.33.76.255	140	Future	10.33.140.0	10.33.140.1 to 10.33.140.254	10.33.140.255	204	Future	10.33.204.0	10.33.204.1 to 10.33.204.254	10.33.204.255
13	Future	10.33.13.0	10.33.13.1 to 10.33.13.254	10.33.13.255	77	Future	10.33.77.0	10.33.77.1 to 10.33.77.254	10.33.77.255	141	Future	10.33.141.0	10.33.141.1 to 10.33.141.254	10.33.141.255	205	Future	10.33.205.0	10.33.205.1 to 10.33.205.254	10.33.205.255
14	VMWare Vmotion	10.33.14.0	10.33.14.1 to 10.33.14.254	10.33.14.255	78	Future	10.33.78.0	10.33.78.1 to 10.33.78.254	10.33.78.255	142	Future	10.33.142.0	10.33.142.1 to 10.33.142.254	10.33.142.255	206	Future	10.33.206.0	10.33.206.1 to 10.33.206.254	10.33.206.255
15	Wireless Infrastructure	10.33.15.0	10.33.15.1 to 10.33.15.126	10.33.15.127	79	Future	10.33.79.0	10.33.79.1 to 10.33.79.254	10.33.79.255	143	Future	10.33.143.0	10.33.143.1 to 10.33.143.254	10.33.143.255	207	Future	10.33.207.0	10.33.207.1 to 10.33.207.254	10.33.207.255
16	Future	10.33.16.0	10.33.16.1 to 10.33.16.254	10.33.16.255	80	Future	10.33.80.0	10.33.80.1 to 10.33.80.254	10.33.80.255	144	Future	10.33.144.0	10.33.144.1 to 10.33.144.254	10.33.144.255	208	Future	10.33.208.0	10.33.208.1 to 10.33.208.254	10.33.208.255
17	Future	10.33.17.0	10.33.17.1 to 10.33.17.254	10.33.17.255	81	Future	10.33.81.0	10.33.81.1 to 10.33.81.254	10.33.81.255	145	Future	10.33.145.0	10.33.145.1 to 10.33.145.254	10.33.145.255	209	Future	10.33.209.0	10.33.209.1 to 10.33.209.254	10.33.209.255
18	Future	10.33.18.0	10.33.18.1 to 10.33.18.254	10.33.18.255	82	Future	10.33.82.0	10.33.82.1 to 10.33.82.254	10.33.82.255	146	Future	10.33.146.0	10.33.146.1 to 10.33.146.254	10.33.146.255	210	Future	10.33.210.0	10.33.210.1 to 10.33.210.254	10.33.210.255
19	Future	10.33.19.0	10.33.19.1 to 10.33.19.254	10.33.19.255	83	Future	10.33.83.0	10.33.83.1 to 10.33.83.254	10.33.83.255	147	Future	10.33.147.0	10.33.147.1 to 10.33.147.254	10.33.147.255	211	Future	10.33.211.0	10.33.211.1 to 10.33.211.254	10.33.211.255
20	MHT Desktops	10.33.20.0	10.33.20.1 to 10.33.20.254	10.33.20.255	84	Future	10.33.84.0	10.33.84.1 to 10.33.84.254	10.33.84.255	148	Future	10.33.148.0	10.33.148.1 to 10.33.148.254	10.33.148.255	212	Future	10.33.212.0	10.33.212.1 to 10.33.212.254	10.33.212.255
21	Future	10.33.21.0	10.33.21.1 to 10.33.21.254	10.33.21.255	85	Virtual Cluster Heartbea	10.33.85.0	10.33.85.1 to 10.33.85.254	10.33.85.255	149	Future	10.33.149.0	10.33.149.1 to 10.33.149.254	10.33.149.255	213	Future	10.33.213.0	10.33.213.1 to 10.33.213.254	10.33.213.255
22	MHT Users	10.33.22.0	10.33.22.1 to 10.33.22.126	10.33.22.127	86	Future	10.33.86.0	10.33.86.1 to 10.33.86.254	10.33.86.255	150	Future	10.33.150.0	10.33.150.1 to 10.33.150.254	10.33.150.255	214	Future	10.33.214.0	10.33.214.1 to 10.33.214.254	10.33.214.255
23	Future	10.33.23.0	10.33.23.1 to 10.33.23.254	10.33.23.255	87	Future	10.33.87.0	10.33.87.1 to 10.33.87.254	10.33.87.255	151	Future	10.33.151.0	10.33.151.1 to 10.33.151.254	10.33.151.255	215	Future	10.33.215.0	10.33.215.1 to 10.33.215.254	10.33.215.255
24	MHT Accounting Users	10.33.24.0	10.33.24.1 to 10.33.24.254	10.33.24.255	88	Future	10.33.88.0	10.33.88.1 to 10.33.88.254	10.33.88.255	152	Future	10.33.152.0	10.33.152.1 to 10.33.152.254	10.33.152.255	216	Future	10.33.216.0	10.33.216.1 to 10.33.216.254	10.33.216.255
25	Admin Users	10.33.25.0	10.33.25.1 to 10.33.25.254	10.33.25.255	89	Future	10.33.89.0	10.33.89.1 to 10.33.89.254	10.33.89.255	153	Future	10.33.153.0	10.33.153.1 to 10.33.153.254	10.33.153.255	217	Future	10.33.217.0	10.33.217.1 to 10.33.217.254	10.33.217.255
26	MHT Wireless Authentic	10.33.26.0	10.33.26.1 to 10.33.26.254	10.33.26.255	90	Future	10.33.90.0	10.33.90.1 to 10.33.90.254	10.33.90.255	154	Future	10.33.154.0	10.33.154.1 to 10.33.154.254	10.33.154.255	218	Future	10.33.218.0	10.33.218.1 to 10.33.218.254	10.33.218.255
27	LEO Users	10.33.27.0	10.33.27.1 to 10.33.27.254	10.33.27.255	91	Future	10.33.91.0	10.33.91.1 to 10.33.91.254	10.33.91.255	155	Future	10.33.155.0	10.33.155.1 to 10.33.155.254	10.33.155.255	219	Future	10.33.219.0	10.33.219.1 to 10.33.219.254	10.33.219.255
28	MHT Building Maintenan	10.33.28.0	10.33.28.1 to 10.33.28.254	10.33.28.255	92	Future	10.33.92.0	10.33.92.1 to 10.33.92.254	10.33.92.255	156	Future	10.33.156.0	10.33.156.1 to 10.33.156.254	10.33.156.255	220	Future	10.33.220.0	10.33.220.1 to 10.33.220.254	10.33.220.255
29	MHT TSA Users	10.33.29.0	10.33.29.1 to 10.33.29.254	10.33.29.255	93	Future	10.33.93.0	10.33.93.1 to 10.33.93.254	10.33.93.255	157	Future	10.33.157.0	10.33.157.1 to 10.33.157.254	10.33.157.255	221	Future	10.33.221.0	10.33.221.1 to 10.33.221.254	10.33.221.255
30	MHT Printers	10.33.30.0	10.33.30.1 to 10.33.30.254	10.33.30.255	94	Future	10.33.94.0	10.33.94.1 to 10.33.94.254	10.33.94.255	158	Future	10.33.158.0	10.33.158.1 to 10.33.158.254	10.33.158.255	222	Future	10.33.222.0	10.33.222.1 to 10.33.222.254	10.33.222.255
31	MHT Security Users	10.33.31.0	10.33.31.1 to 10.33.31.254	10.33.31.127	95	Future	10.33.95.0	10.33.95.1 to 10.33.95.254	10.33.95.255	159	Future	10.33.159.0	10.33.159.1 to 10.33.159.254	10.33.159.255	223	Future	10.33.223.0	10.33.223.1 to 10.33.223.254	10.33.223.255
32	MHT Fingerprint System	10.33.32.0	10.33.32.1 to 10.33.32.254	10.33.32.127	96	Future	10.33.96.0	10.33.96.1 to 10.33.96.254	10.33.96.255	160	Future	10.33.160.0	10.33.160.1 to 10.33.160.254	10.33.160.255	224	Future	10.33.224.0	10.33.224.1 to 10.33.224.254	10.33.224.255
33	Guest	10.33.33.0	10.33.33.1 to 10.33.33.254	10.33.33.127	97	Future	10.33.97.0	10.33.97.1 to 10.33.97.254	10.33.97.255	161	Future	10.33.161.0	10.33.161.1 to 10.33.161.254	10.33.161.255	225	Future	10.33.225.0	10.33.225.1 to 10.33.225.254	10.33.225.255
34	Future	10.33.34.0	10.33.34.1 to 10.33.34.254	10.33.34.127	98	Future	10.33.98.0	10.33.98.1 to 10.33.98.254	10.33.98.255	162	Future	10.33.162.0	10.33.162.1 to 10.33.162.254	10.33.162.255	226	Future	10.33.226.0	10.33.226.1 to 10.33.226.254	10.33.226.255
35	Future	10.33.35.0	10.33.35.1 to 10.33.35.254	10.33.35.127	99	Future	10.33.99.0	10.33.99.1 to 10.33.99.254	10.33.99.255	163	Future	10.33.163.0	10.33.163.1 to 10.33.163.254	10.33.163.255	227	Future	10.33.227.0	10.33.227.1 to 10.33.227.254	10.33.227.255
36	Future	10.33.36.0	10.33.36.1 to 10.33.36.254	10.33.36.127	100	Milltown	10.33.100.0	10.33.100.1 to 10.33.100.254	10.33.100.255	164	Future	10.33.164.0	10.33.164.1 to 10.33.164.254	10.33.164.255	228	Future	10.33.228.0	10.33.228.1 to 10.33.228.254	10.33.228.255
37	Future	10.33.37.0	10.33.37.1 to 10.33.37.254	10.33.37.127	101	Hudson-Manchester	10.33.101.0	10.33.101.1 to 10.33.101.254	10.33.101.255	165	Future	10.33.165.0	10.33.165.1 to 10.33.165.254	10.33.165.255	229	Future	10.33.229.0	10.33.229.1 to 10.33.229.254	10.33.229.255
38	Future	10.33.38.0	10.33.38.1 to 10.33.38.254	10.33.38.127	102	Ben and Jerry's	10.33.102.0	10.33.102.1 to 10.33.102.254	10.33.102.255	166	Future	10.33.166.0	10.33.166.1 to 10.33.166.254	10.33.166.255	230	Future	10.33.230.0	10.33.230.1 to 10.33.230.254	10.33.230.255
39	Future	10.33.39.0	10.33.39.1 to 10.33.39.254	10.33.39.127	103	Worldwide Flight Svc	10.33.103.0	10.33.103.1 to 10.33.103.254	10.33.103.255	167	Future	10.33.167.0	10.33.167.1 to 10.33.167.254	10.33.167.255	231	Future	10.33.231.0	10.33.231.1 to 10.33.231.254	10.33.231.255
40	Future	10.33.40.0	10.33.40.1 to 10.33.40.254	10.33.40.127	104	International RAM	10.33.104.0	10.33.104.1 to 10.33.104.254	10.33.104.255	168	Future	10.33.168.0	10.33.168.1 to 10.33.168.254	10.33.168.255	232	Future	10.33.232.0	10.33.232.1 to 10.33.232.254	10.33.232.255
41	Future	10.33.41.0	10.33.41.1 to 10.33.41.254	10.33.41.255	105	Delta	10.33.105.0	10.33.105.1 to 10.33.105.254	10.33.105.255	169	Future	10.33.169.0	10.33.169.1 to 10.33.169.254	10.33.169.255	233	Future	10.33.233.0	10.33.233.1 to 10.33.233.254	10.33.233.255
42	Southwest DMZ	10.33.42.0	10.33.42.1 to 10.33.42.254	10.33.42.255	106	Future	10.33.106.0	10.33.106.1 to 10.33.106.254	10.33.106.255	170	Future	10.33.170.0	10.33.170.1 to 10.33.170.254	10.33.170.255	234	Future	10.33.234.0	10.33.234.1 to 10.33.234.254	10.33.234.255
43	Future	10.33.43.0	10.33.43.1 to 10.33.43.254	10.33.43.255	107	Future	10.33.107.0	10.33.107.1 to 10.33.107.254	10.33.107.255	171	Future	10.33.171.0	10.33.171.1 to 10.33.171.254	10.33.171.255	235	Future	10.33.235.0	10.33.235.1 to 10.33.235.254	10.33.235.255
44	Future	10.33.44.0	10.33.44.1 to 10.33.44.254	10.33.44.255	108	Future	10.33.108.0	10.33.108.1 to 10.33.108.254	10.33.108.255	172	Future	10.33.172.0	10.33.172.1 to 10.33.172.254	10.33.172.255	236	Future	10.33.236.0	10.33.236.1 to 10.33.236.254	10.33.236.255
45	Johnson Controls	10.33.45.0	10.33.45.1 to 10.33.45.254	10.33.45.255	109	Future	10.33.109.0	10.33.109.1 to 10.33.109.254	10.33.109.255	173	Future	10.33.173.0	10.33.173.1 to 10.33.173.254	10.33.173.255	237	Future	10.33.237.0	10.33.237.1 to 10.33.237.254	10.33.237.255
46	Future	10.33.46.0	10.33.46.1 to 10.33.46.254	10.33.46.255	110	Future	10.33.110.0	10.33.110.1 to 10.33.110.254	10.33.110.255	174	Future	10.33.174.0	10.33.174.1 to 10.33.174.254	10.33.174.255	238	Future	10.33.238.0	10.33.238.1 to 10.33.238.254	10.33.238.255
47	Future	10.33.47.0	10.33.47.1 to 10.33.47.254	10.33.47.255	111	Future	10.33.111.0	10.33.111.1 to 10.33.111.254	10.33.111.255	175	Future	10.33.175.0	10.33.175.1 to 10.33.175.254	10.33.175.255	239	Future	10.33.239.0	10.33.239.1 to 10.33.239.254	10.33.239.255
48	Future	10.33.48.0	10.33.48.1 to 10.33.48.254	10.33.48.255	112	Future	10.33.112.0	10.33.112.1 to 10.33.112.254	10.33.112.255	176	Future	10.33.176.0	10.33.176.1 to 10.33.176.254	10.33.176.255	240	Future	10.33.240.0	10.33.240.1 to 10.33.240.254	10.33.240.255
49	Future	10.33.49.0	10.33.49.1 to 10.33.49.254	10.33.49.255	113	Future	10.33.113.0	10.33.113.1 to 10.33.113.254	10.33.113.255	177	Future	10.33.177.0	10.33.177.1 to 10.33.177.254	10.33.177.255	241	Future	10.33.241.0	10.33.241.1 to 10.33.241.254	10.33.241.255
50	Future	10.33.50.0	10.33.50.1 to 10.33.50.254	10.33.50.255	114	Future	10.33.114.0	10.33.114.1 to 10.33.114.254	10.33.114.255	178	Future	10.33.178.0	10.33.178.1 to 10.33.178.254	10.33.178.255	242	Future	10.33.242.0	10.33.242.1 to 10.33.242.254	10.33.242.255
51	Future	10.33.51.0	10.33.51.1 to 10.33.51.254	10.33.51.255	115	Future	10.33.115.0	10.33.115.1 to 10.33.115.254	10.33.115.255	179	Future	10.33.179.0	10.33.179.1 to 10.33.179.254	10.33.179.255	243	Future	10.33.243.0	10.33.243.1 to 10.33.243.254	10.33.243.255
52	Future	10.33.52.0	10.33.52.1 to 10.33.52.254	10.33.52.255	116	Future	10.33.116.0	10.33.116.1 to 10.33.116.254	10.33.116.255	180	Future	10.33.180.0	10.33.180.1 to 10.33.180.254	10.33.180.255	244	Future	10.33.244.0	10.33.244.1 to 10.33.244.254	10.33.244.255
53	Future	10.33.53.0	10.33.53.1 to 10.33.53.254	10.33.53.255	117	Future	10.33.117.0	10.33.117.1 to 10.33.117.254	10.33.117.255	181	Future	10.33.181.0	10.33.181.1 to 10.33.181.254	10.33.181.255	245	Future	10.33.245.0	10.33.245.1 to 10.33.245.254	10.33.245.255
54	Future	10.33.54.0	10.33.54.1 to 10.33.54.254	10.33.54.255	118	Dunkin Donuts	10.33.118.0	10.33.118.1 to 10.33.118.254	10.33.118.255	182	Future	10.33.182.0	10.33.182.1 to 10.33.182.254	10.33.182.255	246	Future	10.33.246.0	10.33.246.1 to 10.33.246.254	10.33.246.255
55	Signs	10.33.55.0	10.33.55.1 to 10.33.55.254	10.33.55.255	119	Audax Technologies	10.33.119.0	10.33.119.1 to 10.33.119.254	10.33.119.255	183	Future	10.33.183.0	10.33.183.1 to 10.33.183.254	10.33.183.255	247	Future	10.33.247.0	10.33.247.1 to 10.33.247.254	10.33.247.255
56	Future	10.33.56.0	10.33.56.1 to 10.33.56.254	10.33.56.255	120	VLAN 709	10.33.120.0	10.33.120.1 to 10.33.120.254	10.33.120.255	184	Future	10.33.184.0	10.33.184.1 to 10.33.184.254	10.33.184.255	248	Future	10.33.248.0	10.33.248.1 to 10.33.248.254	10.33.248.255
57	Future	10.33.57.0	10.33.57.1 to 10.33.57.254	10.33.57.255	121	City Network	10.33.121.0	10.33.121.1 to 10.33.121.254	10.33.121.255	185	Future	10.33.185.0	10.33.185.1 to 10.33.185.254	10.33.185.255	249	Future	10.33.249.0	10.33.249.1 to 10.33.249.254	10.33.249.255
58	Future	10.33.58.0	10.33.58.1 to 10.33.58.254	10.33.58.255	122	External Network	10.33.122.0	10.33.122.1 to 10.33.122.254	10.33.122.255	186	Future	10.33.186.0	10.33.186.1 to 10.33.186.254	10.33.186.255	250	Future	10.33.250.0	10.33.250.1 to 10.33.250.254	10.33.250.255
59	Future	10.33.59.0	10.33.59.1 to 10.33.59.254	10.33.59.255	123	FDDI Default	10.33.123.0	10.33.123.1 to 10.33.123.254	10.33.123.255	187	Future	10.33.187.0	10.33.187.1 to 10.33.187.254	10.33.187.255	251	Future	10.33.251.0	10.33.251.1 to 10.33.251.254	10.33.251.255
60	Camera	10.33.60.0	10.33.60.1 to 10.33.60.254	10.33.60.255	124	FDDInet Default	10.33.124.0	10.33.124.1 to 10.33.124.254	10.33.124.255	188	Future	10.33.188.0	10.33.188.1 to 10.33.188.254	10.33.188.255	252	Future	10.33.252.0	10.33.252.1 to 10.33.252.254	10.33.252.255
61	Future	10.33.61.0	10.33.61.1 to 10.33.61.254	10.33.61.255	125	TRBF Default	10.33.125.0	10.33.125.1 to 10.33.125.254	10.33.125.255	189	Future	10.33.189.0	10.33.189.1 to 10.33.189.254	10.33.189.255	253	Future	10.33.253.0	10.33.253.1 to 10.33.253.254	10.33.253.255
62	Future	10.33.62.0	10.33.62.1 to 10.33.62.254	10.33.62.255	126	Future	10.33.126.0	10.33.126.1 to 10.33.126.254	10.33.126.255	190	Future	10.33.190.0	10.33.190.1 to 10.33.190.254	10.33.190.255	254	Network Management	10.33.254.0	10.33.254.1 to 10.33.254.254	10.33.254.255
63	Future	10.33.63.0	10.33.63.1 to 10.33.63.254	10.33.63.255	127	Future	10.33.127.0	10.33.127.1 to 10.33.127.254	10.33.127.255	191	Future	10.33.191.0	10.33.191.1 to 10.33.191.254	10.33.191.255					

NORTH CAMPUS (34)

North Campus				10.34.0.0/24	MHT IP Addressing Plan														
VLAN	Function	Network	Hosts	Broadcast	VLAN	Function	Network	Hosts	Broadcast	VLAN	Function	Network	Hosts	Broadcast	VLAN	Function	Network	Hosts	Broadcast
	Core Uplinks	10.34.0.0	10.34.0.1 to 10.34.0.254	10.34.0.255		Core Uplinks	10.34.64.0	10.34.64.1 to 10.34.64.254	10.34.64.255		Core Uplinks	10.34.128.0	10.34.128.1 to 10.34.128.254	10.34.128.255		Core Uplinks	10.34.192.0	10.34.192.1 to 10.34.192.254	10.34.192.255
1	Default	10.34.1.0	10.34.1.1 to 10.34.1.254	10.34.1.255	65	City Unrouted	10.34.65.0	10.34.65.1 to 10.34.65.254	10.34.65.255	129	Future	10.34.129.0	10.34.129.1 to 10.34.129.254	10.34.129.255	193	Future	10.34.193.0	10.34.193.1 to 10.34.193.254	10.34.193.255
2	Admin	10.34.2.0	10.34.2.1 to 10.34.2.254	10.34.2.255	66	Future	10.34.66.0	10.34.66.1 to 10.34.66.254	10.34.66.255	130	Future	10.34.130.0	10.34.130.1 to 10.34.130.254	10.34.130.255	194	Future	10.34.194.0	10.34.194.1 to 10.34.194.254	10.34.194.255
3	FIDS	10.34.3.0	10.34.3.1 to 10.34.3.254	10.34.3.255	67	Future	10.34.67.0	10.34.67.1 to 10.34.67.254	10.34.67.255	131	Future	10.34.131.0	10.34.131.1 to 10.34.131.254	10.34.131.255	195	Future	10.34.195.0	10.34.195.1 to 10.34.195.254	10.34.195.255
4	Security	10.34.4.0	10.34.4.1 to 10.34.4.254	10.34.4.255	68	Future	10.34.68.0	10.34.68.1 to 10.34.68.254	10.34.68.255	132	Future	10.34.132.0	10.34.132.1 to 10.34.132.254	10.34.132.255	196	Future	10.34.196.0	10.34.196.1 to 10.34.196.254	10.34.196.255
5	Security Camera	10.34.5.0	10.34.5.1 to 10.34.5.254	10.34.5.255	69	Future	10.34.69.0	10.34.69.1 to 10.34.69.254	10.34.69.255	133	Future	10.34.133.0	10.34.133.1 to 10.34.133.254	10.34.133.255	197	Future	10.34.197.0	10.34.197.1 to 10.34.197.254	10.34.197.255
6	Taxi	10.34.6.0	10.34.6.1 to 10.34.6.254	10.34.6.255	70	Power Related	10.34.70.0	10.34.70.1 to 10.34.70.254	10.34.70.255	134	Future	10.34.134.0	10.34.134.1 to 10.34.134.254	10.34.134.255	198	Future	10.34.198.0	10.34.198.1 to 10.34.198.254	10.34.198.255
7	HVAC	10.34.7.0	10.34.7.1 to 10.34.7.254	10.34.7.255	71	Future	10.34.71.0	10.34.71.1 to 10.34.71.254	10.34.71.255	135	Future	10.34.135.0	10.34.135.1 to 10.34.135.254	10.34.135.255	199	Future	10.34.199.0	10.34.199.1 to 10.34.199.254	10.34.199.255
8	Comcast - Passenger	10.34.8.0	10.34.8.1 to 10.34.8.254	10.34.8.255	72	Future	10.34.72.0	10.34.72.1 to 10.34.72.254	10.34.72.255	136	Future	10.34.136.0	10.34.136.1 to 10.34.136.254	10.34.136.255	200	Future	10.34.200.0	10.34.200.1 to 10.34.200.254	10.34.200.255
9	WiFi Private	10.34.9.0	10.34.9.1 to 10.34.9.254	10.34.9.255	73	Future	10.34.73.0	10.34.73.1 to 10.34.73.254	10.34.73.255	137	Future	10.34.137.0	10.34.137.1 to 10.34.137.254	10.34.137.255	201	Future	10.34.201.0	10.34.201.1 to 10.34.201.254	10.34.201.255
10	Comcast - Personnel	10.34.10.0	10.34.10.1 to 10.34.10.254	10.34.10.127	74	Future	10.34.74.0	10.34.74.1 to 10.34.74.254	10.34.74.255	138	Future	10.34.138.0	10.34.138.1 to 10.34.138.254	10.34.138.255	202	Future	10.34.202.0	10.34.202.1 to 10.34.202.254	10.34.202.255
11	ILO	10.34.11.0	10.34.11.1 to 10.34.11.254	10.34.11.255	75	Future	10.34.75.0	10.34.75.1 to 10.34.75.254	10.34.75.255	139	Future	10.34.139.0	10.34.139.1 to 10.34.139.254	10.34.139.255	203	Future	10.34.203.0	10.34.203.1 to 10.34.203.254	10.34.203.255
12	Conveyor	10.34.12.0	10.34.12.1 to 10.34.12.254	10.34.12.255	76	Future	10.34.76.0	10.34.76.1 to 10.34.76.254	10.34.76.255	140	Future	10.34.140.0	10.34.140.1 to 10.34.140.254	10.34.140.255	204	Future	10.34.204.0	10.34.204.1 to 10.34.204.254	10.34.204.255
13	Future	10.34.13.0	10.34.13.1 to 10.34.13.254	10.34.13.255	77	Future	10.34.77.0	10.34.77.1 to 10.34.77.254	10.34.77.255	141	Future	10.34.141.0	10.34.141.1 to 10.34.141.254	10.34.141.255	205	Future	10.34.205.0	10.34.205.1 to 10.34.205.254	10.34.205.255
14	VMWare Vmotion	10.34.14.0	10.34.14.1 to 10.34.14.254	10.34.14.255	78	Future	10.34.78.0	10.34.78.1 to 10.34.78.254	10.34.78.255	142	Future	10.34.142.0	10.34.142.1 to 10.34.142.254	10.34.142.255	206	Future	10.34.206.0	10.34.206.1 to 10.34.206.254	10.34.206.255
15	Wireless Infrastructure	10.34.15.0	10.34.15.1 to 10.34.15.126	10.34.15.127	79	Future	10.34.79.0	10.34.79.1 to 10.34.79.254	10.34.79.255	143	Future	10.34.143.0	10.34.143.1 to 10.34.143.254	10.34.143.255	207	Future	10.34.207.0	10.34.207.1 to 10.34.207.254	10.34.207.255
16	Future	10.34.16.0	10.34.16.1 to 10.34.16.254	10.34.16.255	80	Future	10.34.80.0	10.34.80.1 to 10.34.80.254	10.34.80.255	144	Future	10.34.144.0	10.34.144.1 to 10.34.144.254	10.34.144.255	208	Future	10.34.208.0	10.34.208.1 to 10.34.208.254	10.34.208.255
17	Future	10.34.17.0	10.34.17.1 to 10.34.17.254	10.34.17.255	81	Future	10.34.81.0	10.34.81.1 to 10.34.81.254	10.34.81.255	145	Future	10.34.145.0	10.34.145.1 to 10.34.145.254	10.34.145.255	209	Future	10.34.209.0	10.34.209.1 to 10.34.209.254	10.34.209.255
18	Future	10.34.18.0	10.34.18.1 to 10.34.18.254	10.34.18.255	82	Future	10.34.82.0	10.34.82.1 to 10.34.82.254	10.34.82.255	146	Future	10.34.146.0	10.34.146.1 to 10.34.146.254	10.34.146.255	210	Future	10.34.210.0	10.34.210.1 to 10.34.210.254	10.34.210.255
19	Future	10.34.19.0	10.34.19.1 to 10.34.19.254	10.34.19.255	83	Future	10.34.83.0	10.34.83.1 to 10.34.83.254	10.34.83.255	147	Future	10.34.147.0	10.34.147.1 to 10.34.147.254	10.34.147.255	211	Future	10.34.211.0	10.34.211.1 to 10.34.211.254	10.34.211.255
20	MHT Desktops	10.34.20.0	10.34.20.1 to 10.34.20.254	10.34.20.255	84	Future	10.34.84.0	10.34.84.1 to 10.34.84.254	10.34.84.255	148	Future	10.34.148.0	10.34.148.1 to 10.34.148.254	10.34.148.255	212	Future	10.34.212.0	10.34.212.1 to 10.34.212.254	10.34.212.255
21	Future	10.34.21.0	10.34.21.1 to 10.34.21.254	10.34.21.255	85	Virtual Cluster Heartbeats	10.34.85.0	10.34.85.1 to 10.34.85.254	10.34.85.255	149	Future	10.34.149.0	10.34.149.1 to 10.34.149.254	10.34.149.255	213	Future	10.34.213.0	10.34.213.1 to 10.34.213.254	10.34.213.255
22	MHT Users	10.34.22.0	10.34.22.1 to 10.34.22.126	10.34.22.127	86	Future	10.34.86.0	10.34.86.1 to 10.34.86.254	10.34.86.255	150	Future	10.34.150.0	10.34.150.1 to 10.34.150.254	10.34.150.255	214	Future	10.34.214.0	10.34.214.1 to 10.34.214.254	10.34.214.255
23	Future	10.34.23.0	10.34.23.1 to 10.34.23.254	10.34.23.255	87	Future	10.34.87.0	10.34.87.1 to 10.34.87.254	10.34.87.255	151	Future	10.34.151.0	10.34.151.1 to 10.34.151.254	10.34.151.255	215	Future	10.34.215.0	10.34.215.1 to 10.34.215.254	10.34.215.255
24	MHT Accounting Users	10.34.24.0	10.34.24.1 to 10.34.24.254	10.34.24.255	88	Future	10.34.88.0	10.34.88.1 to 10.34.88.254	10.34.88.255	152	Future	10.34.152.0	10.34.152.1 to 10.34.152.254	10.34.152.255	216	Future	10.34.216.0	10.34.216.1 to 10.34.216.254	10.34.216.255
25	Admin Users	10.34.25.0	10.34.25.1 to 10.34.25.254	10.34.25.255	89	Future	10.34.89.0	10.34.89.1 to 10.34.89.254	10.34.89.255	153	Future	10.34.153.0	10.34.153.1 to 10.34.153.254	10.34.153.255	217	Future	10.34.217.0	10.34.217.1 to 10.34.217.254	10.34.217.255
26	MHT Wireless Authentica	10.34.26.0	10.34.26.1 to 10.34.26.254	10.34.26.255	90	Future	10.34.90.0	10.34.90.1 to 10.34.90.254	10.34.90.255	154	Future	10.34.154.0	10.34.154.1 to 10.34.154.254	10.34.154.255	218	Future	10.34.218.0	10.34.218.1 to 10.34.218.254	10.34.218.255
27	LEO Users	10.34.27.0	10.34.27.1 to 10.34.27.254	10.34.27.255	91	Future	10.34.91.0	10.34.91.1 to 10.34.91.254	10.34.91.255	155	Future	10.34.155.0	10.34.155.1 to 10.34.155.254	10.34.155.255	219	Future	10.34.219.0	10.34.219.1 to 10.34.219.254	10.34.219.255
28	MHT Building Maintenan	10.34.28.0	10.34.28.1 to 10.34.28.254	10.34.28.255	92	Future	10.34.92.0	10.34.92.1 to 10.34.92.254	10.34.92.255	156	Future	10.34.156.0	10.34.156.1 to 10.34.156.254	10.34.156.255	220	Future	10.34.220.0	10.34.220.1 to 10.34.220.254	10.34.220.255
29	MHT TSA Users	10.34.29.0	10.34.29.1 to 10.34.29.254	10.34.29.255	93	Future	10.34.93.0	10.34.93.1 to 10.34.93.254	10.34.93.255	157	Future	10.34.157.0	10.34.157.1 to 10.34.157.254	10.34.157.255	221	Future	10.34.221.0	10.34.221.1 to 10.34.221.254	10.34.221.255
30	MHT Printers	10.34.30.0	10.34.30.1 to 10.34.30.254	10.34.30.255	94	Future	10.34.94.0	10.34.94.1 to 10.34.94.254	10.34.94.255	158	Future	10.34.158.0	10.34.158.1 to 10.34.158.254	10.34.158.255	222	Future	10.34.222.0	10.34.222.1 to 10.34.222.254	10.34.222.255
31	MHT Security Users	10.34.31.0	10.34.31.1 to 10.34.31.254	10.34.31.127	95	Future	10.34.95.0	10.34.95.1 to 10.34.95.254	10.34.95.255	159	Future	10.34.159.0	10.34.159.1 to 10.34.159.254	10.34.159.255	223	Future	10.34.223.0	10.34.223.1 to 10.34.223.254	10.34.223.255
32	MHT Fingerprint System	10.34.32.0	10.34.32.1 to 10.34.32.254	10.34.32.127	96	Future	10.34.96.0	10.34.96.1 to 10.34.96.254	10.34.96.255	160	Future	10.34.160.0	10.34.160.1 to 10.34.160.254	10.34.160.255	224	Future	10.34.224.0	10.34.224.1 to 10.34.224.254	10.34.224.255
33	Guest	10.34.33.0	10.34.33.1 to 10.34.33.254	10.34.33.127	97	Future	10.34.97.0	10.34.97.1 to 10.34.97.254	10.34.97.255	161	Future	10.34.161.0	10.34.161.1 to 10.34.161.254	10.34.161.255	225	Future	10.34.225.0	10.34.225.1 to 10.34.225.254	10.34.225.255
34	Future	10.34.34.0	10.34.34.1 to 10.34.34.254	10.34.34.127	98	Future	10.34.98.0	10.34.98.1 to 10.34.98.254	10.34.98.255	162	Future	10.34.162.0	10.34.162.1 to 10.34.162.254	10.34.162.255	226	Future	10.34.226.0	10.34.226.1 to 10.34.226.254	10.34.226.255
35	Future	10.34.35.0	10.34.35.1 to 10.34.35.254	10.34.35.127	99	Future	10.34.99.0	10.34.99.1 to 10.34.99.254	10.34.99.255	163	Future	10.34.163.0	10.34.163.1 to 10.34.163.254	10.34.163.255	227	Future	10.34.227.0	10.34.227.1 to 10.34.227.254	10.34.227.255
36	Future	10.34.36.0	10.34.36.1 to 10.34.36.254	10.34.36.127	100	Milltown	10.34.100.0	10.34.100.1 to 10.34.100.254	10.34.100.255	164	Future	10.34.164.0	10.34.164.1 to 10.34.164.254	10.34.164.255	228	Future	10.34.228.0	10.34.228.1 to 10.34.228.254	10.34.228.255
37	Future	10.34.37.0	10.34.37.1 to 10.34.37.254	10.34.37.127	101	Hudson-Manchester	10.34.101.0	10.34.101.1 to 10.34.101.254	10.34.101.255	165	Future	10.34.165.0	10.34.165.1 to 10.34.165.254	10.34.165.255	229	Future	10.34.229.0	10.34.229.1 to 10.34.229.254	10.34.229.255
38	Future	10.34.38.0	10.34.38.1 to 10.34.38.254	10.34.38.127	102	Ben and Jerry's	10.34.102.0	10.34.102.1 to 10.34.102.254	10.34.102.255	166	Future	10.34.166.0	10.34.166.1 to 10.34.166.254	10.34.166.255	230	Future	10.34.230.0	10.34.230.1 to 10.34.230.254	10.34.230.255
39	Future	10.34.39.0	10.34.39.1 to 10.34.39.254	10.34.39.127	103	Worldwide Flight Svc	10.34.103.0	10.34.103.1 to 10.34.103.254	10.34.103.255	167	Future	10.34.167.0	10.34.167.1 to 10.34.167.254	10.34.167.255	231	Future	10.34.231.0	10.34.231.1 to 10.34.231.254	10.34.231.255
40	Future	10.34.40.0	10.34.40.1 to 10.34.40.254	10.34.40.127	104	International RAM	10.34.104.0	10.34.104.1 to 10.34.104.254	10.34.104.255	168	Future	10.34.168.0	10.34.168.1 to 10.34.168.254	10.34.168.255	232	Future	10.34.232.0	10.34.232.1 to 10.34.232.254	10.34.232.255
41	Future	10.34.41.0	10.34.41.1 to 10.34.41.254	10.34.41.255	105	Delta	10.34.105.0	10.34.105.1 to 10.34.105.254	10.34.105.255	169	Future	10.34.169.0	10.34.169.1 to 10.34.169.254	10.34.169.255	233	Future	10.34.233.0	10.34.233.1 to 10.34.233.254	10.34.233.255
42	Southwest DMZ	10.34.42.0	10.34.42.1 to 10.34.42.254	10.34.42.255	106	Future	10.34.106.0	10.34.106.1 to 10.34.106.254	10.34.106.255	170	Future	10.34.170.0	10.34.170.1 to 10.34.170.254	10.34.170.255	234	Future	10.34.234.0	10.34.234.1 to 10.34.234.254	10.34.234.255
43	Future	10.34.43.0	10.34.43.1 to 10.34.43.254	10.34.43.255	107	Future	10.34.107.0	10.34.107.1 to 10.34.107.254	10.34.107.255	171	Future	10.34.171.0	10.34.171.1 to 10.34.171.254	10.34.171.255	235	Future	10.34.235.0	10.34.235.1 to 10.34.235.254	10.34.235.255
44	Future	10.34.44.0	10.34.44.1 to 10.34.44.254	10.34.44.255	108	Future	10.34.108.0	10.34.108.1 to 10.34.108.254	10.34.108.255	172	Future	10.34.172.0	10.34.172.1 to 10.34.172.254	10.34.172.255	236	Future	10.34.236.0	10.34.236.1 to 10.34.236.254	10.34.236.255
45	Johnson Controls	10.34.45.0	10.34.45.1 to 10.34.45.254	10.34.45.255	109	Future	10.34.109.0	10.34.109.1 to 10.34.109.254	10.34.109.255	173	Future	10.34.173.0	10.34.173.1 to 10.34.173.254	10.34.173.255	237	Future	10.34.237.0	10.34.237.1 to 10.34.237.254	10.34.237.255
46	Future	10.34.46.0	10.34.46.1 to 10.34.46.254	10.34.46.255	110	Future	10.34.110.0	10.34.110.1 to 10.34.110.254	10.34.110.255	174	Future	10.34.174.0	10.34.174.1 to 10.34.174.254	10.34.174.255	238	Future	10.34.238.0	10.34.238.1 to 10.34.238.254	10.34.238.255
47	Future	10.34.47.0	10.34.47.1 to 10.34.47.254	10.34.47.255	111	Future	10.34.111.0	10.34.111.1 to 10.34.111.254	10.34.111.255	175	Future	10.34.175.0	10.34.175.1 to 10.34.175.254	10.34.175.255	239	Future	10.34.239.0	10.34.239.1 to 10.34.239.254	10.34.239.255
48	Future	10.34.48.0	10.34.48.1 to 10.34.48.254	10.34.48.255	112	Future	10.34.112.0	10.34.112.1 to 10.34.112.254	10.34.112.255	176	Future	10.34.176.0	10.34.176.1 to 10.34.176.254	10.34.176.255	240	Future	10.34.240.0	10.34.240.1 to 10.34.240.254	10.34.240.255
49	Future	10.34.49.0	10.34.49.1 to 10.34.49.254	10.34.49.255	113	Future	10.34.113.0	10.34.113.1 to 10.34.113.254	10.34.113.255	177	Future	10.34.177.0	10.34.177.1 to 10.34.177.254	10.34.177.255	241	Future	10.34.241.0	10.34.241.1 to 10.34.241.254	10.34.241.255
50	Future	10.34.50.0	10.34.50.1 to 10.34.50.254	10.34.50.255	114	Future	10.34.114.0	10.34.114.1 to 10.34.114.254	10.34.114.255	178	Future	10.34.178.0	10.34.178.1 to 10.34.178.254	10.34.178.255	242	Future	10.34.242.0	10.34.242.1 to 10.34.242.254	10.34.242.255
51	Future	10.34.51.0	10.34.51.1 to 10.34.51.254	10.34.51.255	115	Future	10.34.115.0	10.34.115.1 to 10.34.115.254	10.34.115.255	179	Future	10.34.179.0	10.34.179.1 to 10.34.179.254	10.34.179.255	243	Future	10.34.243.0	10.34.243.1 to 10.34.243.254	10.34.243.255
52	Future	10.34.52.0	10.34.52.1 to 10.34.52.254	10.34.52.255	116	Future	10.34.116.0	10.34.116.1 to 10.34.116.254	10.34.116.255	180	Future	10.34.180.0	10.34.180.1 to 10.34.180.254	10.34.180.255	244	Future	10.34.244.0	10.34.244.1 to 10.34.244.254	10.34.244.255
53	Future	10.34.53.0	10.34.53.1 to 10.34.53.254	10.34.53.255	117	Future	10.34.117.0	10.34.117.1 to 10.34.117.254	10.34.117.255	181	Future	10.34.181.0	10.34.181.1 to 10.34.181.254	10.34.181.255	245	Future	10.34.245.0	10.34.245.1 to 10.34.245.254	10.34.245.255
54	Future	10.34.54.0	10.34.54.1 to 10.34.54.254	10.34.54.255	118	Dunkin Donuts	10.34.118.0	10.34.118.1 to 10.34.118.254	10.34.118.255	182	Future	10.34.182.0	10.34.182.1 to 10.34.182.254	10.34.182.255	246	Future	10.34.246.0	10.34.246.1 to 10.34.246.254	10.34.246.255
55	Signs	10.34.55.0	10.34.55.1 to 10.34.55.254	10.34.55.255	119	Audax Technologies	10.34.119.0	10.34.119.1 to 10.34.119.254	10.34.119.255	183	Future	10.34.183.0	10.34.183.1 to 10.34.183.254	10.34.183.255	247	Future	10.34.247.0	10.34.247.1 to 10.34.247.254	10.34.247.255
56	Future	10.34.56.0	10.34.56.1 to 10.34.56.254	10.34.56.255	120	VLAN 709	10.34.120.0	10.34.120.1 to 10.34.120.254	10.34.120.255	184	Future	10.34.184.0	10.34.184.1 to 10.34.184.254	10.34.184.255	248	Future	10.34.248.0	10.34.248.1 to 10.34.248.254	10.34.248.255
57	Future	10.34.57.0	10.34.57.1 to 10.34.57.254	10.34.57.255	121	City Network	10.34.121.0	10.34.121.1 to 10.34.121.254	10.34.121.255	185	Future	10.34.185.0	10.34.185.1 to 10.34.185.254	10.34.185.255	249	Future	10.34.249.0	10.34.249.1 to 10.34.249.254	10.34.249.255
58	Future	10.34.58.0	10.34.58.1 to 10.34.58.254	10.34.58.255	122	External Network	10.34.122.0	10.34.122.1 to 10.34.122.254	10.34.122.255	186	Future	10.34.186.0	10.34.186.1 to 10.34.186.254	10.34.186.255	250	Future	10.34.250.0	10.34.250.1 to 10.34.250.254	10.34.250.255
59	Future	10.34.59.0	10.34.59.1 to 10.34.59.254	10.34.59.255	123	FDDI Default	10.34.123.0	10.34.123.1 to 10.34.123.254	10.34.123.255	187	Future	10.34.187.0	10.34.187.1 to 10.34.187.254	10.34.187.255	251	Future	10.34.251.0	10.34.251.1 to 10.34.251.254	10.34.251.255
60	Camera	10.34.60.0	10.34.60.1 to 10.34.60.254	10.34.60.255	124	FDDInet Default	10.34.124.0	10.34.124.1 to 10.34.124.254	10.34.124.255	188	Future	10.34.188.0	10.34.188.1 to 10.34.188.254	10.34.188.255	252	Future	10.34.252.0	10.34.252.1 to 10.34.252.254	10.34.252.255
61	Future	10.34.61.0	10.34.61.1 to 10.34.61.254	10.34.61.255	125	TRBF Default	10.34.125.0	10.34.125.1 to 10.34.125.254	10.34.125.255	189	Future	10.34.189.0	10.34.189.1 to 10.34.189.254	10.34.189.255	253	Future	10.34.253.0	10.34.253.1 to 10.34.253.254	10.34.253.255
62	Future	10.34.62.0	10.34.62.1 to 10.34.62.254	10.34.62.255	126	Future	10.34.126.0	10.34.126.1 to 10.34.126.254	10.34.126.255	190	Future	10.34.190.0	10.34.190.1 to 10.34.190.254	10.34.190.255	254	Network Management	10.34.254.0	10.34.254.1 to 10.34.254.254	10.34.254.255
63	Future	10.34.63.0	10.34.63.1 to 10.34.63.254	10.34.63.255	127	Future	10.34.127.0	10.34.127.1 to 10.34.127.254	10.34.127.255	191	Future	10.34.191.0	10.34.191.1 to 10.34.191.254	10.34.191.255					

SOUTH CAMPUS (35)

South Campus | 10.35.0.0/24 | MHT IP Addressing Plan

VLAN	Function	Network	Hosts	Broadcast
	Core Uplinks	10.35.0.0	10.35.0.1 to 10.35.0.254	10.35.0.255
1	Default	10.35.1.0	10.35.1.1 to 10.35.1.254	10.35.1.255
2	Admin	10.35.2.0	10.35.2.1 to 10.35.2.254	10.35.2.255
3	FIDS	10.35.3.0	10.35.3.1 to 10.35.3.254	10.35.3.255
4	Security	10.35.4.0	10.35.4.1 to 10.35.4.254	10.35.4.255
5	Security Camera	10.35.5.0	10.35.5.1 to 10.35.5.254	10.35.5.255
6	Taxi	10.35.6.0	10.35.6.1 to 10.35.6.254	10.35.6.255
7	HVAC	10.35.7.0	10.35.7.1 to 10.35.7.254	10.35.7.255
8	Comcast - Passenger	10.35.8.0	10.35.8.1 to 10.35.8.254	10.35.8.255
9	WiFi Private	10.35.9.0	10.35.9.1 to 10.35.9.254	10.35.9.255
10	Comcast - Personnel	10.35.10.0	10.35.10.1 to 10.35.10.254	10.35.10.127
11	iLO	10.35.11.0	10.35.11.1 to 10.35.11.254	10.35.11.255
12	Conveyor	10.35.12.0	10.35.12.1 to 10.35.12.254	10.35.12.255
13	Future	10.35.13.0	10.35.13.1 to 10.35.13.254	10.35.13.255
14	VMWare Vmotion	10.35.14.0	10.35.14.1 to 10.35.14.254	10.35.14.255
15	Wireless Infrastructure	10.35.15.0	10.35.15.1 to 10.35.15.126	10.35.15.127
16	Future	10.35.16.0	10.35.16.1 to 10.35.16.254	10.35.16.255
17	Future	10.35.17.0	10.35.17.1 to 10.35.17.254	10.35.17.255
18	Future	10.35.18.0	10.35.18.1 to 10.35.18.254	10.35.18.255
19	Future	10.35.19.0	10.35.19.1 to 10.35.19.254	10.35.19.255
20	MHT Desktops	10.35.20.0	10.35.20.1 to 10.35.20.254	10.35.20.255
21	Future	10.35.21.0	10.35.21.1 to 10.35.21.254	10.35.21.255
22	MHT Users	10.35.22.0	10.35.22.1 to 10.35.22.126	10.35.22.127
23	Future	10.35.23.0	10.35.23.1 to 10.35.23.254	10.35.23.255
24	MHT Accounting Users	10.35.24.0	10.35.24.1 to 10.35.24.254	10.35.24.255
25	Admin Users	10.35.25.0	10.35.25.1 to 10.35.25.254	10.35.25.255
26	MHT Wireless Authentical	10.35.26.0	10.35.26.1 to 10.35.26.254	10.35.26.255
27	LEO Users	10.35.27.0	10.35.27.1 to 10.35.27.254	10.35.27.255
28	MHT Building Maintenanc	10.35.28.0	10.35.28.1 to 10.35.28.254	10.35.28.255
29	MHT TSA Users	10.35.29.0	10.35.29.1 to 10.35.29.254	10.35.29.255
30	MHT Printers	10.35.30.0	10.35.30.1 to 10.35.30.254	10.35.30.255
31	MHT Security Users	10.35.31.0	10.35.31.1 to 10.35.31.254	10.35.31.127
32	MHT Fingerprint System	10.35.32.0	10.35.32.1 to 10.35.32.254	10.35.32.127
33	Guest	10.35.33.0	10.35.33.1 to 10.35.33.254	10.35.33.127
34	Future	10.35.34.0	10.35.34.1 to 10.35.34.254	10.35.34.127
35	Future	10.35.35.0	10.35.35.1 to 10.35.35.254	10.35.35.127
36	Future	10.35.36.0	10.35.36.1 to 10.35.36.254	10.35.36.127
37	Future	10.35.37.0	10.35.37.1 to 10.35.37.254	10.35.37.127
38	Future	10.35.38.0	10.35.38.1 to 10.35.38.254	10.35.38.127
39	Future	10.35.39.0	10.35.39.1 to 10.35.39.254	10.35.39.127
40	Future	10.35.40.0	10.35.40.1 to 10.35.40.254	10.35.40.127
41	Future	10.35.41.0	10.35.41.1 to 10.35.41.254	10.35.41.255
42	Southwest DMZ	10.35.42.0	10.35.42.1 to 10.35.42.254	10.35.42.255
43	Future	10.35.43.0	10.35.43.1 to 10.35.43.254	10.35.43.255
44	Future	10.35.44.0	10.35.44.1 to 10.35.44.254	10.35.44.255
45	Johnson Controls	10.35.45.0	10.35.45.1 to 10.35.45.254	10.35.45.255
46	Future	10.35.46.0	10.35.46.1 to 10.35.46.254	10.35.46.255
47	Future	10.35.47.0	10.35.47.1 to 10.35.47.254	10.35.47.255
48	Future	10.35.48.0	10.35.48.1 to 10.35.48.254	10.35.48.255
49	Future	10.35.49.0	10.35.49.1 to 10.35.49.254	10.35.49.255
50	Future	10.35.50.0	10.35.50.1 to 10.35.50.254	10.35.50.255
51	Future	10.35.51.0	10.35.51.1 to 10.35.51.254	10.35.51.255
52	Future	10.35.52.0	10.35.52.1 to 10.35.52.254	10.35.52.255
53	Future	10.35.53.0	10.35.53.1 to 10.35.53.254	10.35.53.255
54	Future	10.35.54.0	10.35.54.1 to 10.35.54.254	10.35.54.255
55	Signs	10.35.55.0	10.35.55.1 to 10.35.55.254	10.35.55.255
56	Future	10.35.56.0	10.35.56.1 to 10.35.56.254	10.35.56.255
57	Future	10.35.57.0	10.35.57.1 to 10.35.57.254	10.35.57.255
58	Future	10.35.58.0	10.35.58.1 to 10.35.58.254	10.35.58.255
59	Future	10.35.59.0	10.35.59.1 to 10.35.59.254	10.35.59.255
60	Camera	10.35.60.0	10.35.60.1 to 10.35.60.254	10.35.60.255
61	Future	10.35.61.0	10.35.61.1 to 10.35.61.254	10.35.61.255
62	Future	10.35.62.0	10.35.62.1 to 10.35.62.254	10.35.62.255
63	Future	10.35.63.0	10.35.63.1 to 10.35.63.254	10.35.63.255
64	Core Uplinks	10.35.64.0	10.35.64.1 to 10.35.64.254	10.35.64.255
65	City Unrouted	10.35.65.0	10.35.65.1 to 10.35.65.254	10.35.65.255
66	Future	10.35.66.0	10.35.66.1 to 10.35.66.254	10.35.66.255
67	Future	10.35.67.0	10.35.67.1 to 10.35.67.254	10.35.67.255
68	Future	10.35.68.0	10.35.68.1 to 10.35.68.254	10.35.68.255
69	Future	10.35.69.0	10.35.69.1 to 10.35.69.254	10.35.69.255
70	Power Related	10.35.70.0	10.35.70.1 to 10.35.70.254	10.35.70.255
71	Future	10.35.71.0	10.35.71.1 to 10.35.71.254	10.35.71.255
72	Future	10.35.72.0	10.35.72.1 to 10.35.72.254	10.35.72.255
73	Future	10.35.73.0	10.35.73.1 to 10.35.73.254	10.35.73.255
74	Future	10.35.74.0	10.35.74.1 to 10.35.74.254	10.35.74.255
75	Future	10.35.75.0	10.35.75.1 to 10.35.75.254	10.35.75.255
76	Future	10.35.76.0	10.35.76.1 to 10.35.76.254	10.35.76.255
77	Future	10.35.77.0	10.35.77.1 to 10.35.77.254	10.35.77.255
78	Future	10.35.78.0	10.35.78.1 to 10.35.78.254	10.35.78.255
79	Future	10.35.79.0	10.35.79.1 to 10.35.79.254	10.35.79.255
80	Future	10.35.80.0	10.35.80.1 to 10.35.80.254	10.35.80.255
81	Future	10.35.81.0	10.35.81.1 to 10.35.81.254	10.35.81.255
82	Future	10.35.82.0	10.35.82.1 to 10.35.82.254	10.35.82.255
83	Future	10.35.83.0	10.35.83.1 to 10.35.83.254	10.35.83.255
84	Future	10.35.84.0	10.35.84.1 to 10.35.84.254	10.35.84.255
85	Virtual Cluster Heartbeats	10.35.85.0	10.35.85.1 to 10.35.85.254	10.35.85.255
86	Future	10.35.86.0	10.35.86.1 to 10.35.86.254	10.35.86.255
87	Future	10.35.87.0	10.35.87.1 to 10.35.87.254	10.35.87.255
88	Future	10.35.88.0	10.35.88.1 to 10.35.88.254	10.35.88.255
89	Future	10.35.89.0	10.35.89.1 to 10.35.89.254	10.35.89.255
90	Future	10.35.90.0	10.35.90.1 to 10.35.90.254	10.35.90.255
91	Future	10.35.91.0	10.35.91.1 to 10.35.91.254	10.35.91.255
92	Future	10.35.92.0	10.35.92.1 to 10.35.92.254	10.35.92.255
93	Future	10.35.93.0	10.35.93.1 to 10.35.93.254	10.35.93.255
94	Future	10.35.94.0	10.35.94.1 to 10.35.94.254	10.35.94.255
95	Future	10.35.95.0	10.35.95.1 to 10.35.95.254	10.35.95.255
96	Future	10.35.96.0	10.35.96.1 to 10.35.96.254	10.35.96.255
97	Future	10.35.97.0	10.35.97.1 to 10.35.97.254	10.35.97.255
98	Future	10.35.98.0	10.35.98.1 to 10.35.98.254	10.35.98.255
99	Future	10.35.99.0	10.35.99.1 to 10.35.99.254	10.35.99.255
100	Milltown	10.35.100.0	10.35.100.1 to 10.35.100.254	10.35.100.255
101	Hudson-Manchester	10.35.101.0	10.35.101.1 to 10.35.101.254	10.35.101.255
102	Ben and Jerry's	10.35.102.0	10.35.102.1 to 10.35.102.254	10.35.102.255
103	Worldwide Flight Svc	10.35.103.0	10.35.103.1 to 10.35.103.254	10.35.103.255
104	International RAM	10.35.104.0	10.35.104.1 to 10.35.104.254	10.35.104.255
105	Delta	10.35.105.0	10.35.105.1 to 10.35.105.254	10.35.105.255
106	Future	10.35.106.0	10.35.106.1 to 10.35.106.254	10.35.106.255
107	Future	10.35.107.0	10.35.107.1 to 10.35.107.254	10.35.107.255
108	Future	10.35.108.0	10.35.108.1 to 10.35.108.254	10.35.108.255
109	Future	10.35.109.0	10.35.109.1 to 10.35.109.254	10.35.109.255
110	Future	10.35.110.0	10.35.110.1 to 10.35.110.254	10.35.110.255
111	Future	10.35.111.0	10.35.111.1 to 10.35.111.254	10.35.111.255
112	Future	10.35.112.0	10.35.112.1 to 10.35.112.254	10.35.112.255
113	Future	10.35.113.0	10.35.113.1 to 10.35.113.254	10.35.113.255
114	Future	10.35.114.0	10.35.114.1 to 10.35.114.254	10.35.114.255
115	Future	10.35.115.0	10.35.115.1 to 10.35.115.254	10.35.115.255
116	Future	10.35.116.0	10.35.116.1 to 10.35.116.254	10.35.116.255
117	Future	10.35.117.0	10.35.117.1 to 10.35.117.254	10.35.117.255
118	Dunkin Donuts	10.35.118.0	10.35.118.1 to 10.35.118.254	10.35.118.255
119	Audax Technologies	10.35.119.0	10.35.119.1 to 10.35.119.254	10.35.119.255
120	VLAN 709	10.35.120.0	10.35.120.1 to 10.35.120.254	10.35.120.255
121	City Network	10.35.121.0	10.35.121.1 to 10.35.121.254	10.35.121.255
122	External Network	10.35.122.0	10.35.122.1 to 10.35.122.254	10.35.122.255
123	FDDI Default	10.35.123.0	10.35.123.1 to 10.35.123.254	10.35.123.255
124	FDDInet Default	10.35.124.0	10.35.124.1 to 10.35.124.254	10.35.124.255
125	TRBF Default	10.35.125.0	10.35.125.1 to 10.35.125.254	10.35.125.255
126	Future	10.35.126.0	10.35.126.1 to 10.35.126.254	10.35.126.255
127	Future	10.35.127.0	10.35.127.1 to 10.35.127.254	10.35.127.255
128	Core Uplinks	10.35.128.0	10.35.128.1 to 10.35.128.254	10.35.128.255
129	Future	10.35.129.0	10.35.129.1 to 10.35.129.254	10.35.129.255
130	Future	10.35.130.0	10.35.130.1 to 10.35.130.254	10.35.130.255
131	Future	10.35.131.0	10.35.131.1 to 10.35.131.254	10.35.131.255
132	Future	10.35.132.0	10.35.132.1 to 10.35.132.254	10.35.132.255
133	Future	10.35.133.0	10.35.133.1 to 10.35.133.254	10.35.133.255
134	Future	10.35.134.0	10.35.134.1 to 10.35.134.254	10.35.134.255
135	Future	10.35.135.0	10.35.135.1 to 10.35.135.254	10.35.135.255
136	Future	10.35.136.0	10.35.136.1 to 10.35.136.254	10.35.136.255
137	Future	10.35.137.0	10.35.137.1 to 10.35.137.254	10.35.137.255
138	Future	10.35.138.0	10.35.138.1 to 10.35.138.254	10.35.138.255
139	Future	10.35.139.0	10.35.139.1 to 10.35.139.254	10.35.139.255
140	Future	10.35.140.0	10.35.140.1 to 10.35.140.254	10.35.140.255
141	Future	10.35.141.0	10.35.141.1 to 10.35.141.254	10.35.141.255
142	Future	10.35.142.0	10.35.142.1 to 10.35.142.254	10.35.142.255
143	Future	10.35.143.0	10.35.143.1 to 10.35.143.254	10.35.143.255
144	Future	10.35.144.0	10.35.144.1 to 10.35.144.254	10.35.144.255
145	Future	10.35.145.0	10.35.145.1 to 10.35.145.254	10.35.145.255
146	Future	10.35.146.0	10.35.146.1 to 10.35.146.254	10.35.146.255
147	Future	10.35.147.0	10.35.147.1 to 10.35.147.254	10.35.147.255
148	Future	10.35.148.0	10.35.148.1 to 10.35.148.254	10.35.148.255
149	Future	10.35.149.0	10.35.149.1 to 10.35.149.254	10.35.149.255
150	Future	10.35.150.0	10.35.150.1 to 10.35.150.254	10.35.150.255
151	Future	10.35.151.0	10.35.151.1 to 10.35.151.254	10.35.151.255
152	Future	10.35.152.0	10.35.152.1 to 10.35.152.254	10.35.152.255
153	Future	10.35.153.0	10.35.153.1 to 10.35.153.254	10.35.153.255
154	Future	10.35.154.0	10.35.154.1 to 10.35.154.254	10.35.154.255
155	Future	10.35.155.0	10.35.155.1 to 10.35.155.254	10.35.155.255
156	Future	10.35.156.0	10.35.156.1 to 10.35.156.254	10.35.156.255
157	Future	10.35.157.0	10.35.157.1 to 10.35.157.254	10.35.157.255
158	Future	10.35.158.0	10.35.158.1 to 10.35.158.254	10.35.158.255
159	Future	10.35.159.0	10.35.159.1 to 10.35.159.254	10.35.159.255
160	Future	10.35.160.0	10.35.160.1 to 10.35.160.254	10.35.160.255
161	Future	10.35.161.0	10.35.161.1 to 10.35.161.254	10.35.161.255
162	Future	10.35.162.0	10.35.162.1 to 10.35.162.254	10.35.162.255
163	Future	10.35.163.0	10.35.163.1 to 10.35.163.254	10.35.163.255
164	Future	10.35.164.0	10.35.164.1 to 10.35.164.254	10.35.164.255
165	Future	10.35.165.0	10.35.165.1 to 10.35.165.254	10.35.165.255
166	Future	10.35.166.0	10.35.166.1 to 10.35.166.254	10.35.166.255
167	Future	10.35.167.0	10.35.167.1 to 10.35.167.254	10.35.167.255
168	Future	10.35.168.0	10.35.168.1 to 10.35.168.254	10.35.168.255
169	Future	10.35.169.0	10.35.169.1 to 10.35.169.254	10.35.169.255
170	Future	10.35.170.0	10.35.170.1 to 10.35.170.254	10.35.170.255
171	Future	10.35.171.0	10.35.171.1 to 10.35.171.254	10.35.171.255
172	Future	10.35.172.0	10.35.172.1 to 10.35.172.254	10.35.172.255
173	Future	10.35.173.0	10.35.173.1 to 10.35.173.254	10.35.173.255
174	Future	10.35.174.0	10.35.174.1 to 10.35.174.254	10.35.174.255
175	Future	10.35.175.0	10.35.175.1 to 10.35.175.254	10.35.175.255
176	Future	10.35.176.0	10.35.176.1 to 10.35.176.254	10.35.176.255
177	Future	10.35.177.0	10.35.177.1 to 10.35.177.254	10.35.177.255
178	Future	10.35.178.0	10.35.178.1 to 10.35.178.254	10.35.178.255
179	Future	10.35.179.0	10.35.179.1 to 10.35.179.254	10.35.179.255
180	Future	10.35.180.0	10.35.180.1 to 10.35.180.254	10.35.180.255
181	Future	10.35.181.0	10.35.181.1 to 10.35.181.254	10.35.181.255
182	Future	10.35.182.0	10.35.182.1 to 10.35.182.254	10.35.182.255
183	Future	10.35.183.0	10.35.183.1 to 10.35.183.254	10.35.183.255
184	Future	10.35.184.0	10.35.184.1 to 10.35.184.254	10.35.184.255
185	Future	10.35.185.0	10.35.185.1 to 10.35.185.254	10.35.185.255
186	Future	10.35.186.0	10.35.186.1 to 10.35.186.254	10.35.186.255
187	Future	10.35.187.0	10.35.187.1 to 10.35.187.254	10.35.187.255
188	Future	10.35.188.0	10.35.188.1 to 10.35.188.254	10.35.188.255
189	Future	10.35.189.0	10.35.189.1 to 10.35.189.254	10.35.189.255
190	Future	10.35.190.0	10.35.190.1 to 10.35.190.254	10.35.190.255
191	Future	10.35.191.0	10.35.191.1 to 10.35.191.254	10.35.191.255
192	Core Uplinks	10.35.192.0	10.35.192.1 to 10.35.192.254	10.35.192.255
193	Future	10.35.193.0	10.35.193.1 to 10.35.193.254	10.35.193.255
194	Future	10.35.194.0	10.35.194.1 to 10.35.194.254	10.35.194.255
195	Future	10.35.195.0	10.35.195.1 to 10.35.195.254	10.35.195.255
196	Future	10.35.196.0	10.35.196.1 to 10.35.196.254	10.35.196.255
197	Future	10.35.197.0	10.35.197.1 to 10.35.197.254	10.35.197.255
198	Future	10.35.198.0	10.35.198.1 to 10.35.198.254	10.35.198.255
199	Future	10.35.199.0	10.35.199.1 to 10.35.199.254	10.35.199.255
200	Future	10.35.200.0	10.35.200.1 to 10.35.200.254	10.35.200.255
201	Future	10.35.201.0	10.35.201.1 to 10.35.201.254	10.35.201.255
202	Future	10.35.202.0	10.35.202.1 to 10.35.202.254	10.35.202.255
203	Future	10.35.203.0	10.35.203.1 to 10.35.203.254	10.35.203.255
204	Future	10.35.204.0	10.35.204.1 to 10.35.204.254	10.35.204.255
205	Future	10.35.205.0	10.35.205.1 to 10.35.205.254	10.35.205.255
206	Future	10.35.206.0	10.35.206.1 to 10.35.206.254	10.35.206.255
207	Future	10.35.207.0	10.35.207.1 to 10.35.207.254	10.35.207.255
208	Future	10.35.208.0	10.35.208.1 to 10.35.208.254	10.35.208.255
209	Future	10.35.209.0	10.35.209.1 to 10.35.209.254	10.35.209.255
210	Future	10.35.210.0	10.35.210.1 to 10.35.210.254	10.35.210.255
211	Future	10.35.211.0	10.35.211.1 to 10.35.211.254	10.35.211.255
212	Future	10.35.212.0	10.35.212.1 to 10.35.212.254	10.35.212.255
213	Future	10.35.213.0	10.35.213.1 to 10.35.213.254	10.35.213.255
214	Future	10.35.214.0	10.35.214.1 to 10.35.214.254	10.35.214.255
215	Future	10.35.215.0	10.35.215.1 to 10.35.215.254	10.35.215.255
216	Future	10.35.216.0	10.35.216.1 to 10.35.216.254	10.35.216.255
217	Future	10.35.217.0	10.35.217.1 to 10.35.217.254	10.35.217.255
218	Future	10.35.218.0	10.35.218.1 to 10.35.218.254	10.35.218.255
219	Future	10.35.219.0	10.35.219.1 to 10.35.219.254	10.35.219.255
220	Future	10.35.220.0	10.35.220.1 to 10.35.220.254	10.35.220.255
221	Future	10.35.221.0	10.35.221.1 to 10.35.221.254	10.35.221.255
222	Future	10.35.222.0	10.35.222.1 to 10.35.222.254	10.35.222.255
223	Future	10.35.223.0	10.35.223.1 to 10.35.223.254	10.35.223.255
224	Future	10.35.224.0	10.35.224.1 to 10.35.224.254	10.35.224.255
225	Future	10.35.225.0	10.35.225.1 to 10.35.225.254	10.35.225.255
226	Future	10.35.226.0	10.35.226.1 to 10.35.226.254	10.35.226.255
227	Future	10.35.227.0	10.35.227.1 to 10.35.227.254	10.35.227.255
228	Future	10.35.228.0	10.35.228.1 to 10.35.228.254	10.35.228.255
229	Future	10.35.229.0	10.35.229.1 to 10.35.229.254	10.35.229.255
230	Future	10.35.230.0	10.35.230.1 to 10.35.230.254	10.35.230.255
231	Future	10.35.231.0	10.35.231.1 to 10.35.231.254	10.35.231.255
232	Future	10.35.232.0	10.35.232.1 to 10.35.232.254	10.35.232.255
233	Future	10.35.233.0	10.35.233.1 to 10.35.233.254	10.35.233.255
234	Future	10.35.234.0	10.35.234.1 to 10.35.234.254	10.35.234.255
235	Future	10.35.235.0	10.35.235.1 to 10.35.235.254	10.35.235.255
236	Future	10.35.236.0	10.35.236.1 to 10.35.236.254	10.35.236.255
237	Future	10.35.237.0	10.35.237.1 to 10.35.237.254	10.35.237.255
238	Future	10.35.238.0	10.35.238.1 to 10.35.238.254	10.35.238.255
239	Future	10.35.239.0	10.35.239.1 to 10.35.239.254	10.35.239.255
240	Future	10.35.240.0	10.35.240.1 to 10.35.240.254	10.35.240.255
241	Future	10.35.241.0	10.35.241.1 to 10.35.241.254	10.35.241.255
242	Future	10.35.242.0	10.35.242.1 to 10.35.242.254	10.35.242.255
243	Future	10.35.243.0	10.35.243.1 to 10.35.243.254	10.35.243.255
244	Future	10.35.244.0	10.35.244.1 to 10.35.244.254	10.35.244.255
245	Future	10.35.245.0	10.35.245.1 to 10.35.245.254	10.35.245.255
246	Future	10.35.246.0	10.35.246.1 to 10.35.246.254	10.35.246.255
247	Future	10.35.247.0	10.35.247.1 to 10.35.247.254	10.35.247.255
248	Future	10.35.248.0	10.35.248.1 to 10.35.248.254	10.35.248.255
249	Future	10.35.249.0	10.35.249.1 to 10.35.249.254	10.35.249.255
250	Future	10.35.250.0	10.35.250.1 to 10.35.250.254	10.35.250.255
251	Future	10.35.251.0	10.35.251.1 to 10.35.251.254	10.35.251.255
252	Future	10.35.252.0	10.35.252.1 to 10.35.252.254	10.35.252.255
253	Future	10.35.253.0	10.35.253.1 to 10.35.253.254	10.35.253.255
254	Network Management	10.35.254.0	10.35.254.1 to 10.35.254.254	10.35.254.255

EAST CAMPUS (36)

East Campus 10.36.0.0/24 MHT IP Addressing Plan

VLAN	Function	Network	Hosts	Broadcast
	Core Uplinks	10.36.0.0	10.36.0.1 to 10.36.0.254	10.36.0.255
1	Default	10.36.1.0	10.36.1.1 to 10.36.1.254	10.36.1.255
2	Admin	10.36.2.0	10.36.2.1 to 10.36.2.254	10.36.2.255
3	FIDS	10.36.3.0	10.36.3.1 to 10.36.3.254	10.36.3.255
4	Security	10.36.4.0	10.36.4.1 to 10.36.4.254	10.36.4.255
5	Security Camera	10.36.5.0	10.36.5.1 to 10.36.5.254	10.36.5.255
6	Taxi	10.36.6.0	10.36.6.1 to 10.36.6.254	10.36.6.255
7	HVAC	10.36.7.0	10.36.7.1 to 10.36.7.254	10.36.7.255
8	Comcast - Passenger	10.36.8.0	10.36.8.1 to 10.36.8.254	10.36.8.255
9	WiFi Private	10.36.9.0	10.36.9.1 to 10.36.9.254	10.36.9.255
10	Comcast - Personnel	10.36.10.0	10.36.10.1 to 10.36.10.254	10.36.10.127
11	iLO	10.36.11.0	10.36.11.1 to 10.36.11.254	10.36.11.255
12	Conveyor	10.36.12.0	10.36.12.1 to 10.36.12.254	10.36.12.255
13	Future	10.36.13.0	10.36.13.1 to 10.36.13.254	10.36.13.255
14	VMWare Vmotion	10.36.14.0	10.36.14.1 to 10.36.14.254	10.36.14.255
15	Wireless Infrastructure	10.36.15.0	10.36.15.1 to 10.36.15.126	10.36.15.127
16	Future	10.36.16.0	10.36.16.1 to 10.36.16.254	10.36.16.255
17	Future	10.36.17.0	10.36.17.1 to 10.36.17.254	10.36.17.255
18	Future	10.36.18.0	10.36.18.1 to 10.36.18.254	10.36.18.255
19	Future	10.36.19.0	10.36.19.1 to 10.36.19.254	10.36.19.255
20	MHT Desktops	10.36.20.0	10.36.20.1 to 10.36.20.254	10.36.20.255
21	Future	10.36.21.0	10.36.21.1 to 10.36.21.254	10.36.21.255
22	MHT Users	10.36.22.0	10.36.22.1 to 10.36.22.126	10.36.22.127
23	Future	10.36.23.0	10.36.23.1 to 10.36.23.254	10.36.23.255
24	MHT Accounting Users	10.36.24.0	10.36.24.1 to 10.36.24.254	10.36.24.255
25	Admin Users	10.36.25.0	10.36.25.1 to 10.36.25.254	10.36.25.255
26	MHT Wireless Authentical	10.36.26.0	10.36.26.1 to 10.36.26.254	10.36.26.255
27	LEO Users	10.36.27.0	10.36.27.1 to 10.36.27.254	10.36.27.255
28	MHT Building Maintenan	10.36.28.0	10.36.28.1 to 10.36.28.254	10.36.28.255
29	MHT TSA Users	10.36.29.0	10.36.29.1 to 10.36.29.254	10.36.29.255
30	MHT Printers	10.36.30.0	10.36.30.1 to 10.36.30.254	10.36.30.255
31	MHT Security Users	10.36.31.0	10.36.31.1 to 10.36.31.254	10.36.31.127
32	MHT Fingerprint System	10.36.32.0	10.36.32.1 to 10.36.32.254	10.36.32.127
33	Guest	10.36.33.0	10.36.33.1 to 10.36.33.254	10.36.33.127
34	Future	10.36.34.0	10.36.34.1 to 10.36.34.254	10.36.34.127
35	Future	10.36.35.0	10.36.35.1 to 10.36.35.254	10.36.35.127
36	Future	10.36.36.0	10.36.36.1 to 10.36.36.254	10.36.36.127
37	Future	10.36.37.0	10.36.37.1 to 10.36.37.254	10.36.37.127
38	Future	10.36.38.0	10.36.38.1 to 10.36.38.254	10.36.38.127
39	Future	10.36.39.0	10.36.39.1 to 10.36.39.254	10.36.39.127
40	Future	10.36.40.0	10.36.40.1 to 10.36.40.254	10.36.40.127
41	Future	10.36.41.0	10.36.41.1 to 10.36.41.254	10.36.41.255
42	Southwest DMZ	10.36.42.0	10.36.42.1 to 10.36.42.254	10.36.42.255
43	Future	10.36.43.0	10.36.43.1 to 10.36.43.254	10.36.43.255
44	Future	10.36.44.0	10.36.44.1 to 10.36.44.254	10.36.44.255
45	Johnson Controls	10.36.45.0	10.36.45.1 to 10.36.45.254	10.36.45.255
46	Future	10.36.46.0	10.36.46.1 to 10.36.46.254	10.36.46.255
47	Future	10.36.47.0	10.36.47.1 to 10.36.47.254	10.36.47.255
48	Future	10.36.48.0	10.36.48.1 to 10.36.48.254	10.36.48.255
49	Future	10.36.49.0	10.36.49.1 to 10.36.49.254	10.36.49.255
50	Future	10.36.50.0	10.36.50.1 to 10.36.50.254	10.36.50.255
51	Future	10.36.51.0	10.36.51.1 to 10.36.51.254	10.36.51.255
52	Future	10.36.52.0	10.36.52.1 to 10.36.52.254	10.36.52.255
53	Future	10.36.53.0	10.36.53.1 to 10.36.53.254	10.36.53.255
54	Future	10.36.54.0	10.36.54.1 to 10.36.54.254	10.36.54.255
55	Signs	10.36.55.0	10.36.55.1 to 10.36.55.254	10.36.55.255
56	Future	10.36.56.0	10.36.56.1 to 10.36.56.254	10.36.56.255
57	Future	10.36.57.0	10.36.57.1 to 10.36.57.254	10.36.57.255
58	Future	10.36.58.0	10.36.58.1 to 10.36.58.254	10.36.58.255
59	Future	10.36.59.0	10.36.59.1 to 10.36.59.254	10.36.59.255
60	Camera	10.36.60.0	10.36.60.1 to 10.36.60.254	10.36.60.255
61	Future	10.36.61.0	10.36.61.1 to 10.36.61.254	10.36.61.255
62	Future	10.36.62.0	10.36.62.1 to 10.36.62.254	10.36.62.255
63	Future	10.36.63.0	10.36.63.1 to 10.36.63.254	10.36.63.255
64	Core Uplinks	10.36.64.0	10.36.64.1 to 10.36.64.254	10.36.64.255
65	City Unrouted	10.36.65.0	10.36.65.1 to 10.36.65.254	10.36.65.255
66	Future	10.36.66.0	10.36.66.1 to 10.36.66.254	10.36.66.255
67	Future	10.36.67.0	10.36.67.1 to 10.36.67.254	10.36.67.255
68	Future	10.36.68.0	10.36.68.1 to 10.36.68.254	10.36.68.255
69	Future	10.36.69.0	10.36.69.1 to 10.36.69.254	10.36.69.255
70	Power Related	10.36.70.0	10.36.70.1 to 10.36.70.254	10.36.70.255
71	Future	10.36.71.0	10.36.71.1 to 10.36.71.254	10.36.71.255
72	Future	10.36.72.0	10.36.72.1 to 10.36.72.254	10.36.72.255
73	Future	10.36.73.0	10.36.73.1 to 10.36.73.254	10.36.73.255
74	Future	10.36.74.0	10.36.74.1 to 10.36.74.254	10.36.74.255
75	Future	10.36.75.0	10.36.75.1 to 10.36.75.254	10.36.75.255
76	Future	10.36.76.0	10.36.76.1 to 10.36.76.254	10.36.76.255
77	Future	10.36.77.0	10.36.77.1 to 10.36.77.254	10.36.77.255
78	Future	10.36.78.0	10.36.78.1 to 10.36.78.254	10.36.78.255
79	Future	10.36.79.0	10.36.79.1 to 10.36.79.254	10.36.79.255
80	Future	10.36.80.0	10.36.80.1 to 10.36.80.254	10.36.80.255
81	Future	10.36.81.0	10.36.81.1 to 10.36.81.254	10.36.81.255
82	Future	10.36.82.0	10.36.82.1 to 10.36.82.254	10.36.82.255
83	Future	10.36.83.0	10.36.83.1 to 10.36.83.254	10.36.83.255
84	Future	10.36.84.0	10.36.84.1 to 10.36.84.254	10.36.84.255
85	Virtual Cluster Heartbeats	10.36.85.0	10.36.85.1 to 10.36.85.254	10.36.85.255
86	Future	10.36.86.0	10.36.86.1 to 10.36.86.254	10.36.86.255
87	Future	10.36.87.0	10.36.87.1 to 10.36.87.254	10.36.87.255
88	Future	10.36.88.0	10.36.88.1 to 10.36.88.254	10.36.88.255
89	Future	10.36.89.0	10.36.89.1 to 10.36.89.254	10.36.89.255
90	Future	10.36.90.0	10.36.90.1 to 10.36.90.254	10.36.90.255
91	Future	10.36.91.0	10.36.91.1 to 10.36.91.254	10.36.91.255
92	Future	10.36.92.0	10.36.92.1 to 10.36.92.254	10.36.92.255
93	Future	10.36.93.0	10.36.93.1 to 10.36.93.254	10.36.93.255
94	Future	10.36.94.0	10.36.94.1 to 10.36.94.254	10.36.94.255
95	Future	10.36.95.0	10.36.95.1 to 10.36.95.254	10.36.95.255
96	Future	10.36.96.0	10.36.96.1 to 10.36.96.254	10.36.96.255
97	Future	10.36.97.0	10.36.97.1 to 10.36.97.254	10.36.97.255
98	Future	10.36.98.0	10.36.98.1 to 10.36.98.254	10.36.98.255
99	Future	10.36.99.0	10.36.99.1 to 10.36.99.254	10.36.99.255
100	Milltown	10.36.100.0	10.36.100.1 to 10.36.100.254	10.36.100.255
101	Hudson-Manchester	10.36.101.0	10.36.101.1 to 10.36.101.254	10.36.101.255
102	Ben and Jerry's	10.36.102.0	10.36.102.1 to 10.36.102.254	10.36.102.255
103	Worldwide Flight Svc	10.36.103.0	10.36.103.1 to 10.36.103.254	10.36.103.255
104	International RAM	10.36.104.0	10.36.104.1 to 10.36.104.254	10.36.104.255
105	Delta	10.36.105.0	10.36.105.1 to 10.36.105.254	10.36.105.255
106	Future	10.36.106.0	10.36.106.1 to 10.36.106.254	10.36.106.255
107	Future	10.36.107.0	10.36.107.1 to 10.36.107.254	10.36.107.255
108	Future	10.36.108.0	10.36.108.1 to 10.36.108.254	10.36.108.255
109	Future	10.36.109.0	10.36.109.1 to 10.36.109.254	10.36.109.255
110	Future	10.36.110.0	10.36.110.1 to 10.36.110.254	10.36.110.255
111	Future	10.36.111.0	10.36.111.1 to 10.36.111.254	10.36.111.255
112	Future	10.36.112.0	10.36.112.1 to 10.36.112.254	10.36.112.255
113	Future	10.36.113.0	10.36.113.1 to 10.36.113.254	10.36.113.255
114	Future	10.36.114.0	10.36.114.1 to 10.36.114.254	10.36.114.255
115	Future	10.36.115.0	10.36.115.1 to 10.36.115.254	10.36.115.255
116	Future	10.36.116.0	10.36.116.1 to 10.36.116.254	10.36.116.255
117	Future	10.36.117.0	10.36.117.1 to 10.36.117.254	10.36.117.255
118	Dunkin Donuts	10.36.118.0	10.36.118.1 to 10.36.118.254	10.36.118.255
119	Audax Technologies	10.36.119.0	10.36.119.1 to 10.36.119.254	10.36.119.255
120	VLAN 709	10.36.120.0	10.36.120.1 to 10.36.120.254	10.36.120.255
121	City Network	10.36.121.0	10.36.121.1 to 10.36.121.254	10.36.121.255
122	External Network	10.36.122.0	10.36.122.1 to 10.36.122.254	10.36.122.255
123	FDDI Default	10.36.123.0	10.36.123.1 to 10.36.123.254	10.36.123.255
124	FDDInet Default	10.36.124.0	10.36.124.1 to 10.36.124.254	10.36.124.255
125	TRBF Default	10.36.125.0	10.36.125.1 to 10.36.125.254	10.36.125.255
126	Future	10.36.126.0	10.36.126.1 to 10.36.126.254	10.36.126.255
127	Future	10.36.127.0	10.36.127.1 to 10.36.127.254	10.36.127.255
	Core Uplinks	10.36.128.0	10.36.128.1 to 10.36.128.254	10.36.128.255
129	Future	10.36.129.0	10.36.129.1 to 10.36.129.254	10.36.129.255
130	Future	10.36.130.0	10.36.130.1 to 10.36.130.254	10.36.130.255
131	Future	10.36.131.0	10.36.131.1 to 10.36.131.254	10.36.131.255
132	Future	10.36.132.0	10.36.132.1 to 10.36.132.254	10.36.132.255
133	Future	10.36.133.0	10.36.133.1 to 10.36.133.254	10.36.133.255
134	Future	10.36.134.0	10.36.134.1 to 10.36.134.254	10.36.134.255
135	Future	10.36.135.0	10.36.135.1 to 10.36.135.254	10.36.135.255
136	Future	10.36.136.0	10.36.136.1 to 10.36.136.254	10.36.136.255
137	Future	10.36.137.0	10.36.137.1 to 10.36.137.254	10.36.137.255
138	Future	10.36.138.0	10.36.138.1 to 10.36.138.254	10.36.138.255
139	Future	10.36.139.0	10.36.139.1 to 10.36.139.254	10.36.139.255
140	Future	10.36.140.0	10.36.140.1 to 10.36.140.254	10.36.140.255
141	Future	10.36.141.0	10.36.141.1 to 10.36.141.254	10.36.141.255
142	Future	10.36.142.0	10.36.142.1 to 10.36.142.254	10.36.142.255
143	Future	10.36.143.0	10.36.143.1 to 10.36.143.254	10.36.143.255
144	Future	10.36.144.0	10.36.144.1 to 10.36.144.254	10.36.144.255
145	Future	10.36.145.0	10.36.145.1 to 10.36.145.254	10.36.145.255
146	Future	10.36.146.0	10.36.146.1 to 10.36.146.254	10.36.146.255
147	Future	10.36.147.0	10.36.147.1 to 10.36.147.254	10.36.147.255
148	Future	10.36.148.0	10.36.148.1 to 10.36.148.254	10.36.148.255
149	Future	10.36.149.0	10.36.149.1 to 10.36.149.254	10.36.149.255
150	Future	10.36.150.0	10.36.150.1 to 10.36.150.254	10.36.150.255
151	Future	10.36.151.0	10.36.151.1 to 10.36.151.254	10.36.151.255
152	Future	10.36.152.0	10.36.152.1 to 10.36.152.254	10.36.152.255
153	Future	10.36.153.0	10.36.153.1 to 10.36.153.254	10.36.153.255
154	Future	10.36.154.0	10.36.154.1 to 10.36.154.254	10.36.154.255
155	Future	10.36.155.0	10.36.155.1 to 10.36.155.254	10.36.155.255
156	Future	10.36.156.0	10.36.156.1 to 10.36.156.254	10.36.156.255
157	Future	10.36.157.0	10.36.157.1 to 10.36.157.254	10.36.157.255
158	Future	10.36.158.0	10.36.158.1 to 10.36.158.254	10.36.158.255
159	Future	10.36.159.0	10.36.159.1 to 10.36.159.254	10.36.159.255
160	Future	10.36.160.0	10.36.160.1 to 10.36.160.254	10.36.160.255
161	Future	10.36.161.0	10.36.161.1 to 10.36.161.254	10.36.161.255
162	Future	10.36.162.0	10.36.162.1 to 10.36.162.254	10.36.162.255
163	Future	10.36.163.0	10.36.163.1 to 10.36.163.254	10.36.163.255
164	Future	10.36.164.0	10.36.164.1 to 10.36.164.254	10.36.164.255
165	Future	10.36.165.0	10.36.165.1 to 10.36.165.254	10.36.165.255
166	Future	10.36.166.0	10.36.166.1 to 10.36.166.254	10.36.166.255
167	Future	10.36.167.0	10.36.167.1 to 10.36.167.254	10.36.167.255
168	Future	10.36.168.0	10.36.168.1 to 10.36.168.254	10.36.168.255
169	Future	10.36.169.0	10.36.169.1 to 10.36.169.254	10.36.169.255
170	Future	10.36.170.0	10.36.170.1 to 10.36.170.254	10.36.170.255
171	Future	10.36.171.0	10.36.171.1 to 10.36.171.254	10.36.171.255
172	Future	10.36.172.0	10.36.172.1 to 10.36.172.254	10.36.172.255
173	Future	10.36.173.0	10.36.173.1 to 10.36.173.254	10.36.173.255
174	Future	10.36.174.0	10.36.174.1 to 10.36.174.254	10.36.174.255
175	Future	10.36.175.0	10.36.175.1 to 10.36.175.254	10.36.175.255
176	Future	10.36.176.0	10.36.176.1 to 10.36.176.254	10.36.176.255
177	Future	10.36.177.0	10.36.177.1 to 10.36.177.254	10.36.177.255
178	Future	10.36.178.0	10.36.178.1 to 10.36.178.254	10.36.178.255
179	Future	10.36.179.0	10.36.179.1 to 10.36.179.254	10.36.179.255
180	Future	10.36.180.0	10.36.180.1 to 10.36.180.254	10.36.180.255
181	Future	10.36.181.0	10.36.181.1 to 10.36.181.254	10.36.181.255
182	Future	10.36.182.0	10.36.182.1 to 10.36.182.254	10.36.182.255
183	Future	10.36.183.0	10.36.183.1 to 10.36.183.254	10.36.183.255
184	Future	10.36.184.0	10.36.184.1 to 10.36.184.254	10.36.184.255
185	Future	10.36.185.0	10.36.185.1 to 10.36.185.254	10.36.185.255
186	Future	10.36.186.0	10.36.186.1 to 10.36.186.254	10.36.186.255
187	Future	10.36.187.0	10.36.187.1 to 10.36.187.254	10.36.187.255
188	Future	10.36.188.0	10.36.188.1 to 10.36.188.254	10.36.188.255
189	Future	10.36.189.0	10.36.189.1 to 10.36.189.254	10.36.189.255
190	Future	10.36.190.0	10.36.190.1 to 10.36.190.254	10.36.190.255
191	Future	10.36.191.0	10.36.191.1 to 10.36.191.254	10.36.191.255
	Core Uplinks	10.36.192.0	10.36.192.1 to 10.36.192.254	10.36.192.255
193	Future	10.36.193.0	10.36.193.1 to 10.36.193.254	10.36.193.255
194	Future	10.36.194.0	10.36.194.1 to 10.36.194.254	10.36.194.255
195	Future	10.36.195.0	10.36.195.1 to 10.36.195.254	10.36.195.255
196	Future	10.36.196.0	10.36.196.1 to 10.36.196.254	10.36.196.255
197	Future	10.36.197.0	10.36.197.1 to 10.36.197.254	10.36.197.255
198	Future	10.36.198.0	10.36.198.1 to 10.36.198.254	10.36.198.255
199	Future	10.36.199.0	10.36.199.1 to 10.36.199.254	10.36.199.255
200	Future	10.36.200.0	10.36.200.1 to 10.36.200.254	10.36.200.255
201	Future	10.36.201.0	10.36.201.1 to 10.36.201.254	10.36.201.255
202	Future	10.36.202.0	10.36.202.1 to 10.36.202.254	10.36.202.255
203	Future	10.36.203.0	10.36.203.1 to 10.36.203.254	10.36.203.255
204	Future	10.36.204.0	10.36.204.1 to 10.36.204.254	10.36.204.255
205	Future	10.36.205.0	10.36.205.1 to 10.36.205.254	10.36.205.255
206	Future	10.36.206.0	10.36.206.1 to 10.36.206.254	10.36.206.255
207	Future	10.36.207.0	10.36.207.1 to 10.36.207.254	10.36.207.255
208	Future	10.36.208.0	10.36.208.1 to 10.36.208.254	10.36.208.255
209	Future	10.36.209.0	10.36.209.1 to 10.36.209.254	10.36.209.255
210	Future	10.36.210.0	10.36.210.1 to 10.36.210.254	10.36.210.255
211	Future	10.36.211.0	10.36.211.1 to 10.36.211.254	10.36.211.255
212	Future	10.36.212.0	10.36.212.1 to 10.36.212.254	10.36.212.255
213	Future	10.36.213.0	10.36.213.1 to 10.36.213.254	10.36.213.255
214	Future	10.36.214.0	10.36.214.1 to 10.36.214.254	10.36.214.255
215	Future	10.36.215.0	10.36.215.1 to 10.36.215.254	10.36.215.255
216	Future	10.36.216.0	10.36.216.1 to 10.36.216.254	10.36.216.255
217	Future	10.36.217.0	10.36.217.1 to 10.36.217.254	10.36.217.255
218	Future	10.36.218.0	10.36.218.1 to 10.36.218.254	10.36.218.255
219	Future	10.36.219.0	10.36.219.1 to 10.36.219.254	10.36.219.255
220	Future	10.36.220.0	10.36.220.1 to 10.36.220.254	10.36.220.255
221	Future	10.36.221.0	10.36.221.1 to 10.36.221.254	10.36.221.255
222	Future	10.36.222.0	10.36.222.1 to 10.36.222.254	10.36.222.255
223	Future	10.36.223.0	10.36.223.1 to 10.36.223.254	10.36.223.255
224	Future	10.36.224.0	10.36.224.1 to 10.36.224.254	10.36.224.255
225	Future	10.36.225.0	10.36.225.1 to 10.36.225.254	10.36.225.255
226	Future	10.36.226.0	10.36.226.1 to 10.36.226.254	10.36.226.255
227	Future	10.36.227.0	10.36.227.1 to 10.36.227.254	10.36.227.255
228	Future	10.36.228.0	10.36.228.1 to 10.36.228.254	10.36.228.255
229	Future	10.36.229.0	10.36.229.1 to 10.36.229.254	10.36.229.255
230	Future	10.36.230.0	10.36.230.1 to 10.36.230.254	10.36.230.255
231	Future	10.36.231.0	10.36.231.1 to 10.36.231.254	10.36.231.255
232	Future	10.36.232.0	10.36.232.1 to 10.36.232.254	10.36.232.255
233	Future	10.36.233.0	10.36.233.1 to 10.36.233.254	10.36.233.255
234	Future	10.36.234.0	10.36.234.1 to 10.36.234.254	10.36.234.255
235	Future	10.36.235.0	10.36.235.1 to 10.36.235.254	10.36.235.255
236	Future	10.36.236.0	10.36.236.1 to 10.36.236.254	10.36.236.255
237	Future	10.36.237.0	10.36.237.1 to 10.36.237.254	10.36.237.255
238	Future	10.36.238.0	10.36.238.1 to 10.36.238.254	10.36.238.255
239	Future	10.36.239.0	10.36.239.1 to 10.36.239.254	10.36.239.255
240	Future	10.36.240.0	10.36.240.1 to 10.36.240.254	10.36.240.255
241	Future	10.36.241.0	10.36.241.1 to 10.36.241.254	10.36.241.255
242	Future	10.36.242.0	10.36.242.1 to 10.36.242.254	10.36.242.255
243	Future	10.36.243.0	10.36.243.1 to 10.36.243.254	10.36.243.255
244	Future	10.36.244.0	10.36.244.1 to 10.36.244.254	10.36.244.255
245	Future	10.36.245.0	10.36.245.1 to 10.36.245.254	10.36.245.255
246	Future	10.36.246.0	10.36.246.1 to 10.36.246.254	10.36.246.255
247	Future	10.36.247.0	10.36.247.1 to 10.36.247.254	10.36.247.255
248	Future	10.36.248.0	10.36.248.1 to 10.36.248.254	10.36.248.255
249	Future	10.36.249.0	10.36.249.1 to 10.36.249.254	10.36.249.255
250	Future	10.36.250.0	10.36.250.1 to 10.36.250.254	10.36.250.255
251	Future	10.36.251.0	10.36.251.1 to 10.36.251.254	10.36.251.255
252	Future	10.36.252.0	10.36.252.1 to 10.36.252.254	10.36.252.255
253	Future	10.36.253.0	10.36.253.1 to 10.36.253.254	10.36.253.255
254	Network Management	10.36.254.0	10.36.254.1 to 10.36.254.254	10.36.254.255

WEST CAMPUS (37)

West Campus					10.37.0.0/24	MHT IP Addressing Plan															
VLAN	Function	Network	Hosts	Broadcast	VLAN	Function	Network	Hosts	Broadcast		VLAN	Function	Network	Hosts	Broadcast		VLAN	Function	Network	Hosts	Broadcast
	Core Uplinks	10.37.0.0	10.37.0.1 to 10.37.0.254	10.37.0.255		Core Uplinks	10.37.64.0	10.37.64.1 to 10.37.64.254	10.37.64.255			Core Uplinks	10.37.128.0	10.37.128.1 to 10.37.128.254	10.37.128.255			Core Uplinks	10.37.192.0	10.37.192.1 to 10.37.192.254	10.37.192.255
1	Default	10.37.1.0	10.37.1.1 to 10.37.1.254	10.37.1.255	65	City Unrouted	10.37.65.0	10.37.65.1 to 10.37.65.254	10.37.65.255		129	Future	10.37.129.0	10.37.129.1 to 10.37.129.254	10.37.129.255		193	Future	10.37.193.0	10.37.193.1 to 10.37.193.254	10.37.193.255
2	Admin	10.37.2.0	10.37.2.1 to 10.37.2.254	10.37.2.255	66	Future	10.37.66.0	10.37.66.1 to 10.37.66.254	10.37.66.255		130	Future	10.37.130.0	10.37.130.1 to 10.37.130.254	10.37.130.255		194	Future	10.37.194.0	10.37.194.1 to 10.37.194.254	10.37.194.255
3	FIDS	10.37.3.0	10.37.3.1 to 10.37.3.254	10.37.3.255	67	Future	10.37.67.0	10.37.67.1 to 10.37.67.254	10.37.67.255		131	Future	10.37.131.0	10.37.131.1 to 10.37.131.254	10.37.131.255		195	Future	10.37.195.0	10.37.195.1 to 10.37.195.254	10.37.195.255
4	Security	10.37.4.0	10.37.4.1 to 10.37.4.254	10.37.4.255	68	Future	10.37.68.0	10.37.68.1 to 10.37.68.254	10.37.68.255		132	Future	10.37.132.0	10.37.132.1 to 10.37.132.254	10.37.132.255		196	Future	10.37.196.0	10.37.196.1 to 10.37.196.254	10.37.196.255
5	Security Camera	10.37.5.0	10.37.5.1 to 10.37.5.254	10.37.5.255	69	Future	10.37.69.0	10.37.69.1 to 10.37.69.254	10.37.69.255		133	Future	10.37.133.0	10.37.133.1 to 10.37.133.254	10.37.133.255		197	Future	10.37.197.0	10.37.197.1 to 10.37.197.254	10.37.197.255
6	Taxi	10.37.6.0	10.37.6.1 to 10.37.6.254	10.37.6.255	70	Power Related	10.37.70.0	10.37.70.1 to 10.37.70.254	10.37.70.255		134	Future	10.37.134.0	10.37.134.1 to 10.37.134.254	10.37.134.255		198	Future	10.37.198.0	10.37.198.1 to 10.37.198.254	10.37.198.255
7	HVAC	10.37.7.0	10.37.7.1 to 10.37.7.254	10.37.7.255	71	Future	10.37.71.0	10.37.71.1 to 10.37.71.254	10.37.71.255		135	Future	10.37.135.0	10.37.135.1 to 10.37.135.254	10.37.135.255		199	Future	10.37.199.0	10.37.199.1 to 10.37.199.254	10.37.199.255
8	Comcast - Passenger	10.37.8.0	10.37.8.1 to 10.37.8.254	10.37.8.255	72	Future	10.37.72.0	10.37.72.1 to 10.37.72.254	10.37.72.255		136	Future	10.37.136.0	10.37.136.1 to 10.37.136.254	10.37.136.255		200	Future	10.37.200.0	10.37.200.1 to 10.37.200.254	10.37.200.255
9	WiFi Private	10.37.9.0	10.37.9.1 to 10.37.9.254	10.37.9.255	73	Future	10.37.73.0	10.37.73.1 to 10.37.73.254	10.37.73.255		137	Future	10.37.137.0	10.37.137.1 to 10.37.137.254	10.37.137.255		201	Future	10.37.201.0	10.37.201.1 to 10.37.201.254	10.37.201.255
10	Comcast - Personnel	10.37.10.0	10.37.10.1 to 10.37.10.254	10.37.10.127	74	Future	10.37.74.0	10.37.74.1 to 10.37.74.254	10.37.74.255		138	Future	10.37.138.0	10.37.138.1 to 10.37.138.254	10.37.138.255		202	Future	10.37.202.0	10.37.202.1 to 10.37.202.254	10.37.202.255
11	iLO	10.37.11.0	10.37.11.1 to 10.37.11.254	10.37.11.255	75	Future	10.37.75.0	10.37.75.1 to 10.37.75.254	10.37.75.255		139	Future	10.37.139.0	10.37.139.1 to 10.37.139.254	10.37.139.255		203	Future	10.37.203.0	10.37.203.1 to 10.37.203.254	10.37.203.255
12	Conveyor	10.37.12.0	10.37.12.1 to 10.37.12.254	10.37.12.255	76	Future	10.37.76.0	10.37.76.1 to 10.37.76.254	10.37.76.255		140	Future	10.37.140.0	10.37.140.1 to 10.37.140.254	10.37.140.255		204	Future	10.37.204.0	10.37.204.1 to 10.37.204.254	10.37.204.255
13	Future	10.37.13.0	10.37.13.1 to 10.37.13.254	10.37.13.255	77	Future	10.37.77.0	10.37.77.1 to 10.37.77.254	10.37.77.255		141	Future	10.37.141.0	10.37.141.1 to 10.37.141.254	10.37.141.255		205	Future	10.37.205.0	10.37.205.1 to 10.37.205.254	10.37.205.255
14	VMWare Vmotion	10.37.14.0	10.37.14.1 to 10.37.14.254	10.37.14.255	78	Future	10.37.78.0	10.37.78.1 to 10.37.78.254	10.37.78.255		142	Future	10.37.142.0	10.37.142.1 to 10.37.142.254	10.37.142.255		206	Future	10.37.206.0	10.37.206.1 to 10.37.206.254	10.37.206.255
15	Wireless Infrastructure	10.37.15.0	10.37.15.1 to 10.37.15.126	10.37.15.127	79	Future	10.37.79.0	10.37.79.1 to 10.37.79.254	10.37.79.255		143	Future	10.37.143.0	10.37.143.1 to 10.37.143.254	10.37.143.255		207	Future	10.37.207.0	10.37.207.1 to 10.37.207.254	10.37.207.255
16	Future	10.37.16.0	10.37.16.1 to 10.37.16.254	10.37.16.255	80	Future	10.37.80.0	10.37.80.1 to 10.37.80.254	10.37.80.255		144	Future	10.37.144.0	10.37.144.1 to 10.37.144.254	10.37.144.255		208	Future	10.37.208.0	10.37.208.1 to 10.37.208.254	10.37.208.255
17	Future	10.37.17.0	10.37.17.1 to 10.37.17.254	10.37.17.255	81	Future	10.37.81.0	10.37.81.1 to 10.37.81.254	10.37.81.255		145	Future	10.37.145.0	10.37.145.1 to 10.37.145.254	10.37.145.255		209	Future	10.37.209.0	10.37.209.1 to 10.37.209.254	10.37.209.255
18	Future	10.37.18.0	10.37.18.1 to 10.37.18.254	10.37.18.255	82	Future	10.37.82.0	10.37.82.1 to 10.37.82.254	10.37.82.255		146	Future	10.37.146.0	10.37.146.1 to 10.37.146.254	10.37.146.255		210	Future	10.37.210.0	10.37.210.1 to 10.37.210.254	10.37.210.255
19	Future	10.37.19.0	10.37.19.1 to 10.37.19.254	10.37.19.255	83	Future	10.37.83.0	10.37.83.1 to 10.37.83.254	10.37.83.255		147	Future	10.37.147.0	10.37.147.1 to 10.37.147.254	10.37.147.255		211	Future	10.37.211.0	10.37.211.1 to 10.37.211.254	10.37.211.255
20	MHT Desktops	10.37.20.0	10.37.20.1 to 10.37.20.254	10.37.20.255	84	Future	10.37.84.0	10.37.84.1 to 10.37.84.254	10.37.84.255		148	Future	10.37.148.0	10.37.148.1 to 10.37.148.254	10.37.148.255		212	Future	10.37.212.0	10.37.212.1 to 10.37.212.254	10.37.212.255
21	Future	10.37.21.0	10.37.21.1 to 10.37.21.254	10.37.21.255	85	Virtual Cluster Heartbeats	10.37.85.0	10.37.85.1 to 10.37.85.254	10.37.85.255		149	Future	10.37.149.0	10.37.149.1 to 10.37.149.254	10.37.149.255		213	Future	10.37.213.0	10.37.213.1 to 10.37.213.254	10.37.213.255
22	MHT Users	10.37.22.0	10.37.22.1 to 10.37.22.126	10.37.22.127	86	Future	10.37.86.0	10.37.86.1 to 10.37.86.254	10.37.86.255		150	Future	10.37.150.0	10.37.150.1 to 10.37.150.254	10.37.150.255		214	Future	10.37.214.0	10.37.214.1 to 10.37.214.254	10.37.214.255
23	Future	10.37.23.0	10.37.23.1 to 10.37.23.254	10.37.23.255	87	Future	10.37.87.0	10.37.87.1 to 10.37.87.254	10.37.87.255		151	Future	10.37.151.0	10.37.151.1 to 10.37.151.254	10.37.151.255		215	Future	10.37.215.0	10.37.215.1 to 10.37.215.254	10.37.215.255
24	MHT Accounting Users	10.37.24.0	10.37.24.1 to 10.37.24.254	10.37.24.255	88	Future	10.37.88.0	10.37.88.1 to 10.37.88.254	10.37.88.255		152	Future	10.37.152.0	10.37.152.1 to 10.37.152.254	10.37.152.255		216	Future	10.37.216.0	10.37.216.1 to 10.37.216.254	10.37.216.255
25	Admin Users	10.37.25.0	10.37.25.1 to 10.37.25.254	10.37.25.255	89	Future	10.37.89.0	10.37.89.1 to 10.37.89.254	10.37.89.255		153	Future	10.37.153.0	10.37.153.1 to 10.37.153.254	10.37.153.255		217	Future	10.37.217.0	10.37.217.1 to 10.37.217.254	10.37.217.255
26	MHT Wireless Authenticat	10.37.26.0	10.37.26.1 to 10.37.26.254	10.37.26.255	90	Future	10.37.90.0	10.37.90.1 to 10.37.90.254	10.37.90.255		154	Future	10.37.154.0	10.37.154.1 to 10.37.154.254	10.37.154.255		218	Future	10.37.218.0	10.37.218.1 to 10.37.218.254	10.37.218.255
27	LEO Users	10.37.27.0	10.37.27.1 to 10.37.27.254	10.37.27.255	91	Future	10.37.91.0	10.37.91.1 to 10.37.91.254	10.37.91.255		155	Future	10.37.155.0	10.37.155.1 to 10.37.155.254	10.37.155.255		219	Future	10.37.219.0	10.37.219.1 to 10.37.219.254	10.37.219.255
28	MHT Building Maintenan	10.37.28.0	10.37.28.1 to 10.37.28.254	10.37.28.255	92	Future	10.37.92.0	10.37.92.1 to 10.37.92.254	10.37.92.255		156	Future	10.37.156.0	10.37.156.1 to 10.37.156.254	10.37.156.255		220	Future	10.37.220.0	10.37.220.1 to 10.37.220.254	10.37.220.255
29	MHT TSA Users	10.37.29.0	10.37.29.1 to 10.37.29.254	10.37.29.255	93	Future	10.37.93.0	10.37.93.1 to 10.37.93.254	10.37.93.255		157	Future	10.37.157.0	10.37.157.1 to 10.37.157.254	10.37.157.255		221	Future	10.37.221.0	10.37.221.1 to 10.37.221.254	10.37.221.255
30	MHT Printers	10.37.30.0	10.37.30.1 to 10.37.30.254	10.37.30.255	94	Future	10.37.94.0	10.37.94.1 to 10.37.94.254	10.37.94.255		158	Future	10.37.158.0	10.37.158.1 to 10.37.158.254	10.37.158.255		222	Future	10.37.222.0	10.37.222.1 to 10.37.222.254	10.37.222.255
31	MHT Security Users	10.37.31.0	10.37.31.1 to 10.37.31.254	10.37.31.127	95	Future	10.37.95.0	10.37.95.1 to 10.37.95.254	10.37.95.255		159	Future	10.37.159.0	10.37.159.1 to 10.37.159.254	10.37.159.255		223	Future	10.37.223.0	10.37.223.1 to 10.37.223.254	10.37.223.255
32	MHT Fingerprint System	10.37.32.0	10.37.32.1 to 10.37.32.254	10.37.32.127	96	Future	10.37.96.0	10.37.96.1 to 10.37.96.254	10.37.96.255		160	Future	10.37.160.0	10.37.160.1 to 10.37.160.254	10.37.160.255		224	Future	10.37.224.0	10.37.224.1 to 10.37.224.254	10.37.224.255
33	Guest	10.37.33.0	10.37.33.1 to 10.37.33.254	10.37.33.127	97	Future	10.37.97.0	10.37.97.1 to 10.37.97.254	10.37.97.255		161	Future	10.37.161.0	10.37.161.1 to 10.37.161.254	10.37.161.255		225	Future	10.37.225.0	10.37.225.1 to 10.37.225.254	10.37.225.255
34	Future	10.37.34.0	10.37.34.1 to 10.37.34.254	10.37.34.127	98	Future	10.37.98.0	10.37.98.1 to 10.37.98.254	10.37.98.255		162	Future	10.37.162.0	10.37.162.1 to 10.37.162.254	10.37.162.255		226	Future	10.37.226.0	10.37.226.1 to 10.37.226.254	10.37.226.255
35	Future	10.37.35.0	10.37.35.1 to 10.37.35.254	10.37.35.127	99	Future	10.37.99.0	10.37.99.1 to 10.37.99.254	10.37.99.255		163	Future	10.37.163.0	10.37.163.1 to 10.37.163.254	10.37.163.255		227	Future	10.37.227.0	10.37.227.1 to 10.37.227.254	10.37.227.255
36	Future	10.37.36.0	10.37.36.1 to 10.37.36.254	10.37.36.127	100	Milltown	10.37.100.0	10.37.100.1 to 10.37.100.254	10.37.100.255		164	Future	10.37.164.0	10.37.164.1 to 10.37.164.254	10.37.164.255		228	Future	10.37.228.0	10.37.228.1 to 10.37.228.254	10.37.228.255
37	Future	10.37.37.0	10.37.37.1 to 10.37.37.254	10.37.37.127	101	Hudson-Manchester	10.37.101.0	10.37.101.1 to 10.37.101.254	10.37.101.255		165	Future	10.37.165.0	10.37.165.1 to 10.37.165.254	10.37.165.255		229	Future	10.37.229.0	10.37.229.1 to 10.37.229.254	10.37.229.255
38	Future	10.37.38.0	10.37.38.1 to 10.37.38.254	10.37.38.127	102	Ben and Jerry's	10.37.102.0	10.37.102.1 to 10.37.102.254	10.37.102.255		166	Future	10.37.166.0	10.37.166.1 to 10.37.166.254	10.37.166.255		230	Future	10.37.230.0	10.37.230.1 to 10.37.230.254	10.37.230.255
39	Future	10.37.39.0	10.37.39.1 to 10.37.39.254	10.37.39.127	103	Worldwide Flight Svc.	10.37.103.0	10.37.103.1 to 10.37.103.254	10.37.103.255		167	Future	10.37.167.0	10.37.167.1 to 10.37.167.254	10.37.167.255		231	Future	10.37.231.0	10.37.231.1 to 10.37.231.254	10.37.231.255
40	Future	10.37.40.0	10.37.40.1 to 10.37.40.254	10.37.40.127	104	International RAM	10.37.104.0	10.37.104.1 to 10.37.104.254	10.37.104.255		168	Future	10.37.168.0	10.37.168.1 to 10.37.168.254	10.37.168.255		232	Future	10.37.232.0	10.37.232.1 to 10.37.232.254	10.37.232.255
41	Future	10.37.41.0	10.37.41.1 to 10.37.41.254	10.37.41.255	105	Delta	10.37.105.0	10.37.105.1 to 10.37.105.254	10.37.105.255		169	Future	10.37.169.0	10.37.169.1 to 10.37.169.254	10.37.169.255		233	Future	10.37.233.0	10.37.233.1 to 10.37.233.254	10.37.233.255
42	Southwest DMZ	10.37.42.0	10.37.42.1 to 10.37.42.254	10.37.42.255	106	Future	10.37.106.0	10.37.106.1 to 10.37.106.254	10.37.106.255		170	Future	10.37.170.0	10.37.170.1 to 10.37.170.254	10.37.170.255		234	Future	10.37.234.0	10.37.234.1 to 10.37.234.254	10.37.234.255
43	Future	10.37.43.0	10.37.43.1 to 10.37.43.254	10.37.43.255	107	Future	10.37.107.0	10.37.107.1 to 10.37.107.254	10.37.107.255		171	Future	10.37.171.0	10.37.171.1 to 10.37.171.254	10.37.171.255		235	Future	10.37.235.0	10.37.235.1 to 10.37.235.254	10.37.235.255
44	Future	10.37.44.0	10.37.44.1 to 10.37.44.254	10.37.44.255	108	Future	10.37.108.0	10.37.108.1 to 10.37.108.254	10.37.108.255		172	Future	10.37.172.0	10.37.172.1 to 10.37.172.254	10.37.172.255		236	Future	10.37.236.0	10.37.236.1 to 10.37.236.254	10.37.236.255
45	Johnson Controls	10.37.45.0	10.37.45.1 to 10.37.45.254	10.37.45.255	109	Future	10.37.109.0	10.37.109.1 to 10.37.109.254	10.37.109.255		173	Future	10.37.173.0	10.37.173.1 to 10.37.173.254	10.37.173.255		237	Future	10.37.237.0	10.37.237.1 to 10.37.237.254	10.37.237.255
46	Future	10.37.46.0	10.37.46.1 to 10.37.46.254	10.37.46.255	110	Future	10.37.110.0	10.37.110.1 to 10.37.110.254	10.37.110.255		174	Future	10.37.174.0	10.37.174.1 to 10.37.174.254	10.37.174.255		238	Future	10.37.238.0	10.37.238.1 to 10.37.238.254	10.37.238.255
47	Future	10.37.47.0	10.37.47.1 to 10.37.47.254	10.37.47.255	111	Future	10.37.111.0	10.37.111.1 to 10.37.111.254	10.37.111.255		175	Future	10.37.175.0	10.37.175.1 to 10.37.175.254	10.37.175.255		239	Future	10.37.239.0	10.37.239.1 to 10.37.239.254	10.37.239.255
48	Future	10.37.48.0	10.37.48.1 to 10.37.48.254	10.37.48.255	112	Future	10.37.112.0	10.37.112.1 to 10.37.112.254	10.37.112.255		176	Future	10.37.176.0	10.37.176.1 to 10.37.176.254	10.37.176.255		240	Future	10.37.240.0	10.37.240.1 to 10.37.240.254	10.37.240.255
49	Future	10.37.49.0	10.37.49.1 to 10.37.49.254	10.37.49.255	113	Future	10.37.113.0	10.37.113.1 to 10.37.113.254	10.37.113.255		177	Future	10.37.177.0	10.37.177.1 to 10.37.177.254	10.37.177.255		241	Future	10.37.241.0	10.37.241.1 to 10.37.241.254	10.37.241.255
50	Future	10.37.50.0	10.37.50.1 to 10.37.50.254	10.37.50.255	114	Future	10.37.114.0	10.37.114.1 to 10.37.114.254	10.37.114.255		178	Future	10.37.178.0	10.37.178.1 to 10.37.178.254	10.37.178.255		242	Future	10.37.242.0	10.37.242.1 to 10.37.242.254	10.37.242.255
51	Future	10.37.51.0	10.37.51.1 to 10.37.51.254	10.37.51.255	115	Future	10.37.115.0	10.37.115.1 to 10.37.115.254	10.37.115.255		179	Future	10.37.179.0	10.37.179.1 to 10.37.179.254	10.37.179.255		243	Future	10.37.243.0	10.37.243.1 to 10.37.243.254	10.37.243.255
52	Future	10.37.52.0	10.37.52.1 to 10.37.52.254	10.37.52.255	116	Future	10.37.116.0	10.37.116.1 to 10.37.116.254	10.37.116.255		180	Future	10.37.180.0	10.37.180.1 to 10.37.180.254	10.37.180.255		244	Future	10.37.244.0	10.37.244.1 to 10.37.244.254	10.37.244.255
53	Future	10.37.53.0	10.37.53.1 to 10.37.53.254	10.37.53.255	117	Future	10.37.117.0	10.37.117.1 to 10.37.117.254	10.37.117.255		181	Future	10.37.181.0	10.37.181.1 to 10.37.181.254	10.37.181.255		245	Future	10.37.245.0	10.37.245.1 to 10.37.245.254	10.37.245.255
54	Future	10.37.54.0	10.37.54.1 to 10.37.54.254	10.37.54.255	118	Dunkin Donuts	10.37.118.0	10.37.118.1 to 10.37.118.254	10.37.118.255		182	Future	10.37.182.0	10.37.182.1 to 10.37.182.254	10.37.182.255		246	Future	10.37.246.0	10.37.246.1 to 10.37.246.254	10.37.246.255
55	Signs	10.37.55.0	10.37.55.1 to 10.37.55.254	10.37.55.255	119	Audax Technologies	10.37.119.0	10.37.119.1 to 10.37.119.254	10.37.119.255		183	Future	10.37.183.0	10.37.183.1 to 10.37.183.254	10.37.183.255		247	Future	10.37.247.0	10.37.247.1 to 10.37.247.254	10.37.247.255
56	Future	10.37.56.0	10.37.56.1 to 10.37.56.254	10.37.56.255	120	VLAN 709	10.37.120.0	10.37.120.1 to 10.37.120.254	10.37.120.255		184	Future	10.37.184.0	10.37.184.1 to 10.37.184.254	10.37.184.255		248	Future	10.37.248.0	10.37.248.1 to 10.37.248.254	10.37.248.255
57	Future	10.37.57.0	10.37.57.1 to 10.37.57.254	10.37.57.255	121	City Network	10.37.121.0	10.37.121.1 to 10.37.121.254	10.37.121.255		185	Future	10.37.185.0	10.37.185.1 to 10.37.185.254	10.37.185.255		249	Future	10.37.249.0	10.37.249.1 to 10.37.249.254	10.37.249.255
58	Future	10.37.58.0	10.37.58.1 to 10.37.58.254	10.37.58.255	122	External Network	10.37.122.0	10.37.122.1 to 10.37.122.254	10.37.122.255		186	Future	10.37.186.0	10.37.186.1 to 10.37.186.254	10.37.186.255		250	Future	10.37.250.0	10.37.250.1 to 10.37.250.254	10.37.250.255
59	Future	10.37.59.0	10.37.59.1 to 10.37.59.254	10.37.59.255	123	FDDI Default	10.37.123.0	10.37.123.1 to 10.37.123.254	10.37.123.255		187	Future	10.37.187.0	10.37.187.1 to 10.37.187.254	10.37.187.255		251	Future	10.37.251.0	10.37.251.1 to 10.37.251.254	10.37.251.255
60	Camera	10.37.60.0	10.37.60.1 to 10.37.60.254	10.37.60.255	124	FDDInet Default	10.37.124.0	10.37.124.1 to 10.37.124.254	10.37.124.255		188	Future	10.37.188.0	10.37.188.1 to 10.37.188.254	10.37.188.255		252	Future	10.37.252.0	10.37.252.1 to 10.37.252.254	10.37.252.255
61	Future	10.37.61.0	10.37.61.1 to 10.37.61.254	10.37.61.255	125	TRBF Default	10.37.125.0	10.37.125.1 to 10.37.125.254	10.37.125.255		189	Future	10.37.189.0	10.37.189.1 to 10.37.189.254	10.37.189.255		253	Future	10.37.253.0	10.37.253.1 to 10.37.253.254	10.37.253.255
62	Future	10.37.62.0	10.37.62.1 to 10.37.62.254	10.37.62.255	126	Future	10.37.126.0	10.37.126.1 to 10.37.126.254	10.37.126.255		190	Future	10.37.190.0	10.37.190.1 to 10.37.190.254	10.37.190.255		254	Network Management	10.37.254.0	10.37.254.1 to 10.37.254.254	10.37.254.255
63	Future	10.37.63.0	10.37.63.1 to 10.37.63.254	10.37.63.255	127	Future	10.37.127.0	10.37.127.1 to 10.37.127.254	10.37.127.255		191	Future	10.37.191.0	10.37.191.1 to 10.37.191.254	10.37.191.255						

FUTURE FACILITY (38)

Future Facility				10.38.0.0/24	MHT IP Addressing Plan															
VLAN	Function	Network	Hosts	Broadcast	VLAN	Function	Network	Hosts	Broadcast	VLAN	Function	Network	Hosts	Broadcast	VLAN	Function	Network	Hosts	Broadcast
	Core Uplinks	10.38.0.0	10.38.0.1 to 10.38.0.254	10.38.0.255		Core Uplinks	10.38.64.0	10.38.64.1 to 10.38.64.254	10.38.64.255		Core Uplinks	10.38.128.0	10.38.128.1 to 10.38.128.254	10.38.128.255		Core Uplinks	10.38.192.0	10.38.192.1 to 10.38.192.254	10.38.192.255
1	Default	10.38.1.0	10.38.1.1 to 10.38.1.254	10.38.1.255	65	City Unrouted	10.38.65.0	10.38.65.1 to 10.38.65.254	10.38.65.255	129	Future	10.38.129.0	10.38.129.1 to 10.38.129.254	10.38.129.255	193	Future	10.38.193.0	10.38.193.1 to 10.38.193.254	10.38.193.255
2	Admin	10.38.2.0	10.38.2.1 to 10.38.2.254	10.38.2.255	66	Future	10.38.66.0	10.38.66.1 to 10.38.66.254	10.38.66.255	130	Future	10.38.130.0	10.38.130.1 to 10.38.130.254	10.38.130.255	194	Future	10.38.194.0	10.38.194.1 to 10.38.194.254	10.38.194.255
3	FIDS	10.38.3.0	10.38.3.1 to 10.38.3.254	10.38.3.255	67	Future	10.38.67.0	10.38.67.1 to 10.38.67.254	10.38.67.255	131	Future	10.38.131.0	10.38.131.1 to 10.38.131.254	10.38.131.255	195	Future	10.38.195.0	10.38.195.1 to 10.38.195.254	10.38.195.255
4	Security	10.38.4.0	10.38.4.1 to 10.38.4.254	10.38.4.255	68	Future	10.38.68.0	10.38.68.1 to 10.38.68.254	10.38.68.255	132	Future	10.38.132.0	10.38.132.1 to 10.38.132.254	10.38.132.255	196	Future	10.38.196.0	10.38.196.1 to 10.38.196.254	10.38.196.255
5	Security Camera	10.38.5.0	10.38.5.1 to 10.38.5.254	10.38.5.255	69	Future	10.38.69.0	10.38.69.1 to 10.38.69.254	10.38.69.255	133	Future	10.38.133.0	10.38.133.1 to 10.38.133.254	10.38.133.255	197	Future	10.38.197.0	10.38.197.1 to 10.38.197.254	10.38.197.255
6	Taxi	10.38.6.0	10.38.6.1 to 10.38.6.254	10.38.6.255	70	Power Related	10.38.70.0	10.38.70.1 to 10.38.70.254	10.38.70.255	134	Future	10.38.134.0	10.38.134.1 to 10.38.134.254	10.38.134.255	198	Future	10.38.198.0	10.38.198.1 to 10.38.198.254	10.38.198.255
7	HVAC	10.38.7.0	10.38.7.1 to 10.38.7.254	10.38.7.255	71	Future	10.38.71.0	10.38.71.1 to 10.38.71.254	10.38.71.255	135	Future	10.38.135.0	10.38.135.1 to 10.38.135.254	10.38.135.255	199	Future	10.38.199.0	10.38.199.1 to 10.38.199.254	10.38.199.255
8	Comcast - Passenger	10.38.8.0	10.38.8.1 to 10.38.8.254	10.38.8.255	72	Future	10.38.72.0	10.38.72.1 to 10.38.72.254	10.38.72.255	136	Future	10.38.136.0	10.38.136.1 to 10.38.136.254	10.38.136.255	200	Future	10.38.200.0	10.38.200.1 to 10.38.200.254	10.38.200.255
9	WiFi Private	10.38.9.0	10.38.9.1 to 10.38.9.254	10.38.9.255	73	Future	10.38.73.0	10.38.73.1 to 10.38.73.254	10.38.73.255	137	Future	10.38.137.0	10.38.137.1 to 10.38.137.254	10.38.137.255	201	Future	10.38.201.0	10.38.201.1 to 10.38.201.254	10.38.201.255
10	Comcast - Personnel	10.38.10.0	10.38.10.1 to 10.38.10.254	10.38.10.127	74	Future	10.38.74.0	10.38.74.1 to 10.38.74.254	10.38.74.255	138	Future	10.38.138.0	10.38.138.1 to 10.38.138.254	10.38.138.255	202	Future	10.38.202.0	10.38.202.1 to 10.38.202.254	10.38.202.255
11	iLO	10.38.11.0	10.38.11.1 to 10.38.11.254	10.38.11.255	75	Future	10.38.75.0	10.38.75.1 to 10.38.75.254	10.38.75.255	139	Future	10.38.139.0	10.38.139.1 to 10.38.139.254	10.38.139.255	203	Future	10.38.203.0	10.38.203.1 to 10.38.203.254	10.38.203.255
12	Conveyor	10.38.12.0	10.38.12.1 to 10.38.12.254	10.38.12.255	76	Future	10.38.76.0	10.38.76.1 to 10.38.76.254	10.38.76.255	140	Future	10.38.140.0	10.38.140.1 to 10.38.140.254	10.38.140.255	204	Future	10.38.204.0	10.38.204.1 to 10.38.204.254	10.38.204.255
13	Future	10.38.13.0	10.38.13.1 to 10.38.13.254	10.38.13.255	77	Future	10.38.77.0	10.38.77.1 to 10.38.77.254	10.38.77.255	141	Future	10.38.141.0	10.38.141.1 to 10.38.141.254	10.38.141.255	205	Future	10.38.205.0	10.38.205.1 to 10.38.205.254	10.38.205.255
14	VMWare Vmotion	10.38.14.0	10.38.14.1 to 10.38.14.254	10.38.14.255	78	Future	10.38.78.0	10.38.78.1 to 10.38.78.254	10.38.78.255	142	Future	10.38.142.0	10.38.142.1 to 10.38.142.254	10.38.142.255	206	Future	10.38.206.0	10.38.206.1 to 10.38.206.254	10.38.206.255
15	Wireless Infrastructure	10.38.15.0	10.38.15.1 to 10.38.15.126	10.38.15.127	79	Future	10.38.79.0	10.38.79.1 to 10.38.79.254	10.38.79.255	143	Future	10.38.143.0	10.38.143.1 to 10.38.143.254	10.38.143.255	207	Future	10.38.207.0	10.38.207.1 to 10.38.207.254	10.38.207.255
16	Future	10.38.16.0	10.38.16.1 to 10.38.16.254	10.38.16.255	80	Future	10.38.80.0	10.38.80.1 to 10.38.80.254	10.38.80.255	144	Future	10.38.144.0	10.38.144.1 to 10.38.144.254	10.38.144.255	208	Future	10.38.208.0	10.38.208.1 to 10.38.208.254	10.38.208.255
17	Future	10.38.17.0	10.38.17.1 to 10.38.17.254	10.38.17.255	81	Future	10.38.81.0	10.38.81.1 to 10.38.81.254	10.38.81.255	145	Future	10.38.145.0	10.38.145.1 to 10.38.145.254	10.38.145.255	209	Future	10.38.209.0	10.38.209.1 to 10.38.209.254	10.38.209.255
18	Future	10.38.18.0	10.38.18.1 to 10.38.18.254	10.38.18.255	82	Future	10.38.82.0	10.38.82.1 to 10.38.82.254	10.38.82.255	146	Future	10.38.146.0	10.38.146.1 to 10.38.146.254	10.38.146.255	210	Future	10.38.210.0	10.38.210.1 to 10.38.210.254	10.38.210.255
19	Future	10.38.19.0	10.38.19.1 to 10.38.19.254	10.38.19.255	83	Future	10.38.83.0	10.38.83.1 to 10.38.83.254	10.38.83.255	147	Future	10.38.147.0	10.38.147.1 to 10.38.147.254	10.38.147.255	211	Future	10.38.211.0	10.38.211.1 to 10.38.211.254	10.38.211.255
20	MHT Desktops	10.38.20.0	10.38.20.1 to 10.38.20.254	10.38.20.255	84	Future	10.38.84.0	10.38.84.1 to 10.38.84.254	10.38.84.255	148	Future	10.38.148.0	10.38.148.1 to 10.38.148.254	10.38.148.255	212	Future	10.38.212.0	10.38.212.1 to 10.38.212.254	10.38.212.255
21	Future	10.38.21.0	10.38.21.1 to 10.38.21.254	10.38.21.255	85	Virtual Cluster Heartbeats	10.38.85.0	10.38.85.1 to 10.38.85.254	10.38.85.255	149	Future	10.38.149.0	10.38.149.1 to 10.38.149.254	10.38.149.255	213	Future	10.38.213.0	10.38.213.1 to 10.38.213.254	10.38.213.255
22	MHT Users	10.38.22.0	10.38.22.1 to 10.38.22.126	10.38.22.127	86	Future	10.38.86.0	10.38.86.1 to 10.38.86.254	10.38.86.255	150	Future	10.38.150.0	10.38.150.1 to 10.38.150.254	10.38.150.255	214	Future	10.38.214.0	10.38.214.1 to 10.38.214.254	10.38.214.255
23	Future	10.38.23.0	10.38.23.1 to 10.38.23.254	10.38.23.255	87	Future	10.38.87.0	10.38.87.1 to 10.38.87.254	10.38.87.255	151	Future	10.38.151.0	10.38.151.1 to 10.38.151.254	10.38.151.255	215	Future	10.38.215.0	10.38.215.1 to 10.38.215.254	10.38.215.255
24	MHT Accounting Users	10.38.24.0	10.38.24.1 to 10.38.24.254	10.38.24.255	88	Future	10.38.88.0	10.38.88.1 to 10.38.88.254	10.38.88.255	152	Future	10.38.152.0	10.38.152.1 to 10.38.152.254	10.38.152.255	216	Future	10.38.216.0	10.38.216.1 to 10.38.216.254	10.38.216.255
25	Admin Users	10.38.25.0	10.38.25.1 to 10.38.25.254	10.38.25.255	89	Future	10.38.89.0	10.38.89.1 to 10.38.89.254	10.38.89.255	153	Future	10.38.153.0	10.38.153.1 to 10.38.153.254	10.38.153.255	217	Future	10.38.217.0	10.38.217.1 to 10.38.217.254	10.38.217.255
26	MHT Wireless Authentical	10.38.26.0	10.38.26.1 to 10.38.26.254	10.38.26.255	90	Future	10.38.90.0	10.38.90.1 to 10.38.90.254	10.38.90.255	154	Future	10.38.154.0	10.38.154.1 to 10.38.154.254	10.38.154.255	218	Future	10.38.218.0	10.38.218.1 to 10.38.218.254	10.38.218.255
27	LEO Users	10.38.27.0	10.38.27.1 to 10.38.27.254	10.38.27.255	91	Future	10.38.91.0	10.38.91.1 to 10.38.91.254	10.38.91.255	155	Future	10.38.155.0	10.38.155.1 to 10.38.155.254	10.38.155.255	219	Future	10.38.219.0	10.38.219.1 to 10.38.219.254	10.38.219.255
28	MHT Building Maintenan	10.38.28.0	10.38.28.1 to 10.38.28.254	10.38.28.255	92	Future	10.38.92.0	10.38.92.1 to 10.38.92.254	10.38.92.255	156	Future	10.38.156.0	10.38.156.1 to 10.38.156.254	10.38.156.255	220	Future	10.38.220.0	10.38.220.1 to 10.38.220.254	10.38.220.255
29	MHT TSA Users	10.38.29.0	10.38.29.1 to 10.38.29.254	10.38.29.255	93	Future	10.38.93.0	10.38.93.1 to 10.38.93.254	10.38.93.255	157	Future	10.38.157.0	10.38.157.1 to 10.38.157.254	10.38.157.255	221	Future	10.38.221.0	10.38.221.1 to 10.38.221.254	10.38.221.255
30	MHT Printers	10.38.30.0	10.38.30.1 to 10.38.30.254	10.38.30.255	94	Future	10.38.94.0	10.38.94.1 to 10.38.94.254	10.38.94.255	158	Future	10.38.158.0	10.38.158.1 to 10.38.158.254	10.38.158.255	222	Future	10.38.222.0	10.38.222.1 to 10.38.222.254	10.38.222.255
31	MHT Security Users	10.38.31.0	10.38.31.1 to 10.38.31.254	10.38.31.127	95	Future	10.38.95.0	10.38.95.1 to 10.38.95.254	10.38.95.255	159	Future	10.38.159.0	10.38.159.1 to 10.38.159.254	10.38.159.255	223	Future	10.38.223.0	10.38.223.1 to 10.38.223.254	10.38.223.255
32	MHT Fingerprint System	10.38.32.0	10.38.32.1 to 10.38.32.254	10.38.32.127	96	Future	10.38.96.0	10.38.96.1 to 10.38.96.254	10.38.96.255	160	Future	10.38.160.0	10.38.160.1 to 10.38.160.254	10.38.160.255	224	Future	10.38.224.0	10.38.224.1 to 10.38.224.254	10.38.224.255
33	Guest	10.38.33.0	10.38.33.1 to 10.38.33.254	10.38.33.127	97	Future	10.38.97.0	10.38.97.1 to 10.38.97.254	10.38.97.255	161	Future	10.38.161.0	10.38.161.1 to 10.38.161.254	10.38.161.255	225	Future	10.38.225.0	10.38.225.1 to 10.38.225.254	10.38.225.255
34	Future	10.38.34.0	10.38.34.1 to 10.38.34.254	10.38.34.127	98	Future	10.38.98.0	10.38.98.1 to 10.38.98.254	10.38.98.255	162	Future	10.38.162.0	10.38.162.1 to 10.38.162.254	10.38.162.255	226	Future	10.38.226.0	10.38.226.1 to 10.38.226.254	10.38.226.255
35	Future	10.38.35.0	10.38.35.1 to 10.38.35.254	10.38.35.127	99	Future	10.38.99.0	10.38.99.1 to 10.38.99.254	10.38.99.255	163	Future	10.38.163.0	10.38.163.1 to 10.38.163.254	10.38.163.255	227	Future	10.38.227.0	10.38.227.1 to 10.38.227.254	10.38.227.255
36	Future	10.38.36.0	10.38.36.1 to 10.38.36.254	10.38.36.127	100	Milltown	10.38.100.0	10.38.100.1 to 10.38.100.254	10.38.100.255	164	Future	10.38.164.0	10.38.164.1 to 10.38.164.254	10.38.164.255	228	Future	10.38.228.0	10.38.228.1 to 10.38.228.254	10.38.228.255
37	Future	10.38.37.0	10.38.37.1 to 10.38.37.254	10.38.37.127	101	Hudson-Manchester	10.38.101.0	10.38.101.1 to 10.38.101.254	10.38.101.255	165	Future	10.38.165.0	10.38.165.1 to 10.38.165.254	10.38.165.255	229	Future	10.38.229.0	10.38.229.1 to 10.38.229.254	10.38.229.255
38	Future	10.38.38.0	10.38.38.1 to 10.38.38.254	10.38.38.127	102	Ben and Jerry's	10.38.102.0	10.38.102.1 to 10.38.102.254	10.38.102.255	166	Future	10.38.166.0	10.38.166.1 to 10.38.166.254	10.38.166.255	230	Future	10.38.230.0	10.38.230.1 to 10.38.230.254	10.38.230.255
39	Future	10.38.39.0	10.38.39.1 to 10.38.39.254	10.38.39.127	103	Worldwide Flight Svc	10.38.103.0	10.38.103.1 to 10.38.103.254	10.38.103.255	167	Future	10.38.167.0	10.38.167.1 to 10.38.167.254	10.38.167.255	231	Future	10.38.231.0	10.38.231.1 to 10.38.231.254	10.38.231.255
40	Future	10.38.40.0	10.38.40.1 to 10.38.40.254	10.38.40.127	104	International RAM	10.38.104.0	10.38.104.1 to 10.38.104.254	10.38.104.255	168	Future	10.38.168.0	10.38.168.1 to 10.38.168.254	10.38.168.255	232	Future	10.38.232.0	10.38.232.1 to 10.38.232.254	10.38.232.255
41	Future	10.38.41.0	10.38.41.1 to 10.38.41.254	10.38.41.255	105	Delta	10.38.105.0	10.38.105.1 to 10.38.105.254	10.38.105.255	169	Future	10.38.169.0	10.38.169.1 to 10.38.169.254	10.38.169.255	233	Future	10.38.233.0	10.38.233.1 to 10.38.233.254	10.38.233.255
42	Southwest DMZ	10.38.42.0	10.38.42.1 to 10.38.42.254	10.38.42.255	106	Future	10.38.106.0	10.38.106.1 to 10.38.106.254	10.38.106.255	170	Future	10.38.170.0	10.38.170.1 to 10.38.170.254	10.38.170.255	234	Future	10.38.234.0	10.38.234.1 to 10.38.234.254	10.38.234.255
43	Future	10.38.43.0	10.38.43.1 to 10.38.43.254	10.38.43.255	107	Future	10.38.107.0	10.38.107.1 to 10.38.107.254	10.38.107.255	171	Future	10.38.171.0	10.38.171.1 to 10.38.171.254	10.38.171.255	235	Future	10.38.235.0	10.38.235.1 to 10.38.235.254	10.38.235.255
44	Future	10.38.44.0	10.38.44.1 to 10.38.44.254	10.38.44.255	108	Future	10.38.108.0	10.38.108.1 to 10.38.108.254	10.38.108.255	172	Future	10.38.172.0	10.38.172.1 to 10.38.172.254	10.38.172.255	236	Future	10.38.236.0	10.38.236.1 to 10.38.236.254	10.38.236.255
45	Johnson Controls	10.38.45.0	10.38.45.1 to 10.38.45.254	10.38.45.255	109	Future	10.38.109.0	10.38.109.1 to 10.38.109.254	10.38.109.255	173	Future	10.38.173.0	10.38.173.1 to 10.38.173.254	10.38.173.255	237	Future	10.38.237.0	10.38.237.1 to 10.38.237.254	10.38.237.255
46	Future	10.38.46.0	10.38.46.1 to 10.38.46.254	10.38.46.255	110	Future	10.38.110.0	10.38.110.1 to 10.38.110.254	10.38.110.255	174	Future	10.38.174.0	10.38.174.1 to 10.38.174.254	10.38.174.255	238	Future	10.38.238.0	10.38.238.1 to 10.38.238.254	10.38.238.255
47	Future	10.38.47.0	10.38.47.1 to 10.38.47.254	10.38.47.255	111	Future	10.38.111.0	10.38.111.1 to 10.38.111.254	10.38.111.255	175	Future	10.38.175.0	10.38.175.1 to 10.38.175.254	10.38.175.255	239	Future	10.38.239.0	10.38.239.1 to 10.38.239.254	10.38.239.255
48	Future	10.38.48.0	10.38.48.1 to 10.38.48.254	10.38.48.255	112	Future	10.38.112.0	10.38.112.1 to 10.38.112.254	10.38.112.255	176	Future	10.38.176.0	10.38.176.1 to 10.38.176.254	10.38.176.255	240	Future	10.38.240.0	10.38.240.1 to 10.38.240.254	10.38.240.255
49	Future	10.38.49.0	10.38.49.1 to 10.38.49.254	10.38.49.255	113	Future	10.38.113.0	10.38.113.1 to 10.38.113.254	10.38.113.255	177	Future	10.38.177.0	10.38.177.1 to 10.38.177.254	10.38.177.255	241	Future	10.38.241.0	10.38.241.1 to 10.38.241.254	10.38.241.255
50	Future	10.38.50.0	10.38.50.1 to 10.38.50.254	10.38.50.255	114	Future	10.38.114.0	10.38.114.1 to 10.38.114.254	10.38.114.255	178	Future	10.38.178.0	10.38.178.1 to 10.38.178.254	10.38.178.255	242	Future	10.38.242.0	10.38.242.1 to 10.38.242.254	10.38.242.255
51	Future	10.38.51.0	10.38.51.1 to 10.38.51.254	10.38.51.255	115	Future	10.38.115.0	10.38.115.1 to 10.38.115.254	10.38.115.255	179	Future	10.38.179.0	10.38.179.1 to 10.38.179.254	10.38.179.255	243	Future	10.38.243.0	10.38.243.1 to 10.38.243.254	10.38.243.255
52	Future	10.38.52.0	10.38.52.1 to 10.38.52.254	10.38.52.255	116	Future	10.38.116.0	10.38.116.1 to 10.38.116.254	10.38.116.255	180	Future	10.38.180.0	10.38.180.1 to 10.38.180.254	10.38.180.255	244	Future	10.38.244.0	10.38.244.1 to 10.38.244.254	10.38.244.255
53	Future	10.38.53.0	10.38.53.1 to 10.38.53.254	10.38.53.255	117	Future	10.38.117.0	10.38.117.1 to 10.38.117.254	10.38.117.255	181	Future	10.38.181.0	10.38.181.1 to 10.38.181.254	10.38.181.255	245	Future	10.38.245.0	10.38.245.1 to 10.38.245.254	10.38.245.255
54	Future	10.38.54.0	10.38.54.1 to 10.38.54.254	10.38.54.255	118	Dunkin Donuts	10.38.118.0	10.38.118.1 to 10.38.118.254	10.38.118.255	182	Future	10.38.182.0	10.38.182.1 to 10.38.182.254	10.38.182.255	246	Future	10.38.246.0	10.38.246.1 to 10.38.246.254	10.38.246.255
55	Signs	10.38.55.0	10.38.55.1 to 10.38.55.254	10.38.55.255	119	Audax Technologies	10.38.119.0	10.38.119.1 to 10.38.119.254	10.38.119.255	183	Future	10.38.183.0	10.38.183.1 to 10.38.183.254	10.38.183.255	247	Future	10.38.247.0	10.38.247.1 to 10.38.247.254	10.38.247.255
56	Future	10.38.56.0	10.38.56.1 to 10.38.56.254	10.38.56.255	120	VLAN 709	10.38.120.0	10.38.120.1 to 10.38.120.254	10.38.120.255	184	Future	10.38.184.0	10.38.184.1 to 10.38.184.254	10.38.184.255	248	Future	10.38.248.0	10.38.248.1 to 10.38.248.254	10.38.248.255
57	Future	10.38.57.0	10.38.57.1 to 10.38.57.254	10.38.57.255	121	City Network	10.38.121.0	10.38.121.1 to 10.38.121.254	10.38.121.255	185	Future	10.38.185.0	10.38.185.1 to 10.38.185.254	10.38.185.255	249	Future	10.38.249.0	10.38.249.1 to 10.38.249.254	10.38.249.255
58	Future	10.38.58.0	10.38.58.1 to 10.38.58.254	10.38.58.255	122	External Network	10.38.122.0	10.38.122.1 to 10.38.122.254	10.38.122.255	186	Future	10.38.186.0	10.38.186.1 to 10.38.186.254	10.38.186.255	250	Future	10.38.250.0	10.38.250.1 to 10.38.250.254	10.38.250.255
59	Future	10.38.59.0	10.38.59.1 to 10.38.59.254	10.38.59.255	123	FDDI Default	10.38.123.0	10.38.123.1 to 10.38.123.254	10.38.123.255	187	Future	10.38.187.0	10.38.187.1 to 10.38.187.254	10.38.187.255	251	Future	10.38.251.0	10.38.251.1 to 10.38.251.254	10.38.251.255
60	Camera	10.38.60.0	10.38.60.1 to 10.38.60.254	10.38.60.255	124	FDDInet Default	10.38.124.0	10.38.124.1 to 10.38.124.254	10.38.124.255	188	Future	10.38.188.0	10.38.188.1 to 10.38.188.254	10.38.188.255	252	Future	10.38.252.0	10.38.252.1 to 10.38.252.254	10.38.252.255
61	Future	10.38.61.0	10.38.61.1 to 10.38.61.254	10.38.61.255	125	TRBF Default	10.38.125.0	10.38.125.1 to 10.38.125.254	10.38.125.255	189	Future	10.38.189.0	10.38.189.1 to 10.38.189.254	10.38.189.255	253	Future	10.38.253.0	10.38.253.1 to 10.38.253.254	10.38.253.255
62	Future	10.38.62.0	10.38.62.1 to 10.38.62.254	10.38.62.255	126	Future	10.38.126.0	10.38.126.1 to 10.38.126.254	10.38.126.255	190	Future	10.38.190.0	10.38.190.1 to 10.38.190.254	10.38.190.255	254	Network Management	10.38.254.0	10.38.254.1 to 10.38.254.254	10.38.254.255
63	Future	10.38.63.0	10.38.63.1 to 10.38.63.254	10.38.63.255	127	Future	10.38.127.0	10.38.127.1 to 10.38.127.254	10.38.127.255	191	Future	10.38.191.0	10.38.191.1 to 10.38.191.254	10.38.191.255					

FUTURE FACILITY (39)

Future Facility — 10.39.0.0/24 — MHT IP Addressing Plan

VLAN	Function	Network	Hosts	Broadcast
	Core Uplinks	10.39.0.0	10.39.0.1 to 10.39.0.254	10.39.0.255
1	Default	10.39.1.0	10.39.1.1 to 10.39.1.254	10.39.1.255
2	Admin	10.39.2.0	10.39.2.1 to 10.39.2.254	10.39.2.255
3	FIDS	10.39.3.0	10.39.3.1 to 10.39.3.254	10.39.3.255
4	Security	10.39.4.0	10.39.4.1 to 10.39.4.254	10.39.4.255
5	Security Camera	10.39.5.0	10.39.5.1 to 10.39.5.254	10.39.5.255
6	Taxi	10.39.6.0	10.39.6.1 to 10.39.6.254	10.39.6.255
7	HVAC	10.39.7.0	10.39.7.1 to 10.39.7.254	10.39.7.255
8	Comcast - Passenger	10.39.8.0	10.39.8.1 to 10.39.8.254	10.39.8.255
9	WiFi Private	10.39.9.0	10.39.9.1 to 10.39.9.254	10.39.9.255
10	Comcast - Personnel	10.39.10.0	10.39.10.1 to 10.39.10.254	10.39.10.127
11	iLO	10.39.11.0	10.39.11.1 to 10.39.11.254	10.39.11.255
12	Conveyor	10.39.12.0	10.39.12.1 to 10.39.12.254	10.39.12.255
13	Future	10.39.13.0	10.39.13.1 to 10.39.13.254	10.39.13.255
14	VMWare Vmotion	10.39.14.0	10.39.14.1 to 10.39.14.254	10.39.14.255
15	Wireless Infrastructure	10.39.15.0	10.39.15.1 to 10.39.15.126	10.39.15.127
16	Future	10.39.16.0	10.39.16.1 to 10.39.16.254	10.39.16.255
17	Future	10.39.17.0	10.39.17.1 to 10.39.17.254	10.39.17.255
18	Future	10.39.18.0	10.39.18.1 to 10.39.18.254	10.39.18.255
19	Future	10.39.19.0	10.39.19.1 to 10.39.19.254	10.39.19.255
20	MHT Desktops	10.39.20.0	10.39.20.1 to 10.39.20.254	10.39.20.255
21	Future	10.39.21.0	10.39.21.1 to 10.39.21.254	10.39.21.255
22	MHT Users	10.39.22.0	10.39.22.1 to 10.39.22.126	10.39.22.127
23	Future	10.39.23.0	10.39.23.1 to 10.39.23.254	10.39.23.255
24	MHT Accounting Users	10.39.24.0	10.39.24.1 to 10.39.24.254	10.39.24.255
25	Admin Users	10.39.25.0	10.39.25.1 to 10.39.25.254	10.39.25.255
26	MHT Wireless Authentical	10.39.26.0	10.39.26.1 to 10.39.26.254	10.39.26.255
27	LEO Users	10.39.27.0	10.39.27.1 to 10.39.27.254	10.39.27.255
28	MHT Building Maintenan	10.39.28.0	10.39.28.1 to 10.39.28.254	10.39.28.255
29	MHT TSA Users	10.39.29.0	10.39.29.1 to 10.39.29.254	10.39.29.255
30	MHT Printers	10.39.30.0	10.39.30.1 to 10.39.30.254	10.39.30.255
31	MHT Security Users	10.39.31.0	10.39.31.1 to 10.39.31.254	10.39.31.127
32	MHT Fingerprint System	10.39.32.0	10.39.32.1 to 10.39.32.254	10.39.32.127
33	Guest	10.39.33.0	10.39.33.1 to 10.39.33.254	10.39.33.127
34	Future	10.39.34.0	10.39.34.1 to 10.39.34.254	10.39.34.127
35	Future	10.39.35.0	10.39.35.1 to 10.39.35.254	10.39.35.127
36	Future	10.39.36.0	10.39.36.1 to 10.39.36.254	10.39.36.127
37	Future	10.39.37.0	10.39.37.1 to 10.39.37.254	10.39.37.127
38	Future	10.39.38.0	10.39.38.1 to 10.39.38.254	10.39.38.127
39	Future	10.39.39.0	10.39.39.1 to 10.39.39.254	10.39.39.127
40	Future	10.39.40.0	10.39.40.1 to 10.39.40.254	10.39.40.127
41	Future	10.39.41.0	10.39.41.1 to 10.39.41.254	10.39.41.255
42	Southwest DMZ	10.39.42.0	10.39.42.1 to 10.39.42.254	10.39.42.255
43	Future	10.39.43.0	10.39.43.1 to 10.39.43.254	10.39.43.255
44	Future	10.39.44.0	10.39.44.1 to 10.39.44.254	10.39.44.255
45	Johnson Controls	10.39.45.0	10.39.45.1 to 10.39.45.254	10.39.45.255
46	Future	10.39.46.0	10.39.46.1 to 10.39.46.254	10.39.46.255
47	Future	10.39.47.0	10.39.47.1 to 10.39.47.254	10.39.47.255
48	Future	10.39.48.0	10.39.48.1 to 10.39.48.254	10.39.48.255
49	Future	10.39.49.0	10.39.49.1 to 10.39.49.254	10.39.49.255
50	Future	10.39.50.0	10.39.50.1 to 10.39.50.254	10.39.50.255
51	Future	10.39.51.0	10.39.51.1 to 10.39.51.254	10.39.51.255
52	Future	10.39.52.0	10.39.52.1 to 10.39.52.254	10.39.52.255
53	Future	10.39.53.0	10.39.53.1 to 10.39.53.254	10.39.53.255
54	Future	10.39.54.0	10.39.54.1 to 10.39.54.254	10.39.54.255
55	Signs	10.39.55.0	10.39.55.1 to 10.39.55.254	10.39.55.255
56	Future	10.39.56.0	10.39.56.1 to 10.39.56.254	10.39.56.255
57	Future	10.39.57.0	10.39.57.1 to 10.39.57.254	10.39.57.255
58	Future	10.39.58.0	10.39.58.1 to 10.39.58.254	10.39.58.255
59	Future	10.39.59.0	10.39.59.1 to 10.39.59.254	10.39.59.255
60	Camera	10.39.60.0	10.39.60.1 to 10.39.60.254	10.39.60.255
61	Future	10.39.61.0	10.39.61.1 to 10.39.61.254	10.39.61.255
62	Future	10.39.62.0	10.39.62.1 to 10.39.62.254	10.39.62.255
63	Future	10.39.63.0	10.39.63.1 to 10.39.63.254	10.39.63.255
	Core Uplinks	10.39.64.0	10.39.64.1 to 10.39.64.254	10.39.64.255
65	City Unrouted	10.39.65.0	10.39.65.1 to 10.39.65.254	10.39.65.255
66	Future	10.39.66.0	10.39.66.1 to 10.39.66.254	10.39.66.255
67	Future	10.39.67.0	10.39.67.1 to 10.39.67.254	10.39.67.255
68	Future	10.39.68.0	10.39.68.1 to 10.39.68.254	10.39.68.255
69	Future	10.39.69.0	10.39.69.1 to 10.39.69.254	10.39.69.255
70	Power Related	10.39.70.0	10.39.70.1 to 10.39.70.254	10.39.70.255
71	Future	10.39.71.0	10.39.71.1 to 10.39.71.254	10.39.71.255
72	Future	10.39.72.0	10.39.72.1 to 10.39.72.254	10.39.72.255
73	Future	10.39.73.0	10.39.73.1 to 10.39.73.254	10.39.73.255
74	Future	10.39.74.0	10.39.74.1 to 10.39.74.254	10.39.74.255
75	Future	10.39.75.0	10.39.75.1 to 10.39.75.254	10.39.75.255
76	Future	10.39.76.0	10.39.76.1 to 10.39.76.254	10.39.76.255
77	Future	10.39.77.0	10.39.77.1 to 10.39.77.254	10.39.77.255
78	Future	10.39.78.0	10.39.78.1 to 10.39.78.254	10.39.78.255
79	Future	10.39.79.0	10.39.79.1 to 10.39.79.254	10.39.79.255
80	Future	10.39.80.0	10.39.80.1 to 10.39.80.254	10.39.80.255
81	Future	10.39.81.0	10.39.81.1 to 10.39.81.254	10.39.81.255
82	Future	10.39.82.0	10.39.82.1 to 10.39.82.254	10.39.82.255
83	Future	10.39.83.0	10.39.83.1 to 10.39.83.254	10.39.83.255
84	Future	10.39.84.0	10.39.84.1 to 10.39.84.254	10.39.84.255
85	Virtual Cluster Heartbeats	10.39.85.0	10.39.85.1 to 10.39.85.254	10.39.85.255
86	Future	10.39.86.0	10.39.86.1 to 10.39.86.254	10.39.86.255
87	Future	10.39.87.0	10.39.87.1 to 10.39.87.254	10.39.87.255
88	Future	10.39.88.0	10.39.88.1 to 10.39.88.254	10.39.88.255
89	Future	10.39.89.0	10.39.89.1 to 10.39.89.254	10.39.89.255
90	Future	10.39.90.0	10.39.90.1 to 10.39.90.254	10.39.90.255
91	Future	10.39.91.0	10.39.91.1 to 10.39.91.254	10.39.91.255
92	Future	10.39.92.0	10.39.92.1 to 10.39.92.254	10.39.92.255
93	Future	10.39.93.0	10.39.93.1 to 10.39.93.254	10.39.93.255
94	Future	10.39.94.0	10.39.94.1 to 10.39.94.254	10.39.94.255
95	Future	10.39.95.0	10.39.95.1 to 10.39.95.254	10.39.95.255
96	Future	10.39.96.0	10.39.96.1 to 10.39.96.254	10.39.96.255
97	Future	10.39.97.0	10.39.97.1 to 10.39.97.254	10.39.97.255
98	Future	10.39.98.0	10.39.98.1 to 10.39.98.254	10.39.98.255
99	Future	10.39.99.0	10.39.99.1 to 10.39.99.254	10.39.99.255
100	Milltown	10.39.100.0	10.39.100.1 to 10.39.100.254	10.39.100.255
101	Hudson-Manchester	10.39.101.0	10.39.101.1 to 10.39.101.254	10.39.101.255
102	Ben and Jerry's	10.39.102.0	10.39.102.1 to 10.39.102.254	10.39.102.255
103	Worldwide Flight Svc	10.39.103.0	10.39.103.1 to 10.39.103.254	10.39.103.255
104	International RAM	10.39.104.0	10.39.104.1 to 10.39.104.254	10.39.104.255
105	Delta	10.39.105.0	10.39.105.1 to 10.39.105.254	10.39.105.255
106	Future	10.39.106.0	10.39.106.1 to 10.39.106.254	10.39.106.255
107	Future	10.39.107.0	10.39.107.1 to 10.39.107.254	10.39.107.255
108	Future	10.39.108.0	10.39.108.1 to 10.39.108.254	10.39.108.255
109	Future	10.39.109.0	10.39.109.1 to 10.39.109.254	10.39.109.255
110	Future	10.39.110.0	10.39.110.1 to 10.39.110.254	10.39.110.255
111	Future	10.39.111.0	10.39.111.1 to 10.39.111.254	10.39.111.255
112	Future	10.39.112.0	10.39.112.1 to 10.39.112.254	10.39.112.255
113	Future	10.39.113.0	10.39.113.1 to 10.39.113.254	10.39.113.255
114	Future	10.39.114.0	10.39.114.1 to 10.39.114.254	10.39.114.255
115	Future	10.39.115.0	10.39.115.1 to 10.39.115.254	10.39.115.255
116	Future	10.39.116.0	10.39.116.1 to 10.39.116.254	10.39.116.255
117	Future	10.39.117.0	10.39.117.1 to 10.39.117.254	10.39.117.255
118	Dunkin Donuts	10.39.118.0	10.39.118.1 to 10.39.118.254	10.39.118.255
119	Audax Technologies	10.39.119.0	10.39.119.1 to 10.39.119.254	10.39.119.255
120	VLAN 709	10.39.120.0	10.39.120.1 to 10.39.120.254	10.39.120.255
121	City Network	10.39.121.0	10.39.121.1 to 10.39.121.254	10.39.121.255
122	External Network	10.39.122.0	10.39.122.1 to 10.39.122.254	10.39.122.255
123	FDDI Default	10.39.123.0	10.39.123.1 to 10.39.123.254	10.39.123.255
124	FDDInet Default	10.39.124.0	10.39.124.1 to 10.39.124.254	10.39.124.255
125	TRBF Default	10.39.125.0	10.39.125.1 to 10.39.125.254	10.39.125.255
126	Future	10.39.126.0	10.39.126.1 to 10.39.126.254	10.39.126.255
127	Future	10.39.127.0	10.39.127.1 to 10.39.127.254	10.39.127.255
	Core Uplinks	10.39.128.0	10.39.128.1 to 10.39.128.254	10.39.128.255
129	Future	10.39.129.0	10.39.129.1 to 10.39.129.254	10.39.129.255
130	Future	10.39.130.0	10.39.130.1 to 10.39.130.254	10.39.130.255
131	Future	10.39.131.0	10.39.131.1 to 10.39.131.254	10.39.131.255
132	Future	10.39.132.0	10.39.132.1 to 10.39.132.254	10.39.132.255
133	Future	10.39.133.0	10.39.133.1 to 10.39.133.254	10.39.133.255
134	Future	10.39.134.0	10.39.134.1 to 10.39.134.254	10.39.134.255
135	Future	10.39.135.0	10.39.135.1 to 10.39.135.254	10.39.135.255
136	Future	10.39.136.0	10.39.136.1 to 10.39.136.254	10.39.136.255
137	Future	10.39.137.0	10.39.137.1 to 10.39.137.254	10.39.137.255
138	Future	10.39.138.0	10.39.138.1 to 10.39.138.254	10.39.138.255
139	Future	10.39.139.0	10.39.139.1 to 10.39.139.254	10.39.139.255
140	Future	10.39.140.0	10.39.140.1 to 10.39.140.254	10.39.140.255
141	Future	10.39.141.0	10.39.141.1 to 10.39.141.254	10.39.141.255
142	Future	10.39.142.0	10.39.142.1 to 10.39.142.254	10.39.142.255
143	Future	10.39.143.0	10.39.143.1 to 10.39.143.254	10.39.143.255
144	Future	10.39.144.0	10.39.144.1 to 10.39.144.254	10.39.144.255
145	Future	10.39.145.0	10.39.145.1 to 10.39.145.254	10.39.145.255
146	Future	10.39.146.0	10.39.146.1 to 10.39.146.254	10.39.146.255
147	Future	10.39.147.0	10.39.147.1 to 10.39.147.254	10.39.147.255
148	Future	10.39.148.0	10.39.148.1 to 10.39.148.254	10.39.148.255
149	Future	10.39.149.0	10.39.149.1 to 10.39.149.254	10.39.149.255
150	Future	10.39.150.0	10.39.150.1 to 10.39.150.254	10.39.150.255
151	Future	10.39.151.0	10.39.151.1 to 10.39.151.254	10.39.151.255
152	Future	10.39.152.0	10.39.152.1 to 10.39.152.254	10.39.152.255
153	Future	10.39.153.0	10.39.153.1 to 10.39.153.254	10.39.153.255
154	Future	10.39.154.0	10.39.154.1 to 10.39.154.254	10.39.154.255
155	Future	10.39.155.0	10.39.155.1 to 10.39.155.254	10.39.155.255
156	Future	10.39.156.0	10.39.156.1 to 10.39.156.254	10.39.156.255
157	Future	10.39.157.0	10.39.157.1 to 10.39.157.254	10.39.157.255
158	Future	10.39.158.0	10.39.158.1 to 10.39.158.254	10.39.158.255
159	Future	10.39.159.0	10.39.159.1 to 10.39.159.254	10.39.159.255
160	Future	10.39.160.0	10.39.160.1 to 10.39.160.254	10.39.160.255
161	Future	10.39.161.0	10.39.161.1 to 10.39.161.254	10.39.161.255
162	Future	10.39.162.0	10.39.162.1 to 10.39.162.254	10.39.162.255
163	Future	10.39.163.0	10.39.163.1 to 10.39.163.254	10.39.163.255
164	Future	10.39.164.0	10.39.164.1 to 10.39.164.254	10.39.164.255
165	Future	10.39.165.0	10.39.165.1 to 10.39.165.254	10.39.165.255
166	Future	10.39.166.0	10.39.166.1 to 10.39.166.254	10.39.166.255
167	Future	10.39.167.0	10.39.167.1 to 10.39.167.254	10.39.167.255
168	Future	10.39.168.0	10.39.168.1 to 10.39.168.254	10.39.168.255
169	Future	10.39.169.0	10.39.169.1 to 10.39.169.254	10.39.169.255
170	Future	10.39.170.0	10.39.170.1 to 10.39.170.254	10.39.170.255
171	Future	10.39.171.0	10.39.171.1 to 10.39.171.254	10.39.171.255
172	Future	10.39.172.0	10.39.172.1 to 10.39.172.254	10.39.172.255
173	Future	10.39.173.0	10.39.173.1 to 10.39.173.254	10.39.173.255
174	Future	10.39.174.0	10.39.174.1 to 10.39.174.254	10.39.174.255
175	Future	10.39.175.0	10.39.175.1 to 10.39.175.254	10.39.175.255
176	Future	10.39.176.0	10.39.176.1 to 10.39.176.254	10.39.176.255
177	Future	10.39.177.0	10.39.177.1 to 10.39.177.254	10.39.177.255
178	Future	10.39.178.0	10.39.178.1 to 10.39.178.254	10.39.178.255
179	Future	10.39.179.0	10.39.179.1 to 10.39.179.254	10.39.179.255
180	Future	10.39.180.0	10.39.180.1 to 10.39.180.254	10.39.180.255
181	Future	10.39.181.0	10.39.181.1 to 10.39.181.254	10.39.181.255
182	Future	10.39.182.0	10.39.182.1 to 10.39.182.254	10.39.182.255
183	Future	10.39.183.0	10.39.183.1 to 10.39.183.254	10.39.183.255
184	Future	10.39.184.0	10.39.184.1 to 10.39.184.254	10.39.184.255
185	Future	10.39.185.0	10.39.185.1 to 10.39.185.254	10.39.185.255
186	Future	10.39.186.0	10.39.186.1 to 10.39.186.254	10.39.186.255
187	Future	10.39.187.0	10.39.187.1 to 10.39.187.254	10.39.187.255
188	Future	10.39.188.0	10.39.188.1 to 10.39.188.254	10.39.188.255
189	Future	10.39.189.0	10.39.189.1 to 10.39.189.254	10.39.189.255
190	Future	10.39.190.0	10.39.190.1 to 10.39.190.254	10.39.190.255
191	Future	10.39.191.0	10.39.191.1 to 10.39.191.254	10.39.191.255
	Core Uplinks	10.39.192.0	10.39.192.1 to 10.39.192.254	10.39.192.255
193	Future	10.39.193.0	10.39.193.1 to 10.39.193.254	10.39.193.255
194	Future	10.39.194.0	10.39.194.1 to 10.39.194.254	10.39.194.255
195	Future	10.39.195.0	10.39.195.1 to 10.39.195.254	10.39.195.255
196	Future	10.39.196.0	10.39.196.1 to 10.39.196.254	10.39.196.255
197	Future	10.39.197.0	10.39.197.1 to 10.39.197.254	10.39.197.255
198	Future	10.39.198.0	10.39.198.1 to 10.39.198.254	10.39.198.255
199	Future	10.39.199.0	10.39.199.1 to 10.39.199.254	10.39.199.255
200	Future	10.39.200.0	10.39.200.1 to 10.39.200.254	10.39.200.255
201	Future	10.39.201.0	10.39.201.1 to 10.39.201.254	10.39.201.255
202	Future	10.39.202.0	10.39.202.1 to 10.39.202.254	10.39.202.255
203	Future	10.39.203.0	10.39.203.1 to 10.39.203.254	10.39.203.255
204	Future	10.39.204.0	10.39.204.1 to 10.39.204.254	10.39.204.255
205	Future	10.39.205.0	10.39.205.1 to 10.39.205.254	10.39.205.255
206	Future	10.39.206.0	10.39.206.1 to 10.39.206.254	10.39.206.255
207	Future	10.39.207.0	10.39.207.1 to 10.39.207.254	10.39.207.255
208	Future	10.39.208.0	10.39.208.1 to 10.39.208.254	10.39.208.255
209	Future	10.39.209.0	10.39.209.1 to 10.39.209.254	10.39.209.255
210	Future	10.39.210.0	10.39.210.1 to 10.39.210.254	10.39.210.255
211	Future	10.39.211.0	10.39.211.1 to 10.39.211.254	10.39.211.255
212	Future	10.39.212.0	10.39.212.1 to 10.39.212.254	10.39.212.255
213	Future	10.39.213.0	10.39.213.1 to 10.39.213.254	10.39.213.255
214	Future	10.39.214.0	10.39.214.1 to 10.39.214.254	10.39.214.255
215	Future	10.39.215.0	10.39.215.1 to 10.39.215.254	10.39.215.255
216	Future	10.39.216.0	10.39.216.1 to 10.39.216.254	10.39.216.255
217	Future	10.39.217.0	10.39.217.1 to 10.39.217.254	10.39.217.255
218	Future	10.39.218.0	10.39.218.1 to 10.39.218.254	10.39.218.255
219	Future	10.39.219.0	10.39.219.1 to 10.39.219.254	10.39.219.255
220	Future	10.39.220.0	10.39.220.1 to 10.39.220.254	10.39.220.255
221	Future	10.39.221.0	10.39.221.1 to 10.39.221.254	10.39.221.255
222	Future	10.39.222.0	10.39.222.1 to 10.39.222.254	10.39.222.255
223	Future	10.39.223.0	10.39.223.1 to 10.39.223.254	10.39.223.255
224	Future	10.39.224.0	10.39.224.1 to 10.39.224.254	10.39.224.255
225	Future	10.39.225.0	10.39.225.1 to 10.39.225.254	10.39.225.255
226	Future	10.39.226.0	10.39.226.1 to 10.39.226.254	10.39.226.255
227	Future	10.39.227.0	10.39.227.1 to 10.39.227.254	10.39.227.255
228	Future	10.39.228.0	10.39.228.1 to 10.39.228.254	10.39.228.255
229	Future	10.39.229.0	10.39.229.1 to 10.39.229.254	10.39.229.255
230	Future	10.39.230.0	10.39.230.1 to 10.39.230.254	10.39.230.255
231	Future	10.39.231.0	10.39.231.1 to 10.39.231.254	10.39.231.255
232	Future	10.39.232.0	10.39.232.1 to 10.39.232.254	10.39.232.255
233	Future	10.39.233.0	10.39.233.1 to 10.39.233.254	10.39.233.255
234	Future	10.39.234.0	10.39.234.1 to 10.39.234.254	10.39.234.255
235	Future	10.39.235.0	10.39.235.1 to 10.39.235.254	10.39.235.255
236	Future	10.39.236.0	10.39.236.1 to 10.39.236.254	10.39.236.255
237	Future	10.39.237.0	10.39.237.1 to 10.39.237.254	10.39.237.255
238	Future	10.39.238.0	10.39.238.1 to 10.39.238.254	10.39.238.255
239	Future	10.39.239.0	10.39.239.1 to 10.39.239.254	10.39.239.255
240	Future	10.39.240.0	10.39.240.1 to 10.39.240.254	10.39.240.255
241	Future	10.39.241.0	10.39.241.1 to 10.39.241.254	10.39.241.255
242	Future	10.39.242.0	10.39.242.1 to 10.39.242.254	10.39.242.255
243	Future	10.39.243.0	10.39.243.1 to 10.39.243.254	10.39.243.255
244	Future	10.39.244.0	10.39.244.1 to 10.39.244.254	10.39.244.255
245	Future	10.39.245.0	10.39.245.1 to 10.39.245.254	10.39.245.255
246	Future	10.39.246.0	10.39.246.1 to 10.39.246.254	10.39.246.255
247	Future	10.39.247.0	10.39.247.1 to 10.39.247.254	10.39.247.255
248	Future	10.39.248.0	10.39.248.1 to 10.39.248.254	10.39.248.255
249	Future	10.39.249.0	10.39.249.1 to 10.39.249.254	10.39.249.255
250	Future	10.39.250.0	10.39.250.1 to 10.39.250.254	10.39.250.255
251	Future	10.39.251.0	10.39.251.1 to 10.39.251.254	10.39.251.255
252	Future	10.39.252.0	10.39.252.1 to 10.39.252.254	10.39.252.255
253	Future	10.39.253.0	10.39.253.1 to 10.39.253.254	10.39.253.255
254	Network Management	10.39.254.0	10.39.254.1 to 10.39.254.254	10.39.254.255

FUTURE FACILITY (40)

Future Facility				10.40.0.0/24	MHT IP Addressing Plan														
VLAN	Function	Network	Hosts	Broadcast	VLAN	Function	Network	Hosts	Broadcast	VLAN	Function	Network	Hosts	Broadcast	VLAN	Function	Network	Hosts	Broadcast
	Core Uplinks	10.40.0.0	10.40.0.1 to 10.40.0.254	10.40.0.255		Core Uplinks	10.40.64.0	10.40.64.1 to 10.40.64.254	10.40.64.255		Core Uplinks	10.40.128.0	10.40.128.1 to 10.40.128.254	10.40.128.255		Core Uplinks	10.40.192.0	10.40.192.1 to 10.40.192.254	10.40.192.255
1	Default	10.40.1.0	10.40.1.1 to 10.40.1.254	10.40.1.255	65	City Unrouted	10.40.65.0	10.40.65.1 to 10.40.65.254	10.40.65.255	129	Future	10.40.129.0	10.40.129.1 to 10.40.129.254	10.40.129.255	193	Future	10.40.193.0	10.40.193.1 to 10.40.193.254	10.40.193.255
2	Admin	10.40.2.0	10.40.2.1 to 10.40.2.254	10.40.2.255	66	Future	10.40.66.0	10.40.66.1 to 10.40.66.254	10.40.66.255	130	Future	10.40.130.0	10.40.130.1 to 10.40.130.254	10.40.130.255	194	Future	10.40.194.0	10.40.194.1 to 10.40.194.254	10.40.194.255
3	FIDS	10.40.3.0	10.40.3.1 to 10.40.3.254	10.40.3.255	67	Future	10.40.67.0	10.40.67.1 to 10.40.67.254	10.40.67.255	131	Future	10.40.131.0	10.40.131.1 to 10.40.131.254	10.40.131.255	195	Future	10.40.195.0	10.40.195.1 to 10.40.195.254	10.40.195.255
4	Security	10.40.4.0	10.40.4.1 to 10.40.4.254	10.40.4.255	68	Future	10.40.68.0	10.40.68.1 to 10.40.68.254	10.40.68.255	132	Future	10.40.132.0	10.40.132.1 to 10.40.132.254	10.40.132.255	196	Future	10.40.196.0	10.40.196.1 to 10.40.196.254	10.40.196.255
5	Security Camera	10.40.5.0	10.40.5.1 to 10.40.5.254	10.40.5.255	69	Future	10.40.69.0	10.40.69.1 to 10.40.69.254	10.40.69.255	133	Future	10.40.133.0	10.40.133.1 to 10.40.133.254	10.40.133.255	197	Future	10.40.197.0	10.40.197.1 to 10.40.197.254	10.40.197.255
6	Taxi	10.40.6.0	10.40.6.1 to 10.40.6.254	10.40.6.255	70	Power Related	10.40.70.0	10.40.70.1 to 10.40.70.254	10.40.70.255	134	Future	10.40.134.0	10.40.134.1 to 10.40.134.254	10.40.134.255	198	Future	10.40.198.0	10.40.198.1 to 10.40.198.254	10.40.198.255
7	HVAC	10.40.7.0	10.40.7.1 to 10.40.7.254	10.40.7.255	71	Future	10.40.71.0	10.40.71.1 to 10.40.71.254	10.40.71.255	135	Future	10.40.135.0	10.40.135.1 to 10.40.135.254	10.40.135.255	199	Future	10.40.199.0	10.40.199.1 to 10.40.199.254	10.40.199.255
8	Comcast - Passenger	10.40.8.0	10.40.8.1 to 10.40.8.254	10.40.8.255	72	Future	10.40.72.0	10.40.72.1 to 10.40.72.254	10.40.72.255	136	Future	10.40.136.0	10.40.136.1 to 10.40.136.254	10.40.136.255	200	Future	10.40.200.0	10.40.200.1 to 10.40.200.254	10.40.200.255
9	WiFi Private	10.40.9.0	10.40.9.1 to 10.40.9.254	10.40.9.255	73	Future	10.40.73.0	10.40.73.1 to 10.40.73.254	10.40.73.255	137	Future	10.40.137.0	10.40.137.1 to 10.40.137.254	10.40.137.255	201	Future	10.40.201.0	10.40.201.1 to 10.40.201.254	10.40.201.255
10	Comcast - Personnel	10.40.10.0	10.40.10.1 to 10.40.10.254	10.40.10.127	74	Future	10.40.74.0	10.40.74.1 to 10.40.74.254	10.40.74.255	138	Future	10.40.138.0	10.40.138.1 to 10.40.138.254	10.40.138.255	202	Future	10.40.202.0	10.40.202.1 to 10.40.202.254	10.40.202.255
11	ILO	10.40.11.0	10.40.11.1 to 10.40.11.254	10.40.11.255	75	Future	10.40.75.0	10.40.75.1 to 10.40.75.254	10.40.75.255	139	Future	10.40.139.0	10.40.139.1 to 10.40.139.254	10.40.139.255	203	Future	10.40.203.0	10.40.203.1 to 10.40.203.254	10.40.203.255
12	Conveyor	10.40.12.0	10.40.12.1 to 10.40.12.254	10.40.12.255	76	Future	10.40.76.0	10.40.76.1 to 10.40.76.254	10.40.76.255	140	Future	10.40.140.0	10.40.140.1 to 10.40.140.254	10.40.140.255	204	Future	10.40.204.0	10.40.204.1 to 10.40.204.254	10.40.204.255
13	Future	10.40.13.0	10.40.13.1 to 10.40.13.254	10.40.13.255	77	Future	10.40.77.0	10.40.77.1 to 10.40.77.254	10.40.77.255	141	Future	10.40.141.0	10.40.141.1 to 10.40.141.254	10.40.141.255	205	Future	10.40.205.0	10.40.205.1 to 10.40.205.254	10.40.205.255
14	VMWare Vmotion	10.40.14.0	10.40.14.1 to 10.40.14.254	10.40.14.255	78	Future	10.40.78.0	10.40.78.1 to 10.40.78.254	10.40.78.255	142	Future	10.40.142.0	10.40.142.1 to 10.40.142.254	10.40.142.255	206	Future	10.40.206.0	10.40.206.1 to 10.40.206.254	10.40.206.255
15	Wireless Infrastructure	10.40.15.0	10.40.15.1 to 10.40.15.126	10.40.15.127	79	Future	10.40.79.0	10.40.79.1 to 10.40.79.254	10.40.79.255	143	Future	10.40.143.0	10.40.143.1 to 10.40.143.254	10.40.143.255	207	Future	10.40.207.0	10.40.207.1 to 10.40.207.254	10.40.207.255
16	Future	10.40.16.0	10.40.16.1 to 10.40.16.254	10.40.16.255	80	Future	10.40.80.0	10.40.80.1 to 10.40.80.254	10.40.80.255	144	Future	10.40.144.0	10.40.144.1 to 10.40.144.254	10.40.144.255	208	Future	10.40.208.0	10.40.208.1 to 10.40.208.254	10.40.208.255
17	Future	10.40.17.0	10.40.17.1 to 10.40.17.254	10.40.17.255	81	Future	10.40.81.0	10.40.81.1 to 10.40.81.254	10.40.81.255	145	Future	10.40.145.0	10.40.145.1 to 10.40.145.254	10.40.145.255	209	Future	10.40.209.0	10.40.209.1 to 10.40.209.254	10.40.209.255
18	Future	10.40.18.0	10.40.18.1 to 10.40.18.254	10.40.18.255	82	Future	10.40.82.0	10.40.82.1 to 10.40.82.254	10.40.82.255	146	Future	10.40.146.0	10.40.146.1 to 10.40.146.254	10.40.146.255	210	Future	10.40.210.0	10.40.210.1 to 10.40.210.254	10.40.210.255
19	Future	10.40.19.0	10.40.19.1 to 10.40.19.254	10.40.19.255	83	Future	10.40.83.0	10.40.83.1 to 10.40.83.254	10.40.83.255	147	Future	10.40.147.0	10.40.147.1 to 10.40.147.254	10.40.147.255	211	Future	10.40.211.0	10.40.211.1 to 10.40.211.254	10.40.211.255
20	MHT Desktops	10.40.20.0	10.40.20.1 to 10.40.20.254	10.40.20.255	84	Future	10.40.84.0	10.40.84.1 to 10.40.84.254	10.40.84.255	148	Future	10.40.148.0	10.40.148.1 to 10.40.148.254	10.40.148.255	212	Future	10.40.212.0	10.40.212.1 to 10.40.212.254	10.40.212.255
21	Future	10.40.21.0	10.40.21.1 to 10.40.21.254	10.40.21.255	85	Virtual Cluster Heartbeats	10.40.85.0	10.40.85.1 to 10.40.85.254	10.40.85.255	149	Future	10.40.149.0	10.40.149.1 to 10.40.149.254	10.40.149.255	213	Future	10.40.213.0	10.40.213.1 to 10.40.213.254	10.40.213.255
22	MHT Users	10.40.22.0	10.40.22.1 to 10.40.22.126	10.40.22.127	86	Future	10.40.86.0	10.40.86.1 to 10.40.86.254	10.40.86.255	150	Future	10.40.150.0	10.40.150.1 to 10.40.150.254	10.40.150.255	214	Future	10.40.214.0	10.40.214.1 to 10.40.214.254	10.40.214.255
23	Future	10.40.23.0	10.40.23.1 to 10.40.23.254	10.40.23.255	87	Future	10.40.87.0	10.40.87.1 to 10.40.87.254	10.40.87.255	151	Future	10.40.151.0	10.40.151.1 to 10.40.151.254	10.40.151.255	215	Future	10.40.215.0	10.40.215.1 to 10.40.215.254	10.40.215.255
24	MHT Accounting Users	10.40.24.0	10.40.24.1 to 10.40.24.254	10.40.24.255	88	Future	10.40.88.0	10.40.88.1 to 10.40.88.254	10.40.88.255	152	Future	10.40.152.0	10.40.152.1 to 10.40.152.254	10.40.152.255	216	Future	10.40.216.0	10.40.216.1 to 10.40.216.254	10.40.216.255
25	Admin Users	10.40.25.0	10.40.25.1 to 10.40.25.254	10.40.25.255	89	Future	10.40.89.0	10.40.89.1 to 10.40.89.254	10.40.89.255	153	Future	10.40.153.0	10.40.153.1 to 10.40.153.254	10.40.153.255	217	Future	10.40.217.0	10.40.217.1 to 10.40.217.254	10.40.217.255
26	MHT Wireless Authentica	10.40.26.0	10.40.26.1 to 10.40.26.254	10.40.26.255	90	Future	10.40.90.0	10.40.90.1 to 10.40.90.254	10.40.90.255	154	Future	10.40.154.0	10.40.154.1 to 10.40.154.254	10.40.154.255	218	Future	10.40.218.0	10.40.218.1 to 10.40.218.254	10.40.218.255
27	LEO Users	10.40.27.0	10.40.27.1 to 10.40.27.254	10.40.27.255	91	Future	10.40.91.0	10.40.91.1 to 10.40.91.254	10.40.91.255	155	Future	10.40.155.0	10.40.155.1 to 10.40.155.254	10.40.155.255	219	Future	10.40.219.0	10.40.219.1 to 10.40.219.254	10.40.219.255
28	MHT Building Maintenan	10.40.28.0	10.40.28.1 to 10.40.28.254	10.40.28.255	92	Future	10.40.92.0	10.40.92.1 to 10.40.92.254	10.40.92.255	156	Future	10.40.156.0	10.40.156.1 to 10.40.156.254	10.40.156.255	220	Future	10.40.220.0	10.40.220.1 to 10.40.220.254	10.40.220.255
29	MHT TSA Users	10.40.29.0	10.40.29.1 to 10.40.29.254	10.40.29.255	93	Future	10.40.93.0	10.40.93.1 to 10.40.93.254	10.40.93.255	157	Future	10.40.157.0	10.40.157.1 to 10.40.157.254	10.40.157.255	221	Future	10.40.221.0	10.40.221.1 to 10.40.221.254	10.40.221.255
30	MHT Printers	10.40.30.0	10.40.30.1 to 10.40.30.254	10.40.30.255	94	Future	10.40.94.0	10.40.94.1 to 10.40.94.254	10.40.94.255	158	Future	10.40.158.0	10.40.158.1 to 10.40.158.254	10.40.158.255	222	Future	10.40.222.0	10.40.222.1 to 10.40.222.254	10.40.222.255
31	MHT Security Users	10.40.31.0	10.40.31.1 to 10.40.31.254	10.40.31.127	95	Future	10.40.95.0	10.40.95.1 to 10.40.95.254	10.40.95.255	159	Future	10.40.159.0	10.40.159.1 to 10.40.159.254	10.40.159.255	223	Future	10.40.223.0	10.40.223.1 to 10.40.223.254	10.40.223.255
32	MHT Fingerprint System	10.40.32.0	10.40.32.1 to 10.40.32.254	10.40.32.127	96	Future	10.40.96.0	10.40.96.1 to 10.40.96.254	10.40.96.255	160	Future	10.40.160.0	10.40.160.1 to 10.40.160.254	10.40.160.255	224	Future	10.40.224.0	10.40.224.1 to 10.40.224.254	10.40.224.255
33	Guest	10.40.33.0	10.40.33.1 to 10.40.33.254	10.40.33.127	97	Future	10.40.97.0	10.40.97.1 to 10.40.97.254	10.40.97.255	161	Future	10.40.161.0	10.40.161.1 to 10.40.161.254	10.40.161.255	225	Future	10.40.225.0	10.40.225.1 to 10.40.225.254	10.40.225.255
34	Future	10.40.34.0	10.40.34.1 to 10.40.34.254	10.40.34.127	98	Future	10.40.98.0	10.40.98.1 to 10.40.98.254	10.40.98.255	162	Future	10.40.162.0	10.40.162.1 to 10.40.162.254	10.40.162.255	226	Future	10.40.226.0	10.40.226.1 to 10.40.226.254	10.40.226.255
35	Future	10.40.35.0	10.40.35.1 to 10.40.35.254	10.40.35.127	99	Future	10.40.99.0	10.40.99.1 to 10.40.99.254	10.40.99.255	163	Future	10.40.163.0	10.40.163.1 to 10.40.163.254	10.40.163.255	227	Future	10.40.227.0	10.40.227.1 to 10.40.227.254	10.40.227.255
36	Future	10.40.36.0	10.40.36.1 to 10.40.36.254	10.40.36.127	100	Milltown	10.40.100.0	10.40.100.1 to 10.40.100.254	10.40.100.255	164	Future	10.40.164.0	10.40.164.1 to 10.40.164.254	10.40.164.255	228	Future	10.40.228.0	10.40.228.1 to 10.40.228.254	10.40.228.255
37	Future	10.40.37.0	10.40.37.1 to 10.40.37.254	10.40.37.127	101	Hudson-Manchester	10.40.101.0	10.40.101.1 to 10.40.101.254	10.40.101.255	165	Future	10.40.165.0	10.40.165.1 to 10.40.165.254	10.40.165.255	229	Future	10.40.229.0	10.40.229.1 to 10.40.229.254	10.40.229.255
38	Future	10.40.38.0	10.40.38.1 to 10.40.38.254	10.40.38.127	102	Ben and Jerry's	10.40.102.0	10.40.102.1 to 10.40.102.254	10.40.102.255	166	Future	10.40.166.0	10.40.166.1 to 10.40.166.254	10.40.166.255	230	Future	10.40.230.0	10.40.230.1 to 10.40.230.254	10.40.230.255
39	Future	10.40.39.0	10.40.39.1 to 10.40.39.254	10.40.39.127	103	Worldwide Flight Svc	10.40.103.0	10.40.103.1 to 10.40.103.254	10.40.103.255	167	Future	10.40.167.0	10.40.167.1 to 10.40.167.254	10.40.167.255	231	Future	10.40.231.0	10.40.231.1 to 10.40.231.254	10.40.231.255
40	Future	10.40.40.0	10.40.40.1 to 10.40.40.254	10.40.40.127	104	International RAM	10.40.104.0	10.40.104.1 to 10.40.104.254	10.40.104.255	168	Future	10.40.168.0	10.40.168.1 to 10.40.168.254	10.40.168.255	232	Future	10.40.232.0	10.40.232.1 to 10.40.232.254	10.40.232.255
41	Future	10.40.41.0	10.40.41.1 to 10.40.41.254	10.40.41.255	105	Delta	10.40.105.0	10.40.105.1 to 10.40.105.254	10.40.105.255	169	Future	10.40.169.0	10.40.169.1 to 10.40.169.254	10.40.169.255	233	Future	10.40.233.0	10.40.233.1 to 10.40.233.254	10.40.233.255
42	Southwest DMZ	10.40.42.0	10.40.42.1 to 10.40.42.254	10.40.42.255	106	Future	10.40.106.0	10.40.106.1 to 10.40.106.254	10.40.106.255	170	Future	10.40.170.0	10.40.170.1 to 10.40.170.254	10.40.170.255	234	Future	10.40.234.0	10.40.234.1 to 10.40.234.254	10.40.234.255
43	Future	10.40.43.0	10.40.43.1 to 10.40.43.254	10.40.43.255	107	Future	10.40.107.0	10.40.107.1 to 10.40.107.254	10.40.107.255	171	Future	10.40.171.0	10.40.171.1 to 10.40.171.254	10.40.171.255	235	Future	10.40.235.0	10.40.235.1 to 10.40.235.254	10.40.235.255
44	Future	10.40.44.0	10.40.44.1 to 10.40.44.254	10.40.44.255	108	Future	10.40.108.0	10.40.108.1 to 10.40.108.254	10.40.108.255	172	Future	10.40.172.0	10.40.172.1 to 10.40.172.254	10.40.172.255	236	Future	10.40.236.0	10.40.236.1 to 10.40.236.254	10.40.236.255
45	Johnson Controls	10.40.45.0	10.40.45.1 to 10.40.45.254	10.40.45.255	109	Future	10.40.109.0	10.40.109.1 to 10.40.109.254	10.40.109.255	173	Future	10.40.173.0	10.40.173.1 to 10.40.173.254	10.40.173.255	237	Future	10.40.237.0	10.40.237.1 to 10.40.237.254	10.40.237.255
46	Future	10.40.46.0	10.40.46.1 to 10.40.46.254	10.40.46.255	110	Future	10.40.110.0	10.40.110.1 to 10.40.110.254	10.40.110.255	174	Future	10.40.174.0	10.40.174.1 to 10.40.174.254	10.40.174.255	238	Future	10.40.238.0	10.40.238.1 to 10.40.238.254	10.40.238.255
47	Future	10.40.47.0	10.40.47.1 to 10.40.47.254	10.40.47.255	111	Future	10.40.111.0	10.40.111.1 to 10.40.111.254	10.40.111.255	175	Future	10.40.175.0	10.40.175.1 to 10.40.175.254	10.40.175.255	239	Future	10.40.239.0	10.40.239.1 to 10.40.239.254	10.40.239.255
48	Future	10.40.48.0	10.40.48.1 to 10.40.48.254	10.40.48.255	112	Future	10.40.112.0	10.40.112.1 to 10.40.112.254	10.40.112.255	176	Future	10.40.176.0	10.40.176.1 to 10.40.176.254	10.40.176.255	240	Future	10.40.240.0	10.40.240.1 to 10.40.240.254	10.40.240.255
49	Future	10.40.49.0	10.40.49.1 to 10.40.49.254	10.40.49.255	113	Future	10.40.113.0	10.40.113.1 to 10.40.113.254	10.40.113.255	177	Future	10.40.177.0	10.40.177.1 to 10.40.177.254	10.40.177.255	241	Future	10.40.241.0	10.40.241.1 to 10.40.241.254	10.40.241.255
50	Future	10.40.50.0	10.40.50.1 to 10.40.50.254	10.40.50.255	114	Future	10.40.114.0	10.40.114.1 to 10.40.114.254	10.40.114.255	178	Future	10.40.178.0	10.40.178.1 to 10.40.178.254	10.40.178.255	242	Future	10.40.242.0	10.40.242.1 to 10.40.242.254	10.40.242.255
51	Future	10.40.51.0	10.40.51.1 to 10.40.51.254	10.40.51.255	115	Future	10.40.115.0	10.40.115.1 to 10.40.115.254	10.40.115.255	179	Future	10.40.179.0	10.40.179.1 to 10.40.179.254	10.40.179.255	243	Future	10.40.243.0	10.40.243.1 to 10.40.243.254	10.40.243.255
52	Future	10.40.52.0	10.40.52.1 to 10.40.52.254	10.40.52.255	116	Future	10.40.116.0	10.40.116.1 to 10.40.116.254	10.40.116.255	180	Future	10.40.180.0	10.40.180.1 to 10.40.180.254	10.40.180.255	244	Future	10.40.244.0	10.40.244.1 to 10.40.244.254	10.40.244.255
53	Future	10.40.53.0	10.40.53.1 to 10.40.53.254	10.40.53.255	117	Future	10.40.117.0	10.40.117.1 to 10.40.117.254	10.40.117.255	181	Future	10.40.181.0	10.40.181.1 to 10.40.181.254	10.40.181.255	245	Future	10.40.245.0	10.40.245.1 to 10.40.245.254	10.40.245.255
54	Future	10.40.54.0	10.40.54.1 to 10.40.54.254	10.40.54.255	118	Dunkin Donuts	10.40.118.0	10.40.118.1 to 10.40.118.254	10.40.118.255	182	Future	10.40.182.0	10.40.182.1 to 10.40.182.254	10.40.182.255	246	Future	10.40.246.0	10.40.246.1 to 10.40.246.254	10.40.246.255
55	Signs	10.40.55.0	10.40.55.1 to 10.40.55.254	10.40.55.255	119	Audax Technologies	10.40.119.0	10.40.119.1 to 10.40.119.254	10.40.119.255	183	Future	10.40.183.0	10.40.183.1 to 10.40.183.254	10.40.183.255	247	Future	10.40.247.0	10.40.247.1 to 10.40.247.254	10.40.247.255
56	Future	10.40.56.0	10.40.56.1 to 10.40.56.254	10.40.56.255	120	VLAN 709	10.40.120.0	10.40.120.1 to 10.40.120.254	10.40.120.255	184	Future	10.40.184.0	10.40.184.1 to 10.40.184.254	10.40.184.255	248	Future	10.40.248.0	10.40.248.1 to 10.40.248.254	10.40.248.255
57	Future	10.40.57.0	10.40.57.1 to 10.40.57.254	10.40.57.255	121	City Network	10.40.121.0	10.40.121.1 to 10.40.121.254	10.40.121.255	185	Future	10.40.185.0	10.40.185.1 to 10.40.185.254	10.40.185.255	249	Future	10.40.249.0	10.40.249.1 to 10.40.249.254	10.40.249.255
58	Future	10.40.58.0	10.40.58.1 to 10.40.58.254	10.40.58.255	122	External Network	10.40.122.0	10.40.122.1 to 10.40.122.254	10.40.122.255	186	Future	10.40.186.0	10.40.186.1 to 10.40.186.254	10.40.186.255	250	Future	10.40.250.0	10.40.250.1 to 10.40.250.254	10.40.250.255
59	Future	10.40.59.0	10.40.59.1 to 10.40.59.254	10.40.59.255	123	FDDI Default	10.40.123.0	10.40.123.1 to 10.40.123.254	10.40.123.255	187	Future	10.40.187.0	10.40.187.1 to 10.40.187.254	10.40.187.255	251	Future	10.40.251.0	10.40.251.1 to 10.40.251.254	10.40.251.255
60	Camera	10.40.60.0	10.40.60.1 to 10.40.60.254	10.40.60.255	124	FDDInet Default	10.40.124.0	10.40.124.1 to 10.40.124.254	10.40.124.255	188	Future	10.40.188.0	10.40.188.1 to 10.40.188.254	10.40.188.255	252	Future	10.40.252.0	10.40.252.1 to 10.40.252.254	10.40.252.255
61	Future	10.40.61.0	10.40.61.1 to 10.40.61.254	10.40.61.255	125	TRBF Default	10.40.125.0	10.40.125.1 to 10.40.125.254	10.40.125.255	189	Future	10.40.189.0	10.40.189.1 to 10.40.189.254	10.40.189.255	253	Future	10.40.253.0	10.40.253.1 to 10.40.253.254	10.40.253.255
62	Future	10.40.62.0	10.40.62.1 to 10.40.62.254	10.40.62.255	126	Future	10.40.126.0	10.40.126.1 to 10.40.126.254	10.40.126.255	190	Future	10.40.190.0	10.40.190.1 to 10.40.190.254	10.40.190.255	254	Network Management	10.40.254.0	10.40.254.1 to 10.40.254.254	10.40.254.255
63	Future	10.40.63.0	10.40.63.1 to 10.40.63.254	10.40.63.255	127	Future	10.40.127.0	10.40.127.1 to 10.40.127.254	10.40.127.255	191	Future	10.40.191.0	10.40.191.1 to 10.40.191.254	10.40.191.255					

SERVER FARM TERMINAL

Server Farm Terminal — 10.44.0.0/24 — MHT IP Addressing Plan

VLAN	Function	Network	Hosts	Broadcast
	Core Uplinks	10.44.0.0	10.44.0.1 to 10.44.0.254	10.44.0.255
1	Default	10.44.1.0	10.44.1.1 to 10.44.1.254	10.44.1.255
2	Admin	10.44.2.0	10.44.2.1 to 10.44.2.254	10.44.2.255
3	FIDS	10.44.3.0	10.44.3.1 to 10.44.3.254	10.44.3.255
4	Security	10.44.4.0	10.44.4.1 to 10.44.4.254	10.44.4.255
5	Security Camera	10.44.5.0	10.44.5.1 to 10.44.5.254	10.44.5.255
6	Taxi	10.44.6.0	10.44.6.1 to 10.44.6.254	10.44.6.255
7	HVAC	10.44.7.0	10.44.7.1 to 10.44.7.254	10.44.7.255
8	Comcast - Passenger	10.44.8.0	10.44.8.1 to 10.44.8.254	10.44.8.255
9	WiFi Private	10.44.9.0	10.44.9.1 to 10.44.9.254	10.44.9.255
10	Comcast - Personnel	10.44.10.0	10.44.10.1 to 10.44.10.254	10.44.10.127
11	iLO	10.44.11.0	10.44.11.1 to 10.44.11.254	10.44.11.255
12	Conveyor	10.44.12.0	10.44.12.1 to 10.44.12.254	10.44.12.255
13	Future	10.44.13.0	10.44.13.1 to 10.44.13.254	10.44.13.255
14	VMWare Vmotion	10.44.14.0	10.44.14.1 to 10.44.14.254	10.44.14.255
15	Wireless Infrastructure	10.44.15.0	10.44.15.1 to 10.44.15.126	10.44.15.127
16	Future	10.44.16.0	10.44.16.1 to 10.44.16.254	10.44.16.255
17	Future	10.44.17.0	10.44.17.1 to 10.44.17.254	10.44.17.255
18	Future	10.44.18.0	10.44.18.1 to 10.44.18.254	10.44.18.255
19	Future	10.44.19.0	10.44.19.1 to 10.44.19.254	10.44.19.255
20	MHT Desktops	10.44.20.0	10.44.20.1 to 10.44.20.254	10.44.20.255
21	Future	10.44.21.0	10.44.21.1 to 10.44.21.254	10.44.21.255
22	MHT Users	10.44.22.0	10.44.22.1 to 10.44.22.126	10.44.22.127
23	Future	10.44.23.0	10.44.23.1 to 10.44.23.254	10.44.23.255
24	MHT Accounting Users	10.44.24.0	10.44.24.1 to 10.44.24.254	10.44.24.255
25	Admin Users	10.44.25.0	10.44.25.1 to 10.44.25.254	10.44.25.255
26	MHT Wireless Authentical	10.44.26.0	10.44.26.1 to 10.44.26.254	10.44.26.255
27	LEO Users	10.44.27.0	10.44.27.1 to 10.44.27.254	10.44.27.255
28	MHT Building Maintenan	10.44.28.0	10.44.28.1 to 10.44.28.254	10.44.28.255
29	MHT TSA Users	10.44.29.0	10.44.29.1 to 10.44.29.254	10.44.29.255
30	MHT Printers	10.44.30.0	10.44.30.1 to 10.44.30.254	10.44.30.255
31	MHT Security Users	10.44.31.0	10.44.31.1 to 10.44.31.254	10.44.31.127
32	MHT Fingerprint System	10.44.32.0	10.44.32.1 to 10.44.32.254	10.44.32.127
33	Guest	10.44.33.0	10.44.33.1 to 10.44.33.254	10.44.33.127
34	Future	10.44.34.0	10.44.34.1 to 10.44.34.254	10.44.34.127
35	Future	10.44.35.0	10.44.35.1 to 10.44.35.254	10.44.35.127
36	Future	10.44.36.0	10.44.36.1 to 10.44.36.254	10.44.36.127
37	Future	10.44.37.0	10.44.37.1 to 10.44.37.254	10.44.37.127
38	Future	10.44.38.0	10.44.38.1 to 10.44.38.254	10.44.38.127
39	Future	10.44.39.0	10.44.39.1 to 10.44.39.254	10.44.39.127
40	Future	10.44.40.0	10.44.40.1 to 10.44.40.254	10.44.40.127
41	Future	10.44.41.0	10.44.41.1 to 10.44.41.254	10.44.41.255
42	Southwest DMZ	10.44.42.0	10.44.42.1 to 10.44.42.254	10.44.42.255
43	Future	10.44.43.0	10.44.43.1 to 10.44.43.254	10.44.43.255
44	Future	10.44.44.0	10.44.44.1 to 10.44.44.254	10.44.44.255
45	Johnson Controls	10.44.45.0	10.44.45.1 to 10.44.45.254	10.44.45.255
46	Future	10.44.46.0	10.44.46.1 to 10.44.46.254	10.44.46.255
47	Future	10.44.47.0	10.44.47.1 to 10.44.47.254	10.44.47.255
48	Future	10.44.48.0	10.44.48.1 to 10.44.48.254	10.44.48.255
49	Future	10.44.49.0	10.44.49.1 to 10.44.49.254	10.44.49.255
50	Future	10.44.50.0	10.44.50.1 to 10.44.50.254	10.44.50.255
51	Future	10.44.51.0	10.44.51.1 to 10.44.51.254	10.44.51.255
52	Future	10.44.52.0	10.44.52.1 to 10.44.52.254	10.44.52.255
53	Future	10.44.53.0	10.44.53.1 to 10.44.53.254	10.44.53.255
54	Future	10.44.54.0	10.44.54.1 to 10.44.54.254	10.44.54.255
55	Signs	10.44.55.0	10.44.55.1 to 10.44.55.254	10.44.55.255
56	Future	10.44.56.0	10.44.56.1 to 10.44.56.254	10.44.56.255
57	Future	10.44.57.0	10.44.57.1 to 10.44.57.254	10.44.57.255
58	Future	10.44.58.0	10.44.58.1 to 10.44.58.254	10.44.58.255
59	Future	10.44.59.0	10.44.59.1 to 10.44.59.254	10.44.59.255
60	Camera	10.44.60.0	10.44.60.1 to 10.44.60.254	10.44.60.255
61	Future	10.44.61.0	10.44.61.1 to 10.44.61.254	10.44.61.255
62	Future	10.44.62.0	10.44.62.1 to 10.44.62.254	10.44.62.255
63	Future	10.44.63.0	10.44.63.1 to 10.44.63.254	10.44.63.255
64	Core Uplinks	10.44.64.0	10.44.64.1 to 10.44.64.254	10.44.64.255
65	City Unrouted	10.44.65.0	10.44.65.1 to 10.44.65.254	10.44.65.255
66	Future	10.44.66.0	10.44.66.1 to 10.44.66.254	10.44.66.255
67	Future	10.44.67.0	10.44.67.1 to 10.44.67.254	10.44.67.255
68	Future	10.44.68.0	10.44.68.1 to 10.44.68.254	10.44.68.255
69	Future	10.44.69.0	10.44.69.1 to 10.44.69.254	10.44.69.255
70	Power Related	10.44.70.0	10.44.70.1 to 10.44.70.254	10.44.70.255
71	Future	10.44.71.0	10.44.71.1 to 10.44.71.254	10.44.71.255
72	Future	10.44.72.0	10.44.72.1 to 10.44.72.254	10.44.72.255
73	Future	10.44.73.0	10.44.73.1 to 10.44.73.254	10.44.73.255
74	Future	10.44.74.0	10.44.74.1 to 10.44.74.254	10.44.74.255
75	Future	10.44.75.0	10.44.75.1 to 10.44.75.254	10.44.75.255
76	Future	10.44.76.0	10.44.76.1 to 10.44.76.254	10.44.76.255
77	Future	10.44.77.0	10.44.77.1 to 10.44.77.254	10.44.77.255
78	Future	10.44.78.0	10.44.78.1 to 10.44.78.254	10.44.78.255
79	Future	10.44.79.0	10.44.79.1 to 10.44.79.254	10.44.79.255
80	Future	10.44.80.0	10.44.80.1 to 10.44.80.254	10.44.80.255
81	Future	10.44.81.0	10.44.81.1 to 10.44.81.254	10.44.81.255
82	Future	10.44.82.0	10.44.82.1 to 10.44.82.254	10.44.82.255
83	Future	10.44.83.0	10.44.83.1 to 10.44.83.254	10.44.83.255
84	Future	10.44.84.0	10.44.84.1 to 10.44.84.254	10.44.84.255
85	Virtual Cluster Heartbeats	10.44.85.0	10.44.85.1 to 10.44.85.254	10.44.85.255
86	Future	10.44.86.0	10.44.86.1 to 10.44.86.254	10.44.86.255
87	Future	10.44.87.0	10.44.87.1 to 10.44.87.254	10.44.87.255
88	Future	10.44.88.0	10.44.88.1 to 10.44.88.254	10.44.88.255
89	Future	10.44.89.0	10.44.89.1 to 10.44.89.254	10.44.89.255
90	Future	10.44.90.0	10.44.90.1 to 10.44.90.254	10.44.90.255
91	Future	10.44.91.0	10.44.91.1 to 10.44.91.254	10.44.91.255
92	Future	10.44.92.0	10.44.92.1 to 10.44.92.254	10.44.92.255
93	Future	10.44.93.0	10.44.93.1 to 10.44.93.254	10.44.93.255
94	Future	10.44.94.0	10.44.94.1 to 10.44.94.254	10.44.94.255
95	Future	10.44.95.0	10.44.95.1 to 10.44.95.254	10.44.95.255
96	Future	10.44.96.0	10.44.96.1 to 10.44.96.254	10.44.96.255
97	Future	10.44.97.0	10.44.97.1 to 10.44.97.254	10.44.97.255
98	Future	10.44.98.0	10.44.98.1 to 10.44.98.254	10.44.98.255
99	Future	10.44.99.0	10.44.99.1 to 10.44.99.254	10.44.99.255
100	Milltown	10.44.100.0	10.44.100.1 to 10.44.100.254	10.44.100.255
101	Hudson-Manchester	10.44.101.0	10.44.101.1 to 10.44.101.254	10.44.101.255
102	Ben and Jerry's	10.44.102.0	10.44.102.1 to 10.44.102.254	10.44.102.255
103	Worldwide Flight Svc	10.44.103.0	10.44.103.1 to 10.44.103.254	10.44.103.255
104	International RAM	10.44.104.0	10.44.104.1 to 10.44.104.254	10.44.104.255
105	Delta	10.44.105.0	10.44.105.1 to 10.44.105.254	10.44.105.255
106	Future	10.44.106.0	10.44.106.1 to 10.44.106.254	10.44.106.255
107	Future	10.44.107.0	10.44.107.1 to 10.44.107.254	10.44.107.255
108	Future	10.44.108.0	10.44.108.1 to 10.44.108.254	10.44.108.255
109	Future	10.44.109.0	10.44.109.1 to 10.44.109.254	10.44.109.255
110	Future	10.44.110.0	10.44.110.1 to 10.44.110.254	10.44.110.255
111	Future	10.44.111.0	10.44.111.1 to 10.44.111.254	10.44.111.255
112	Future	10.44.112.0	10.44.112.1 to 10.44.112.254	10.44.112.255
113	Future	10.44.113.0	10.44.113.1 to 10.44.113.254	10.44.113.255
114	Future	10.44.114.0	10.44.114.1 to 10.44.114.254	10.44.114.255
115	Future	10.44.115.0	10.44.115.1 to 10.44.115.254	10.44.115.255
116	Future	10.44.116.0	10.44.116.1 to 10.44.116.254	10.44.116.255
117	Future	10.44.117.0	10.44.117.1 to 10.44.117.254	10.44.117.255
118	Dunkin Donuts	10.44.118.0	10.44.118.1 to 10.44.118.254	10.44.118.255
119	Audax Technologies	10.44.119.0	10.44.119.1 to 10.44.119.254	10.44.119.255
120	VLAN 709	10.44.120.0	10.44.120.1 to 10.44.120.254	10.44.120.255
121	City Network	10.44.121.0	10.44.121.1 to 10.44.121.254	10.44.121.255
122	External Network	10.44.122.0	10.44.122.1 to 10.44.122.254	10.44.122.255
123	FDDI Default	10.44.123.0	10.44.123.1 to 10.44.123.254	10.44.123.255
124	FDDInet Default	10.44.124.0	10.44.124.1 to 10.44.124.254	10.44.124.255
125	TRBF Default	10.44.125.0	10.44.125.1 to 10.44.125.254	10.44.125.255
126	Future	10.44.126.0	10.44.126.1 to 10.44.126.254	10.44.126.255
127	Future	10.44.127.0	10.44.127.1 to 10.44.127.254	10.44.127.255
128	Core Uplinks	10.44.128.0	10.44.128.1 to 10.44.128.254	10.44.128.255
129	Future	10.44.129.0	10.44.129.1 to 10.44.129.254	10.44.129.255
130	Future	10.44.130.0	10.44.130.1 to 10.44.130.254	10.44.130.255
131	Future	10.44.131.0	10.44.131.1 to 10.44.131.254	10.44.131.255
132	Future	10.44.132.0	10.44.132.1 to 10.44.132.254	10.44.132.255
133	Future	10.44.133.0	10.44.133.1 to 10.44.133.254	10.44.133.255
134	Future	10.44.134.0	10.44.134.1 to 10.44.134.254	10.44.134.255
135	Future	10.44.135.0	10.44.135.1 to 10.44.135.254	10.44.135.255
136	Future	10.44.136.0	10.44.136.1 to 10.44.136.254	10.44.136.255
137	Future	10.44.137.0	10.44.137.1 to 10.44.137.254	10.44.137.255
138	Future	10.44.138.0	10.44.138.1 to 10.44.138.254	10.44.138.255
139	Future	10.44.139.0	10.44.139.1 to 10.44.139.254	10.44.139.255
140	Future	10.44.140.0	10.44.140.1 to 10.44.140.254	10.44.140.255
141	Future	10.44.141.0	10.44.141.1 to 10.44.141.254	10.44.141.255
142	Future	10.44.142.0	10.44.142.1 to 10.44.142.254	10.44.142.255
143	Future	10.44.143.0	10.44.143.1 to 10.44.143.254	10.44.143.255
144	Future	10.44.144.0	10.44.144.1 to 10.44.144.254	10.44.144.255
145	Future	10.44.145.0	10.44.145.1 to 10.44.145.254	10.44.145.255
146	Future	10.44.146.0	10.44.146.1 to 10.44.146.254	10.44.146.255
147	Future	10.44.147.0	10.44.147.1 to 10.44.147.254	10.44.147.255
148	Future	10.44.148.0	10.44.148.1 to 10.44.148.254	10.44.148.255
149	Future	10.44.149.0	10.44.149.1 to 10.44.149.254	10.44.149.255
150	Future	10.44.150.0	10.44.150.1 to 10.44.150.254	10.44.150.255
151	Future	10.44.151.0	10.44.151.1 to 10.44.151.254	10.44.151.255
152	Future	10.44.152.0	10.44.152.1 to 10.44.152.254	10.44.152.255
153	Future	10.44.153.0	10.44.153.1 to 10.44.153.254	10.44.153.255
154	Future	10.44.154.0	10.44.154.1 to 10.44.154.254	10.44.154.255
155	Future	10.44.155.0	10.44.155.1 to 10.44.155.254	10.44.155.255
156	Future	10.44.156.0	10.44.156.1 to 10.44.156.254	10.44.156.255
157	Future	10.44.157.0	10.44.157.1 to 10.44.157.254	10.44.157.255
158	Future	10.44.158.0	10.44.158.1 to 10.44.158.254	10.44.158.255
159	Future	10.44.159.0	10.44.159.1 to 10.44.159.254	10.44.159.255
160	Future	10.44.160.0	10.44.160.1 to 10.44.160.254	10.44.160.255
161	Future	10.44.161.0	10.44.161.1 to 10.44.161.254	10.44.161.255
162	Future	10.44.162.0	10.44.162.1 to 10.44.162.254	10.44.162.255
163	Future	10.44.163.0	10.44.163.1 to 10.44.163.254	10.44.163.255
164	Future	10.44.164.0	10.44.164.1 to 10.44.164.254	10.44.164.255
165	Future	10.44.165.0	10.44.165.1 to 10.44.165.254	10.44.165.255
166	Future	10.44.166.0	10.44.166.1 to 10.44.166.254	10.44.166.255
167	Future	10.44.167.0	10.44.167.1 to 10.44.167.254	10.44.167.255
168	Future	10.44.168.0	10.44.168.1 to 10.44.168.254	10.44.168.255
169	Future	10.44.169.0	10.44.169.1 to 10.44.169.254	10.44.169.255
170	Future	10.44.170.0	10.44.170.1 to 10.44.170.254	10.44.170.255
171	Future	10.44.171.0	10.44.171.1 to 10.44.171.254	10.44.171.255
172	Future	10.44.172.0	10.44.172.1 to 10.44.172.254	10.44.172.255
173	Future	10.44.173.0	10.44.173.1 to 10.44.173.254	10.44.173.255
174	Future	10.44.174.0	10.44.174.1 to 10.44.174.254	10.44.174.255
175	Future	10.44.175.0	10.44.175.1 to 10.44.175.254	10.44.175.255
176	Future	10.44.176.0	10.44.176.1 to 10.44.176.254	10.44.176.255
177	Future	10.44.177.0	10.44.177.1 to 10.44.177.254	10.44.177.255
178	Future	10.44.178.0	10.44.178.1 to 10.44.178.254	10.44.178.255
179	Future	10.44.179.0	10.44.179.1 to 10.44.179.254	10.44.179.255
180	Future	10.44.180.0	10.44.180.1 to 10.44.180.254	10.44.180.255
181	Future	10.44.181.0	10.44.181.1 to 10.44.181.254	10.44.181.255
182	Future	10.44.182.0	10.44.182.1 to 10.44.182.254	10.44.182.255
183	Future	10.44.183.0	10.44.183.1 to 10.44.183.254	10.44.183.255
184	Future	10.44.184.0	10.44.184.1 to 10.44.184.254	10.44.184.255
185	Future	10.44.185.0	10.44.185.1 to 10.44.185.254	10.44.185.255
186	Future	10.44.186.0	10.44.186.1 to 10.44.186.254	10.44.186.255
187	Future	10.44.187.0	10.44.187.1 to 10.44.187.254	10.44.187.255
188	Future	10.44.188.0	10.44.188.1 to 10.44.188.254	10.44.188.255
189	Future	10.44.189.0	10.44.189.1 to 10.44.189.254	10.44.189.255
190	Future	10.44.190.0	10.44.190.1 to 10.44.190.254	10.44.190.255
191	Future	10.44.191.0	10.44.191.1 to 10.44.191.254	10.44.191.255
192	Core Uplinks	10.44.192.0	10.44.192.1 to 10.44.192.254	10.44.192.255
193	Future	10.44.193.0	10.44.193.1 to 10.44.193.254	10.44.193.255
194	Future	10.44.194.0	10.44.194.1 to 10.44.194.254	10.44.194.255
195	Future	10.44.195.0	10.44.195.1 to 10.44.195.254	10.44.195.255
196	Future	10.44.196.0	10.44.196.1 to 10.44.196.254	10.44.196.255
197	Future	10.44.197.0	10.44.197.1 to 10.44.197.254	10.44.197.255
198	Future	10.44.198.0	10.44.198.1 to 10.44.198.254	10.44.198.255
199	Future	10.44.199.0	10.44.199.1 to 10.44.199.254	10.44.199.255
200	Future	10.44.200.0	10.44.200.1 to 10.44.200.254	10.44.200.255
201	Future	10.44.201.0	10.44.201.1 to 10.44.201.254	10.44.201.255
202	Future	10.44.202.0	10.44.202.1 to 10.44.202.254	10.44.202.255
203	Future	10.44.203.0	10.44.203.1 to 10.44.203.254	10.44.203.255
204	Future	10.44.204.0	10.44.204.1 to 10.44.204.254	10.44.204.255
205	Future	10.44.205.0	10.44.205.1 to 10.44.205.254	10.44.205.255
206	Future	10.44.206.0	10.44.206.1 to 10.44.206.254	10.44.206.255
207	Future	10.44.207.0	10.44.207.1 to 10.44.207.254	10.44.207.255
208	Future	10.44.208.0	10.44.208.1 to 10.44.208.254	10.44.208.255
209	Future	10.44.209.0	10.44.209.1 to 10.44.209.254	10.44.209.255
210	Future	10.44.210.0	10.44.210.1 to 10.44.210.254	10.44.210.255
211	Future	10.44.211.0	10.44.211.1 to 10.44.211.254	10.44.211.255
212	Future	10.44.212.0	10.44.212.1 to 10.44.212.254	10.44.212.255
213	Future	10.44.213.0	10.44.213.1 to 10.44.213.254	10.44.213.255
214	Future	10.44.214.0	10.44.214.1 to 10.44.214.254	10.44.214.255
215	Future	10.44.215.0	10.44.215.1 to 10.44.215.254	10.44.215.255
216	Future	10.44.216.0	10.44.216.1 to 10.44.216.254	10.44.216.255
217	Future	10.44.217.0	10.44.217.1 to 10.44.217.254	10.44.217.255
218	Future	10.44.218.0	10.44.218.1 to 10.44.218.254	10.44.218.255
219	Future	10.44.219.0	10.44.219.1 to 10.44.219.254	10.44.219.255
220	Future	10.44.220.0	10.44.220.1 to 10.44.220.254	10.44.220.255
221	Future	10.44.221.0	10.44.221.1 to 10.44.221.254	10.44.221.255
222	Future	10.44.222.0	10.44.222.1 to 10.44.222.254	10.44.222.255
223	Future	10.44.223.0	10.44.223.1 to 10.44.223.254	10.44.223.255
224	Future	10.44.224.0	10.44.224.1 to 10.44.224.254	10.44.224.255
225	Future	10.44.225.0	10.44.225.1 to 10.44.225.254	10.44.225.255
226	Future	10.44.226.0	10.44.226.1 to 10.44.226.254	10.44.226.255
227	Future	10.44.227.0	10.44.227.1 to 10.44.227.254	10.44.227.255
228	Future	10.44.228.0	10.44.228.1 to 10.44.228.254	10.44.228.255
229	Future	10.44.229.0	10.44.229.1 to 10.44.229.254	10.44.229.255
230	Future	10.44.230.0	10.44.230.1 to 10.44.230.254	10.44.230.255
231	Future	10.44.231.0	10.44.231.1 to 10.44.231.254	10.44.231.255
232	Future	10.44.232.0	10.44.232.1 to 10.44.232.254	10.44.232.255
233	Future	10.44.233.0	10.44.233.1 to 10.44.233.254	10.44.233.255
234	Future	10.44.234.0	10.44.234.1 to 10.44.234.254	10.44.234.255
235	Future	10.44.235.0	10.44.235.1 to 10.44.235.254	10.44.235.255
236	Future	10.44.236.0	10.44.236.1 to 10.44.236.254	10.44.236.255
237	Future	10.44.237.0	10.44.237.1 to 10.44.237.254	10.44.237.255
238	Future	10.44.238.0	10.44.238.1 to 10.44.238.254	10.44.238.255
239	Future	10.44.239.0	10.44.239.1 to 10.44.239.254	10.44.239.255
240	Future	10.44.240.0	10.44.240.1 to 10.44.240.254	10.44.240.255
241	Future	10.44.241.0	10.44.241.1 to 10.44.241.254	10.44.241.255
242	Future	10.44.242.0	10.44.242.1 to 10.44.242.254	10.44.242.255
243	Future	10.44.243.0	10.44.243.1 to 10.44.243.254	10.44.243.255
244	Future	10.44.244.0	10.44.244.1 to 10.44.244.254	10.44.244.255
245	Future	10.44.245.0	10.44.245.1 to 10.44.245.254	10.44.245.255
246	Future	10.44.246.0	10.44.246.1 to 10.44.246.254	10.44.246.255
247	Future	10.44.247.0	10.44.247.1 to 10.44.247.254	10.44.247.255
248	Future	10.44.248.0	10.44.248.1 to 10.44.248.254	10.44.248.255
249	Future	10.44.249.0	10.44.249.1 to 10.44.249.254	10.44.249.255
250	Future	10.44.250.0	10.44.250.1 to 10.44.250.254	10.44.250.255
251	Future	10.44.251.0	10.44.251.1 to 10.44.251.254	10.44.251.255
252	Future	10.44.252.0	10.44.252.1 to 10.44.252.254	10.44.252.255
253	Future	10.44.253.0	10.44.253.1 to 10.44.253.254	10.44.253.255
254	Network Management	10.44.254.0	10.44.254.1 to 10.44.254.254	10.44.254.255

SERVER FARM AAFF (45)

Server Farm ARFF				10.45.0.0/24	MHT IP Addressing Plan															
VLAN	Function	Network	Hosts	Broadcast	VLAN	Function	Network	Hosts	Broadcast	VLAN	Function	Network	Hosts	Broadcast	VLAN	Function	Network	Hosts	Broadcast
	Core Uplinks	10.45.0.0	10.45.0.1 to 10.45.0.254	10.45.0.255		Core Uplinks	10.45.64.0	10.45.64.1 to 10.45.64.254	10.45.64.255		Core Uplinks	10.45.128.0	10.45.128.1 to 10.45.128.254	10.45.128.255		Core Uplinks	10.45.192.0	10.45.192.1 to 10.45.192.254	10.45.192.255
1	Default	10.45.1.0	10.45.1.1 to 10.45.1.254	10.45.1.255	65	City Unrouted	10.45.65.0	10.45.65.1 to 10.45.65.254	10.45.65.255	129	Future	10.45.129.0	10.45.129.1 to 10.45.129.254	10.45.129.255	193	Future	10.45.193.0	10.45.193.1 to 10.45.193.254	10.45.193.255
2	Admin	10.45.2.0	10.45.2.1 to 10.45.2.254	10.45.2.255	66	Future	10.45.66.0	10.45.66.1 to 10.45.66.254	10.45.66.255	130	Future	10.45.130.0	10.45.130.1 to 10.45.130.254	10.45.130.255	194	Future	10.45.194.0	10.45.194.1 to 10.45.194.254	10.45.194.255
3	FIDS	10.45.3.0	10.45.3.1 to 10.45.3.254	10.45.3.255	67	Future	10.45.67.0	10.45.67.1 to 10.45.67.254	10.45.67.255	131	Future	10.45.131.0	10.45.131.1 to 10.45.131.254	10.45.131.255	195	Future	10.45.195.0	10.45.195.1 to 10.45.195.254	10.45.195.255
4	Security	10.45.4.0	10.45.4.1 to 10.45.4.254	10.45.4.255	68	Future	10.45.68.0	10.45.68.1 to 10.45.68.254	10.45.68.255	132	Future	10.45.132.0	10.45.132.1 to 10.45.132.254	10.45.132.255	196	Future	10.45.196.0	10.45.196.1 to 10.45.196.254	10.45.196.255
5	Security Camera	10.45.5.0	10.45.5.1 to 10.45.5.254	10.45.5.255	69	Future	10.45.69.0	10.45.69.1 to 10.45.69.254	10.45.69.255	133	Future	10.45.133.0	10.45.133.1 to 10.45.133.254	10.45.133.255	197	Future	10.45.197.0	10.45.197.1 to 10.45.197.254	10.45.197.255
6	Taxi	10.45.6.0	10.45.6.1 to 10.45.6.254	10.45.6.255	70	Power Related	10.45.70.0	10.45.70.1 to 10.45.70.254	10.45.70.255	134	Future	10.45.134.0	10.45.134.1 to 10.45.134.254	10.45.134.255	198	Future	10.45.198.0	10.45.198.1 to 10.45.198.254	10.45.198.255
7	HVAC	10.45.7.0	10.45.7.1 to 10.45.7.254	10.45.7.255	71	Future	10.45.71.0	10.45.71.1 to 10.45.71.254	10.45.71.255	135	Future	10.45.135.0	10.45.135.1 to 10.45.135.254	10.45.135.255	199	Future	10.45.199.0	10.45.199.1 to 10.45.199.254	10.45.199.255
8	Comcast - Passenger	10.45.8.0	10.45.8.1 to 10.45.8.254	10.45.8.255	72	Future	10.45.72.0	10.45.72.1 to 10.45.72.254	10.45.72.255	136	Future	10.45.136.0	10.45.136.1 to 10.45.136.254	10.45.136.255	200	Future	10.45.200.0	10.45.200.1 to 10.45.200.254	10.45.200.255
9	WiFi Private	10.45.9.0	10.45.9.1 to 10.45.9.254	10.45.9.255	73	Future	10.45.73.0	10.45.73.1 to 10.45.73.254	10.45.73.255	137	Future	10.45.137.0	10.45.137.1 to 10.45.137.254	10.45.137.255	201	Future	10.45.201.0	10.45.201.1 to 10.45.201.254	10.45.201.255
10	Comcast - Personnel	10.45.10.0	10.45.10.1 to 10.45.10.254	10.45.10.127	74	Future	10.45.74.0	10.45.74.1 to 10.45.74.254	10.45.74.255	138	Future	10.45.138.0	10.45.138.1 to 10.45.138.254	10.45.138.255	202	Future	10.45.202.0	10.45.202.1 to 10.45.202.254	10.45.202.255
11	iLO	10.45.11.0	10.45.11.1 to 10.45.11.254	10.45.11.255	75	Future	10.45.75.0	10.45.75.1 to 10.45.75.254	10.45.75.255	139	Future	10.45.139.0	10.45.139.1 to 10.45.139.254	10.45.139.255	203	Future	10.45.203.0	10.45.203.1 to 10.45.203.254	10.45.203.255
12	Conveyor	10.45.12.0	10.45.12.1 to 10.45.12.254	10.45.12.255	76	Future	10.45.76.0	10.45.76.1 to 10.45.76.254	10.45.76.255	140	Future	10.45.140.0	10.45.140.1 to 10.45.140.254	10.45.140.255	204	Future	10.45.204.0	10.45.204.1 to 10.45.204.254	10.45.204.255
13	Future	10.45.13.0	10.45.13.1 to 10.45.13.254	10.45.13.255	77	Future	10.45.77.0	10.45.77.1 to 10.45.77.254	10.45.77.255	141	Future	10.45.141.0	10.45.141.1 to 10.45.141.254	10.45.141.255	205	Future	10.45.205.0	10.45.205.1 to 10.45.205.254	10.45.205.255
14	VMWare Vmotion	10.45.14.0	10.45.14.1 to 10.45.14.254	10.45.14.255	78	Future	10.45.78.0	10.45.78.1 to 10.45.78.254	10.45.78.255	142	Future	10.45.142.0	10.45.142.1 to 10.45.142.254	10.45.142.255	206	Future	10.45.206.0	10.45.206.1 to 10.45.206.254	10.45.206.255
15	Wireless Infrastructure	10.45.15.0	10.45.15.1 to 10.45.15.126	10.45.15.127	79	Future	10.45.79.0	10.45.79.1 to 10.45.79.254	10.45.79.255	143	Future	10.45.143.0	10.45.143.1 to 10.45.143.254	10.45.143.255	207	Future	10.45.207.0	10.45.207.1 to 10.45.207.254	10.45.207.255
16	Future	10.45.16.0	10.45.16.1 to 10.45.16.254	10.45.16.255	80	Future	10.45.80.0	10.45.80.1 to 10.45.80.254	10.45.80.255	144	Future	10.45.144.0	10.45.144.1 to 10.45.144.254	10.45.144.255	208	Future	10.45.208.0	10.45.208.1 to 10.45.208.254	10.45.208.255
17	Future	10.45.17.0	10.45.17.1 to 10.45.17.254	10.45.17.255	81	Future	10.45.81.0	10.45.81.1 to 10.45.81.254	10.45.81.255	145	Future	10.45.145.0	10.45.145.1 to 10.45.145.254	10.45.145.255	209	Future	10.45.209.0	10.45.209.1 to 10.45.209.254	10.45.209.255
18	Future	10.45.18.0	10.45.18.1 to 10.45.18.254	10.45.18.255	82	Future	10.45.82.0	10.45.82.1 to 10.45.82.254	10.45.82.255	146	Future	10.45.146.0	10.45.146.1 to 10.45.146.254	10.45.146.255	210	Future	10.45.210.0	10.45.210.1 to 10.45.210.254	10.45.210.255
19	Future	10.45.19.0	10.45.19.1 to 10.45.19.254	10.45.19.255	83	Future	10.45.83.0	10.45.83.1 to 10.45.83.254	10.45.83.255	147	Future	10.45.147.0	10.45.147.1 to 10.45.147.254	10.45.147.255	211	Future	10.45.211.0	10.45.211.1 to 10.45.211.254	10.45.211.255
20	MHT Desktops	10.45.20.0	10.45.20.1 to 10.45.20.254	10.45.20.255	84	Future	10.45.84.0	10.45.84.1 to 10.45.84.254	10.45.84.255	148	Future	10.45.148.0	10.45.148.1 to 10.45.148.254	10.45.148.255	212	Future	10.45.212.0	10.45.212.1 to 10.45.212.254	10.45.212.255
21	Future	10.45.21.0	10.45.21.1 to 10.45.21.254	10.45.21.255	85	Virtual Cluster Heartbeats	10.45.85.0	10.45.85.1 to 10.45.85.254	10.45.85.255	149	Future	10.45.149.0	10.45.149.1 to 10.45.149.254	10.45.149.255	213	Future	10.45.213.0	10.45.213.1 to 10.45.213.254	10.45.213.255
22	MHT Users	10.45.22.0	10.45.22.1 to 10.45.22.126	10.45.22.127	86	Future	10.45.86.0	10.45.86.1 to 10.45.86.254	10.45.86.255	150	Future	10.45.150.0	10.45.150.1 to 10.45.150.254	10.45.150.255	214	Future	10.45.214.0	10.45.214.1 to 10.45.214.254	10.45.214.255
23	Future	10.45.23.0	10.45.23.1 to 10.45.23.254	10.45.23.255	87	Future	10.45.87.0	10.45.87.1 to 10.45.87.254	10.45.87.255	151	Future	10.45.151.0	10.45.151.1 to 10.45.151.254	10.45.151.255	215	Future	10.45.215.0	10.45.215.1 to 10.45.215.254	10.45.215.255
24	MHT Accounting Users	10.45.24.0	10.45.24.1 to 10.45.24.254	10.45.24.255	88	Future	10.45.88.0	10.45.88.1 to 10.45.88.254	10.45.88.255	152	Future	10.45.152.0	10.45.152.1 to 10.45.152.254	10.45.152.255	216	Future	10.45.216.0	10.45.216.1 to 10.45.216.254	10.45.216.255
25	Admin Users	10.45.25.0	10.45.25.1 to 10.45.25.254	10.45.25.255	89	Future	10.45.89.0	10.45.89.1 to 10.45.89.254	10.45.89.255	153	Future	10.45.153.0	10.45.153.1 to 10.45.153.254	10.45.153.255	217	Future	10.45.217.0	10.45.217.1 to 10.45.217.254	10.45.217.255
26	MHT Wireless Authentica	10.45.26.0	10.45.26.1 to 10.45.26.254	10.45.26.255	90	Future	10.45.90.0	10.45.90.1 to 10.45.90.254	10.45.90.255	154	Future	10.45.154.0	10.45.154.1 to 10.45.154.254	10.45.154.255	218	Future	10.45.218.0	10.45.218.1 to 10.45.218.254	10.45.218.255
27	LEO Users	10.45.27.0	10.45.27.1 to 10.45.27.254	10.45.27.255	91	Future	10.45.91.0	10.45.91.1 to 10.45.91.254	10.45.91.255	155	Future	10.45.155.0	10.45.155.1 to 10.45.155.254	10.45.155.255	219	Future	10.45.219.0	10.45.219.1 to 10.45.219.254	10.45.219.255
28	MHT Building Maintenan	10.45.28.0	10.45.28.1 to 10.45.28.254	10.45.28.255	92	Future	10.45.92.0	10.45.92.1 to 10.45.92.254	10.45.92.255	156	Future	10.45.156.0	10.45.156.1 to 10.45.156.254	10.45.156.255	220	Future	10.45.220.0	10.45.220.1 to 10.45.220.254	10.45.220.255
29	MHT TSA Users	10.45.29.0	10.45.29.1 to 10.45.29.254	10.45.29.255	93	Future	10.45.93.0	10.45.93.1 to 10.45.93.254	10.45.93.255	157	Future	10.45.157.0	10.45.157.1 to 10.45.157.254	10.45.157.255	221	Future	10.45.221.0	10.45.221.1 to 10.45.221.254	10.45.221.255
30	MHT Printers	10.45.30.0	10.45.30.1 to 10.45.30.254	10.45.30.255	94	Future	10.45.94.0	10.45.94.1 to 10.45.94.254	10.45.94.255	158	Future	10.45.158.0	10.45.158.1 to 10.45.158.254	10.45.158.255	222	Future	10.45.222.0	10.45.222.1 to 10.45.222.254	10.45.222.255
31	MHT Security Users	10.45.31.0	10.45.31.1 to 10.45.31.254	10.45.31.127	95	Future	10.45.95.0	10.45.95.1 to 10.45.95.254	10.45.95.255	159	Future	10.45.159.0	10.45.159.1 to 10.45.159.254	10.45.159.255	223	Future	10.45.223.0	10.45.223.1 to 10.45.223.254	10.45.223.255
32	MHT Fingerprint System	10.45.32.0	10.45.32.1 to 10.45.32.254	10.45.32.127	96	Future	10.45.96.0	10.45.96.1 to 10.45.96.254	10.45.96.255	160	Future	10.45.160.0	10.45.160.1 to 10.45.160.254	10.45.160.255	224	Future	10.45.224.0	10.45.224.1 to 10.45.224.254	10.45.224.255
33	Guest	10.45.33.0	10.45.33.1 to 10.45.33.254	10.45.33.127	97	Future	10.45.97.0	10.45.97.1 to 10.45.97.254	10.45.97.255	161	Future	10.45.161.0	10.45.161.1 to 10.45.161.254	10.45.161.255	225	Future	10.45.225.0	10.45.225.1 to 10.45.225.254	10.45.225.255
34	Future	10.45.34.0	10.45.34.1 to 10.45.34.254	10.45.34.127	98	Future	10.45.98.0	10.45.98.1 to 10.45.98.254	10.45.98.255	162	Future	10.45.162.0	10.45.162.1 to 10.45.162.254	10.45.162.255	226	Future	10.45.226.0	10.45.226.1 to 10.45.226.254	10.45.226.255
35	Future	10.45.35.0	10.45.35.1 to 10.45.35.254	10.45.35.127	99	Future	10.45.99.0	10.45.99.1 to 10.45.99.254	10.45.99.255	163	Future	10.45.163.0	10.45.163.1 to 10.45.163.254	10.45.163.255	227	Future	10.45.227.0	10.45.227.1 to 10.45.227.254	10.45.227.255
36	Future	10.45.36.0	10.45.36.1 to 10.45.36.254	10.45.36.127	100	Milltown	10.45.100.0	10.45.100.1 to 10.45.100.254	10.45.100.255	164	Future	10.45.164.0	10.45.164.1 to 10.45.164.254	10.45.164.255	228	Future	10.45.228.0	10.45.228.1 to 10.45.228.254	10.45.228.255
37	Future	10.45.37.0	10.45.37.1 to 10.45.37.254	10.45.37.127	101	Hudson-Manchester	10.45.101.0	10.45.101.1 to 10.45.101.254	10.45.101.255	165	Future	10.45.165.0	10.45.165.1 to 10.45.165.254	10.45.165.255	229	Future	10.45.229.0	10.45.229.1 to 10.45.229.254	10.45.229.255
38	Future	10.45.38.0	10.45.38.1 to 10.45.38.254	10.45.38.127	102	Ben and Jerry's	10.45.102.0	10.45.102.1 to 10.45.102.254	10.45.102.255	166	Future	10.45.166.0	10.45.166.1 to 10.45.166.254	10.45.166.255	230	Future	10.45.230.0	10.45.230.1 to 10.45.230.254	10.45.230.255
39	Future	10.45.39.0	10.45.39.1 to 10.45.39.254	10.45.39.127	103	Worldwide Flight Svc	10.45.103.0	10.45.103.1 to 10.45.103.254	10.45.103.255	167	Future	10.45.167.0	10.45.167.1 to 10.45.167.254	10.45.167.255	231	Future	10.45.231.0	10.45.231.1 to 10.45.231.254	10.45.231.255
40	Future	10.45.40.0	10.45.40.1 to 10.45.40.254	10.45.40.127	104	International RAM	10.45.104.0	10.45.104.1 to 10.45.104.254	10.45.104.255	168	Future	10.45.168.0	10.45.168.1 to 10.45.168.254	10.45.168.255	232	Future	10.45.232.0	10.45.232.1 to 10.45.232.254	10.45.232.255
41	Future	10.45.41.0	10.45.41.1 to 10.45.41.254	10.45.41.255	105	Delta	10.45.105.0	10.45.105.1 to 10.45.105.254	10.45.105.255	169	Future	10.45.169.0	10.45.169.1 to 10.45.169.254	10.45.169.255	233	Future	10.45.233.0	10.45.233.1 to 10.45.233.254	10.45.233.255
42	Southwest DMZ	10.45.42.0	10.45.42.1 to 10.45.42.254	10.45.42.255	106	Future	10.45.106.0	10.45.106.1 to 10.45.106.254	10.45.106.255	170	Future	10.45.170.0	10.45.170.1 to 10.45.170.254	10.45.170.255	234	Future	10.45.234.0	10.45.234.1 to 10.45.234.254	10.45.234.255
43	Future	10.45.43.0	10.45.43.1 to 10.45.43.254	10.45.43.255	107	Future	10.45.107.0	10.45.107.1 to 10.45.107.254	10.45.107.255	171	Future	10.45.171.0	10.45.171.1 to 10.45.171.254	10.45.171.255	235	Future	10.45.235.0	10.45.235.1 to 10.45.235.254	10.45.235.255
44	Future	10.45.44.0	10.45.44.1 to 10.45.44.254	10.45.44.255	108	Future	10.45.108.0	10.45.108.1 to 10.45.108.254	10.45.108.255	172	Future	10.45.172.0	10.45.172.1 to 10.45.172.254	10.45.172.255	236	Future	10.45.236.0	10.45.236.1 to 10.45.236.254	10.45.236.255
45	Johnson Controls	10.45.45.0	10.45.45.1 to 10.45.45.254	10.45.45.255	109	Future	10.45.109.0	10.45.109.1 to 10.45.109.254	10.45.109.255	173	Future	10.45.173.0	10.45.173.1 to 10.45.173.254	10.45.173.255	237	Future	10.45.237.0	10.45.237.1 to 10.45.237.254	10.45.237.255
46	Future	10.45.46.0	10.45.46.1 to 10.45.46.254	10.45.46.255	110	Future	10.45.110.0	10.45.110.1 to 10.45.110.254	10.45.110.255	174	Future	10.45.174.0	10.45.174.1 to 10.45.174.254	10.45.174.255	238	Future	10.45.238.0	10.45.238.1 to 10.45.238.254	10.45.238.255
47	Future	10.45.47.0	10.45.47.1 to 10.45.47.254	10.45.47.255	111	Future	10.45.111.0	10.45.111.1 to 10.45.111.254	10.45.111.255	175	Future	10.45.175.0	10.45.175.1 to 10.45.175.254	10.45.175.255	239	Future	10.45.239.0	10.45.239.1 to 10.45.239.254	10.45.239.255
48	Future	10.45.48.0	10.45.48.1 to 10.45.48.254	10.45.48.255	112	Future	10.45.112.0	10.45.112.1 to 10.45.112.254	10.45.112.255	176	Future	10.45.176.0	10.45.176.1 to 10.45.176.254	10.45.176.255	240	Future	10.45.240.0	10.45.240.1 to 10.45.240.254	10.45.240.255
49	Future	10.45.49.0	10.45.49.1 to 10.45.49.254	10.45.49.255	113	Future	10.45.113.0	10.45.113.1 to 10.45.113.254	10.45.113.255	177	Future	10.45.177.0	10.45.177.1 to 10.45.177.254	10.45.177.255	241	Future	10.45.241.0	10.45.241.1 to 10.45.241.254	10.45.241.255
50	Future	10.45.50.0	10.45.50.1 to 10.45.50.254	10.45.50.255	114	Future	10.45.114.0	10.45.114.1 to 10.45.114.254	10.45.114.255	178	Future	10.45.178.0	10.45.178.1 to 10.45.178.254	10.45.178.255	242	Future	10.45.242.0	10.45.242.1 to 10.45.242.254	10.45.242.255
51	Future	10.45.51.0	10.45.51.1 to 10.45.51.254	10.45.51.255	115	Future	10.45.115.0	10.45.115.1 to 10.45.115.254	10.45.115.255	179	Future	10.45.179.0	10.45.179.1 to 10.45.179.254	10.45.179.255	243	Future	10.45.243.0	10.45.243.1 to 10.45.243.254	10.45.243.255
52	Future	10.45.52.0	10.45.52.1 to 10.45.52.254	10.45.52.255	116	Future	10.45.116.0	10.45.116.1 to 10.45.116.254	10.45.116.255	180	Future	10.45.180.0	10.45.180.1 to 10.45.180.254	10.45.180.255	244	Future	10.45.244.0	10.45.244.1 to 10.45.244.254	10.45.244.255
53	Future	10.45.53.0	10.45.53.1 to 10.45.53.254	10.45.53.255	117	Future	10.45.117.0	10.45.117.1 to 10.45.117.254	10.45.117.255	181	Future	10.45.181.0	10.45.181.1 to 10.45.181.254	10.45.181.255	245	Future	10.45.245.0	10.45.245.1 to 10.45.245.254	10.45.245.255
54	Future	10.45.54.0	10.45.54.1 to 10.45.54.254	10.45.54.255	118	Dunkin Donuts	10.45.118.0	10.45.118.1 to 10.45.118.254	10.45.118.255	182	Future	10.45.182.0	10.45.182.1 to 10.45.182.254	10.45.182.255	246	Future	10.45.246.0	10.45.246.1 to 10.45.246.254	10.45.246.255
55	Signs	10.45.55.0	10.45.55.1 to 10.45.55.254	10.45.55.255	119	Audax Technologies	10.45.119.0	10.45.119.1 to 10.45.119.254	10.45.119.255	183	Future	10.45.183.0	10.45.183.1 to 10.45.183.254	10.45.183.255	247	Future	10.45.247.0	10.45.247.1 to 10.45.247.254	10.45.247.255
56	Future	10.45.56.0	10.45.56.1 to 10.45.56.254	10.45.56.255	120	VLAN 709	10.45.120.0	10.45.120.1 to 10.45.120.254	10.45.120.255	184	Future	10.45.184.0	10.45.184.1 to 10.45.184.254	10.45.184.255	248	Future	10.45.248.0	10.45.248.1 to 10.45.248.254	10.45.248.255
57	Future	10.45.57.0	10.45.57.1 to 10.45.57.254	10.45.57.255	121	City Network	10.45.121.0	10.45.121.1 to 10.45.121.254	10.45.121.255	185	Future	10.45.185.0	10.45.185.1 to 10.45.185.254	10.45.185.255	249	Future	10.45.249.0	10.45.249.1 to 10.45.249.254	10.45.249.255
58	Future	10.45.58.0	10.45.58.1 to 10.45.58.254	10.45.58.255	122	External Network	10.45.122.0	10.45.122.1 to 10.45.122.254	10.45.122.255	186	Future	10.45.186.0	10.45.186.1 to 10.45.186.254	10.45.186.255	250	Future	10.45.250.0	10.45.250.1 to 10.45.250.254	10.45.250.255
59	Future	10.45.59.0	10.45.59.1 to 10.45.59.254	10.45.59.255	123	FDDI Default	10.45.123.0	10.45.123.1 to 10.45.123.254	10.45.123.255	187	Future	10.45.187.0	10.45.187.1 to 10.45.187.254	10.45.187.255	251	Future	10.45.251.0	10.45.251.1 to 10.45.251.254	10.45.251.255
60	Camera	10.45.60.0	10.45.60.1 to 10.45.60.254	10.45.60.255	124	FDDInet Default	10.45.124.0	10.45.124.1 to 10.45.124.254	10.45.124.255	188	Future	10.45.188.0	10.45.188.1 to 10.45.188.254	10.45.188.255	252	Future	10.45.252.0	10.45.252.1 to 10.45.252.254	10.45.252.255
61	Future	10.45.61.0	10.45.61.1 to 10.45.61.254	10.45.61.255	125	TRBF Default	10.45.125.0	10.45.125.1 to 10.45.125.254	10.45.125.255	189	Future	10.45.189.0	10.45.189.1 to 10.45.189.254	10.45.189.255	253	Future	10.45.253.0	10.45.253.1 to 10.45.253.254	10.45.253.255
62	Future	10.45.62.0	10.45.62.1 to 10.45.62.254	10.45.62.255	126	Future	10.45.126.0	10.45.126.1 to 10.45.126.254	10.45.126.255	190	Future	10.45.190.0	10.45.190.1 to 10.45.190.254	10.45.190.255	254	Network Management	10.45.254.0	10.45.254.1 to 10.45.254.254	10.45.254.255
63	Future	10.45.63.0	10.45.63.1 to 10.45.63.254	10.45.63.255	127	Future	10.45.127.0	10.45.127.1 to 10.45.127.254	10.45.127.255	191	Future	10.45.191.0	10.45.191.1 to 10.45.191.254	10.45.191.255					

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APPENDIX I

Baggage Screening

APPENDIX I
BAGGAGE SCREENING

The first scenario studied was to replace in-kind with L-3-Communications equipment. The PGDS defines that newer versions of the equipment will be expected to be deployed for future systems, these being;

- L-3 3DX SX (310 – 360 bags per hour, with a nominal 335 bag per hour processing rate);
- L-3 3DX 6600 (470-540 bags per hour, with a nominal 500 bags per hour processing rate); and
- L-3 3DX 6000 in Standalone mod (180 - 220 bags per hour, with a nominal 200 bags per hour processing rate).

Here we examine the systems from merely a throughput perspective. The capacity of the existing EDS, the proposed replacement EDS, and the demand load of the baggage screening (on a per-pod basis) utilizing L-3 equipment is seen below.

Peak Hour

Air Carrier	Existing EDS Capacity	Proposed EDS Capacity	Existing Demand Load
Southwest Airlines [(2) EDS]	650	1000	519
USAirways [1 Primary EDS and 1 Stand-by]	325	335	243
Air Canada/United Airlines	325	335	144
Delta (including NWA)	325	335	198
Vacant	325	335	
Continental	325	335	101

In comparing the demand load to the capacity of the proposed replacement L-3 equipment, it would seem that a plan of replacement in kind would be reasonable, although the resultant capacity may be a bit in excess of the demand.

An examination of how the EDS might be viewed in the Redundant mode, evaluates how much capacity is available from the secondary EDS if the primary EDS is non-operational.

Air Carrier	Proposed EDS Capacity	Existing Demand Load
Southwest Airlines [(2) EDS]		
Primary EDS	500	
Secondary EDS	500	519
USAirways [1 Primary EDS and 1 Stand-by]		
Primary EDS	335	
Secondary EDS [Stand-by Examiner 3DX SX]	220	243
Air Canada/United Airlines		
Primary EDS	335	
Secondary EDS [In the Delta Module]	335	144

Air Carrier	Proposed EDS Capacity	Existing Demand Load
Delta (including NWA)		
Primary EDS	335	
Secondary EDS [In the United Airlines Module]	335	198
Vacant for new entrant		
Primary EDS	335	
Secondary EDS [In the CO Airlines Module]	335	xx
Continental		
Primary EDS	335	
Secondary EDS [In the Vacant Module]	335	101

It is speculated that the TSA would find the capacity of the SWA arrangement acceptable. Additionally, it is believed that TSA would ask if there is a better arrangement for USAirways, as the redundant EDS machine in the bagroom is not easily used.

This leads to a discussion of whether an alternate type of EDS might be better suited for upcoming replacement projects. The Reduced Size EDS (RSEDS) (a product of Reveal Inc.) has been deployed on many similar mini-in-line projects in the last couple of years. This is defined as the second scenario.

The second scenario would be to replace the L-3-Communications equipment with Reveal's RSEDS units. The PGDS defines several units for upcoming deployment, including:

- CT-80DR (220 to 230 bags per hour, with a nominal processing rate of 225 bags per hour).
- CT-800 (310 to 360 bags per hour, with a nominal 335 bags per hour processing rate).
- CT-80DR in Standalone mode (110 to 120 bags per hour, with a nominal 115 bags per hour processing rate).
- CT-800 in Standalone mode (180 to 220 bags per hour, with a nominal 200 bags per hour processing rate).

The capacity of the existing EDS, the proposed replacement EDS with RSEDS, and the demand load of the baggage screening (on a per-pod basis) is seen below.

Peak Hour

Air Carrier	Existing EDS Capacity	Proposed EDS Capacity	Existing Demand Load
Southwest Airlines [(2) Existing EDS and proposed (3) EDS]	650	1005	519
USAirways [1 Primary EDS and 1 Stand-by]	325	535	243
Air Canada/United Airlines	325	225	144
Delta (including NWA)	325	225	198
Vacant	325	225	
Continental	325	225	101

In comparing the demand load to the capacity of the proposed replacement RSEDS, it would seem that a plan of replacement with RSEDS would be reasonable, but again there is excess capacity.

An examination of how the RSEDS might be viewed in the redundant mode, evaluates how much capacity is available from the secondary EDS if the primary EDS is non-operational.

Southwest Airlines		
Primary EDS [CT-800]	335	
Secondary EDS [CT-800]	335	
Third EDS [CT-800]	335	
Second and Third Combined	670	519
USAirways		
Primary EDS [CT-800DR]	225	
Secondary EDS [Stand-by CT-800]	335	243
Air Canada/United Airlines		
Primary EDS [CT-800DR]	225	
Secondary EDS [In the Delta Module]	225	144
Delta (including NWA)		
Primary EDS [CT-800DR]	225	
Secondary EDS [In the United Airlines Module]	225	198
Vacant for new entrant		
Primary EDS [CT-800DR]	225	
Secondary EDS [In the CO Airlines Module]	225	xx
Continental		
Primary EDS [CT-800DR]	225	
Secondary EDS [In the Vacant Module]	225	101

It is suggested that the TSA would find the capacity of the SWA arrangement acceptable. It might again be speculated that TSA would ask if there is a better arrangement for USAirways, than merely providing a stand-alone RSEDS in the bagroom. For the other four modules, the TSA might suggest that this is an appropriate fit.

It should be noted though that there are challenges with Reveal equipment in a replacement project. There would be a significant amount of communications re-integration that would have to be completed. The Reveal devices also don't currently generate similar reports as the L-3 equipment and, in the Airport Master Plan team's opinion, the reports are not as thorough.

For the replacement projects, the TSA might suggest that they would prefer the CBIS modules be reconfigured to reduce the number of TSOs. Changing from mini-in-line configurations to more common configuration is not very viable, at the very least not an effective use of terminal footprint and dollars.

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APPENDIX J

Factors Impacting Concession Demand

APPENDIX J
FACTORS IMPACTING CONCESSION DEMAND

J-1 THE NUMBER OF POTENTIAL CUSTOMERS

The first factor that determines how much concession space is needed is the number of potential customers for the concessions. While the primary market is enplaning passengers, secondary markets that must be considered include deplaning passengers, meeters/greeters, the party which brings the passenger to the Airport, and employees based in or within close proximity to the terminal. Tertiary markets which may be drawn upon in certain cases include airport-based employees whose primary place of business is elsewhere on the airport besides the terminal and its environs, and local residents.

Table J-1 shows historical and forecast enplaned passenger figures for the terminal at MHT.

TABLE J-1
HISTORIC AND FORECAST ENPLANED PASSENGERS
AT MANCHESTER-BOSTON REGIONAL AIRPORT

	Enplaned Passengers
2005	2,168,258
2006	1,952,277
2007	1,948,313
2008	1,861,695
2009	1,595,477
2010	1,494,000
2011	1,505,000
2012	1,561,000
2013	1,600,000
2014	1,634,000
2015	1,668,000

Source: Airport Records; URS Team Forecasts

Deplaning passengers have historically not been considered when planning concessions at US airports. It has generally been accepted that these persons just want to leave the airport as quickly as possible and rarely stop to shop.

Meeter/greeters are people who come to the Terminal to pick-up travelers arriving at the Airport. The people who bring and accompany enplaning passengers to the Airport are a second group of interest. Both offer the potential to become concession customers. In the case of the former, meeter/greeters are waiting for arrivals, often with little or nothing to do. When there are flight delays, their waits may be indeterminate in length. They, along with employees, form a core of potential customers for landside (i.e. non-secure areas) concessions. The individuals or group which accompanies the passengers to the Airport may be potential concession customers if they are looking to spend time with their friends and

family before those people depart from MHT, although they rarely stay at the airport very long once the departing traveler is in the security queue.

Employees at the airport are a key potential market for concessions. These people spend a good portion of their days either in or around the Terminal and are likely to utilize the shops, especially the food service concessions. While no estimate of the impact of the employee market is included in the projections of concession demand, providing concessions that attract and serve the needs of this large market can only help to increase concession sales.

J-2 TERMINAL CONFIGURATION/CUSTOMER FLOWS

Another factor that impacts concessions sales is the configuration of the Terminal and the resulting movement of passengers. How passengers arrive at their final destination within the airport can greatly impact concession sales. As a general rule, the success of a concession location is predicated on "exposures" (how many people see the location). However, a large number of exposures do not, by themselves, guarantee concession success. For example, every person at MHT who is boarding a flight passes by the landside concessions, providing substantive exposure. Not everyone will choose to stop and make a purchase at those locations for a number of reasons:

- Potential customers see the lines at the security checkpoint and they are worried about how long it will take for them to get through the security queue. As their first priority is boarding their flight, they will tend to shy away from stopping to shop or eat.
- The configuration of the security queuing basically bisects the terminal, resulting in potential customers having to walk around numerous obstacles in order to reach the concession locations.
- The food court is essentially hidden from sight until a potential customer is near or in the security queue. It is difficult to spot from a distance.
- In order for a departing passenger to access the Dunkin Donuts or the Hudson News, they must pass through the areas where many meeter/greeters wait for their arriving friends and family. This sets up an additional impediment to access.

On the secure side of the Terminal, passengers immediately are segregated by airline, with Southwest's passengers heading toward the higher numbered gates on the north side of the Terminal and passengers of all other airlines either going straight towards their holdrooms or bearing off towards the lower numbered gates. This means that only certain passengers will be exposed to each airside concession location, unless they wish to wander the Terminal, which is not a common behavior. Generally, it is held that travelers wish to get to their holdroom areas and stay there, wandering only short distances and trying to keep their holdrooms in visual range.

J-3 SECURITY ISSUES

Enhanced security has had a major impact on concession sales and placement at US airports. Some impacts have likely been beneficial to concession sales:

- By encouraging early arrival at the airport, potential customers tend to have more dwell time at an airport, which may encourage shopping and purchasing as entertainment to fill otherwise idle time.

- By banning large amounts (greater than 3 ounces) of lotions and liquids passing through security checkpoints, a potential market for the purchase of such products on the secure side of the terminal has been established. Additionally, there is the potential for toiletries to be needed by arriving passengers who had to discard products from their carry-on bags at their embarkation point.

Conversely, some impacts have likely negatively impacted concession sales and operations:

- When potential customers see a long security line, they tend to get in it rather than spend time at landside concessions.

- With the ban on carrying liquids through security, it has eliminated sales of such items on the non-secure side of the Terminal to the primary customer (departing passengers).

- The time spent passing through security screening is time that is not spent shopping or dining.

- The requirement for screening of merchandise being brought to shops and restaurants on the secure side of the Terminal has added to both the cost and difficulty of concession operations. It is highly likely that these requirements will become more stringent in the future.

- Screening of concession goods at passenger screening checkpoints may cause resentment among passengers for the extra time that it adds to their waits. This may translate into a choice not to shop.

J-4 DWELL TIME/ALTERNATIVE ACTIVITIES

Simply stated, the more time that potential customers have to spend at the airport, the more likely it is that they will make a purchase from either a food service or retail concession. However, total time at an airport must also account for the completion of necessary functions, like ticketing/obtaining boarding passes, checking baggage, and passing through security screening. Therefore, commercial dwell time, or the time that a person has to shop or eat is actually much less than the total time span from parking a car to boarding a flight. MHT offers relatively close proximities and shorter queuing lines that manifest in more commercial dwell time for those customers that plan 1.5 – 2.0 hour arrivals before departure.

J-5 CONCESSION PRICING POLICY

Concession pricing can have a substantial impact on overall sales at airport venues. MHT's concession agreements require pricing that reflects prevailing market conditions in the greater Manchester area, other tenant's pricing structure at the airport, and a good price-value relationship for the product or service sold.

J-6 FLIGHT STAGE LENGTH/IN-FLIGHT AMENITIES

By choosing to eliminate free food on aircraft, airlines have helped to spur the utilization of airport concessions. Travelers on most flights of relatively short stage length, such as the majority of those from MHT, are not fed at all, or are fed only snacks such as pretzels or peanuts. As a result, passengers tend to purchase food for consumption before they leave the airport or during their flight. This has spurred the growth of "grab 'n go" food service concessions, and the importance of quick-service restaurants at MHT.

J-7 CONCESSION BRANDING

Concession branding is a key issue in the preparation of a plan for an airports' commercial operation. The types of concessions that an airport wishes to offer dictates much of how it can/should act in populating its stores and shops. Generally speaking, there are three branding strategies available to airports, with numerous subcategories beneath each type of branding.

National or international brands are those that are well known to people regardless of where they reside. MHT examples include Dunkin Donuts, Starbucks, Quiznos, and Pizza Hut among literally hundreds of "street" brands that have a presence at US airports. Purchases of products from these branded shops offer security to the purchaser…they have a level of expectation based on experience and knowledge of the brand and are comfortable purchasing from those shops. The customer has a very good idea of what he or she will receive, the quality, the prices, etc. Related to this are product-themed shops and restaurants, featuring a known brand. Samuel Adams Brewhouse is an example of this type of branding. A subset of national branding is well-known airport-only (or airport predominant) brands. MHT's Hudson News is a prime example of this.

A second branding strategy is local branding, where the concessions are outlets of well-known local restaurants and retail locations. At MHT, the Milltowne Grille (which promotes itself on its website as *a full service bistro that happens to be at an airport, but not "an airport restaurant"*) and Smuttynose Café (a regional craft-beer brewer) are examples of local brands. A major benefit of having locally branded concessions is that these concessions bring a flavor of the community to the airport and offer a "sense of place" that national and international brands do not. Local brands help to make an airport's concession program more unique, which may help to spur customer purchases because there are products that they cannot get at any other airport. There is also a potential public relations benefit as local operators get involved in the airport and more revenue stays in the airport's community.

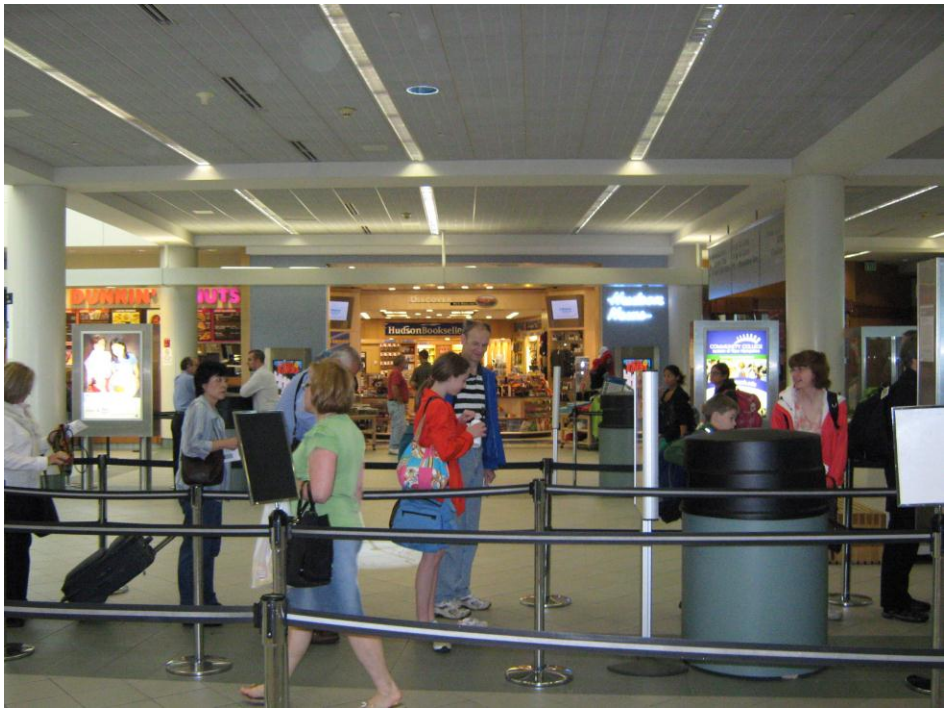
J-8 PHOTOGRAPHS OF EXISTING CONCESSIONS

Samuel Adams Meeting House

Food Court Concessions

Flower Vending Machine

Hudson News Landside

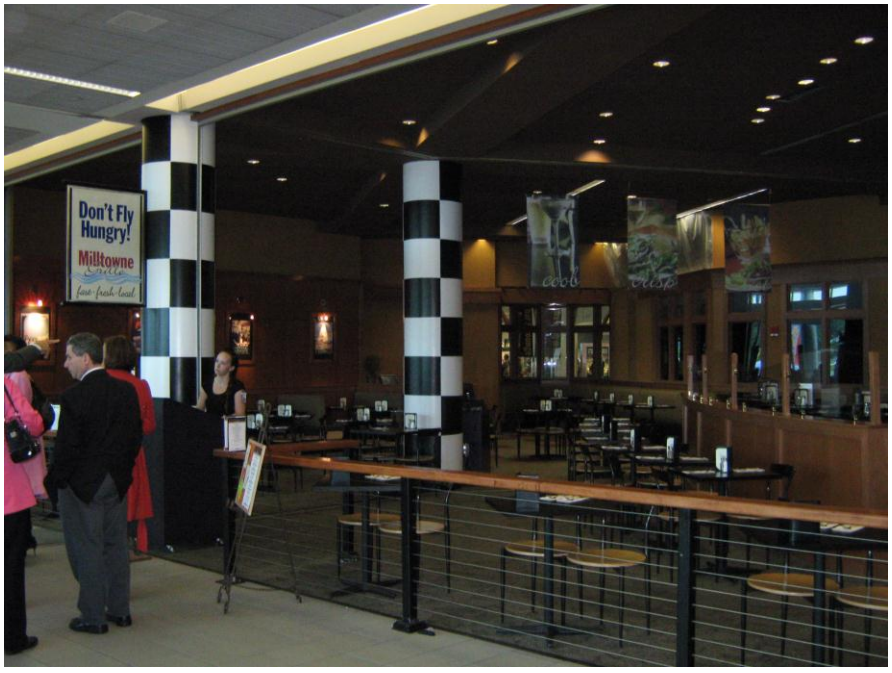


Dunkin Donuts Landside

Vending Machines

Dunkin Donuts Airside Location

Milltowne Grille



Starbucks

Great American Bagel Café

Sam Adams Pub and Café

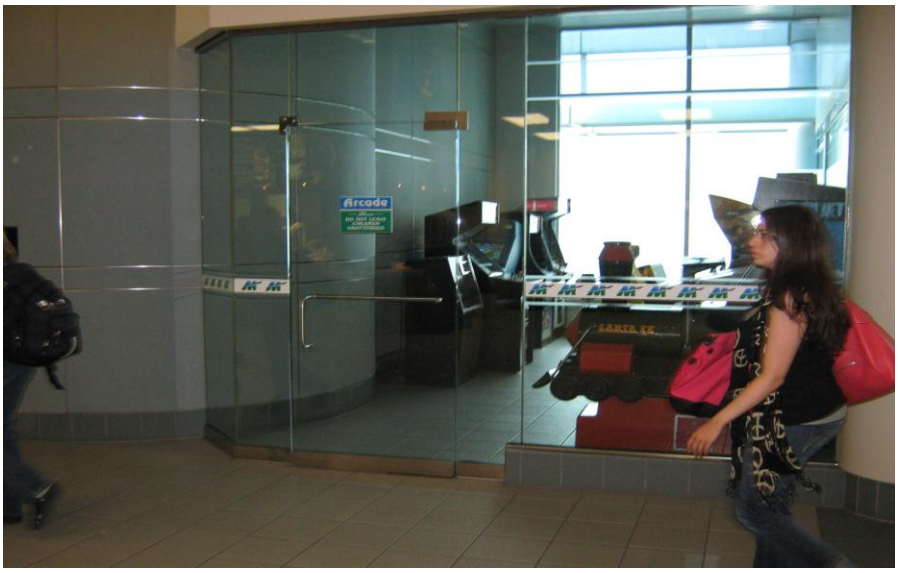
Quiznos

Hudson News Adjacent to Southwest Gates

Hudson News Near Gates 8 and 9

Hudson News Near Gates 1-4

Game Room



Massage Chairs

J-9 CONCESSION PERFORMANCE METRICS

There are a number of metrics that can be considered to quantify concession performance and productivity. These are shown in **Table J-2**.

TABLE J-2
CONCESSION ANALYSIS EVALUATION METRICS

Effective Percentage Rent	Sales divided by rent received by the Airport. A high effective percentage rent suggests a contract advantageous to the Airport. Higher rents often occur in concession contracts without pricing controls, in older contracts that have been renewed, or in very long-term deals. Generally, higher effective percentage rents occur in contracts where a single entity operates all or most of the concession locations.
Sales per Square Foot	A measurement of the effective use of concession space. A high sales per square foot may imply that the airport is "under-concessioned" (that is, does not have enough concession space to adequately serve potential demand) and, as a result, may be underperforming due to a lack of product availability or variety. A low sales per square foot metric suggests that there may be too much concession space, the concession space is poorly placed to capture the available customers, or the products offered do not meet the needs/desires of the customers.
Sales per Enplaned Passenger	Sales productivity measurement that indicates how well the product offering is meeting the needs/desires of the customers. Low sales per enplaned passenger may indicate poor quality concessions, a lack of choice, poor customer service, or pricing issues. Higher sales per enplaned passenger suggest a concessions program that is successfully addressing customer needs.
Revenue per Enplaned Passenger	A measurement of the value of each passenger's purchases to the airport's income. Low revenues per enplaned passenger, if paired with low sales per enplaned passenger, tend to indicate operational issues (low sales, poorly performing concessions, and/or a lack of concession options (failure to meet customer needs)). If sales per enplaned passenger are high and revenue per enplaned passenger is low, it is likely a structural issue (concessions contracts that pay below-average revenue, an accounting issue, or reporting problems).
Square Feet per 1,000 Enplaned Passengers	A measurement of the amount of concession space relative to the number of potential customers. High ratios tend to indicate over-built concessions, or, in one airport case, including large amounts of support space in the allocated concession space. Low ratios suggest that there is not enough concession space allocated, which may result in missed sales and revenue generation opportunities.

Source: McFarland Johnson Analysis