

From November 2010 through July 2011 the chiefs and other designated individuals from six urban municipalities in Brown County (Allouez, Ashwaubenon, Bellevue, De Pere, Green Bay and Howard) met seven times to fulfill the charge given them at the November 2, 2010 Ritter Forum on Public Policy—namely to develop a shared vision of what a combined urban metro fire department could look like.

Premise:

Given our geography and population, if we were building a new department from the ground up for the metro area, what level of service, what total level of staffing, equipment and stations do we need for the metro area?

Summary:

Our study and discussion has shown that today we have more administrative and equipment cost in total than we would have under a metro department which would have better response times, better training, and better public education, investigation and inspection services. We believe that every municipality will get some benefit, either better service at the same cost or better service at less cost. Examples of the ways this can be achieved include: eliminating the cost of duplicated equipment and its maintenance, reducing administrative cost by eliminating duplication in the merged department, and saving money in purchasing through complete coordination and bidding of capital purchases. A great potential for savings may also lie in the reorganization and redeployment of fire suppression personnel. We have uncovered other, less-evident benefits. For example, everyone, Green Bay included, will be gaining access to additional resources and additional experience on real calls. A metro department will better contain cost in future years as population grows. If elected officials agree that this could be an improved model, then we should take the next steps forward.

Our Vision:

Metro only – This vision covers the six metro communities (Green Bay, De Pere, Allouez, Ashwaubenon, Howard, Bellevue). We have examined metro area needs as a whole.

Identity – A new identity should be developed with the existing departmental identities retained within it.

Operational control – The model here would be a new entity that would provide service to each municipality. This new department would be funded by each municipality. Community control would be based on each municipality deciding the level of service desired at a given level of cost. In addition local communities will still have control over fire code, zoning, and other related municipal ordinances. This provides policy makers with oversight and accountability of the new department. The legal structure of the new metro department is yet to be determined. With state enabling legislation, one model could be a municipal fire district. Existing law could enable a structure where contracting would take place with a municipality, a Chapter 213 or Chapter 181 department.

Response time – The response time should be 9 minutes or less (including turnout time) for advanced life support (2 paramedics and an ambulance) response to 90% of all calls; basic life support (including turnout time) at 6 minutes or less in response to 90% of all calls; and on scene 9 minutes or less (including turnout time) for fire response of 15 firefighters with an engine, ladder and command in response to 90% of all structure fire or fire alarm calls. This is based on a blend of the National Fire Protection Association (NFPA) 1710 and 1720 standards. These are standards for the organization and deployment of fire suppression operations, emergency medical operations, and special operations to the public by career fire

departments. Currently, departments vary widely in meeting NFPA standards and in their ISO ratings. (*See Appendix A: current departmental datasheet rows # 44-45 and #39.*)

Staffing model – Full time personnel, part time personnel and paid-on-call personnel should all be used. We will follow national standards for command.

Training Standards – Current training requirements of the individual departments vary widely. (*See Appendix B: training requirements spreadsheet.*) For full time career, part time and paid-on-call firefighters, the minimum training requirement is the same: Certified Firefighter 2 and EMT. The probationary period for full-time career firefighters should be 1 year. The probationary period for paid-on-call firefighters should be one year and evaluation. Annual drill (via pre-determined or formalized training plan) for paid-on-call firefighters should be a minimum of 80 hours and for full time firefighters 100 hours, but in any case sufficient to meet Comm 30 standards. (Comm 30 is the WI Department of Commerce Administrative Code – Fire Department Safety and Health Standards Pursuant to s. 101.055 (3) (a), of the statutes; the purpose of this chapter is to establish minimum safety and health standards for public sector fire department employees.) Full time career firefighters must be certified for aerial operator and driver operator. Paid-on-call firefighters who drive apparatus must have the same certifications. The National Incident Management System (NIMS) level of training for firefighters should be Incident Command System (ICS) 200, for officers ICS 300, and for command/chief officers ICS 400. Fire officers should also attend additional internal training, to be defined by the department, to at least meet NFPA fire officer standards or higher.

Equipment Deployment to Meet Standard of Coverage – (*See Appendix A: current departmental datasheet sections on existing equipment—rows #20 through #24, existing call volume and existing response—rows #1 through #19*) In the new metro department, staffing and equipment placement at stations and location of stations should be sufficient to achieve the response time previously agreed to (see “Response Time” above).

Ambulance. The departments in the metro area now have 8 ambulances and 5 reserve (unstaffed) ambulances, plus a County Rescue ambulance in Bellevue and one in Howard. We looked at a map of the call density of E-911 calls for fire/rescue and medical assistance during 2010 (*see Ambulance Map 6*). We studied a combination GIS map showing the 7-minute drive-time of ambulances at their current locations, constrained by municipal boundaries, and compared this to a plot of the call volume/locations of E-911 calls for fire/rescue and medical assistance during 2010 (*see Ambulance Map 1b*). In developing this map, we used a 7-minute drive time to allow for two minutes of turnout time and still be able to achieve the agreed on 9-minute response time. There were 25,959 fire response/EMS calls last year in the six metro areas, and we achieved the 9-minute response time standard on 25,165 calls, about 97%. We also studied an analysis of overlapping coverage showing the number of ambulances that can meet the response time standard (*see Ambulance Map 1c*) which shows up to six ambulances covering some addresses. However, this map also shows it is likely no ambulances are able to achieve the standard in parts of the far east and southwest sides of the metro area.

We experimented with eliminating municipal boundaries, and then moving and eliminating some equipment:

If we move the ambulance at Green Bay Station 5 over to Green Bay Station 7 and the ambulance at Green Bay Station 6 up to Howard Station 1 and the ambulance at Allouez to Bellevue Station 2 and the ambulance at Ashwaubenon station 1 to Ashwaubenon station 2, we can increase coverage of the metro area to 98% response efficiency (an increase to 25,503 calls meeting the 90% standard) while at the same time not using either of the County Rescue vehicles. (*See Ambulance Map 5.*) Based on

current cost for these contracts, the combined department could **save approximately \$310,000** in cost annually. It may also be possible to **recover up to \$700,000 in patient billing dollars** now going to outside contractors. However this report does not address in detail the allocation of revenue.

We checked an overlap coverage analysis map (*see Ambulance Map 5b*) to see if this scenario still provides for sufficient support from nearby ambulances when one ambulance is out on a call, or in other words, whether unit hour utilization for each unit may be too stretched. An initial look seems to show that many of the areas with greatest call density still have several nearby ambulances available within the agreed response time. Such issues should be further addressed in a metro department by internal staffing decisions and operational plans.

Ladders. The departments in the metro area currently have six 100-foot ladder vehicles, and several other somewhat shorter ladders that we did not map. We looked at a map of the call density for E-911 calls for structure fires and fire alarms during 2010 (*see Ladder Map 4*). As with ambulance coverage, we studied a number of combination GIS maps showing the 7-minute drive times of ladders from their current locations, with current agency boundaries (for example, De Pere covers Allouez under a current agreement- *see Ladders Map 1b*), and with a ladder staffed at Green Bay Station 5 (*see Ladders Map 2b*). There were 1373 structure fire and fire alarm calls during 2010, and 1140 or 83% were within the response time standard; if the ladder at Green Bay Station 5 was staffed that could be increased to 1166 calls or 85% within the response time standard. We also reviewed overlap coverage analysis maps for these scenarios (*Ladders Maps 1c and 2c*) which show that up to 4 ladders can cover some addresses. These maps also show that no ladders are able to achieve the standard in significant areas of the far northeast side and the far south side of the metro area.

We experimented with a number of scenarios, and would like to share one with you. In this experiment, we eliminated municipal boundaries and then relocated the ladder that may become operational at Green Bay Station 5 out to Station 7 (*see Ladders Map 3*). In this scenario, we can improve the response numbers significantly to 1293 out of 1373 or 94% achieving the standard. While this scenario does not involve the elimination of equipment, removing municipal boundaries and properly locating that ladder gives much better coverage now and will mean much better coverage of the future growth areas anticipated on the east and south sides of the metro area (*see overlap analysis in Ladders Map 3c*). The current fleet has the capacity to absorb increased call volume, but only through redeployment metro-wide.

Engines. The departments in the metro area currently have 15 primary engines, one each, located at the 15 fire stations in the metro area. We also have 8 other engines kept in one or another kind of secondary, reserve or unstaffed status. We looked at a combination GIS map of the 5-minute drive times for each of these engines at their current locations, with municipal boundary constraints, to see their response to E-911 calls for structure fires and fire alarms during 2010. There were 1373 structure fire and fire alarm calls in 2010 and 1205 or 88% were within the response time standard, which is 1 minute of turnout time and 5 minutes of drive time (*see Engine Map 2b*). We used a 5-minute drive time to assure that basic life support can be provided within the given standard of 6 minutes or less including one minute of turnout time. We then examined a map (*Engine Map 2*) showing the responses of these engines without agency boundary limits. 1324 of the 1373 calls, or an improvement to 96%, would be served within the response time standard. As you can see, there are a number of cases where, under a metro department, some areas of municipalities would be

better served by an engine responding from a neighboring community. (See overlap analysis in Engines Map 2c).

Additional efficiencies could be gained in the area of reserve equipment. In a metro department we would recommend that there be 4 reserve engines. The capital improvement plan for a metro department could have four fewer engines than currently, thereby decreasing fleet replacement cost and fleet maintenance cost. This reduction in reserve apparatus could mean an operational savings of \$24,000 per year on insurance, pump tests, maintenance, etc. It would also mean over \$1.5 million in savings in capital expenditures over the course of 10 years, amounting to an estimated \$150,000 per year.

Maintenance. Currently, Green Bay utilizes two on-staff maintenance mechanics with the proper certifications to perform necessary repairs and maintenance, while other departments utilize contracted services. It should be possible to reduce contracted maintenance costs and gain economies of scale by bringing these functions in-house in a combined department even if addition of a third mechanic were considered.

Personnel Deployment to Meet Standard of Coverage – A great potential for savings may also lie in the reorganization and redeployment of fire suppression personnel. At this time we are not modeling in detail any proposed changes in personnel deployment in the new department. The new department should be able to adjust use of full time personnel, part time personnel and paid-on-call personnel to provide service to each municipality at the level it requests. In order to do that, cost could be assessed to each municipality based on the level of staffing desired and consequently the level of service (response time) provided (see “Cost Assessment Models” below.)

Administrative Cost – The current total administrative cost for the independent departments is \$2,373,569:

Administrative Expenditures	Green Bay	De Pere	Ashwaubenon	Allouez	Bellevue	Howard
Fire Chief	\$138,000	\$117,600	\$114,500	\$112,875	\$42,000	\$117,711
Other Administrative Staff	\$936,000	\$106,400	\$219,800	\$0	\$104,000	\$83,483
Clerical	\$125,000	\$56,000	\$55,900	\$29,300		\$15,000
Departmental Total	\$1,199,000	\$280,000	\$390,200	\$142,175	\$146,000	\$216,174

We would like to propose the following administrative structure for a combined department, and we have made an estimate of the total cost of personnel for that administrative structure:

Chief	\$160,000
Assistant Fire Chiefs (2)	\$288,000
Division Chiefs (4)	\$390,000
Battalion Chiefs (7)	\$819,000
Training	\$288,000
Fire Inspection	\$200,000
Clerical	\$125,000
TOTAL	\$2,270,000

The total annual **cost reduction** from current administrative cost is approximately **\$103,600**.

Note that for the first time all departments will have access to complete and full-scale public education, inspection and investigation services. All departments will likewise gain economies of scale in these functions.

Purchasing – Based on examination of capital expenditures in recent years, it appears that in a typical year the six departments make slightly more than \$1 million in purchases of durable equipment such as vehicles,

radios, cardiac monitors and the like (*see Appendix A, row #42*). We believe at least a **5% savings, or \$50,000 annually**, could be achieved in a consolidated department by unified purchasing. This would imply adoption of common specifications, timing and scheduling of purchasing to attain the best discount. Individual departments could still retain their existing identity and indicia on equipment, even with common purchasing. In addition, similar savings could be achieved on purchasing of consumable materials and supplies such as turnout gear, hose, etc. We have not estimated the cost savings on these expenditures.

Summary of Savings – A conservative estimate of **annual savings** overall as a result of combining into a metro department across the six communities would be **\$637,600**:

- Ambulance: \$310,000, not counting an additional \$700,000 from recovery of patient billing fees
- Reduction of reserve equipment and its maintenance: \$174,000
- Administration: \$103,600
- Capital purchases: \$50,000, not including consumable materials and supplies
- Not quantified: reduction of contract maintenance cost, reorganization of fire suppression personnel

Cost assessment models – A cost assessment model might be based on assessed valuation, call volume, or population; or a formula with each factor counting one-third of the assessment; or perhaps a formula where a key factor is more heavily weighted.

Today there is an extreme range of cost for fire protection across the six existing departments, whether you compare total expenses or expenditure per capita. This is because the different communities are currently accepting wide variations in levels of service based on the staffing model under which they have chosen to operate. For example, some using part-time or power-shift staffing do not have the same 24-hour coverage as the full time departments which can cause delays in response coverage at certain times in the day. It should also be noted that for some departments the current expenditures are adjusted by offsetting EMS revenues. In a metro department, it would be possible to standardize the level of service, improving service greatly in some areas—this would however imply a more equal cost across all communities. Alternatively, the new metro department might adjust the deployment of full time personnel, part time personnel and paid-on-call personnel to provide service to each municipality at the level it requests. In that case, cost could be assessed to each municipality based on the level of staffing desired and consequently the level of service (response time) provided. In any case, the six communities would in some way be able to share the estimated \$637,600 annual savings we have documented above.

How to proceed from current conditions to this model. If elected officials agree that this could be an improved model, then we should take the next steps forward. Is there interest among municipalities represented at the Ritter Forum in moving forward? If so, with the help of consultants, an implementation plan could be developed that would detail a departmental structure, cost assessment formula, and other issues.

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Data	Data	2010	2010	2010	2010	2010
Field #	Field Description	Allouez	Ashwaubenon	Bellevue	De Pere	Green Bay
1	Name Of Reporting Software For Fire/EMS	Firehouse	Firehouse	Firehouse	Firehouse	ImageTrend
2	2005 Census Pop	15,440	17,626	15,240	22,310	104,000
3	Square Miles in Service Area - Fire	5		14.6	12.24	48
4	Square Miles in Service Area - EMS	5		14.6	38.22	48
5	Total Number of Parcels in Service Area - Fire (Including High Risk)	5,013	6,251	5,114	8,511	35951
6	Total Number of Parcels in Service Area - EMS (Including High Risk)	5,013	6,251	4,600	11,612	35951
7	Number of High Risk Parcels Per NIFRS (Definition Included)			9	149	
8	Avg. Response Time From Dispatch To Arrival On Scene - Fire Incidents	4:40	6:00	6:18	5:11	6:18
9	Avg. Response Time From Dispatch To Arrival On Scene - EMS Incidents	3:50	6:00	N/A	4:27 (in city)	5:52
NIFRS Data Set (For Fire Responses)						
10	Fires	14	29	28	63	285
11	Overpressure Rupture, Explosion, Overheat (no fire)	2	5	1	2	10
12	Rescue and EMS (fire related)	0	14	40	74	0
13	Hazardous Conditions	33	40	13	48	236
14	Service Calls	31	7	41	46	742
15	Good Intent Calls	17	68	21	18	504
16	False Alarms / False Calls	48	82	57	90	458
17	Severe Weather/Natural Disasters	1	0	2	0	9
18	Special Incidents/Citizen Complaints/Other	5	20	21	1	340
	TOTAL	151	265	224	342	2584
19	Number Of Responses - EMS	858	800	800	1650	7182
		1009	1065	1024	1992	9766
Identify All Vehicles Per NIMS Guidelines						
20		Engine 1611, 1612	Engine 311, 312, 313, 321, 322	N/A support only	Engine 111, 121, 122	Engine 411, 421, 422, 431, 441, 451, 461, 471, 491, 492
21		Ladder 1611	Ladder 311		Ladder 111	Ladder 421, 451, 461, 491
22		Ambulance 1611	Ambulance 311, 312, 313	Engine 511, 521, 512	Ambu 111, 121, 122	Ambulance 421, 431, 451, 461, 491, 492
23			Special 311	Ladder 511	Utility 111 Boat 111	WR 2, Zodiac 2, Fireboat, HazMat 1 & 2, Foam 1, LT 1, Tanker 471, Tech R
24		Pickup 1611	Miscellaneous vehicles - 3	Rescue 521	Car 101, 102	Batt 411 & 431, Chief 401, 402, 403, 404; GTR 1 & 2, INV 408, 409, 410 PU 1 & 10
Staff (Please indentify total FTE's for each position listed)						
				Utility 521, Trailer 521, Utility 511		
				Water Tender 511		
25	Chief	1	1	0.5	1	1
26	Assistant Chief	0	0	0.9	1	1
27	Battalion Chief	0	4	0.2	0	8
28	Captain	3	0	1.7	3	27
29	Lieutenant	0	7	1.2	3	24
30	Career Firefighter (Without Paramedic License)	0	19	4	8	41; plus 26 Engineers
31	Volunteer Fire Fighter	0	0	0	0	0
32	Paid On Call Fire Fighter	14	27	40	17	0
33	Career Firefighter / Paramedic	12	26	0	19	68 total paramedics
34	Other Administrative Staff	1	1	0.25	1	2; plus 2 Mechanics
35	Do You Contract EMS Services?	No	No	Yes	No	No
36	If Yes:				provide service to L&L	
37	Number of Paramedics:	15	30	Not contractually specified		68
38	Number of EMTs:	0	31	Not contractually specified		97
39	ISO Rating	4	5	2	3	2
40	Total Operating Revenues	\$314,353	\$595,402	\$171,625	\$500,000	\$2,052,550
41	Total Operating Expenditures	\$2,486,049	\$3,303,023	\$636,758	\$2,710,523	\$20,560,190
42	Total Capital Expenditures (not identified in operating expenditures)	0	\$17,531	\$135,000	\$94,800	\$654,000
44	NFPA 1710 - Career Department - Identify the % of Standard Your Dept. Has Met	unknown	unknown	83%	60%	100
45	NFPA 1720 - Volunteer Department - Identify the % of Standard Your Dept. Has Met	unknown	N/A	N/A	N/A	
46	Total Fire Inspection Completed			1,434	1,050	12000
47						

Data	Data	2010	2010
Field #	Field Description	Howard	TOTAL
1	Name Of Reporting Software For Fire/EMS	FireHouse	
2	2005 Census Pop	16,400	191,016
3	Square Miles in Service Area - Fire	17	97
4	Square Miles in Service Area - EMS	contracted	
5	Total Number of Parcels in Service Area - Fire (Including High Risk)	6,810	67,650
6	Total Number of Parcels in Service Area - EMS (Including High Risk)	6,810	70,237
7	Number of High Risk Parcels Per NIFRS (Definition Included)	16	
8	Avg. Response Time From Dispatch To Arrival On Scene - Fire Incidents	7:42	
9	Avg. Response Time From Dispatch To Arrival On Scene - EMS Incidents	5:00	
NIFRS Data Set (For Fire Responses)			
10	Fires	43	462
11	Overpressure Rupture, Explosion, Overheat (no fire)	0	20
12	Rescue and EMS (fire related)	14	142
13	Hazardous Conditions	27	397
14	Service Calls	71	938
15	Good Intent Calls	63	691
16	False Alarms / False Calls	48	783
17	Severe Weather/Natural Disasters	0	12
18	Special Incidents/Citizen Complaints/Other	1	388
	TOTAL	267	3,833
19	Number Of Responses - EMS	875	11,282
		1142	15,115
Identify All Vehicles Per NIMS Guidelines			
20		Engine 211, 221, 212, 223	
21		Ladder 211	
22		Tender 211, 221	
23		Support 211	
24		Chief 200, Chief 201	
Staff (Please indentify total FTE's for each position listed)			
25	Chief	1	6
26	Assistant Chief	1	4
27	Battalion Chief	2	14
28	Captain	1	36
29	Lieutenant	8	43
30	Career Firefighter (Without Paramedic License)	0	131
31	Volunteer Fire Fighter	0	0
32	Paid On Call Fire Fighter	40	138
33	Career Firefighter / Paramedic	0	125
34	Other Administrative Staff	0	7
35	Do You Contract EMS Services?	Yes	
36	If Yes:		
37	Number of Paramedics:	2 working 24 Hr SMPT	
38	Number of EMTs:	2	130
39	ISO Rating	3	19
40	Total Operating Revenues	\$45,000	3,678,930
41	Total Operating Expenditures	\$510,000	30,206,543
42	Total Capital Expenditures (not identified in operating expenditures)	\$105,000	1,006,331
44	NFPA 1710 - Career Department - Identify the % of Standard Your Dept. Has Met		
45	NFPA 1720 - Volunteer Department - Identify the % of Standard Your Dept. Has Met	Do Not Comply	
46	Total Fire Inspection Completed	1150 2X Per Year	
47			

Training Requirements and Drill Requirement

Jurisdiction	State Requirements and NIMS Federal Requirements				Individual Department Requirement											
	Firefighter Minimum State Requirements	* Firefighter Annual Drill Requirements Com 30 plus references of NFPA, and OSHA 1910.120 as incorporated into COM 30	Driver Requirements State Requirements Driver Operator 30 Hrs. and Aerial Entry Operator 6 Hrs.	NIMS Requirements not referenced in Com 30	Firefighter Minimum Requirements Volunteer or Paid on Call	Firefighter Minimum Requirements Full Time Career	Probationary Period Full- Time Career	Probationary Period Volunteer or Paid-on-call	*Annual Drill Hours Paid on Call or Volunteer Firefighter	*Annual Drill Hours Fulltime Career	Entry Level Aerial Operator 6 hrs	Entry Level Driver Operator 30 hrs	NIMS Training Level Firefighter	NIMS Training Level Officer	NIMS Training Chief Officers	Other Training Dept. Required (non-EMS)
Allouez	Completion of Entry One and Entry Two 60 Hrs Total Initial Tng.	68-96 hours based on interpretation	Entry Level Driver Operator and Entry Aerial Operator if driver will operate an aerial 30 and 6 hrs respectfully	ICS 200 Minimum for Firefighters, ICS 300 for Line Mgt and ICS 400 for Chief Officers	Certified Firefighter 1	Certified Firefighter 2, Paramedic	1 year, and completion of competency program	completion of competency program	48 minimum	100 minimum	not required	not required	ICS 200	ICS 300	ICS 400	
Howard	Completion of Entry One and Entry Two 60 Hrs Total Initial Tng.	68-96 hours based on interpretation	Entry Level Driver Operator and Entry Aerial Operator if driver will operate an aerial 30 and 6 hrs respectfully	ICS 200 Minimum for Firefighters, ICS 300 for Line Mgt and ICS 400 for Chief Officers	Certified Firefighter 2	na	na	1 year, and completion of recruit competency program (120 hrs)	96 minimum	na	required	required	ICS 200	ICS 300	ICS 400	Engineers train 48 hours per year in addition to Firefighter Training. RIT Team receives Separate RIT Training
Bellevue	Completion of Entry One and Entry Two 60 Hrs Total Initial Tng.	68-96 hours based on interpretation	Driver Operator and Entry Aerial Operator if driver will operate an aerial 30 and 6 hrs respectfully	ICS 200 Minimum for Firefighters, ICS 300 for Line Mgt and ICS 400 for Chief Officers	Certified Firefighter 2, EMT, RIT Technician Program (40 hrs)	Certified Firefighter 2, EMT, Certified Inspector, HazMat Tech., RIT Technician Program 40 Hrs), Special Operations Team	1 year, and completion of competency program	completion of competency program and 108 hour Academy	88 minimum	88 minimum	required	required	ICS 200	ICS 400	ICS 400	Engineers train 36 hours per year in addition to Firefighter Training. Special Operations Team members training minimum 40 hrs. per year. Dive Team receives approximately 40 hours a year drill time besides specialized Cert. Tng.
DePere	Completion of Entry One and Entry Two 60 Hrs Total Initial Tng.	68-96 hours based on interpretation	Entry Level Driver Operator and Entry Aerial Operator if driver will operate an aerial 30 and 6 hrs respectfully	ICS 200 Minimum for Firefighters, ICS 300 for Line Mgt and ICS 400 for Chief Officers	Certified Firefighter 1	Certified Firefighter 2, EMT	1 year and evaluation	1 year and evaluation	66 minimum	not specified	required plus Certified Driver Operator Aerial	required plus Certified Driver Operator	ICS 100, 200, 700	ICS 300	ICS 400, 800	no other required but optional
Ashwaubenon (Fire tng. Only)	Completion of Entry One and Entry Two 60 Hrs Total Initial Tng.	68-96 hours based on interpretation	Entry Level Driver Operator and Entry Aerial Operator if driver will operate an aerial 30 and 6 hrs respectfully	ICS 200 Minimum for Firefighters, ICS 300 for Line Mgt and ICS 400 for Chief Officers	Certified Firefighter 1	Certified Firefighter 1, EMT	18 months and evaluation	1 year and evaluation	72 minimum	56 minimum	not required	required	ICS 300	ICS 400	ICS 400	
Green Bay Fire	Completion of Entry One and Entry Two 60 Hrs Total Initial Tng.	68-96 hours based on interpretation	Entry Level Driver Operator and Entry Aerial Operator if driver will operate an aerial 30 and 6 hrs respectfully	ICS 200 Minimum for Firefighters, ICS 300 for Line Mgt and ICS 400 for Chief Officers	na	Certified Firefighter 2, EMT	1 year and evaluation and completion of Recruit Academy	na	na	240 Hrs.	required	required	ICS 200	ICS 300	ICS 400	Hazardous Materials, Technical Rescue, and Other Special Team members training is as required per team / competency per year.

* note Does not include additional command level annual training which may be required for command staff

* note Does not include Emergency Medical or Engineer Annual Drill Requirements. No EMS Training is included unless Noted

** Note Airport is private contractor

Ambulance Map 6

Call Density

E-911 calls for fire/rescue and medical assistance during 2010

Legend

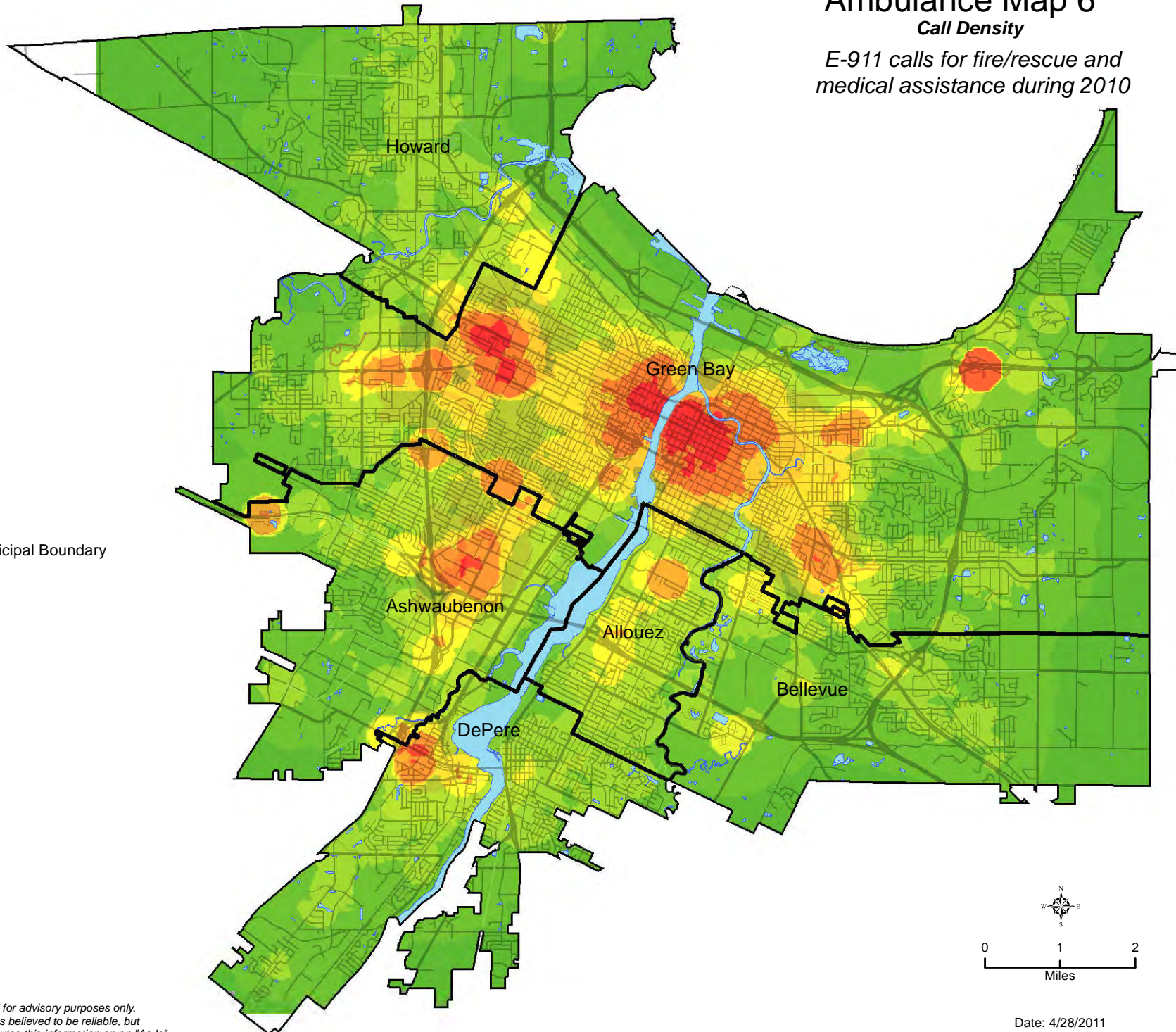
 Municipal Boundary

Call Density

 Low



 High



This map is intended for advisory purposes only. It is based on sources believed to be reliable, but Brown County distributes this information on an "As Is" basis. No warranties are implied.










Date: 4/28/2011

Brown County Planning & Land Services Dept - Land Information Office (920) 448-6295

Ambulance Map 1b

Existing Ambulance Locations including
the 2 County Rescue ambulances:
7-minute drive times
with municipal boundary limits

Legend

-  Ambulance
-  Fire Station
-  Municipal Boundary
-  Areas within approximately 7 Minutes' drive time with municipal boundaries constraining response
- 
- 
- 
- 
- 

Statistics:

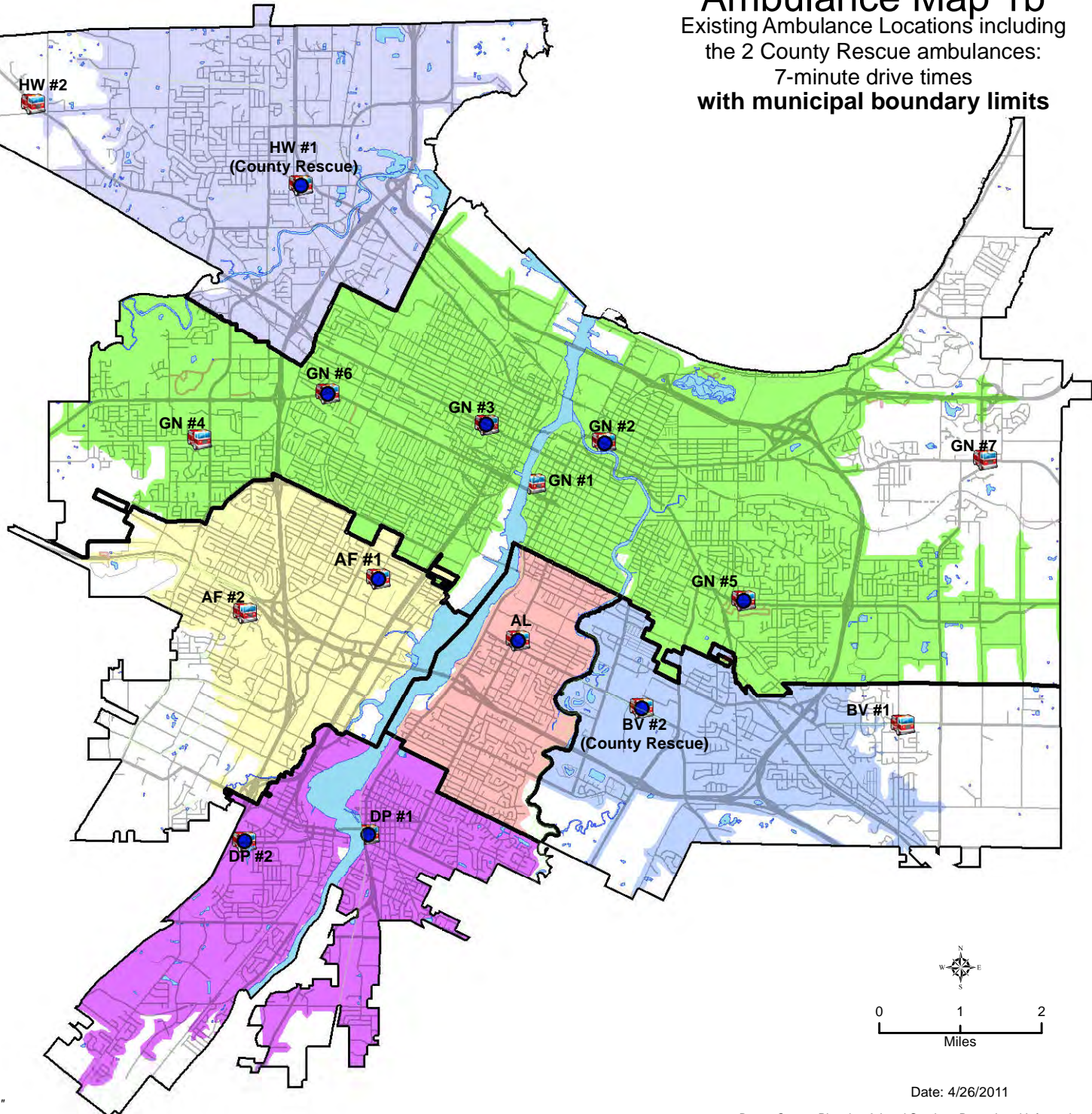
25,959 calls* in 2010
within analysis area**

With the "Map 1b" analysis:
25,165 (97%)* are within
the 7-minute drive time

*E-911 calls for fire/rescue and
medical assistance during 2010
were used for this analysis.

Analysis area includes Green Bay,
Howard, Ashwaubenon, Allouez,
DePere and Bellevue.

*This map is intended for advisory purposes only.
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basis. No warranties are implied.*






Date: 4/26/2011

Ambulance Map 1c

Overlapping Coverage Analysis

Existing Ambulance Locations including
the 2 County Rescue ambulances:
7-minute estimated drive times
without agency boundary limits

Legend

-  Ambulance
 -  Fire Station
 -  Municipal Boundary
- 0
1
2
3
4
5
6
- number of
ambulances
within
approximately
7 minutes
drive
time

Statistics:

25,959 calls* in 2010
within analysis area**

25,389 (98%) are within
the 7-minute drive time

Overlapping Coverage Analysis

of ambulances w/in 7-minute drive

6 ambulances: 784 calls (3%)

5 ambulances: 3905 calls (15%)

4 ambulances: 6639 calls (26%)

3 ambulances: 6579 calls (25%)

2 ambulances: 5425 calls (21%)

subtotal: 23,332 calls (90%) are within
overlapping 7-minute coverage areas

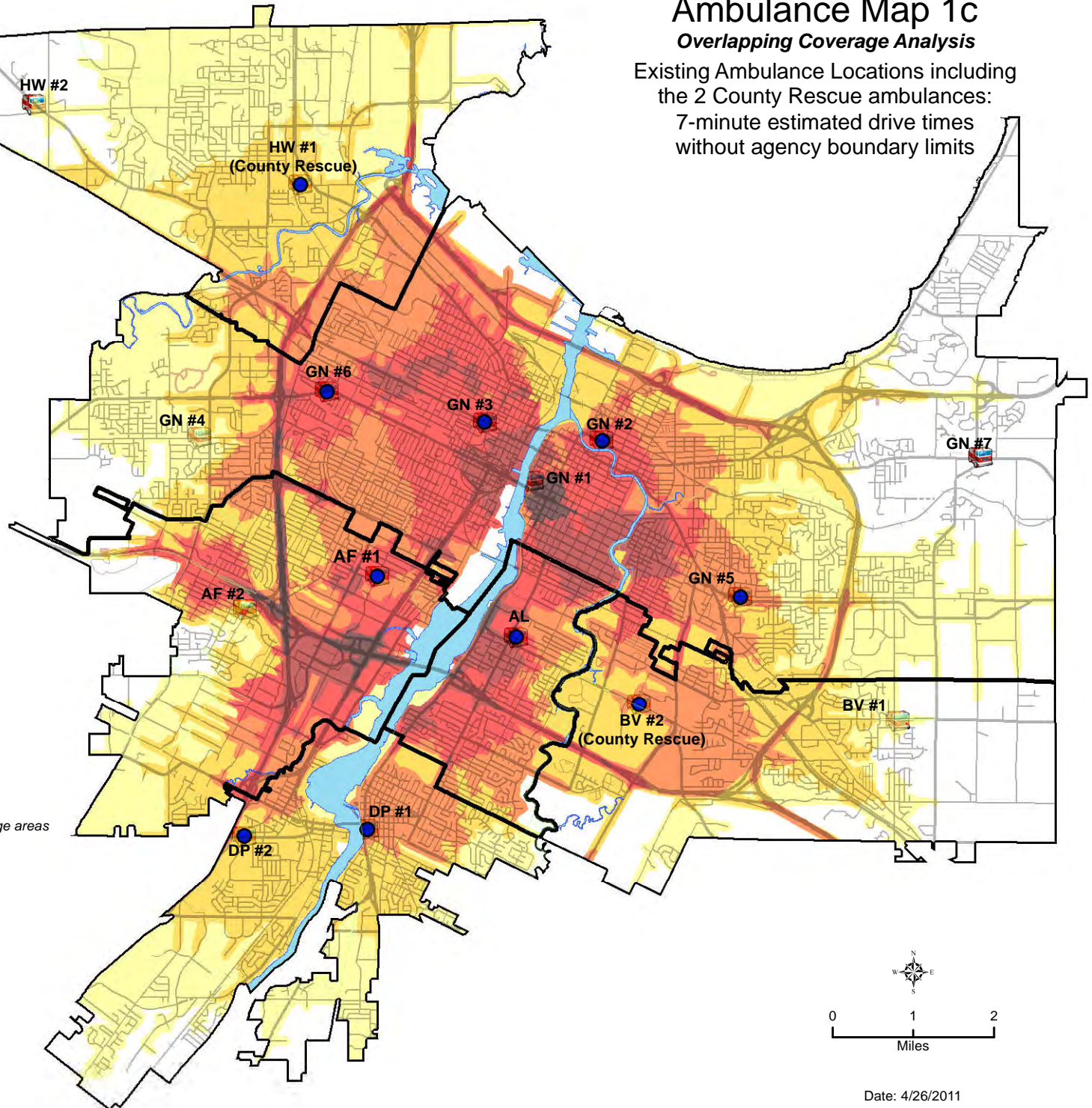
1 ambulance: 2057 calls (8%)

No ambulance w/in
7-minute drive: 570 calls (2%)

*E-911 calls for fire/rescue and
medical assistance during 2010
were used for this analysis.

**Analysis area includes Green Bay,
Howard, Ashwaubenon, Allouez,
DePere and Bellevue

This map is intended for advisory purposes only.
It is based on sources believed to be reliable, but
Brown County distributes this information on an "As Is"
basis. No warranties are implied.







Date: 4/26/2011

Ambulance Map 5

Ambulances moved:
 GN Sta. #5 to GN Sta. #7;
 GN #6 moved to HW #1,
 Allouez to BV #2, and
 AF#1 to AF#2

7-minute estimated drive times
 without agency boundary limits

Legend

-  Ambulance
-  7 Minute Drive Time from Ambulance
-  Fire Station
-  Municipal Boundary

Statistics:

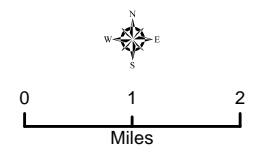
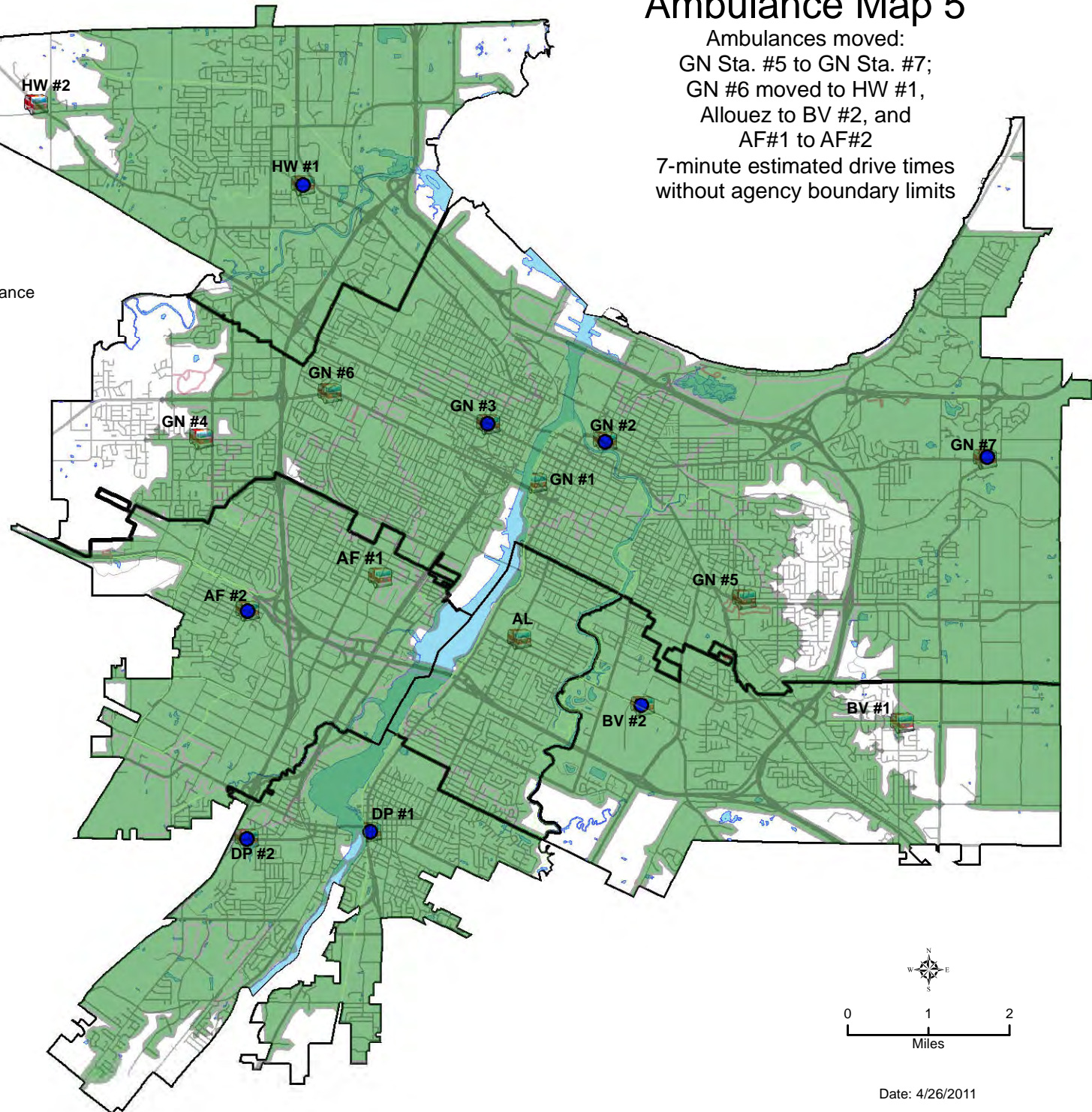
25,959 calls* in 2010
 within analysis area

With the "Map 5" analysis:
 25,503 (98%)* are within
 the 7-minute drive time

*E-911 calls for fire/rescue and
 medical assistance during 2010
 were used for this analysis.

**Analysis area includes Green Bay,
 Howard, Ashwaubenon Allouez,
 DePere and Bellevue.

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 basis. No warranties are implied.*



Date: 4/26/2011











Ambulance Map 5b

Overlapping Coverage Analysis

with medical assistance & fire/rescue call locations

Ambulances moved:
 GN Sta. #5 to GN Sta. #7;
 GN #6 moved to HW #1,
 Allouez to BV #2, and
 AF#1 to AF#2

Legend

-  Ambulance
 -  Fire Station
 -  Municipal Boundary
 -  Medical Assistance & Fire/Rescue call
-
-  0
 -  1
 -  2
 -  3
 -  4
 -  5
- number of ambulances within approximately 7 minutes drive time

Statistics:

25,959 calls* in 2010 within analysis area**

25,503 (98%) are within the 7-minute drive time

Overlapping Coverage Analysis

of ambulances w/in 7-minute drive

- 5 ambulances: 50 calls (0%)
- 4 ambulances: 829 calls (3%)
- 3 ambulances: 4735 calls (18%)
- 2 ambulances: 13,980 calls (54%)

subtotal: 19,594 calls (75%) were within overlapping 7-minute coverage areas

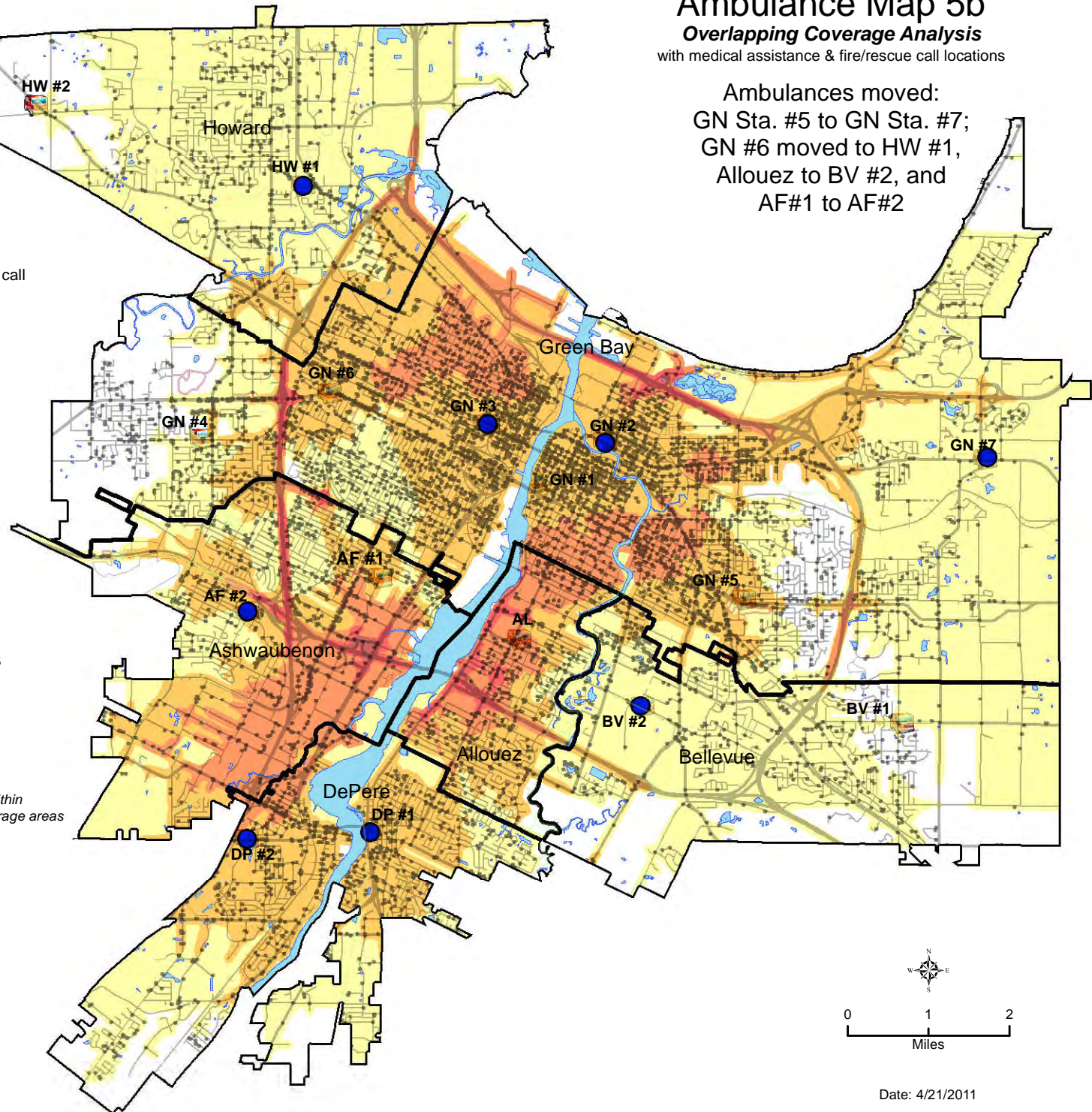
1 ambulance: 5909 calls (23%)

No ambulance w/in 7-minute drive: 456 calls (2%)

*E-911 calls for fire/rescue and medical assistance during 2010 were used for this analysis.

**Analysis area includes Green Bay, Howard, Ashwaubenon, Allouez, DePere and Bellevue

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Date: 4/21/2011

Ladder Map 4

Call Density

E-911 calls for Structure Fires
& Fire Alarms during 2010

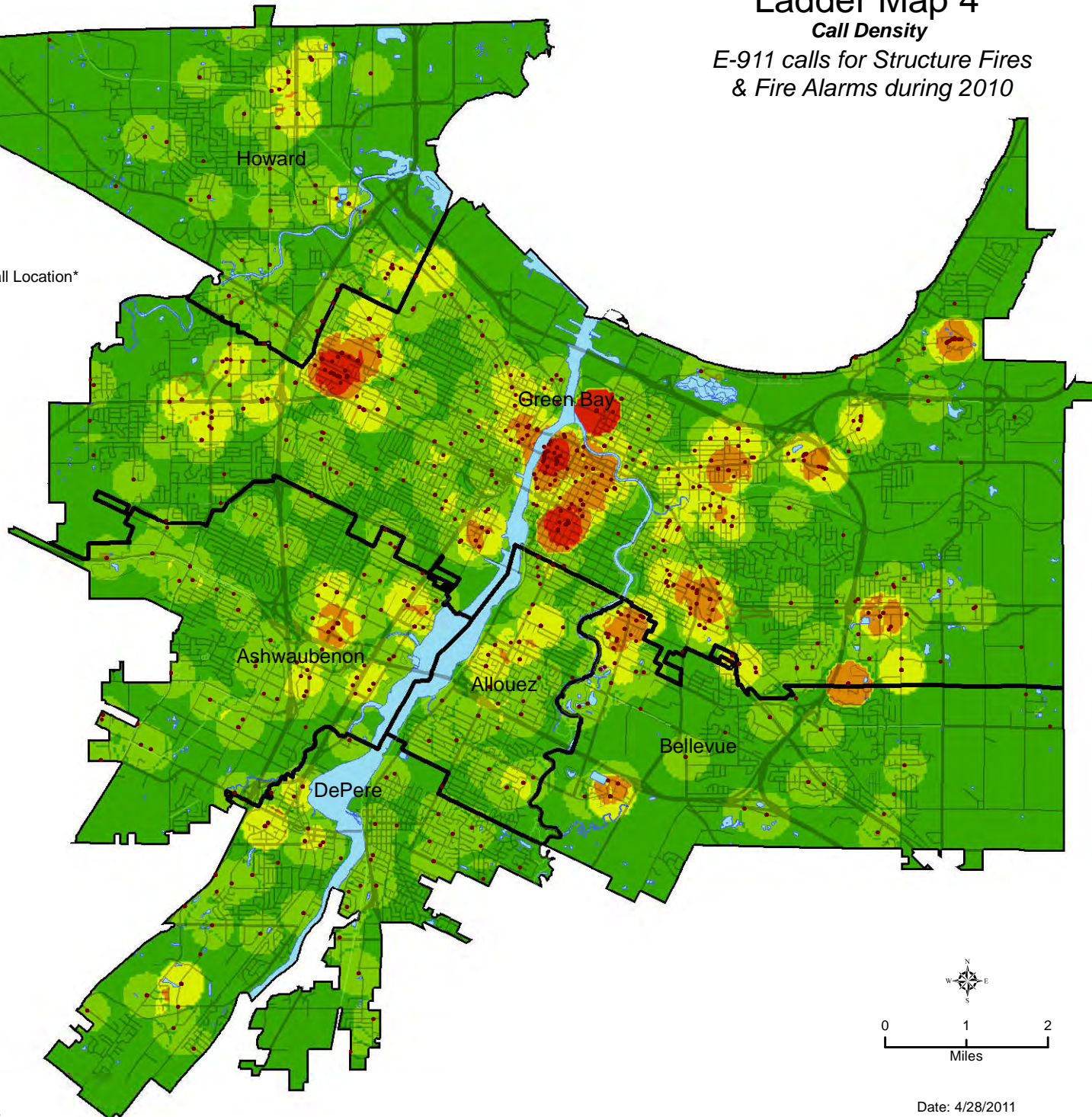
Legend

-  Municipal Boundary
-  Structure Fire or Fire Alarm Call Location*

Call Density

-  Low
-  Medium
-  High
-  Very High

*Many of the dots on the map represent multiple calls to the same location. The call density shading does take these "stacked up" dots into account.



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Date: 4/28/2011

Brown County Planning & Land Services Dept - Land Information Office (920) 448-6295

Ladders - Map 1b

Existing Ladder Locations
 7-minute estimated drive times
 with agency boundary limits
 (exception: DePere covers Allouez
 under current arrangement)

Legend

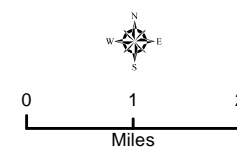
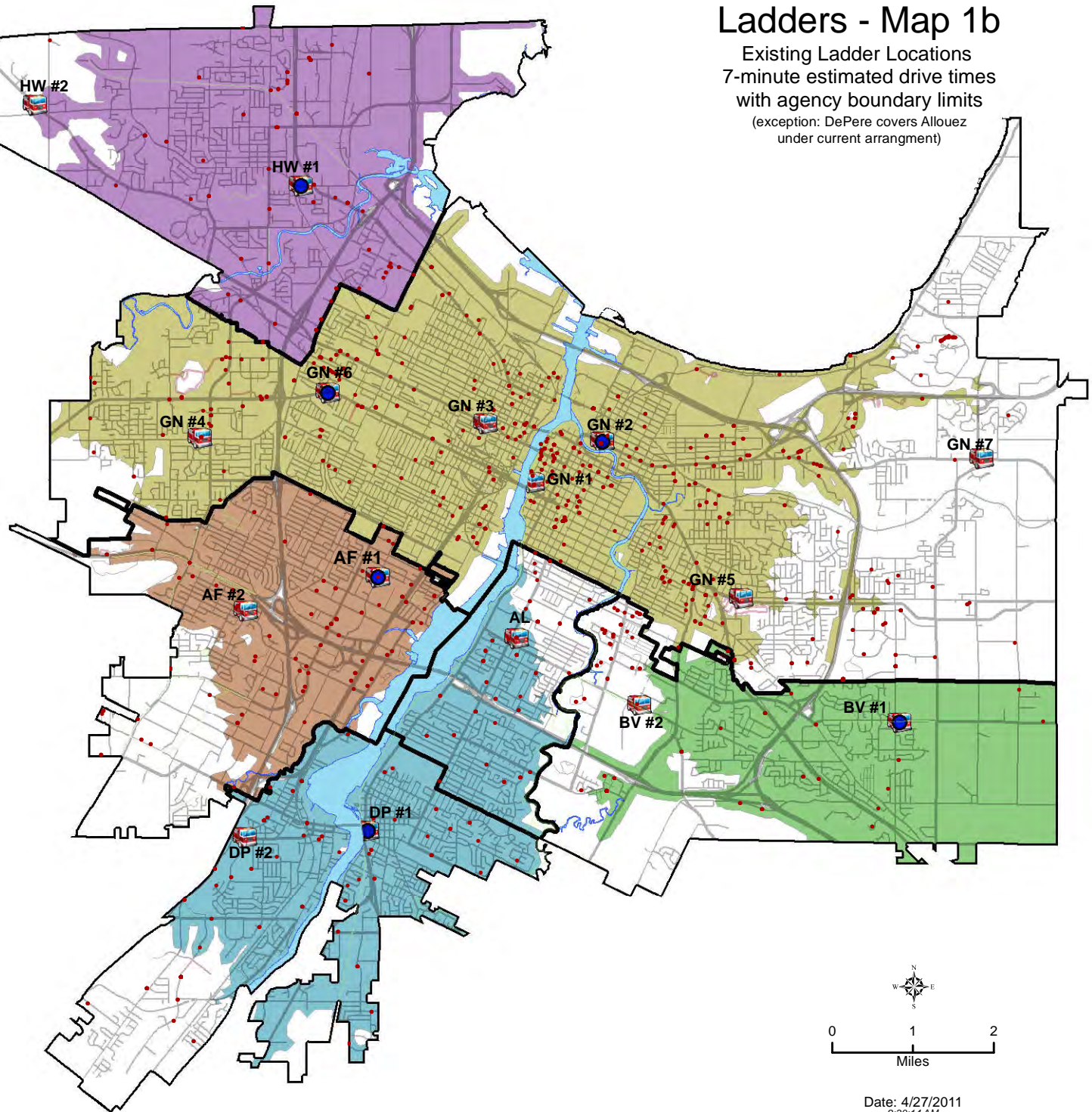
-  Fire Station
-  Station with Ladder
-  Municipal Boundary
-  Fire Alarms and Structure Fires in 2010
- Estimated Drive Time:**
-  Areas within approximately 7 minutes' drive time
- 
- 
- 

Statistics:

1373 calls* in 2010
 within analysis area**
 1140 (83%) are within
 the 7-minute drive time

*E-911 calls for Fire Alarms and Structure Fires during 2010 were used for this analysis

**Analysis area includes Green Bay, Howard, Ashwaubenon Allouez, DePere and Bellevue












Date: 4/27/2011
 9:30:14 AM

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Ladders - Map 2b

Existing Ladder Locations including GN#5
 7-minute estimated drive times with
 agency boundary limits
 (exception: DePere covers Allouez
 under current arrangement)

Legend

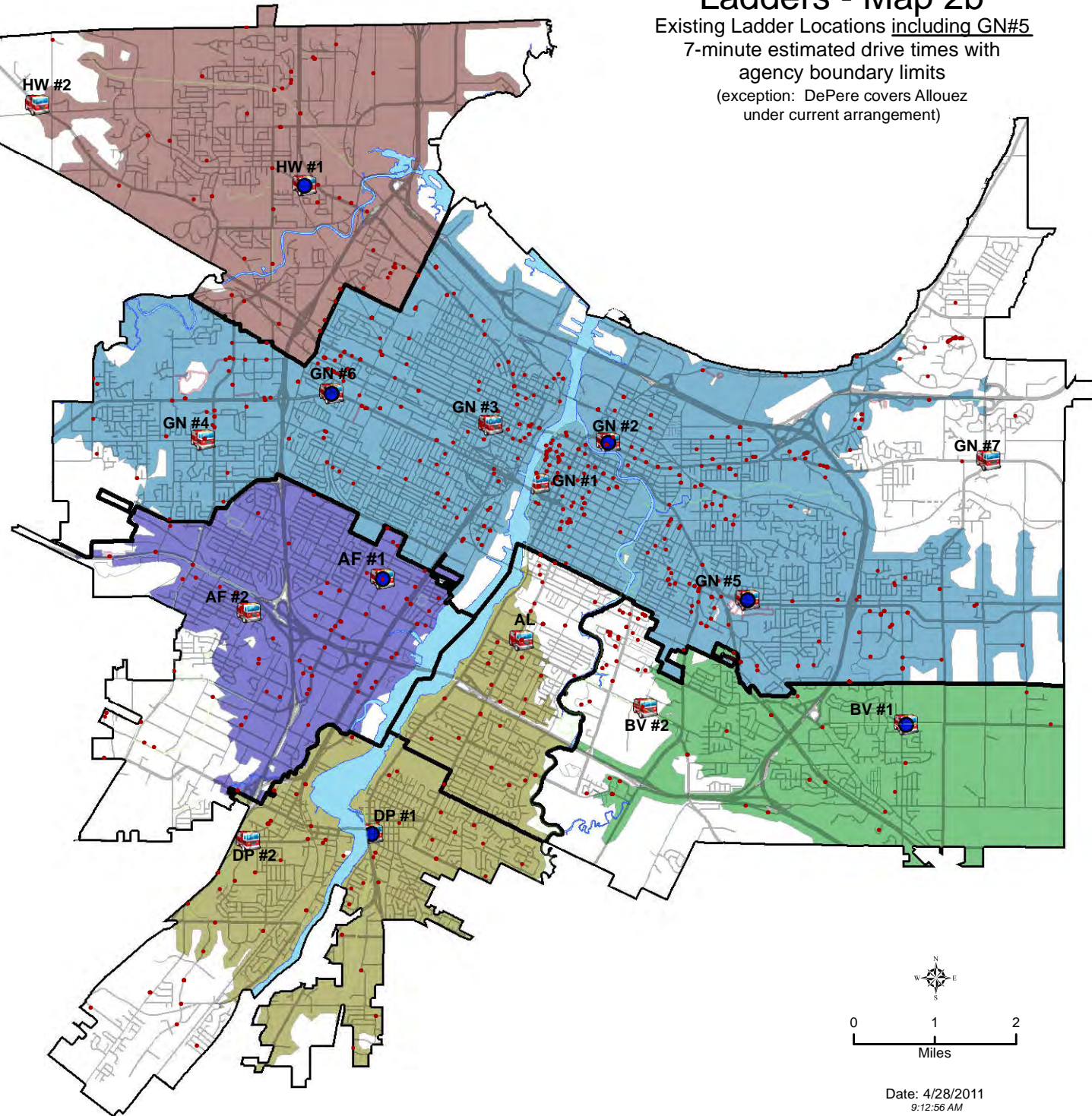
-  Fire Station
-  Station with Ladder
-  Municipal Boundary
-  Fire Alarms and Structure Fires in 2010
- Estimated Drive Time:**
-  Areas within approximately 7 minutes' drive time
- 
- 
- 
- 

Statistics:

1373 calls* in 2010
 within analysis area**
 1166 (85%) are within
 the 7-minute drive time

*E-911 calls for Fire Alarms and
 Structure Fires during 2010
 were used for this analysis

**Analysis area includes Green Bay,
 Howard, Ashwaubenon Allouez,
 DePere and Bellevue



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Date: 4/28/2011
 9:12:56 AM











Ladders - Map 1c

Overlapping Coverage Analysis

Existing Ladder Locations

7-minute estimated drive times
without agency boundary limits

Legend

-  FireStation
 -  Station with Ladder
 -  Municipal Boundary
 -  FireAlarms and StructureFires in 2010
-
- | | | |
|--|---|---------------|
|  | 0 | number of |
|  | 1 | ladder |
|  | 2 | stations |
|  | 3 | within |
|  | 3 | approximately |
|  | 4 | 7 minutes |
| | 4 | drive time |

Statistics:

1373 calls* in 2010
within analysis area**

1265 (92%) are within
the 7-minute drive time

Overlapping Coverage Analysis

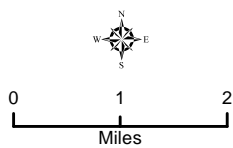
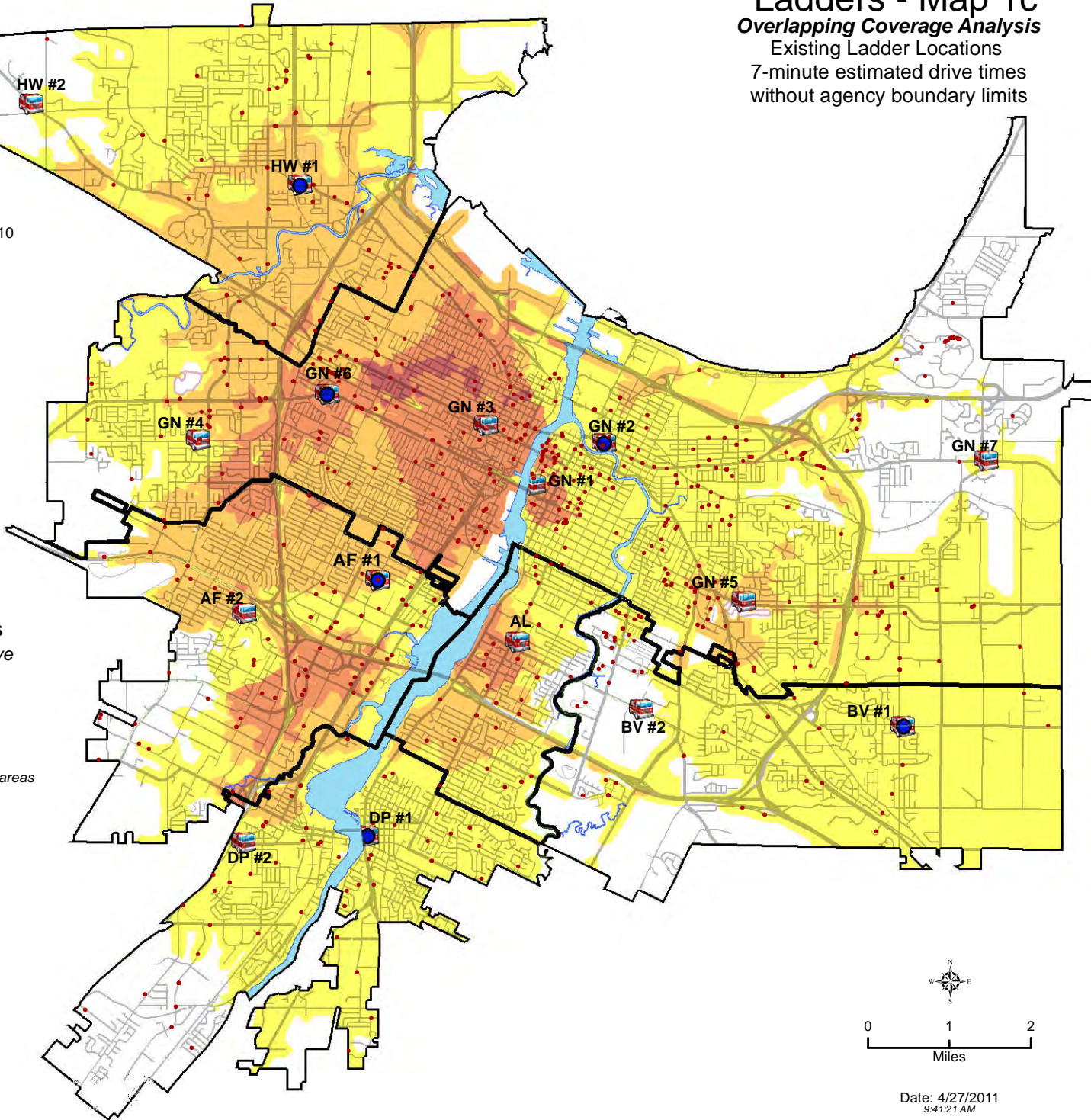
of ladder stations w/in 7-minute drive

- 4 stations: 7 calls (1%)
- 3 stations: 244 calls (18%)
- 2 stations: 347 calls (25%)
- subtotal: 598 calls (44%) are within overlapping 7-minute coverage areas
- 1 station: 667 calls (49%)
- No metro ladder station w/in 7-minute drive: 108 calls (7%)

*E-911 calls for Fire Alarms and Structure Fires during 2010 were used for this analysis

**Analysis area includes Green Bay, Howard, Ashwaubenon Allouez, DePere and Bellevue

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Date: 4/27/2011
9:41:21 AM

Ladders - Map 2c

Overlapping Coverage Analysis

Existing Ladder Locations including GN#5
7-minute estimated drive times
without agency boundary limits

Legend

-  Fire Station
 -  Station with Ladder
 -  Municipal Boundary
 -  Fire Alarms and Structure Fires in 2010
-
- | | | |
|---|---|---------------|
|  | 0 | number of |
|  | 1 | ladder |
|  | 2 | stations |
|  | 3 | within |
|  | 4 | approximately |
| | | 7 minutes |
| | | drive time |

Statistics:

1373 calls* in 2010
within analysis area**

1284 (94%) are within
the 7-minute drive time

Overlapping Coverage Analysis

of ladder stations w/in 7-minute drive

4 stations: 17 calls (1%)

3 stations: 287 calls (21%)

2 stations: 640 calls (47%)

subtotal: 944 calls (69%) are within
overlapping 7-minute coverage areas

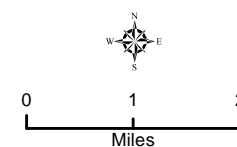
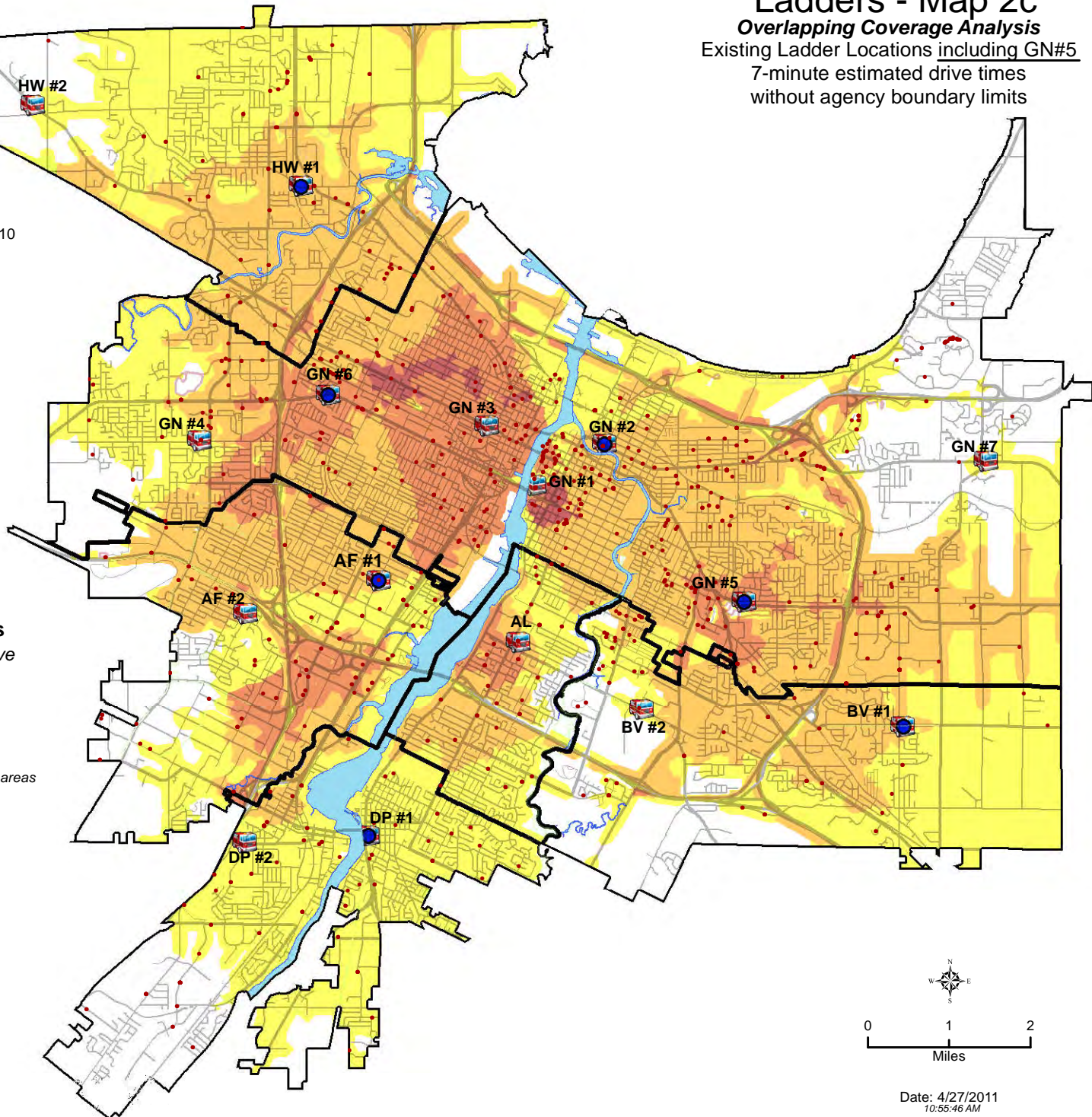
1 station: 340 calls (25%)

No metro ladder station w/in
7-minute drive: 89 calls (6%)

*E-911 calls for Fire Alarms and
Structure Fires during 2010
were used for this analysis

**Analysis area includes Green Bay,
Howard, Ashwaubenon Allouez,
DePere and Bellevue

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basis. No warranties are implied.*












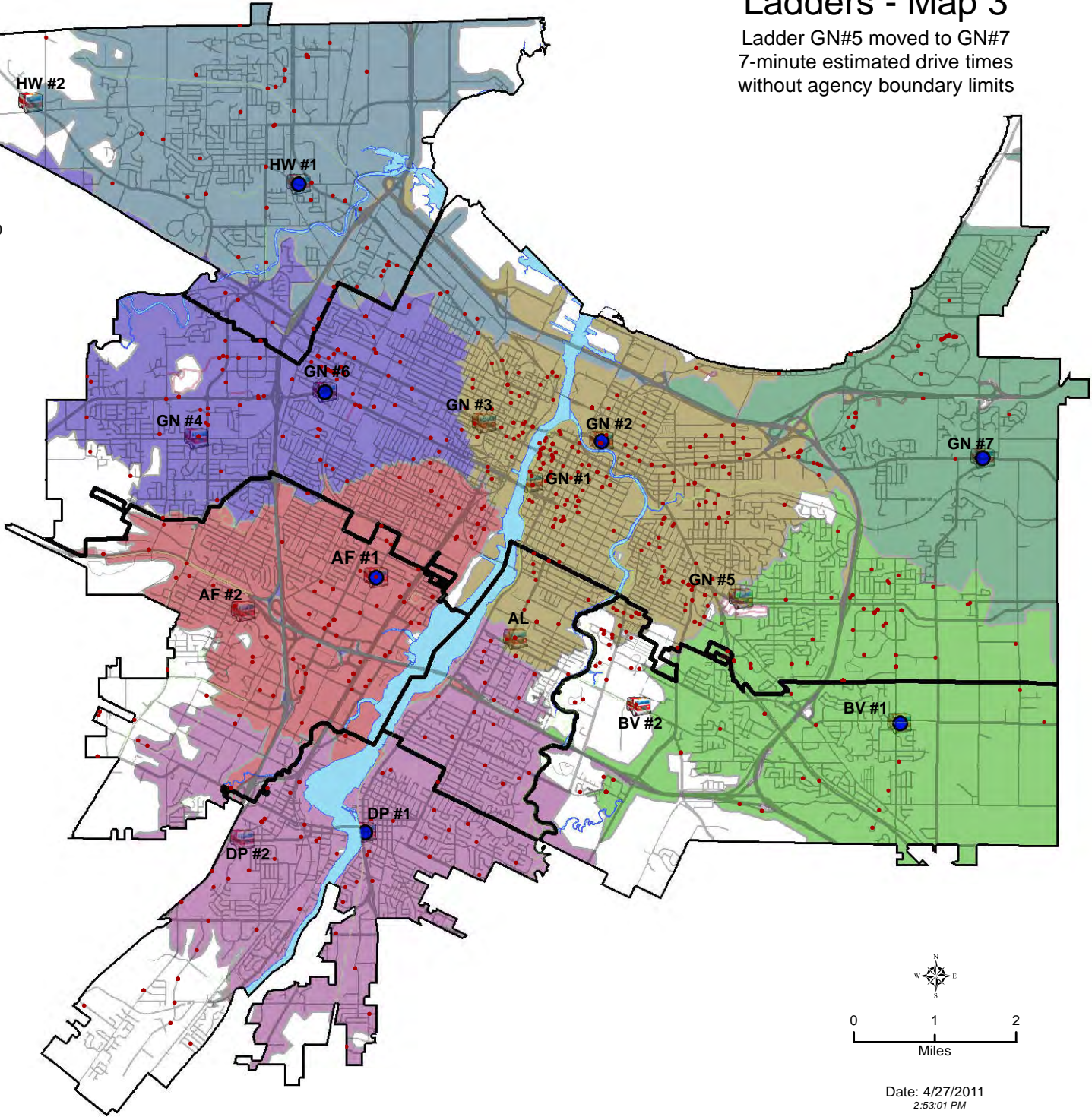
Date: 4/27/2011
10:55:46 AM

Ladders - Map 3

Ladder GN#5 moved to GN#7
 7-minute estimated drive times
 without agency boundary limits

Legend

-  FireStation
-  Station with Ladder
-  Municipal Boundary
-  FireAlarms and StructureFires in 2010
- Estimated Drive Time:**
-  Areas within approximately 7 minutes drive time - (note: overlapping areas are allocated to closest facility)
- 
- 
- 
- 



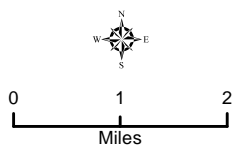
Statistics:

1373 calls* in 2010 within analysis area**
 1293 (94%) are within the 7-minute drive time

*E-911 calls for Fire Alarms and Structure Fires during 2010 were used for this analysis

**Analysis area includes Green Bay, Howard, Ashwaubenon Allouez, DePere and Bellevue

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






Date: 4/27/2011
 2:53:01 PM

Ladders - Map 3c

Overlapping Coverage Analysis

Ladder GN#5 moved to GN#7
 7-minute estimated drive times
 without agency boundary limits

Legend

-  FireStation
 -  Station with Ladder
 -  Municipal Boundary
 -  FireAlarms and StructureFires in 2010
- | | | |
|---|---|---|
|  | 0 | number of ladder stations within approximately 7 minutes drive time |
|  | 1 | |
|  | 2 | |
|  | 3 | |
|  | 4 | |

Statistics:

1373 calls* in 2010 within analysis area**
 1293 (94%) are within the 7-minute drive time

Overlapping Coverage Analysis

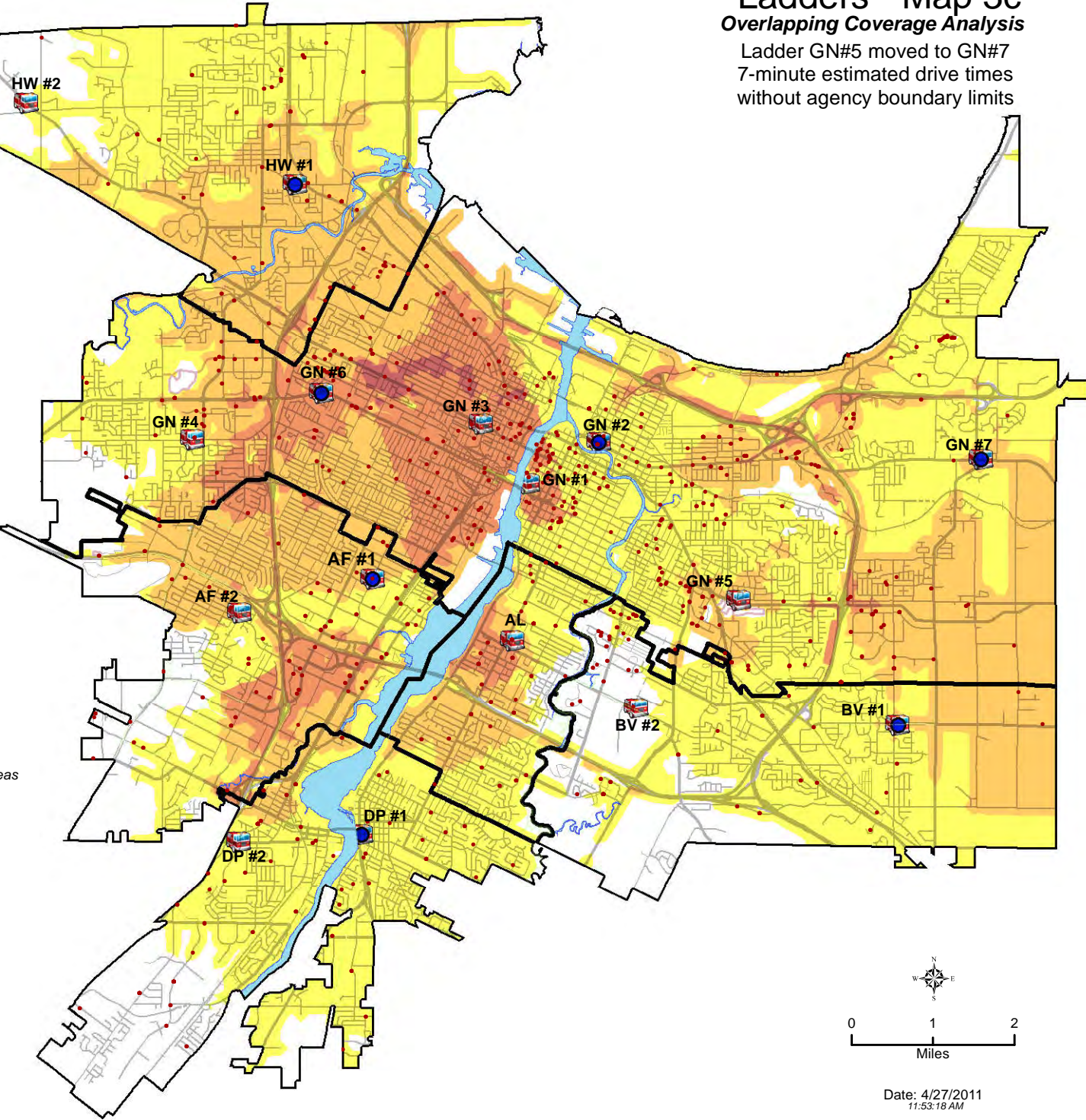
of ladder stations w/in 7-minute drive

4 stations:	7 calls (<1%)
3 stations:	255 calls (19%)
2 stations:	463 calls (34%)
<i>subtotal: 725 calls (53%) are within overlapping 7-minute coverage areas</i>	
1 station:	568 calls (41%)
No metro ladder station w/in 7-minute drive:	80 calls (6%)

*E-911 calls for Fire Alarms and Structure Fires during 2010 were used for this analysis

**Analysis area includes Green Bay, Howard, Ashwaubenon Allouez, DePere and Bellevue

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




Date: 4/27/2011
 11:53:18 AM

Engines - Map 2

Existing Engine Locations
5-minute estimated drive times
without agency boundary limits

Legend

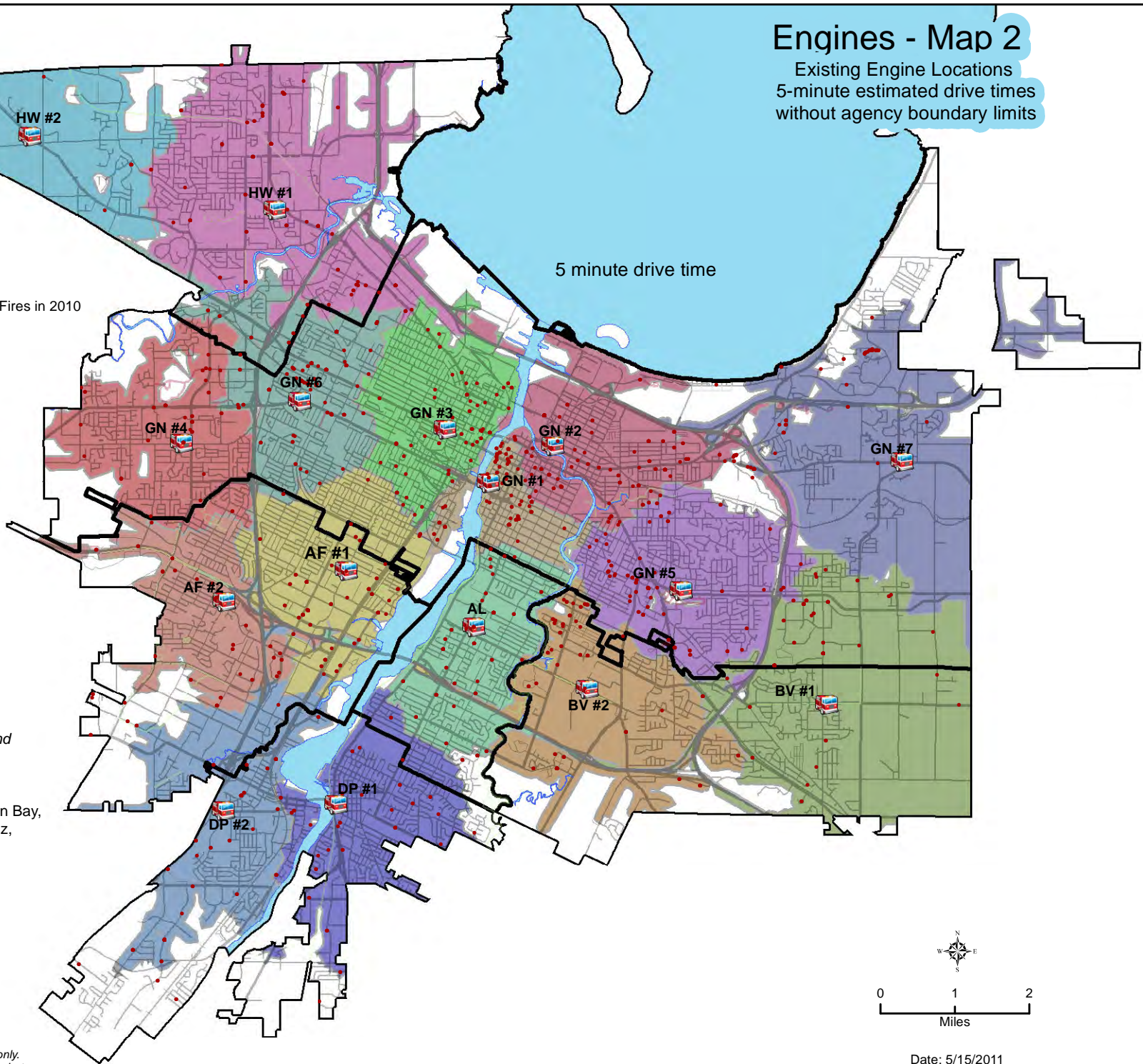
-  Fire Engine Station
-  FireAlarms and StructureFires in 2010
-  Municipal Boundary
- Estimated Drive Time:**
-  Areas within approximately 5 minutes' drive time
- 
- 

Statistics:

1373 calls* in 2010
within analysis area**
1324 (96%) are within
the 5-minute drive time

*E-911 calls for Fire Alarms and
Structure Fires during 2010
were used for this analysis

**Analysis area includes Green Bay,
Howard, Ashwaubenon Allouez,
DePere and Bellevue






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basis. No warranties are implied.

Date: 5/15/2011
9:56:42 PM

Engines- Map 2b

Existing Engine Locations
5-minute estimated drive times
with agency boundary limits

Legend

-  Fire Engine Station
-  Municipal Boundary
-  Estimated Drive Time:
Areas within approximately 5 minutes drive time

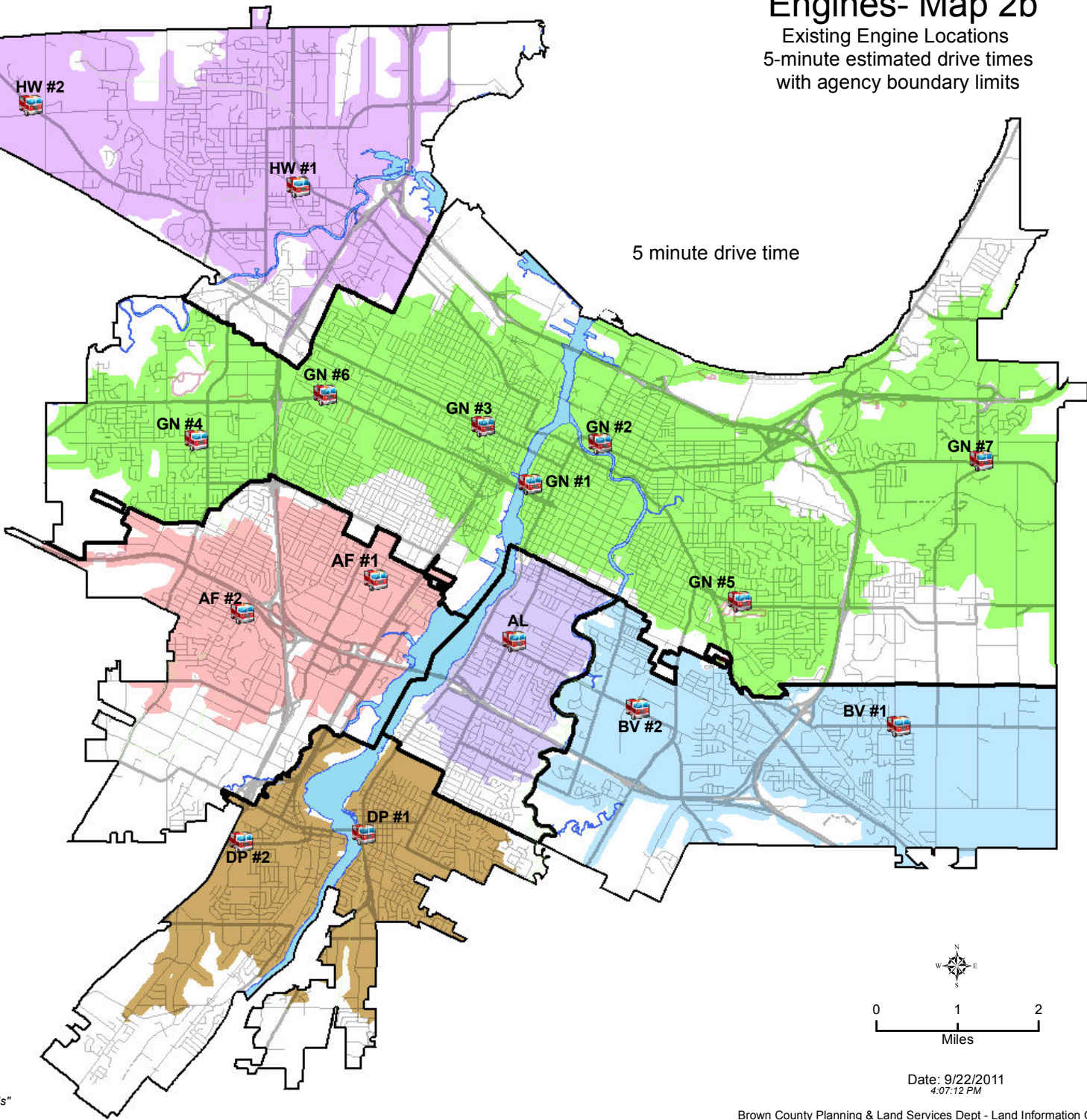
Statistics:

1373 calls* in 2010 within analysis area**
1205 (88%) are within the 5-minute drive time

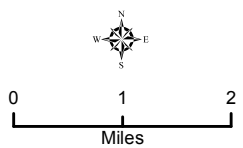
*E-911 calls for Fire Alarms and Structure Fires during 2010 were used for this analysis

**Analysis area includes Green Bay, Howard, Ashwaubenon Allouez, DePere and Bellevue

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5 minute drive time





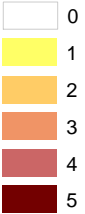
Date: 9/22/2011
4:07:12 PM

Engines- Map 2c

Overlapping Coverage Analysis

Existing Engine Locations
 5-minute estimated drive times
 without agency boundary limits

Legend

-  Fire Engine Station
-  Municipal Boundary
- 
 - 0 number of engine stations within approximately 5 minutes drive time
 - 1
 - 2
 - 3
 - 4
 - 5

Statistics:

1373 calls* in 2010 within analysis area**
 1325 (97%) are within the 5-minute drive time

Overlapping Coverage Analysis

of engine stations w/in 5-minute drive

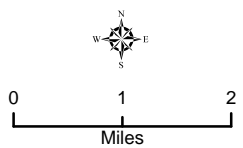
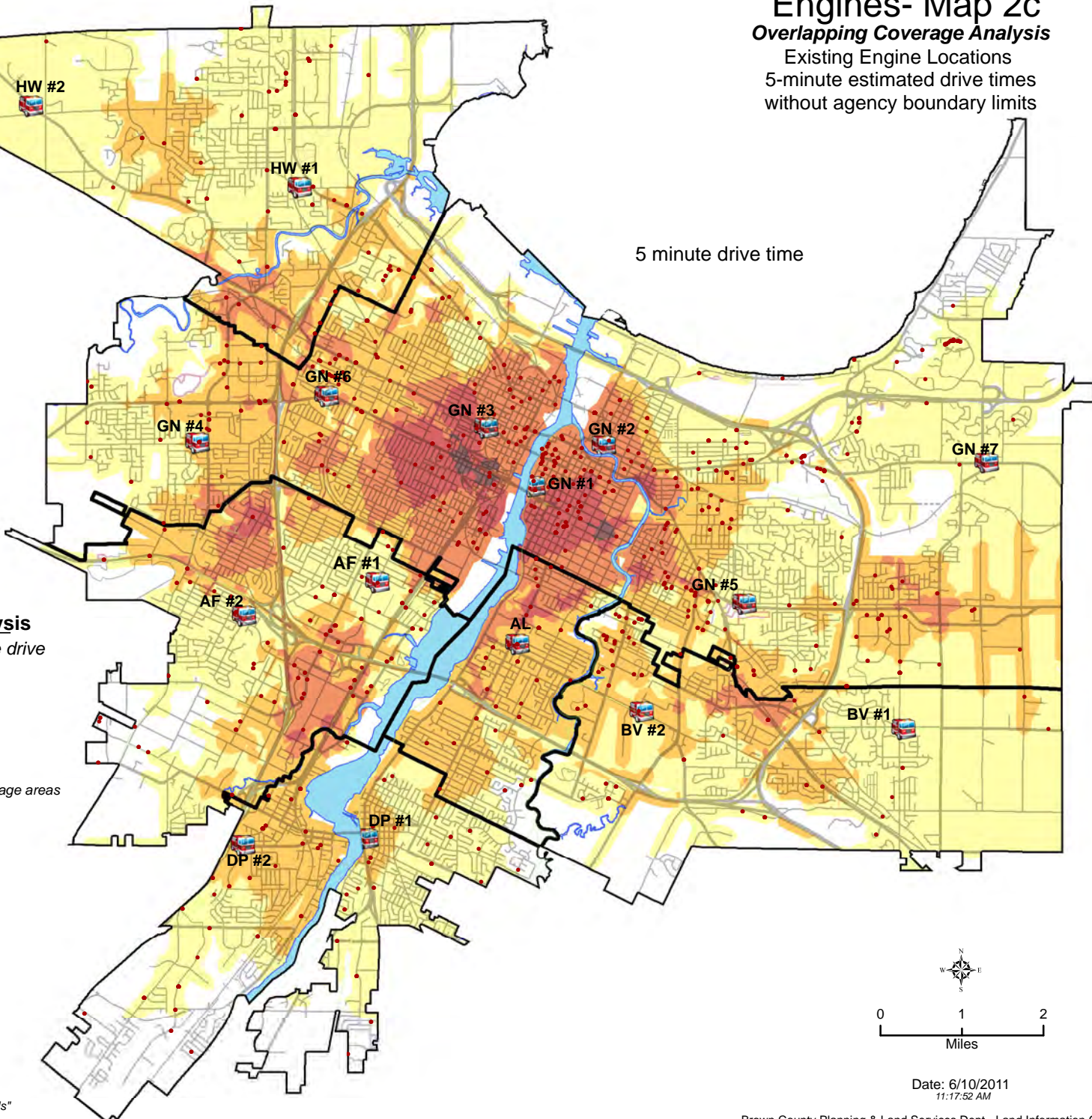
- 5 stations: 3 calls (<1%)
- 4 stations: 93 calls (7%)
- 3 stations: 341 calls (25%)
- 2 stations: 513 calls (37%)
- 1 station: 375 calls (27%)
- No metro engine station w/in 5-minute drive: 48 calls (3%)

subtotal: 950 calls (70%) are within overlapping 5-minute coverage areas

*E-911 calls for Fire Alarms and Structure Fires during 2010 were used for this analysis

**Analysis area includes Green Bay, Howard, Ashwaubenon Allouez, DePere and Bellevue

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Date: 6/10/2011
 11:17:52 AM