Testimony to Task Force on Health Planning Reform

October 30, 2008

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Thank you for the opportunity to address this Task Force. If my face is familiar, I have attended several meetings, and I have reviewed transcripts for others. I appreciate the work you are doing, and understand how complex all of this is.

I've been involved in health care planning for longer than I care to admit, and I'm constantly challenged with keeping up with changes. I can only imagine how hard it's been to try to reform the CON process in a limited amount of time, with a limited amount of resources.

I'm appealing to you today out of a sincere desire for effective statewide planning in Illinois. While I'm a Vice President at Edward Hospital, I also have a personal and professional interest in public health and health planning. I have been active in health planning, policy, and management for over 25 years, having received my Masters Degree in Public Health from Yale University in 1982. I have held senior planning positions in several hospitals in Massachusetts, prior to moving to Illinois in 1994. Since then, I was active as an independent health care consultant, until assuming my current role at Edward. So, I have seen health care from a variety of perspectives, and I hope you take my experience into account as you consider my comments.

I have read with interest the summary of Task Force discussions that have occurred to date, and see that there is consensus on several issues, including an interest in streamlining the process and in establishing a better system for statewide healthcare planning.

I agree with the sentiment expressed by many others that we don't have a proactive statewide health plan in Illinois, at least in terms of the development of health care facilities. I feel that CON can play a critical role in supporting appropriate health planning, but…and this is crucial…it will only have integrity if it supported by rules that make sense…rules that are transparent…and rules that are easy to understand and are applied consistently and in a way that supports such a plan. We're not there yet.

I want to stress a couple of key points today—first, the CON process needs to be supported by good rulemaking, and second, the Task Force—or some independent body—needs to look at how these rules are implemented. I also want to discuss something called the "migration factor." I've noticed that, in spite of the fact that the legislation requires the Task Force to develop recommendations on the migration factor – a key planning principle that helps define health care needs in a region – no one has yet addressed this issue. I know that the Task Force is busy finalizing its recommendations, but I wanted to be sure my concerns about this were not left unsaid.

To my first point: the current CON rules are anything but simple, and they are not applied consistently. Virtually no CON application meets all of the current rules, yet some applications are approved while others are not. Planning Board members are in a very difficult position, required to process and integrate a tremendous amount of complex information in the context of confusing and sometimes conflicting rules, with the intention of making the 'right' decisions--which we can only hope are based on sound planning principles. I believe you have already heard about this same concern from several people testifying before this Task Force.

It has been widely acknowledged that current rules governing bed need are imperfect and require revision. I urge the Task Force to play an active role in this

process. If your recommendations are not clear and complete – without specific direction on how rules should change, we risk perpetuating the status quo.

That leads me to my second point—attention needs to be paid not only to what the rules are, but how they are implemented.

Public Act 05-005 – this is the law that created this Task Force – was passed nearly unanimously in the General Assembly. Public Act 05-005 was passed to ensure high growth areas of the state had adequate access to hospital services, and it was a step in the right direction; however, it was not implemented as intended. The law required IDPH to update its inventory and bed need formula to incorporate: (1) most recent utilization data…that means the rate of hospitalization in an area; (2) ten year population projections; and (3) an appropriate migration factor, ***not less than*** 50%, for the medical/surgical/pediatric category of service.

After the passing of this Act, but before IDPH had an opportunity to update the Inventory, I worked with some consultants to calculate its impact on the bed need in various planning areas. Interestingly, Silver Cross Hospital did the same thing. Even more interestingly, we independently came up with essentially the same answer—that Planning Area A-13 would have a need for about ***150 additional*** medical/surgical beds by 2015. Imagine my surprise when IDPH published its own answer—which came out to the need for only ***12 additional*** beds!

After much discussion with IDPH technical staff, and to their credit, a significant amount of work on their part, here is what we found out:

- The utilization data used in the formula is not the most recent available--it is from 2005, which is now 3 years old.
- Ten year population projections are used, but only from a base year of 2005, and they do not roll forward. This means the projection year is 2015. That's only 6 ½ years away, not 10 years away.

Moreover, the base year estimate and the projection come from different sources.

- A 50% migration factor is used for the base year (i.e., 2005), but the resulting days are not projected forward to account for population growth. This essentially states that utilization by the population using hospitals within the Planning Area will increase…but utilization by the population using hospitals outside the Planning Area will not.

While we expected that the bed-to-population ratio in the fastest growing areas would generally ***increase*** as a result of this legislation, we actually found that it ***decreased*** in Planning Area A-13. We found that some of the inputs into the bed need formula remain outdated, flawed and extremely difficult to understand. It is important that you hear about this experience as we work toward restructuring our CON process. We have a lot more work to do before we can guarantee the development of a health plan that is predictable, transparent, and ensures equitable access across all regions. It will require good rules, and good implementation of those rules. Again, I urge the Task Force to play an active role in ensuring this happens.

I would like you to review the most recent IDPH Bed Inventory, which I have attached to this testimony. This provides a wealth of information about the supply and future demand for various categories of hospital services across the state, and it shows very clearly that we've got some issues to deal with. As you review this Inventory, you will see that there are thousands of excess beds in the City of Chicago, and huge excesses in other areas of the State. But then you have some areas where there aren't enough beds.

As a planner, I look at this Inventory and see some odd patterns. There is large variation in bed supply and bed need across Planning Areas. There is a strange imbalance of bed supply and bed need within Planning Areas. Obviously, things

have not been working as they should. What we are missing in Illinois is a participative and interactive planning process where we look at this as a whole and say, 'something's not right,' and 'what are we going to do to fix this?' Instead, we have a process where we hear 'this is the way it is,' and 'the rules are the rules.'

I would like to focus my remaining comments on the migration adjustment. As I mentioned previously, I was concerned that this issue has not yet been addressed in front of the Task Force. I believe this is not because it is unimportant—it is because very few people, including hospital planners, understand it. And it's little wonder, because it is quite complicated, so bear with me as I try to explain it.

IDPH divides the state into 40 Planning Areas. The purpose of the Planning Area is to ensure that services are appropriately planned for the residents of that area. In its calculation of bed need, IDPH uses a migration adjustment to account for patients who historically have utilized services outside of their 'home' Planning Area. Conceptually, this makes sense; however, the Task Force needs to understand two very important things:

1. Migration factors are inconsistent among categories of service, and
2. No population adjustment is applied to migration days, which I alluded to above

Issue #1 – Inconsistent migration factors:

- A migration factor of 85% is utilized for obstetrics
- A migration factor of 50% (recently changed from 15%) is utilized for medical/surgical/pediatrics
- No migration factor is utilized for ICU

This is saying that, in the future, a particular Planning Area should have enough beds to accommodate 85% of the obstetrical patients who have historically accessed beds in other areas, but only 50% of the medical/surgical and pediatrics and none of the ICU patients. Think about that—hospitals within a Planning Area should be allowed to meet most of the needs of obstetrical patients, but only some of the needs the medical/surgical and ICU patients. This doesn't make a whole lot of sense.

I have not found a policy statement supporting this, and I have not found a single person who can explain it. In fact, Ray Passeri, former Executive Director for the CON program, has suggested in a sworn deposition that the original disparity in migration factors (until PA-05-005 it was 85% for OB and 15% for medical/surgical) may be the result of a mathematical error!

While a lower migration factor for medical/surgical/pediatric and ICU utilization may have had some historical relevance when many services could only be received at academic medical centers, this is no longer the case. The vast majority of services utilized by patients are now readily available in local community hospitals, thus limiting the need to travel outside the Planning Area for care. There is no logical explanation for the disparity in migration factors. It contributes to disaggregated care, and it makes for difficult—even irrational--planning.

Issue #2: No population projections are applied to migration days

As I mentioned previously, the IDPH bed need formula applies population projections to the segment of the population utilizing hospitals within its own Planning Area, but not for the segment of the population utilizing hospitals in other Planning Areas. IDPH is saying that, if you've used your own Planning Area's hospitals in the past, your utilization will grow as your population grows. But if you didn't, it will not—it will stay the same. Your population will grow, but

your utilization will not. Again, this simply doesn't make sense, and it contributes to the imbalance of beds across Planning Areas that I discussed previously.

This migration adjustment issue makes little difference in the majority of Planning Areas, as they have plenty of excess capacity and they are not impacted by significant out-migration. However, it can have very serious implications for Planning Areas with low capacity and with historically large out-migration. This policy serves no apparent purpose, and it contributes to ineffective statewide planning--again, leading to gross inequities in access across the State.

Under current practice, areas that have traditionally experienced high levels of out-migration – residents leaving the area for services – will never have the same access to health care services that is afforded other areas of the State. Because of the way the bed need formula works, their bed supply will simply never catch up. Over time, the disparities just get bigger and bigger. This just isn't right.

One might speculate that patients can easily access hospitals in adjacent Planning Areas, so the impact on public health and safety is minimal. I would agree that **if** hospitals within adjacent Areas are located nearby and **if** they have plenty of capacity, this may work just fine in the short term. But these are two very big '**ifs**.' In areas experiencing population growth, this will only work for so long. In a high growth area, congestion grows, and travel times increase. Hospital emergency departments and inpatient units become crowded. Continued reliance on hospitals in other Planning Areas, which may be over-stressed by growth within their own Planning Areas, is not proactive planning--it is a disaster waiting to happen. Why should residents of some Planning Areas be required to travel far distances for health care, while residents of other Planning Areas have access to two more hospitals within walking distance?

Planning Areas were established to ensure reasonable access to that area's population. It is poor health policy to require residents of some communities to

depend on hospitals in other Planning Areas to meet their needs, just because they have done so in the past. This is **not** consistent with the principles supporting prudent yet proactive planning. We can do better.

The question is: What is the "right" migration factor? I believe that the migration factor should be high and it should be consistent across categories of service. It should be high because it is the role of health planning to ensure access—not limit it. A high migration adjustment will guarantee that this will happen in ***all*** Planning Areas—not just those with certain demographic characteristics. It should be consistent because it will provide for more rational and integrated health planning that more fully addresses the comprehensive health care needs of a local population.

As such, I feel that **a consistent 85% migration factor should be recommended by the Task Force.** Applying a consistent 85% migration factor will have **no negative impact on any region of the State** (see attached table). The bed need in 'net out-migration' areas will increase slightly, while the bed need in 'net in-migration' areas will decrease slightly. However, **the shifts in bed need are extremely modest, and in no case will a deficit or a surplus be created where one did not already exist**. This will simply guarantee that adequate access to acute care beds is provided within **all** planning areas. Over time, this will allow the inequities in bed to population ratios across the state to start to correct themselves.

Beyond the use of consistent migration factors, it is important that the Task Force recommends that the bed need formula be changed to ensure **migration days are adjusted for projected demographic changes**--including the growth and aging of the population—just as days experienced within a Planning Area are. This is simply common sense. As I mentioned above, it is not reasonable to assume that those patients utilizing hospitals within a Planning Area will be affected by demographic trends, but those patients utilizing other hospitals will

not. We believe that this is an **unintended oversight** in the existing rules that further contributes to ineffective statewide planning.

In conclusion, having been a health care planner for a very long time, I know this is complex stuff you're dealing with. But it has huge implications for the health care of all Illinoisans.

I hope that this Task Force will indeed streamline the process, offer very specific recommendations, and also change the migration factor to allow more Illinoisans to have the ability to have health care closer to home.

Thank you again for your time and consideration – and I'd be happy to answer questions.

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ILLINOIS DEPARTMENT OF PUBLIC HEALTH
REVISED BED NEED DETERMINATIONS
10/15/2008

Hospital Planning Area	MEDICAL-SURGICAL/PEDIATRIC BEDS				INTENSIVE CARE BEDS				OBSTETRIC BEDS			
	Beds	Calculated Bed Need	Bed Need	Bed Excess	Beds	Calculated Bed Need	Bed Need	Bed Excess	Beds	Calculated Bed Need	Bed Need	Bed Excess
A-001	3,323	1,653	0	1,670	410	400	0	10	274	122	0	152
A-002	2,036	1,235	0	801	414	389	0	25	244	74	0	170
A-003	2,425	1,266	0	1,159	276	265	0	11	302	158	0	144
A-004	3,040	2,137	0	903	311	343	32	0	236	161	0	75
A-005	1,158	1,014	0	144	212	216	4	0	182	103	0	79
A-006	1,417	770	0	647	242	291	49	0	129	82	0	47
A-007	1,464	1,028	0	436	204	191	0	13	162	43	0	119
A-008	828	616	0	212	109	118	9	0	71	59	0	12
A-009	969	762	0	207	90	114	24	0	127	117	0	10
A-010	232	298	66	0	33	41	8	0	39	60	21	0
A-011	296	368	72	0	45	49	4	0	43	81	38	0
A-012	421	277	0	144	48	43	0	5	62	59	0	3
A-013	710	750	40	0	94	91	0	3	91	167	76	0
A-014	318	195	0	123	62	71	9	0	42	16	0	26
B-001	795	499	0	296	99	105	6	0	82	54	0	28
B-002	152	85	0	67	8	7	0	1	25	9	0	16
B-003	185	105	0	80	14	20	6	0	20	11	0	9
B-004	259	137	0	122	20	9	0	11	18	15	0	3
C-001	915	598	0	317	230	163	0	67	111	51	0	60
C-002	512	180	0	332	46	25	0	21	77	19	0	58
C-003	233	120	0	113	22	28	6	0	33	9	0	24
C-004	133	79	0	54	12	9	0	3	22	8	0	14
C-005	420	255	0	165	49	30	0	19	49	23	0	26
D-001	396	214	0	182	53	55	2	0	60	28	0	32
D-002	291	206	0	85	31	27	0	4	46	26	0	20
D-003	276	159	0	117	21	15	0	6	31	15	0	16
D-004	518	265	0	253	55	33	0	22	52	23	0	29
D-005	173	89	0	84	8	9	1	0	20	12	0	8
E-001	1,172	509	0	663	108	97	0	11	65	31	0	34
E-002	142	79	0	63	8	5	0	3	3	12	9	0
E-003	77	37	0	40	4	2	0	2	8	7	0	1
E-004	159	71	0	88	13	10	0	3	11	7	0	4
E-005	284	156	0	128	26	19	0	7	27	11	0	16
F-001	1,441	643	0	798	111	87	0	24	186	66	0	120
F-002	182	117	0	65	14	13	0	1	21	11	0	10
F-003	233	91	0	142	12	10	0	2	23	10	0	13
F-004	401	208	0	193	31	32	1	0	25	12	0	13
F-005	194	83	0	111	0	0	0	0	0	11	11	0
F-006	221	153	0	68	24	25	1	0	12	17	5	0
F-007	362	170	0	192	20	21	1	0	34	11	0	23
	28,763	17,677	178	11,264	3,589	3,478	163	274	3,065	1,811	160	1,414

Net Migration, Projected Population Change and Bed to Population Ratios by Planning Area Ranked by 2015 Bed to Population Ratio						
Planning Area	**2005 Net Migration (discharges)***	**Projected Population Change (2005-2015)**	**% Projected Population Change (2005-2015)**	**2005 M/S/P Bed to Pop Ratio (based on actual supply)**	**2015 Beds:Pop after PA-05-005 (based on higher of current supply or 2015 Calculated Need)**	**2015 Beds:Pop as % of Statewide Average after PA 05-005 (based on higher of existing supply or 2015 calculated need)**
A-10	8,428	70,630	23.03%	0.76	0.79	37.48%
A-11	7,345	75,260	20.47%	0.81	0.83	39.42%
A-13	19,980	170,680	25.03%	1.04	0.88	41.73%
A-5	-1,941	25,860	2.77%	1.24	1.21	57.31%
A-9	4,141	91,660	13.03%	1.38	1.22	57.84%
A-12	-2,024	32,910	10.98%	1.40	1.27	60.04%
D-2	960	20,130	9.99%	1.44	1.31	62.28%
F-6	2,521	12,060	8.97%	1.64	1.51	71.54%
D-1	-3,787	20,950	8.80%	1.66	1.53	72.54%
D-5	1,229	7,470	7.50%	1.74	1.62	76.71%
B-3	1,936	4,680	4.30%	1.70	1.63	77.31%
E-3	1,355	3,830	9.08%	1.83	1.67	79.43%
B-2	787	4,940	5.76%	1.77	1.68	79.54%
A-8	3,310	23,830	5.37%	1.85	1.76	83.51%
E-2	3,549	5,240	6.60%	1.89	1.77	84.13%
C-4	2,051	3,480	4.99%	1.91	1.82	86.25%
C-5	636	6,840	3.17%	1.94	1.89	89.45%
B-1	-2,114	35,090	9.45%	2.14	1.96	92.86%
F-2	315	5,840	6.93%	2.16	2.02	95.81%
F-7	-1,287	10,910	6.80%	2.26	2.11	100.20%
A-7	-12,894	49,180	8.00%	2.38	2.20	104.59%
B-4	1,425	10,580	10.18%	2.49	2.26	107.36%
F-3	975	4,540	4.63%	2.37	2.27	107.70%
C-1	-5,369	30,110	8.18%	2.49	2.30	109.06%
A-4	5,919	52,780	4.61%	2.64	2.53	119.85%
E-4	1,494	3,520	6.00%	2.71	2.56	121.31%
D-3	3,971	-2,370	-2.17%	2.53	2.58	122.60%
C-3	299	6,450	8.10%	2.93	2.71	128.46%
F-1	-2,146	13,220	2.31%	2.78	2.72	129.04%
A-6	-2,793	33,770	6.97%	2.92	2.73	129.68%
E-5	329	9,980	10.78%	3.07	2.77	131.44%
A-14	-394	7,080	6.59%	2.96	2.78	131.72%
A-3	18,155	10,170	1.19%	2.88	2.84	134.84%
F-5	1,061	4,540	7.26%	3.10	2.89	137.27%
A-1	-21,456	70,040	6.70%	3.18	2.98	141.42%
D-4	2,013	7,880	4.81%	3.16	3.02	143.21%
A-2	-32,565	1,510	0.25%	3.36	3.35	159.18%
E-1	-8,278	18,040	5.84%	3.65	3.45	163.72%
F-4	-556	7,610	7.13%	3.76	3.51	166.42%
C-2	3,420	14,330	9.23%	3.85	3.53	167.37%
Total	***0***	***985,250***	***7.72%***	***2.27***	***2.11***	***100.00%***

** Positive = net out-migration; Negative = net in-migration; Source: IDPH Inventory*

	Spread (high-low)
1.04	2.74
0.765562227	0.374751485

2008 Medical/Surgical/Pediatric Bed Need Analysis Under Varying Migration Adjustments

Planning Area	Description	Net Migration Days (negative = net in-migration area; positive = net out-migration area	Outmigration Adj. Days' @50% (current migration adjustment)	Outmigra-tion Beds @ 50%	Outmigra-tion Adj. Days' @85% (proposed migration adjustment)	Outmigra-tion Beds @ 85%	Current 2008 IDPH Inventory Bed Excess (Need) with 50% Migration Adjustment Factor (9/19/2008)	Adjusted 2008 IDPH Inventory Bed Excess (Need) with 85% Migration Adjustment Factor	Difference (loss or gain of 'bed need' by moving from 50% to 85% migration factor)
A-01	City of Chicago Community Areas of Uptown, Lincoln Square, North Center, Lakeview, Lincoln Park, Near North Side, Edison Park, Norwood Park, Jefferson Park, Forest Glen, North Park, Albany Park, Portage Park, Irving Park, Dunning, Montclare, Belmont Cragi	-109,187	-54,594	-166	-92,809	-283	1,670	1,554	-116
A-02	City of Chicago Community Areas of Humboldt Park, West Town, Austin, West Garfield Park, East Garfield Park, Near West Side, North Lawndale, South Lawndale, Lower West Side, Loop, Armour Square, McKinley Park, and Bridgeport.	-165,896	-82,948	-253	-141,012	-429	801	624	-177
A-03	City of Chicago Community Areas of Douglas, Oakland, Fuller Park, Grand Boulevard, Kenwood, Near South Side, Washington Park, Hyde Park, Woodlawn, South Shore, Chatham, Avalon Park, South Chicago, Burnside, Calumet Heights, Roseland, Pullman, South Deerin	86,753	43,377	132	73,740	224	1,159	1,251	92
A-04	City of Chicago Community Areas of West Pullman, Riverdale, Hegewisch, Ashburn, Auburn Gresham, Beverly, Washington Heights, Mount Greenwood, and Morgan Park; Cook County Townships of Lemont, Stickney, Worth, Lyons, Palos, Calumet, Thornton, Bremen, Orlan	32,505	16,253	49	27,629	84	903	938	35
A-05	DuPage County.	-6,460	-3,230	-10	-5,491	-17	144	137	-7
A-06	Cook County Townships of River Forest, Oak Park, Cicero, Berwyn, Riverside, Proviso, Leyden, and Norwood Park.	-15,403	-7,702	-23	-13,093	-40	647	631	-16
A-07	Cook County Townships of Maine, Elk Grove, Schaumburg, Palatine and Wheeling	-62,250	-31,125	-95	-52,913	-161	436	370	-66
A-08	City of Chicago Community Areas of Rogers Park and West Ridge; Cook County Townships of Northfield, New Trier, Niles, and Evanston.	16,202	8,101	25	13,772	42	212	229	17
A-09	Lake County	21,554	10,777	33	18,321	56	207	230	23
A-10	McHenry County	42,223	21,112	64	35,890	109	-66	-111	45
A-11	Cook County Townships of Barrington and Hanover; Kane County Townships of Hampshire, Rutland, Dundee, Burlington, Plato, Elgin, Virgil, Campton, and St. Charles.	36,995	18,498	56	31,446	96	-72	-111	39
A-12	Kendall County; Kane County Townships of Kaneville, Black Berry, Aurora, Big Rock, Sugar Grove, Batavia and Geneva.	-9,695	-4,848	-15	-8,241	-25	144	134	-10
A-13	Grundy and Will Counties	99,840	49,920	152	84,864	258	-40	-146	106
A-14	Kankakee County	-1,803	-902	-3	-1,533	-5	123	121	-2
B-01	Boone and Winnebago Counties; DeKalb County Townships of Franklin, Kingston, and Genoa; Ogle County Townships of Monroe, White Rock, Lynnville, Scott, Marion, Byron, Rockvale, Leaf River, and Mount Morris.	-10,170	-5,085	-15	-8,645	-26	296	285	-11
B-02	Jo Daviess and Stephenson Counties; Ogle County Townships of Forreston, Maryland, Lincoln, and Brookville; Carroll County Townships of Washington, Savanna, Woodland, Mount Carroll, Freedom, Salem, Cherry Grove-Shannon, and	3,787	1,894	6	3,219	10	67	71	4
B-03	Whiteside County; Lee County Townships of Palmyra, Nelson, Harmon, Hamilton, Dixon, South Dixon, Marion, East Grove, Nachusa, China, Amboy, May, Ashton, Bradford, Lee Center, and Sublette; Carroll County Townships of York, Fairhaven, Wysox, and Elkhorn Gr	9,628	4,814	15	8,184	25	80	90	10
B-04	Lee County Townships of Reynolds, Alto, Viola, Willow Creek, Brooklyn, and Wyoming; DeKalb County Townships of Paw Paw, Victor, Somonauk, Sandwich, Shabbona, Clinton, Squaw Grove, Milan, Afton, Pierce, Malta, DeKalb, Cortland, Mayfield, South Grove and Sy	7,250	3,625	11	6,163	19	122	130	8
C-01	Woodford, Peoria, Tazwell, and Marshall Counties; Stark County Townships of Goshen, Toulon, Penn, West Jersey, Valley, and Essex.	-26,734	-13,367	-41	-22,724	-69	317	289	-28
C-02	LaSalle, Bureau, and Putnam Counties; Stark County Townships of Elmira and Osceola.	17,258	8,629	26	14,669	45	332	350	18
C-03	Henderson, Warren, and Knox Counties	1,575	788	2	1,339	4	113	115	2
C-04	McDonough and Fulton Counties	10,156	5,078	15	8,633	26	54	65	11
C-05	Rock Island, Henry, and Mercer Counties	3,154	1,577	5	2,681	8	165	168	3
D-01	Champaign, Douglas, and Piatt Counties; Ford County Townships of Lyman, Sullivant, Peach Orchard, Wall, Drummer, Dix, Patton, and Button; Iroquois County Townships of Loda, Pigeon Grove, and Artesia.	-18,614	-9,307	-28	-15,822	-48	182	162	-20
D-02	Livingston and McLean Counties; Ford County Townships of Rogers, Mona, Pella, and Brenton	4,938	2,469	8	4,197	13	85	90	5
D-03	Vermilion County; Iroquois County Townships of Milks Grove, Chebanse, Papineau, Beaverville, Ashkum, Martinton, Beaver, Danforth, Douglas, Iroquois, Cresent, Middleport, Belmont, Concord, Sheldon, Ash Grove, Milford, Stockland, Fountain Creek, Lovejoy, Pr	19,618	9,809	30	16,675	51	117	138	21
D-04	Vermilion County; Iroquois County Townships of Milks Grove, Chebanse, Papineau, Beaverville, Ashkum, Martinton, Beaver, Danforth, Douglas, Iroquois, Cresent,	9,876	4,938	15	8,395	26	253	264	11
D-05	Coles, Cumberland, Clark, and Edgar Counties	6,175	3,088	9	5,249	16	84	91	7
E-01	Logan, Menard, Mason, Sangamon, Christian and Cass Counties; Brown County Townships of Ripley, Cooperstown, and Versailles; Schuyler County Townships of	-41,096	-20,548	-63	-34,932	-106	663	619	-44
E-02	Macoupin and Montgomery Counties.	17,596	8,798	27	14,957	46	63	82	19
E-03	Greene, Jersey, and Calhoun Counties	6,698	3,349	10	5,693	17	40	47	7
E-04	Pike, Scott, and Morgan Counties.	7,530	3,765	11	6,401	19	88	96	8
E-05	Adams and Hancock Counties; Schuyler County Townships of Birmingham, Brooklyn, Camden, and Huntsville; Brown County Townships of Pea Ridge, Missouri, Lee, Mount Sterling, Buckhorn, and Elkhorn	1,598	799	2	1,358	4	128	130	2
F-01	Madison and St. Clair Counties; Monroe County Precincts 2, 3, 4, 5, 7, 10, 11, 14, 16, 17, 18, 19, 21, and 22; Clinton County Townships of Sugar Creek, Looking Glass, Germantown, Breese, St. Rose, Wheatfield, Wade, Sante Fe, Lake, Irishtown,	-10,451	-5,226	-16	-8,883	-27	798	787	-11
F-02	Bond, Fayette, and Effingham Counties; Clay County Townships of Blair, Bible Grove, and Larkinsburg; Jasper County Townships of Grove, North Muddy, South Muddy, Smallwood, Wade, and Crooked Creek.	1,494	747	2	1,270	4	65	67	2
F-03	Jasper County Townships of Hunt City, Willow Hill, Ste. Marie, Fox, and Grandville; Clay County Townships of Louisville, Songer, Xenia, Oskaloosa, Hoosier, Harter, Stanford, Pixley, and Clay City; Wayne County Townships of Orchard, Keith, Garden Hill, Ber	4,838	2,419	7	4,112	13	142	147	5
F-04	Marion, Jefferson, and Washington Counties; Wayne County Townships of Big Mound, Orel, Hickory Hill, Arrington and Four Mile; Clinton County Townships of East Fork, Meridian and Brookside.	-2,788	-1,394	-4	-2,370	-7	193	190	-3
F-05	Hamilton, White, Gallatin, Hardin, and Saline Counties; Pope County Townships of Eddyville #6 and Golconda #2	5,199	2,600	8	4,419	13	111	117	6
F-06	Franklin, Williamson, Johnson, and Massac Counties; Pope County Townships of Jefferson #4, Webster #5, Golconda #1, and Golconda #3	12,311	6,156	19	10,464	32	68	81	13
F-07	Randolph, Perry, Jackson, Union, Alexander, and Pulaski Counties; Monroe County Precincts 1, 6, 8, 9, 12, 13, 15, 20 and 23.	-6,203	-3,102	-9	-5,273	-16	192	185	-7