Testimony To
THE INTERIM TAXATION COMMITTEE
Prepared Tuesday, November 28, 2007 by
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North Dakota Association of Counties

REGARDING PROPERTY TAXATION STUDIES

Chairman Stenehjem and members of the Taxation Committee, thank you for your request to provide information on local government valuation, structure and road costs. As the request was quite extensive, we have broken it down into the components of the request as outlined in your agenda.

Coordination of County Response to HB1303

Prepared by NDACo – November 28, 2007

The passage of HB1303, detailing the priority of factors to be considered in agricultural land valuation, and setting a deadline for the incorporation of soils data into the valuation process, has prompted significant activity among counties.

Recognizing that some (and quite possibly many) counties will be found to fall short of the requirements of this legislation, the NDACo Board of Directors requested that its staff do what it could to assist counties in their response.

Most counties believe that soil data was "considered' in the initial valuation of agricultural parcels when the statewide valuation process was changed in 1981. However, many do not have an actual calculation of the number of acres of each soil type by parcel, nor do they have documentation of the methodology used to originally establish parcel value. Without these key components, their valuation system will in all probability fall short of compliance with HB1303

In very general terms, we believe that counties not currently in compliance with HB1303 will need to complete the steps listed:

- calculate acreages of each soil type within each parcel (average of 6,000 ag parcels per county),
- assign productivity values to each soil type, (ideally with the assistance of a local "soils committee" of assessors and producers),
- consider, and implement as appropriate, modifiers to adjust the productivity values either by soil or by parcel, (again with a local soils committee),
- consider, and implement a methodology to take land use into consideration in determining relative value,
- implement the necessary software to manipulate acreage and value data to establish a relative value for each parcel, and then distribute the countywide value (established by statutory formula) among all parcels, and
- import the final value for each parcel for each year into existing property tax software so that all local government mills can be "spread" against that value.

While the first step can be accomplished manually (as some counties have done) by hand drawing parcel boundaries on paper soils maps and using "dot-counting" grids, the long-term benefits and tight timeframes argue strongly for implementing a GIS (geographical information system) solution.

NDACo recognized that there are numerous local and regional vendors proficient in GIS technologies and techniques; however the problem that all "non-compliant" counties face is how to choose the right vendor for their needs. Some counties may wish to "farm-out" the entire project, while others may wish to purchase training and technical assistance for an "in-house" effort – many will ultimately use a mixture of two extremes. Some counties may want to purchase the GIS parcel data development only, and others may want a "turn-key" solution that combines the parceling with the valuation development software.

What NDACo has attempted to do is develop the tools and information that can help a county make and implement the best decision for their particular situation. To this end, NDACo hired an individual charged with a specific list of responsibilities:

- Assist the counties (and the tax department) in the assessment of each county's status with respect to HB1303 compliance,
- Speak to statewide (annual convention), regional, and county-level groups; explaining the options and necessary steps for achieving compliance,
- Establish and staff advisory committees to help guide the development of specific work products,
- Develop a voluntary "data standard" for GIS parcel data, to encourage uniform parcel development and ultimate statewide compatibility,
- Develop a model Request for Proposals for counties to use for purchasing GIS services,
- Compile a list of vendors through Request for Information (RFI) process, and
- Consult with individuals and groups of counties as requested.

Already a surprising amount of work has been conducted. I will give Mr. Walstad a copy of the draft RFP and the data standard distributed two weeks ago. Each county has also been given a two-inch binder containing the results of the RFI. This binder identifies and describes the capabilities of the 17 different vendors that have responded to the RFI.

The decisions facing counties however are both costly and have long-term consequences. Most counties will need to finance this effort over several years, and counties that are choosing to implement their first GIS application, are, very likely, making a decision that will affect any future GIS development within the county. Some neighboring counties that find themselves in similar circumstances are discussing a joint RFP, joint staffing, or both. All of these complications encourage cautious decision-making, but with the potential loss of State revenue looming 24 months away, caution may be costly as well.

A group of seven counties in the Devils Lake region have met and tentatively agreed to develop a single RFP. While they are very hopeful that this joint effort will reduce their costs and speed up the process, they are very concerned about meeting the December 2009 deadline. They have asked that they be allowed to appear on this Committee's agenda to discuss their joint efforts, the challenges they face, and their desire for some sort of delay of the deadline in situations where clear progress is being made.

Parcel Development Vendors
(17 Responding to NDACo's Request for Information)

Applied Data Consultants
www.adc4gis.com
2985 58th Street
Eau Claire, WI 54703

Bartlett & West, Inc.
www.bartwest.com
3456 E Century Av.
Bismarck, ND 58503

BPro, Inc.
www.bpro.com
318 S. Pierre St.
Pierre, SD 57501

ESRI
www.esri.com
880 Blue Gentian Rd., Ste.200
St. Paul, MN 55121-1596

GIS Data Services, Inc.
1715 N Griffin St.
Bismarck, ND 58501
GIS Group Inc.
www.gisgroupinc.com

NewCom Technologies, Inc.
www.newcomtech.com
6000 Grand Avenue
Des Moines, Iowa 50312

Houston Engineering, Inc
www.houstonengineeringinc.com
3712 Lockport Street
Bismarck, ND 58503

Infotech Enterprises America, Inc.
www.infotech-enterprises.com
100 Carpenter Drive, Ste 200
Sterling, VA 20164

Kadrmas, Lee and Jackson
128 Soo Line Dr.
PO Box 1157
Bismarck, ND 58502

Lanworth
300 Park Blvd., Ste. 425
Itasca, IL 60143
www.lanworth.com

Lightowler Johnson Associates
www.lja-1.com
700 Main Avenue
Fargo, ND 58103
and
919 7th St. S. Kirkwood Tower
Suite 601
Bismarck, ND 58504

Michael Baker Jr., Inc.
2925 Layfair Drive
Jackson, MS 39232-9507
www.mbakercorp.com/gis

Prairie Mapping
335 5th Street SE
Rugby, ND 58369

Pro-West & Associates, Inc.
www.prowestgis.com
PO Box 812
8239 State 371 NW
Walker, MN 56484

Secure Software Solutions
securesoftwaresolutions@hughes.net
3329 29th Street
New Salem, ND 58563

The Sidwell Company
www.sidwellco.com
675 Sidwell Court
Saint Charles, IL 60174-3492

Smart Data Strategies, Inc.
http://www.sds-inc.com
357 Riverside Dr., Ste. 100
Franklin, TN 37064

The Office of County State's Attorney
Prepared by NDACo – November 28, 2007

The Committee requested additional information regarding a comment at its previous meeting about statutory hindrances to pursuing specific consolidation and cooperation efforts among counties. Most notably, are the problems that counties lacking a practicing attorney willing to run for the Office of State's Attorney face when attempting to elect or appoint an attorney that resides outside of the county.

Attached below is an inter-office memo prepared by NDACo's attorney (and former assistant state's attorney) that outlines the difficulties of applying the (sometimes conflicting) statutes to the real world.

The North Dakota State's Attorneys Association has begun their own examination of this issue, and the Advisory Commission on Intergovernmental Relations has begun hearing testimony on the topic. We are hopeful that between these two groups draft legislation will be developed to better address the legal representation of those counties lacking a practicing attorney.

Internal NDACo office memo

Date: November 8, 2007
Re: State's Attorney election issues

Questions Presented:
What are the legislative obstacles and remedies for counties who do not have a resident attorney but still require legal services?

Answer:
The short answer is ND Const Article VII, Section 8 and NDCC 11-10-04(3), creating the residency requirement, is the obstacle for counties without a resident attorney. The legislature **has** created a number of statutes that can and are being used to skirt the residency requirements. However, the statues created have practical problems like relying on many variables and in some cases conflict with other statutes. It is important to note though that the vast majority of counties have no problems with the residency requirements. I think out of the 53 counties this only is a problem in 3. (Of course this could grow with shrinking rural population). But in any "solution" we would have to be careful not to throw the baby out with the bath water.

Background:
Article VII, Section 8 requires elected officers to be elected by the jurisdiction they are to serve. (In other words residency requirement) NDCC 11-10-04(3) also requires this. The question then becomes in counties that do not have an attorney or have one that doesn't want the SA job what are they to do?

County Commissioners could appoint an SA thereby getting rid of the election residency requirements in Article VII and 11-10-04(3).
HOWEVER, there are a couple of problems with this.

1) NDCC 11-10-02.3 requires a vote to make the SA an appointed official; AND

2) Even if voters approve the SA being appointed, NDCC 44-02-09 requires appointed officials to have the same qualifications as an elected official therefore again requiring residency.

Other Options:
NDCC 11-10.3-01 allows multiple counties to agree to share an elected official. In other words, the county commission of two or more boards could agree through a joint powers agreement to combine SA's offices. This act then expands the jurisdiction residency requirement that would allow for a non-resident State's Attorney to also be the State's attorney for that jurisdiction.
Example: Grant county and Morton county enter into a joint powers agreement for the Morton County SA's office to handle Grant County's work.
Problems:

1) Requires agreement between counties.
2) Allows voters in both counties to petition against the arraignment.
3) Tendency for greater instability since JPA's are subject to changes.

An example: Foster and Griggs entered into a JPA to share an SA. The SA ran and successfully won the most votes in both counties. The Griggs County Commission for whatever reason decided they did not like the results of the election and they let their JPA expire thereby requiring a residency requirement and therefore ousting the winner of the election. Griggs then entered into a JPA with Barnes. Griggs then appointed Barnes's SA who then hired a different attorney (based out of Minnesota) to handle Griggs' matters. (questionable – considering, in effect, the Commission appointed the SA despite NDCC 11-10-02 which requires the SA be elected unless there is a vote on the matter pursuant to NDCC 11-10-02.3).

Other Options:
NDCC 11-10-04(5)(a)(b) allows county commissioners of two or more jurisdictions, by resolution, to allow a candidate for SA to run in each county. This sounds reasonable however, as a practical matter this leaves many questions unanswered such as what happens if the SA wins the election in their non-residency county but then losses in their residency county. Does the Constitutional requirements then apply? Or if the commissioners do not like the results of the election can they rescind their resolution after the election thereby requiring residency? (Again this is what essentially happened in Griggs)

Other Options:
The Attorney General suggested in 2002-L-67 that an elected resident SA can appoint a non-resident Assistant SA and then if the SA steps down the Assistant can continue to run the office while the replacement SA is being sought. NDCC 44-02-04 states county commissioners MUST fill a vacancy in county office. However, it does not list a time frame so theoretically once the Assistant SA is appointed they could continue their "search" for a replacement indefinitely. This is what has been happening in Grant County because they have a resident attorney who used to be the SA. He is no longer interested in doing the job but he runs for office every four years only then to appoint an assistant and then retire. This "election" is probably the cleanest and easiest way to address the residency requirement. Of course this still requires an actual resident attorney to run and win the office. This obviously would not work if there were no attorneys living in the county.

C

County Valuation & Levy Comparison – 2000 vs. 2006

Prepared by NDACo – November 28, 2007

The Committee requested that NDACo prepare a comparison of countywide property valuation, county mill rates, and property tax collected for each county in tax years 2000 and 2006. The attached table contains the results of our efforts to respond to this request.

As counties levy for all local governments and for a variety of purposes, this analysis was prepared in a manner that segregated those levies that are levied countywide and strictly for the funding of county responsibilities (i.e. General Fund, Human Services Fund, County Road Fund, etc.). Such levies imposed by the county, but less than countywide (i.e. Unorganized Road and Bridge Fund) were not included in this analysis, as these levies are applied only to the portion of the county's valuation that relates to the specific area of the county that is unorganized. The adjacent list contains all current county levies, with those excluded from this analysis highlighted.

1201	General or Home Rule		1227	Spec. Assmt on County Property
1202	Care of Patients in State Inst.		1228	Emergency Medical Services
1203	Human Services		1229	Weather Modification
1204	County Road & Bridge		1231	Bond P&I: Co.Bldgs.,Bridges,Rds.
1205	Extra Ordinary Outlay		1232	Abandoned Cemetery Maintenance
1206	Aid to Multi-County Fair Assoc.		1233	County Road
1208	Regional or Co. Correction Center		1235	Insurance Reserve
1210	Emergency		1239	County Hospital Association
1211	OASIS, Soc. Sec. & Retirement		1240	County Fair, Land & Buildings
1212	Farm to Market & Federal Aid Road		1241	Co.Fair Land Purchase or Lease
1213	Veterans Service Officer		1242	Econ.,Ind.,Planning Surv. & Train
1214	Extension Service		1244	Planning Purposes
1215	Extension Service		1257	Weed & Grass Control
1216	Historical Society Work		1258	Weed Control & Leafy Spurge
1217	Health District		1259	Unorganized Road & Bridge
1218	Aid to County Fair		1260	Library & Reading Room
1219	Job Development		1261	Comprehensive Health Care Insur.
1220	Human Services		1262	Handicapped Programs & Activities
1221	Programs & Activities for Elderly		1264	Water Resource District
1222	Emergency Human Services		1265	Joint Water Resource District
1224	Advertising		1266	Vector Control District
1225	Airport Authority		1267	County Parks & Recreational Areas
1226	County Loan		1269	Co. Parks & Rec. Facilities

As there is a lot of data on the table, and since comparing two specific years can yield somewhat erroneous results for individual counties, (due to a large road project or disaster declaration) the data has also been stratified into "like" counties for analysis.

The groups used were:

- Urban Counties – Burleigh, Cass, Grand Forks, & Ward
- Midsize Counties – Barnes, Morton, Pembina, Ramsey, Richland, Stark, Stutsman, Traill, Walsh, & Williams
- High-Impact Oil Counties – Billings, Bowman, McKenzie, & Williams (Note Williams is included in two categories)
- Sioux County – Analyzed separately due to the dramatic difference in their valuation change
- Other Counties – the remaining 36 counties.

We hope this is the information that the Committee was seeking. Please let us know if there is another format in which you would like it presented.

County Taxable Valuation and Levies - 2000 & 2006

Countywide levies only

COUNTY	Tax Year 2000 Taxable Value	Mills Levied	Dollars Levied	Tax Year 2006 Taxable Value	Mills Levied	Dollars Levied	Percent Change 2000 to 2006 Taxable Value	Mills Levied	Dollars Levied
ADAMS	6,535,650	119.82	783,102	7,507,345	132.46	994,423	15%	11%	27%
BARNES	26,973,513	91.87	2,478,057	37,449,664	95.60	3,580,188	39%	4%	44%
BENSON	11,435,717	105.53	1,206,811	13,794,208	101.74	1,403,423	21%	-4%	16%
BILLINGS	4,534,753	37.92	171,958	5,143,741	59.97	308,470	13%	58%	79%
BOTTINEAU	19,567,468	78.31	1,532,328	25,974,500	84.78	2,202,118	33%	8%	44%
BOWMAN	8,429,929	72.44	610,664	9,984,978	53.03	529,503	18%	-27%	-13%
BURKE	8,168,517	65.30	533,404	8,674,873	79.44	689,132	6%	22%	29%
BURLEIGH	122,033,295	60.87	7,428,167	194,888,084	53.72	10,469,388	60%	-12%	41%
CASS	242,295,621	62.62	15,172,552	395,777,450	61.00	24,142,424	63%	-3%	59%
CAVALIER	18,086,844	94.29	1,705,409	21,350,837	102.45	2,187,393	18%	9%	28%
DICKEY	13,599,295	113.03	1,537,128	17,463,207	111.54	1,947,846	28%	-1%	27%
DIVIDE	8,765,896	79.22	694,434	9,636,717	87.31	841,382	10%	10%	21%
DUNN	11,483,305	77.44	889,267	12,876,596	94.06	1,211,173	12%	21%	36%
EDDY	5,642,598	127.08	717,061	6,481,230	160.34	1,039,200	15%	26%	45%
EMMONS	12,198,212	77.50	945,361	14,303,609	92.12	1,317,648	17%	19%	39%
FOSTER	10,471,435	81.68	855,254	12,872,665	90.08	1,159,570	23%	10%	36%
GOLDEN VALLEY	5,105,641	81.70	417,131	5,597,101	79.23	443,458	10%	-3%	6%
GRAND FORKS	113,032,559	77.32	8,740,054	161,756,077	86.86	14,050,133	43%	12%	61%
GRANT	7,655,896	84.24	644,933	8,921,506	98.61	879,750	17%	17%	36%
GRIGGS	8,185,507	116.45	953,202	9,379,929	125.21	1,174,461	15%	8%	23%
HETTINGER	7,858,256	106.37	835,883	9,812,881	113.70	1,115,725	25%	7%	33%
KIDDER	8,179,276	81.47	666,366	10,223,053	92.42	944,815	25%	13%	42%
LaMOURE	13,956,918	72.67	1,014,179	18,657,111	90.32	1,685,110	34%	24%	66%
LOGAN	6,180,966	100.36	620,322	7,120,074	99.79	710,512	15%	-1%	15%
McHENRY	16,653,549	79.22	1,319,294	22,827,004	73.33	1,673,904	37%	-7%	27%
McINTOSH	8,993,357	100.11	900,325	10,182,452	111.73	1,137,685	13%	12%	26%
McKENZIE	15,328,822	18.11	277,605	17,230,408	34.47	593,932	12%	90%	114%
McLEAN	21,550,648	41.27	889,395	28,574,201	42.74	1,221,261	33%	4%	37%
MERCER	16,566,218	53.17	880,826	18,895,195	80.31	1,517,473	14%	51%	72%
MORTON	47,145,843	121.64	5,734,820	61,505,204	122.85	7,555,914	30%	1%	32%
MOUNTRAIL	13,535,374	107.20	1,450,992	16,308,796	117.73	1,920,035	20%	10%	32%
NELSON	10,324,929	128.36	1,325,308	11,233,880	125.33	1,407,942	9%	-2%	6%
OLIVER	4,740,645	67.00	317,623	5,843,990	79.89	466,876	23%	19%	47%
PEMBINA	27,223,281	78.35	2,132,944	31,175,622	81.19	2,531,149	15%	4%	19%
PIERCE	11,599,536	94.97	1,101,608	14,505,869	85.59	1,241,557	25%	-10%	13%
RAMSEY	22,596,455	100.86	2,279,078	26,565,997	121.15	3,218,471	18%	20%	41%
RANSOM	12,673,997	93.36	1,183,223	16,977,377	90.86	1,542,564	34%	-3%	30%
RENVILLE	8,986,524	79.69	716,136	10,369,902	76.09	789,046	15%	-5%	10%
RICHLAND	39,194,926	109.18	4,279,302	51,433,575	110.00	5,657,693	31%	1%	32%
ROLETTE	8,873,938	92.68	822,392	10,208,574	95.08	970,580	15%	3%	18%
SARGENT	12,150,114	94.09	1,143,143	15,915,726	97.20	1,546,929	31%	3%	35%
SHERIDAN	5,798,379	83.86	486,252	6,582,473	96.54	635,472	14%	15%	31%
SIOUX	1,986,599	134.17	266,542	2,056,532	125.98	259,082	4%	-6%	-3%
SLOPE	4,668,933	54.99	256,745	5,186,511	39.46	204,660	11%	-28%	-20%
STARK	31,024,475	101.22	3,140,297	44,563,703	102.60	4,572,236	44%	1%	46%
STEELE	9,448,421	92.85	877,286	11,066,751	96.79	1,071,151	17%	4%	22%
STUTSMAN	42,809,556	91.28	3,907,656	53,706,579	95.42	5,124,682	25%	5%	31%
TOWNER	10,813,915	88.95	961,898	11,608,241	88.21	1,023,963	7%	-1%	6%
TRAILL	22,383,234	95.21	2,131,108	26,942,089	123.76	3,334,353	20%	30%	56%
WALSH	28,425,162	111.04	3,156,330	32,636,564	120.14	3,920,957	15%	8%	24%
WARD	93,549,057	64.30	6,015,204	127,555,976	75.72	9,658,539	36%	18%	61%
WELLS	15,245,785	94.56	1,441,641	18,849,951	101.56	1,914,401	24%	7%	33%
WILLIAMS	33,664,427	108.45	3,650,907	41,436,481	109.55	4,539,366	23%	1%	24%
TOTAL	1,298,333,166		104,198,910	1,777,593,059		146,279,119	37%		40%
Urban (4)	570,910,532		37,355,977	879,977,587		58,320,484	54%		56%
Midsize (10)	321,440,872		32,890,500	407,415,478		44,035,009	27%		34%
Other (35)	375,701,659		32,625,664	455,784,335		42,232,639	21%		29%
High Oil Impact (4)	61,957,931		4,711,134	73,795,608		5,971,272	19%		27%
Sioux County	1,986,599		266,542	2,056,532		259,082	4%		-3%

* Williams included in Midsize & High Oil Impact

Producer Price Index (PPI) – Road & Street Construction

Prepared by NDACo – November 28, 2007

The Committee requested additional information on the Producer Price Index (PPI) for Road and Street Construction, which was used in the Association's testimony on September 4th to illustrate the dramatic increase in county road costs.

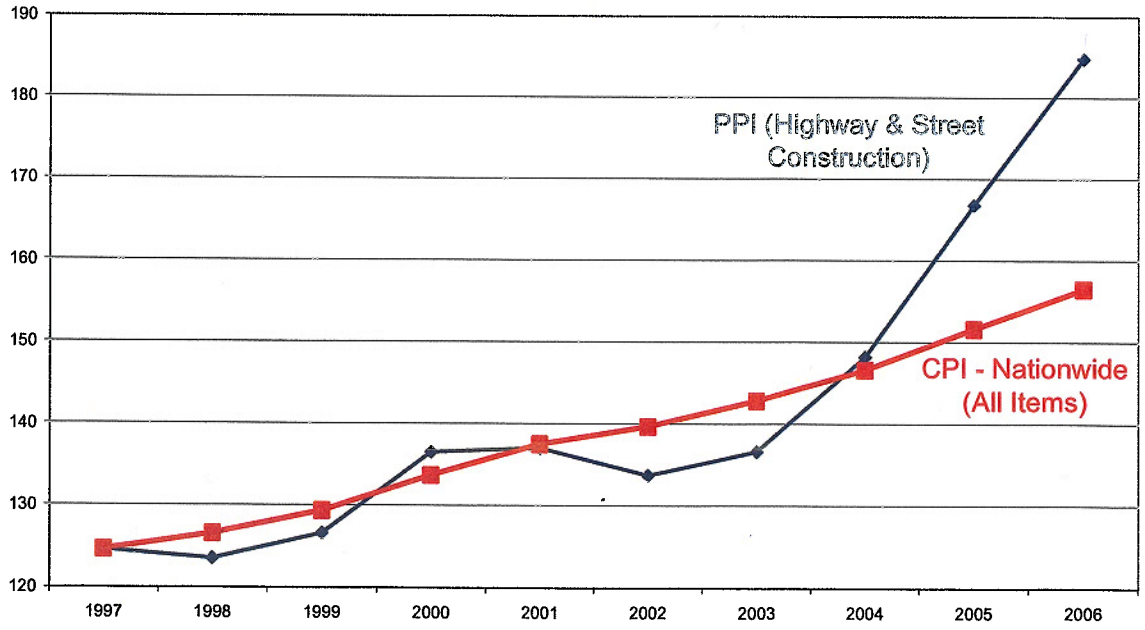
The Producer Price Index (PPI) is a family of indexes that is calculated by the U.S. Department of Labor, Bureau of Labor Statistics, which is the same federal agency that prepares the various Consumer Price Index (CPI) calculations. The PPI differs from the CPI in that it looks at the costs of "producing" (in this case road construction) rather than the cost of procuring individual products (i.e. meat, clothes, gasoline) or a blended index of all consumer costs.

The PPI, we believe, is a more accurate reflection (than the CPI) of the change in county road costs, because the PPI does not include the cost of sales and use taxes (which counties do not generally pay), and the specific PPI for road construction blends the costs of fuel, labor, equipment (purchase & lease), and other relevant components in proportion to their impact on overall road construction costs. Just as a private road contractor uses the PPI to trend their internal and external costs, a county road department must consider the exact same factors in developing their annual budget.

The first (of many) pages of information on the calculation and use of the PPI from the Department of Labor website has been attached for the Committee's use. Much more can be obtained at: http://www.bls.gov/ppi/

As a comparison, the chart below illustrates the relative change in CPI (Nationwide-all goods) and PPI (highway & street construction) for the last ten years.

Comparison of Economic Indices
Relative Change - 1997 to 2006



U.S. Department of Labor
Bureau of Labor Statistics
Producer Price Indexes

Frequently Asked Questions

What is the Producer Price Index (PPI)?

The Producer Price Index is a family of indexes that measures the average change over time in the selling prices received by domestic producers of goods and services. PPIs measure price change from the perspective of the seller. This contrasts with other measures, such as the Consumer Price Index (CPI), that measure price change from the purchaser's perspective. Sellers' and purchasers' prices may differ due to government subsidies, sales and excise taxes, and distribution costs.

Over 10,000 PPIs for individual products and groups of products are released each month. PPIs are available for the products of virtually every industry in the mining and manufacturing sectors of the U.S. economy. New PPIs are gradually being introduced for the products of industries in the transportation, utilities, trade, finance, and services sectors of the economy.

How are PPIs used?

Producer Price Index data are widely used by the business community as well as government. Major uses are:

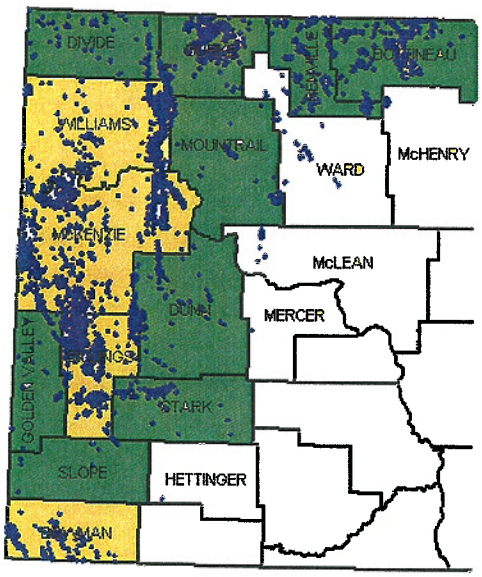
As an economic indicator. The PPIs capture price movements prior to the retail level. Therefore, they may foreshadow subsequent price changes for businesses and consumers. The President, Congress, and the Federal Reserve employ these data in formulating fiscal and monetary policies.

As the basis for contract escalation. PPI data are commonly used in escalating purchase and sales contracts. These contracts typically specify dollar amounts to be paid at some point in the future. It is often desirable to include an escalation clause that accounts for increases in input prices. For example, a long-term contract for bread may be escalated for changes in wheat prices by applying the percent change in the PPI for wheat to the contracted price for bread. (See BLS Report 807, Escalation and Producer Price Indexes: A Guide for Contracting Parties.)

Road Maintenance Costs – "Oil Counties" vs. Other Counties

Prepared by NDACo – November 28, 2007

The Committee asked that NDACo attempt to compare the costs of county road maintenance in oil and gas-impacted counties with all other counties. We have gathered road mileage (by road classification), bridge numbers, and expenditure data from counties and stratified it into four groups that we have termed; "highly impacted" oil counties, "moderately impacted" oil counties, "urban" counties, and "all other" counties as we believe it will help the Committee in its analysis.



We have grouped Billings, Bowman, McKenzie, and Williams Counties in the "highly impacted" group (yellow), since each has historically experienced more than twice the oil and gas production of any of the other counties. The "moderately impacted" group contains Bottineau, Burke, Divide, Dunn, Golden Valley, Mountrail, Renville, Slope, and Stark Counties, although since much of the current development has moved to Dunn and Mountrail, these two could possibly be grouped with the previous four.

The four "urban counties", Burleigh, Cass, Grand Forks & Ward have been segregated, as the costs of maintaining city fringe roads and the revenue available to them appear to skew the "all other county" category if they are not. The "all other" group contains the remaining 37 counties.

As discussed in a 2000 NDDOT funded report, (KLJ, 2000) expenditures are not an ideal approximation of "costs" in a particular county. As most counties, and particularly energy-impacted counties, have greater road maintenance needs than revenue to support those needs, the true "cost" to the county is actually the current expenditures plus the road deterioration that a county cannot afford to address in that current year budget. By simply comparing expenditures between counties, the assumption is that this hidden cost of roadway deterioration is equal in all counties – and that is obviously not likely. However, since what we have is expenditure data, the remainder of this document will use this data set for comparison.

The attached table contains all of the data collected, but as the counties are quite dissimilar in number of road miles by each category and number of bridges, we have used some assumptions in an attempt to "standardize" the counties for analysis.

A detailed 2005 study (based on 1997-2001 costs) in Minnesota (MNDOT, 2005) developed a series of average costs for local roadway maintenance, based on traffic counts (AADT-average annual daily traffic) and surface type. For this analysis, the study's results were adjusted to current costs, using inflation figures specific to road construction, and are displayed below:

Relative Maintenance Costs by Road Type & Traffic Volume		
	2001 Costs	2007 Costs
Gravel <50 AADT (local rural)	$1,600/year	$4,100/year
Gravel 100 AADT (major collector)	$1,800/year	$4,600/year
Paved 200 AADT (major collector)	$2,400/year	$6,200/year

As each county has a different mix of what NDDOT classifies as "local rural", "major collector-gravel", and "major collector-paved" roads, we have attempted to use the relationship between the MNDOT developed costs as a means of standardizing all roads to "collector gravel". Using this relationship, the relative maintenance costs, a mile of "local rural" road is equivalent (in cost) to 0.89 miles of "major collector-gravel", and a mile of "major collector-paved" is equivalent to 1.35 miles of "major collector-gravel".

While road miles by class is a large variable among counties, the variation in the number of bridges is possibly even more significant to county costs. We have two counties with no "major structures", or bridges over 20-feet in length, and at the other extreme, we have three counties with over 200 major structures.

County bridge replacements over the last 24 months (20 structures) have averaged $310,000 per bridge (excluding engineering costs). With a design life of 50 years, the annual cost to counties is $6,200/year per bridge, or on bridge is roughly equivalent (in annual cost) to 1.35 miles of our standard "major collector-gravel" road. It should be noted however that actual average replacement life for county bridges is 122.1 years (KLJ, 2000).

Using these adjustments, we come up with a total of 33,779 miles of average "major collector-gravel" roads, ranging from 148 miles in Foster County to over 10 times that many (1,942 miles) in Morton County. The number calculated for each county is shown in Column "e" of the attached table. The counties have been sorted in ascending order by this calculated figure.

These mileage figures were then divided into two different expenditure averages. NDACo maintains a compilation of State Audit reports for each county, with the most recent complete set for CY2004. Using the average annual expenditure for highways (all funds) for the most recent ten years (Column f), we see a statewide average of $88 million dollars per year. With the rapid inflation that is impacting road construction, we also surveyed the counties for CY2006 and estimated CY2007 expenditures to arrive at an updated annual average (Column h), which shows that county highway expenditures have exceeded $106 million per year statewide.

Applying these two annual expenditure averages to the number of "standard" road miles in each county, we get two "expenditures per mile" figures that can be used for a very general comparison – keeping in mind that this assumes a fairly low and very uniform traffic level across the entire state (which quite obviously may not be accurate for an individual county).

As mentioned above, the counties were grouped as indicated in the color-coding, and these groups show some significant differences. The summary results are copied below:

Expenditure Analysis Results

	Expend Per "Mile" (Annual Average) CY95-CY04	Expend per "Mile" (Annual Average) CY06-CY07
All Counties (53)	2,610	3,130
Urban Counties (4)	5,066	7,049
Oil Counties "Highly Impacted" (4)	2,313	4,869
Oil Counties "Moderately Impacted (8)	2,127	2,445
All Other Counties (37)	2,330	2,413

The differences in the first column between the "all other county" figure and the figures for the "impacted" counties is very small, suggesting that during that 10 year period (CY95-CY04), expenditures (and resources to support road activity) were fairly uniform. A possible consideration when examining this data set is the fact that many counties received significant disaster relief funding for road repair in 1997 and 1999.

While in the CY06-CY07 expenditure column we see a fairly dramatic relative increase in the "highly impacted" county average, we see a much smaller increase in the "moderately impacted" counties. Again, this is expenditures – and as discussed above, expenditures are not likely a true expression of costs, but often a greater reflection of revenue available, than of need.

Looking again at the MNDOT study data, it appears that most (if not all) counties lack sufficient revenue to meet the reasonable maintenance cost for our "average" road mile, and when the much greater traffic volumes that come with oil production are considered, the concern becomes much greater.

Studies cited:

Economics of Upgrading an Aggregate Road: Final Report. January 2005. *Published by:* Minnesota Department of Transportation. http://www.lrrb.org/pdf/200509.pdf

Urban Street and County Road Funding Needs Assessment For 13 North Dakota Cities and 53 North Dakota Counties: Project SPR-0010022. November 2004, Kadrmas Lee & Jackson.

County Road Expenditure Analysis

	Local Gravel	Major Collector Gravel	Major Collector Paved	Bridges >20'	Adjusted to "Gravel" Collector	Avg. Annual Highway Expenditures CY95-CY04	Expend per Avg. Mile - WITH Bridges	Avg. Annual Highway Expenditures CY06-CY07	Expend per Avg. Mile - WITH Bridges
	a	b	c	d	e	f	g	h	i
Foster	72	24	28	16	148	786,875	5,322	598,767	4,0
Renville	23	67	32	17	153	706,129	4,600	952,570	6,20
Divide	17	125	10	10	168	769,710	4,587	1,018,298	6,068
Eddy	102	21	54	19	210	613,052	2,925	729,532	3,481
Wells	125	45	45	32	260	1,220,027	4,685	933,990	3,586
Sargent	127	85	28	27	273	1,230,818	4,509	999,325	3,661
LaMoure	20	75	95	49	287	1,633,804	5,691	1,244,180	4,334
Griggs	149	100	30	17	296	1,018,663	3,436	1,212,209	4,089
Ransom	138	108	39	23	314	1,064,735	3,388	872,889	2,777
Golden Valley	200	99	10	22	321	653,013	2,034	708,617	2,207
Cavalier	24	164	38	68	329	1,546,947	4,709	1,840,867	5,603
Burke	219	71	34	16	333	713,335	2,144	895,323	2,691
Slope	181	146	-	30	349	606,122	1,739	902,923	2,591
Kidder	193	133	39	-	358	749,077	2,094	815,518	2,280
Bottineau	-	66	93	126	361	2,627,250	7,277	3,126,427	8,660
Steele	122	51	57	97	367	807,021	2,200	590,635	1,610
Hettinger	172	158	17	60	415	580,751	1,400	538,878	1,299
Sioux	399	52	2	7	419	317,691	757	505,792	1,206
Dickey	228	122	43	30	423	1,409,515	3,334	1,677,323	3,967
Pembina	-	8	155	164	437	1,445,026	3,306	1,472,534	3,369
Ramsey	247	39	94	45	447	2,237,044	5,002	1,687,706	3,774
Bowman	310	66	34	49	454	1,307,490	2,879	4,587,500	10,101
Barnes	147	89	165	30	482	2,225,494	4,615	2,463,772	5,109
Nelson	343	97	68	19	521	1,490,826	2,864	746,565	1,434
Stutsman	281	128	82	28	527	3,120,532	5,918	1,965,951	3,729
Towner	397	107	-	51	529	1,116,964	2,112	1,329,187	2,514
Benson	276	211	37	24	540	2,358,171	4,371	2,806,223	5,201
Sheridan	484	110	10	-	555	682,754	1,230	509,843	91
Burleigh	276	181	40	65	568	3,786,746	6,664	5,063,000	8,9
Mountrail	327	169	70	22	585	966,825	1,654	1,053,748	1,80
Traill	179	67	130	146	598	1,965,105	3,287	2,338,475	3,911
Adams	491	133	1	37	621	619,825	998	673,348	1,085
Walsh	-	97	155	234	622	2,633,427	4,236	2,577,671	4,147
Logan	550	111	7	11	625	521,384	834	620,447	993
Oliver	572	71	21	18	633	794,959	1,256	946,002	1,495
McHenry	420	140	31	96	686	1,759,852	2,566	1,515,044	2,209
Richland	319	20	149	151	709	3,003,683	4,237	3,233,654	4,561
Billings	605	123	5	31	710	2,034,482	2,864	3,455,706	4,865
Pierce	685	104	6	7	731	1,572,685	2,150	606,642	829
McIntosh	754	59	49	9	809	914,097	1,130	759,324	938
Mercer	668	126	49	53	858	2,584,177	3,012	2,334,026	2,720
Ward	511	147	171	74	933	2,796,018	2,996	4,397,993	4,713
Rolette	862	80	53	12	936	1,258,682	1,345	1,497,831	1,600
Williams	740	52	107	65	943	2,106,015	2,232	2,703,003	2,865
Cass	196	176	203	246	955	7,399,016	7,748	11,608,983	12,156
Grand Forks	286	88	219	280	1,016	3,609,685	3,552	3,406,697	3,352
McKenzie	944	125	92	83	1,203	2,211,080	1,838	5,374,878	4,468
Emmons	1,146	151	11	44	1,246	1,094,716	879	1,120,894	900
McLean	1,163	144	61	32	1,306	1,465,157	1,122	2,854,000	2,185
Dunn	1,192	233	16	60	1,398	1,311,908	938	2,005,299	1,434
Stark	1,141	174	71	108	1,431	2,492,445	1,741	1,803,179	1,260
Grant	1,392	146	-	54	1,459	766,506	525	1,401,730	961
Morton	1,484	203	79	215	1,922	3,456,491	1,799	4,654,815	2,422
Total/Average	21,900	5,683	3,134	3,229	33,779	88,163,796	2,610	105,739,726	3,130
Urban Counties (4)	1,269	593	633	665	3,473	17,591,465	5,066	24,476,672	7,04
"Highly Impacted" (4)	2,599	366	239	228	3,311	7,659,068	2,313	16,121,087	4,8
"Moderately Impacted (9)	3,301	1,149	336	411	5,099	10,846,736	2,127	12,466,383	2,44
All Other (36)	18,032	4,725	2,263	2,336	26,996	62,913,264	2,330	65,141,967	2,413

Township Road Costs – Organized & Unorganized Townships

Prepared by NDACo – November 28, 2007

The North Dakota Association of Counties does not generally maintain detailed information on the revenue and expenditures of the State's townships. To be as responsive as possible to the Committee's requests however, we gathered what statewide data we found available. From a combination of Department of Transportation roadway data and the supporting information for the State Treasurer's allocation of the "Township Highway Aid Fund" (54-27-19.1), we were able to compile are fairly accurate picture of the total township road mileage in each county, broken down by organized and unorganized townships.

It must be remembered when examining this data, that while unorganized townships are synonymous with Public Land Survey System (PLSS) townships and mostly 36 sections in size. "Civil" or organized townships are political subdivisions with established governments, and although, many times these townships correspond with PLSS townships, many times they don't. In North Dakota, there are civil townships that cover up to four PLSS townships (i.e. 144 sections), and there are some that cover a complete PLSS township and just a portion of another.

As we are unaware of any compilation of township expenditure data, we have attempted to approximate expenditures by examining the revenue available to townships. While certainly not all inclusive, the attached table shows the two primary sources of township road funding:

1. The Township Highway Aid Fund which distributes one cent of the motor fuels tax revenue to organized townships and to the county on behalf of the unorganized townships. The distribution is based on their road miles relative to the total township road miles in the State. Counties must use the revenue received directly for the benefit of the unorganized township roads. Last year this fund allocated $93 per mile of township road.
2. Property taxes. Organized townships have several levies available for the construction and maintenance of roads. For unorganized townships, counties may levy up to 18 mills (within unorganized townships only) specifically for the township roads within the unorganized township for which the revenue was collected.

The table contrasts these two funding sources with the number of township road miles identified in each county. Care must be taken in making comparisons, when looking at raw numbers for a single year. Sometimes townships are in debt to counties for road maintenance and must levy more in one year to make up for extraordinary costs in the previous, sometimes townships must levy less than their anticipated costs due to a previous mild winter and a resulting fund balance.

It should also be considered that a mile of road in a township immediately adjacent the city of Fargo will very likely have a much higher maintenance cost than one halfway between Bowbells and Lignite (Burke Co.). Finally, other minor sources of funding are not included, such as state grant land payments ($165,000 statewide) and federal PILT payments in those townships with federal lands.

From a statewide perspective however, it appears that townships have approximately $400 per mile available on an annual basis. A 2005 study (based on 1997-2001 costs) in Minnesota has suggested that to adequately maintain a rural gravel road with a traffic count of less than 50

AADT (average annual daily traffic) an investment of about $1,600 per year is needed. Inflating those costs to 2007 (Using PPI) would give you a figure of $4,100. An older NDDOT study (KLJ, 2000) suggested that maintenance of a "poor gravel road (bladed only 2 or 3 times per year)" costs $200-$300/mile. Inflating this would yield a cost figure of $565-$845/mile per year.

It becomes obvious that these two revenue sources are insufficient in most townships to meet the local transportation needs. As counties do the vast majority of the maintenance work in both unorganized townships (by statute) and organized townships (by contract), several county engineers and road superintendents were contacted to fill in the detail. The universal response was that the county road fund essentially subsidizes the maintenance of the township roads because the townships lack sufficient funds to adequately respond to the need.

Studies cited:

Economics of Upgrading an Aggregate Road: Final Report. January 2005. *Published by:* Minnesota Department of Transportation. http://www.lrrb.org/pdf/200509.pdf

Urban Street and County Road Funding Needs Assessment For 13 North Dakota Cities and 53 North Dakota Counties: Project SPR-0010022. November 2004, Kadrmas Lee & Jackson.

Township Road Revenue Data

State Treasurer's Office Data 10/30/2007 State Tax Dept. Statitical Report

	Unorganized Township Road Miles	CY2006 Twp Road Fund Distribution	2006 Unorganized Twp. Road & Bridge Levy	Revenue Available (Partial?)	Dollars per Road Mile (Approx.)
Adams	191	17,753	44,134	61,888	324
Barnes	-	-		-	
Benson	8	755	1,618	2,373	297
Billings	605	59,020	141,055	200,074	331
Bottineau	-	-		-	
Bowman	62	5,763	17,933	23,696	382
Burke	7	643	1,200	1,843	263
Burleigh	169	15,443	269,903	285,346	1,688
Cass	-	-		-	
Cavalier	-	-		-	
Dickey	-	-		-	
Divide	-	-		-	
Dunn	876	81,424	329,796	411,221	469
Eddy	-	-		-	
Emmons	1,054	85,398	296,727	382,126	363
Foster	-	-		-	
Golden Valley	132	12,269	17,258	29,527	224
Grand Forks	-	-		-	
Grant	1,392	130,529	129,975	260,504	187
Griggs	-	-		-	
Hettinger	50	4,648		4,648	93
Kidder	46	4,202	3,551	7,753	169
LaMoure	-	-		-	
Logan	508	47,419	76,152	123,571	243
McHenry	110	10,352	24,594	34,946	318
McIntosh	754	70,084	142,768	212,852	282
McKenzie	722	67,110	120,752	187,862	260
McLean	1,053	97,877	149,963	247,840	235
Mercer	419	38,946	205,385	244,331	583
Morton	991	91,571	876,960	968,531	977
Mountrail	58	5,413	8,106	13,519	233
Nelson	-	-		-	
Oliver	457	42,478	93,790	136,268	298
Pembina	-	-		-	
Pierce	501	47,382	85,555	132,937	265
Ramsey	-	-		-	
Ransom	-	-		-	
Renville	-	-		-	
Richland	-	-		-	
Rolette	670	62,277	119,480	181,756	271
Sargent	-	-		-	
Sheridan	424	39,411	53,742	93,153	220
Sioux	292	27,078	61,156	88,235	302
Slope	180	16,711	14,738	31,450	175
Stark	1,043	96,879	408,399	505,279	484
Steele	-	-		-	
Stutsman	40	3,718	7,446	11,164	279
Towner	-	-		-	
Traill	-	-		-	
Walsh	-	-		-	
Ward	19	1,756	8,171	9,927	522
Wells	3	279		279	93
Williams	41	3,800	15,209	19,009	464
	12,877	1,188,388	3,725,518	4,913,906	**382**

Civil Twp	Organized Township Road Miles	CY2006 Twp Road Fund Distribution	2006 Organized Twp.Road & Bridge Levies	Revenue Available (Partial?)	Dollars per Road Mile (Approx.)
19	320	29,744	67,992	97,736	305
42	1,451	134,803	645,873	780,676	538
37	1,130	106,585	238,607	345,192	305
-	-	-	-	-	
44	1,853	172,237	411,709	583,946	315
24	412	38,295	100,676	138,972	337
29	934	85,737	140,748	226,485	242
41	1,059	96,769	383,834	480,604	454
50	2,408	223,416	1,017,811	1,241,228	515
40	1,553	144,352	365,530	509,881	328
33	926	87,770	250,039	337,809	365
32	1,236	114,343	204,500	318,843	258
-	-	-	-	-	
18	528	49,078	128,039	177,117	335
8	76	6,158	21,407	27,565	363
18	574	53,489	207,596	261,085	455
11	455	42,292	89,088	131,380	289
41	1,739	161,640	824,600	986,240	567
13	163	15,285	34,065	49,350	303
21	547	50,844	159,816	210,660	385
32	858	79,751	153,157	232,908	271
37	925	84,491	672,097	756,588	818
32	1,140	105,895	263,155	369,050	324
10	181	16,895	23,667	40,562	224
45	1,527	143,709	303,369	447,078	293
1	29	2,696	4,377	7,072	244
17	420	39,039	112,019	151,058	360
29	688	63,950	149,933	213,883	311
-	-	-	-	-	
1	1	92	8,649	8,741	8,741
49	1,207	112,644	213,714	326,358	270
27	703	66,295	245,632	311,926	444
-	-	-	-	-	
24	1,583	147,047	755,098	902,145	570
15	553	52,300	201,475	253,775	459
35	1,013	93,887	326,060	419,947	415
24	837	77,528	313,075	390,603	467
24	878	81,610	176,916	258,526	294
36	1,831	170,056	1,447,407	1,617,463	883
8	128	11,898	23,693	35,590	278
24	822	76,269	345,441	421,710	513
16	419	38,946	53,466	92,413	221
1	23	2,133	4,063	6,196	269
22	444	41,222	60,462	101,683	229
-	-	-	-	-	
20	787	73,152	253,088	326,240	415
62	1,730	160,804	524,729	685,533	396
28	660	61,279	188,796	250,075	379
25	1,221	112,881	1,193,532	1,306,413	1,070
36	1,609	148,266	482,469	630,735	392
57	1,573	145,405	884,133	1,029,538	655
36	1,406	130,688	258,427	389,115	277
54	1,185	109,818	754,966	864,783	730
1,348	43,745	4,063,482	15,688,995	19,752,477	**452**