



# Gross Receipts Tax Base Study Phase II

## Development of Modeling Tool to be Used in Evaluating Alternatives to the Current Gross Receipts Tax

NM Revenue Stabilization and Tax Policy Committee

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# ***LFC Principles of Good Tax Policy***

**Adequacy:** revenue should be adequate to fund government Services

**Efficiency:** broad base with low rates; minimize distortion; avoid reliance on one tax

**Equity:** fairness to taxpayers in similar circumstances; fairness to taxpayers with different incomes

**Simplicity:** encourage compliance and minimize administrative costs

**Accountability:** tax preferences should be easy to monitor and should be reviewed periodically

***Implementing principles requires trade-offs***

# Outline of Presentation

Why the interest in modeling the gross receipts tax and alternatives?

BBER's updated state gross receipts tax model based on IMPLAN and new models for counties

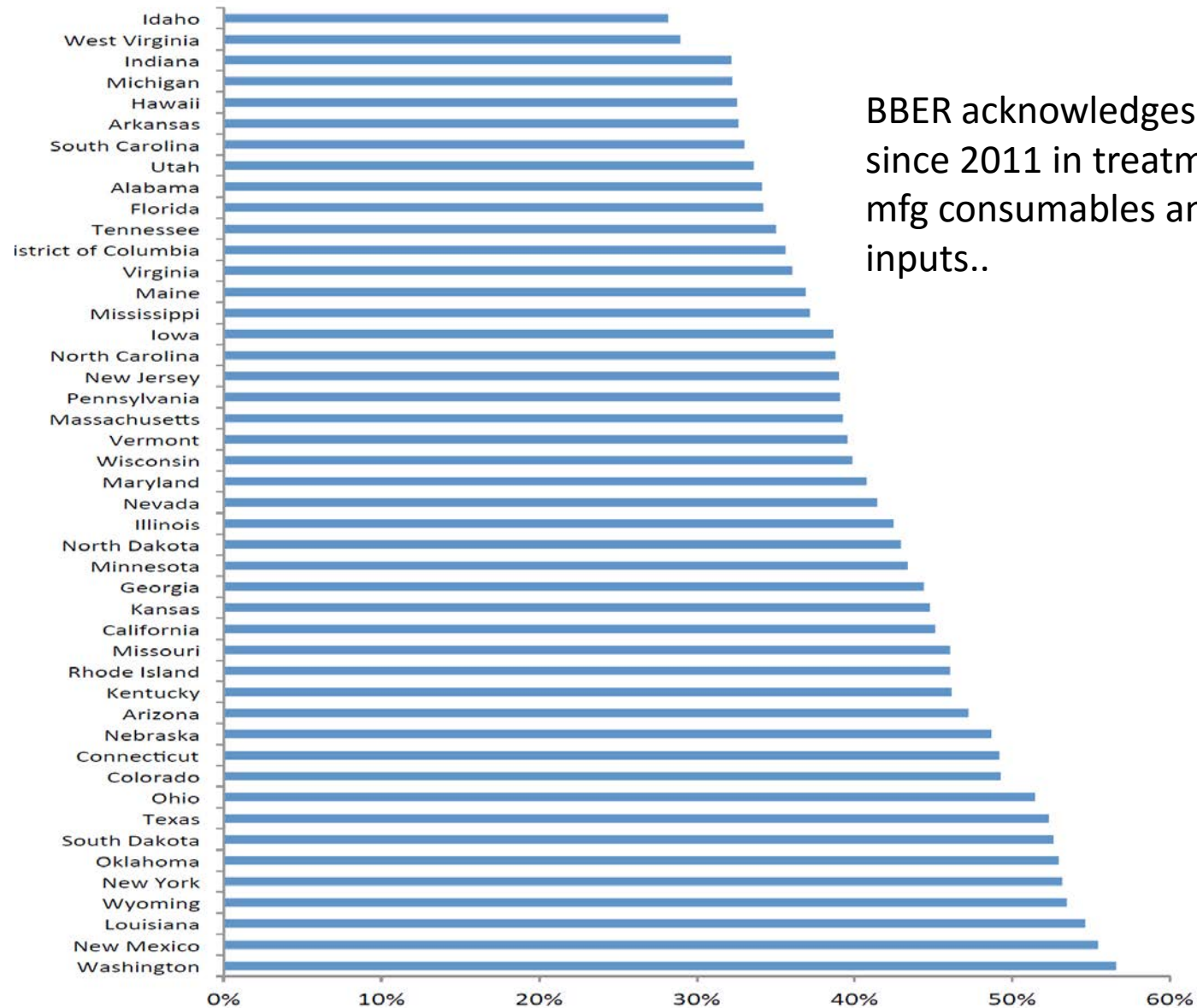
Evaluation of strengths and weaknesses

Application of findings to Health Care Industry

Future Work: Development/refinement of transactions tax model for New Mexico and analysis of impacts on local governments

# NM a Leader in the % of Sales Taxes on Business Inputs

Estimated percentage of state and local sales taxes imposed on business input purchases, 2011



BBER acknowledges changes since 2011 in treatment of mfg consumables and const. inputs..

Source: Ernst and Young calculations

# What's Wrong with Taxing Business Inputs

Taxation of business-to-business purchases in the production and distribution chain results in...

1. **Increased business costs due to pyramiding**, basically multiplying the number of times the same business costs are taxed.
2. Which, because of the hidden taxes paid, makes the **goods and services produced more expensive and less competitive in export markets.**
3. Businesses likely to be **less profitable.**
4. Businesses have an **incentive to source inputs out-of-state.**
5. Which has the effect of **reducing the economic multiplier** – the bang received from any business expansion.
6. Businesses may be induced to **locate production operations elsewhere.**

Based on 2013 article "What's Wrong with Taxing Business Services?" by Robert Cline, Andrew Phillips, Tom Neubig and Ernst and Young for the Council on State Taxation and addressing State legislatures interest in expanding sales and use taxes to include more business to business sales of goods and services

## **Distortions Greatest When Tax Rates are Higher**

# New Mexico Gross Receipt Tax Rates

## FY Average GRT Rates Based on Report 80 Activity

	Gross Receipts	Taxable Gross Receipts	Gross Tax	Food & Medical Deductions	Average State Rate
\$ Millions	A	B	C	D	E = (C/B)
FY2010	\$95,623	\$44,773	\$3,014	\$3,900	6.731%
FY2011	\$103,786	\$47,825	\$3,283	\$4,046	6.864%
FY2012	\$105,298	\$49,546	\$3,391	\$4,243	6.843%
FY2013	\$107,631	\$50,576	\$3,465	\$4,299	6.851%
FY2014	\$109,294	\$52,313	\$3,570	\$4,354	6.825%
FY2015	\$109,994	\$55,179	\$3,792	\$4,278	6.873%

Source: RP-80. Fiscal years represent business activity.

NM Department of Taxation and Revenue Website

Note: Average or effective rate reflects changes in base as well as in enactments.

# New Mexico Gross Receipt Tax Rates

## Gross Receipts Tax Rate in Place, Muni Sample, Selected Years, Jan Thru June

Municipality	January thru June					Chg 00-16
	2000	2003	2009	2012	2016	
<b>Bernalillo Co</b>						
Albuquerque*	5.8125%	5.8125%	6.7500%	7.0000%	7.1875%	1.3750%
Los Ranchos	5.8750%	5.8750%	6.8125%	7.0625%	7.2500%	1.3750%
Rio Rancho	6.1875%	6.1875%	7.1250%	7.6250%	7.8125%	1.6250%
Tijeras	5.7500%	5.7500%	6.8750%	6.9375%	7.6250%	1.8750%
Remainder of County	5.3750%	5.3750%	5.8125%	6.0625%	6.2500%	0.8750%
<b>Chaves Co</b>						
Dexter	6.3125%	6.3125%	6.8125%	6.9375%	7.3150%	1.0025%
Hagerman	6.5000%	6.5000%	7.0000%	7.1250%	7.5000%	1.0000%
Lake Arthur	5.8125%	5.8125%	6.3125%	6.4375%	6.8125%	1.0000%
Roswell	6.5000%	6.5000%	7.0000%	7.1250%	7.5000%	1.0000%
Remainder of County	5.9375%	5.9375%	5.9375%	6.0625%	6.4375%	0.5000%
<b>Rio Arriba</b>						
Chama	6.1875%	6.2500%	7.2500%	8.1875%	8.1875%	2.0000%
Espanola	6.1875%	6.6250%	7.7500%	8.1875%	8.5625%	2.3750%
Remainder of County	5.6250%	5.6875%	6.0250%	6.5000%	6.5000%	0.8750%
<b>Dona Ana</b>						
Anthony			7.3750%	7.2500%	7.7500%	
Hatch	6.3750%	6.3750%	7.2500%	7.4375%	7.8125%	1.4375%
Las Cruces	6.3750%	6.5000%	7.3750%	7.5625%	8.3125%	1.9375%
Mesilla	6.3750%	6.3750%	7.6250%	7.8125%	8.1875%	1.8125%
Sunland Park	6.3750%	6.3750%	7.2500%	7.6875%	8.4375%	2.0625%
Remainder of County	5.8125%	5.8125%	6.1875%	6.3750%	6.7500%	0.9375%

# Tax Modeling Tool

BBER is developing/refining a Tax Modeling Tool using IMPLAN and IMPLAN Proprietary Data Bases for 2012, augmented by other available data, e.g., US Economic Census, US Bureau of Economic Analysis data on income and employment.

Have modeled the gross receipts tax for both the State and a sample of counties. County models can be adapted to examine municipal tax base and distributions.

We are also involved in building similar State and local models to examine the impacts of a tax on transactions, similar to that proposed by Sen. Sharer.



# Development and Refinement of Conceptual Model of the Gross Receipts Tax Using IMPLAN

Major challenge relates to capturing existing GRT exemptions and deductions, which is not always easy or even possible. TRD tax expenditure reports help. Have chosen to model data for calendar 2012, when have benefit of *2012 Economic Census*.

# Modeling Gross Receipts Tax Revenues

**Output** – **Exemptions** = **Total Gross Receipts**

IMPLAN sales by 3 dig Naics Industry, validated by 2012 *Economic Census*, Net of Indirect taxes and custom duties

Sales by nonprofits, Sales taxed elsewhere (e.g. motor vehicles), Other specific (agriculture)

(Per NM TRD Report 80)

**Gross Receipts** – **Deductions** = **Taxable Gross Receipts**

Inter-state commerce, mfg “ingredients” and (now) consumables, inputs for construction, sales for resale, many specific (prosthetic devices, jet fuel), sales of goods to state & local governments

The tax base

(Per NM TRD Report 80)

# Collection of Other Data Relevant to Estimating Tax Base

- Data from *2012 Economic Census* used in grossing up figures for wholesale and retail trade and in adjusting totals for other industries.
- Gross receipts tax data (Report 80, available on line, was processed by BBER and aggregated to 3-digit NAICS for calendar 2012. Report 500 and data on local government distributions)
- Data from a variety of sources to be used in estimating deductions and exemptions where IMPLAN data unavailable or otherwise insufficient, e.g., BEA data on SNAP, on Medicare, Military insurance; FDIC data on interest on loans. Sources include TRD reports on tax expenditures.

# 2016 Gross Receipts Tax Model Based on 2012 IMPLAN Data

All Data in Thousands of Dollars

NAICS Industry		IMPLAN				TRD Taxable		
		Output Adj for 2012 Economic Census	Rev Output Net of Taxes	Output less Exemptions constrained	Modeled 3-digit NAICS Deductions	Modeled Taxable gross receipts	Gross Reciepts 2012	3-Digit Model Error
Agric & Natl Res	11	3,552,936	3,447,793	87,623	39,590	48,033	57,592	(9,559)
Mining	21	16,749,586	15,523,780	3,516,375	784,023	2,732,352	3,624,503	(892,151)
Utilities	22	3,098,290	2,855,241	2,705,241	1,279,057	1,426,184	2,235,436	(809,252)
Construction	23	7,312,365	7,229,510	7,229,510	1,972,544	5,256,966	5,423,499	(166,533)
Manufacturing	31-33	21,929,915	21,806,691	15,028,106	12,643,771	2,384,335	1,924,763	459,572
Wholesale Trade	42	17,404,680	16,518,432	16,518,432	11,495,889	5,022,544	2,317,254	2,705,290
Retail Trade	44-45	25,179,274	24,187,144	16,044,622	8,756,085	7,288,536	12,130,225	(4,841,689)
Transp & Warehsg	48-49	3,659,980	3,587,594	3,587,569	1,526,710	2,060,859	722,514	1,338,345
Information	51	4,925,522	4,580,971	3,419,437	997,363	2,422,074	2,422,639	(565)
Finance & Insurance	52	5,822,734	5,612,131	874,726	126,016	748,711	274,220	474,490
Real Est, Rent, Leasg	53	12,597,534	11,177,297	469,534	423,628	45,906	978,682	(932,776)
Prof & Tech'l Serv	54	10,520,640	10,415,185	10,172,829	4,499,010	5,673,819	4,527,241	1,146,578
Mgt of Companies	55	896,179	878,117	878,117	49,825	828,292	41,118	787,174
Admin & Waste Serv	56	3,834,742	3,772,128	3,772,128	798,262	2,973,866	1,581,696	1,392,170
Educational Services	61	600,000	579,936	516,873	163,252	353,621	209,867	143,754
Health & Socl Assist	62	11,503,740	11,425,981	5,628,664	2,018,878	3,609,786	2,156,068	1,453,719
Arts & Leisure	71	1,458,207	1,357,139	1,035,588	203,961	831,627	197,652	633,975
Accom & Food Serv	72	4,906,077	4,496,320	4,496,320	1,206,871	3,289,449	3,488,186	(198,737)
Oth Serv except PA	81	3,004,936	3,007,796	2,325,103	198,052	2,127,052	4,830,792	(2,703,740)
		158,957,339	152,459,186	98,306,797	49,338,058	49,124,010	49,143,945	(19,935)

-0.04%

Sources of data: IMPLAN model, 2012 databases; 2012 Economic Census, NM Taxation and Revenue Dept data on statewide gross receipts tax, calendar 2012. TRD Tax Expenditure reports, various miscellaneous data sources.

Note: Deductions are constrained so that deductions + exemptions are = or < output.

# Exemptions: Getting to TRD's "Total Gross Receipts"

NAICS Industry	Adjusted IMPLAN Output Net of Taxes	Exemptions				Output less Exemptions constrained	Total Gross Receipts	Error on the Estimate		
		Taxed elsewhere 7-9-13.2	Sales of Non-Profits		Miscellaneous				Total Exemptions	
			% of Output Exempt	Estimated Receipts						
All Data in \$000s										
Agric & Natl Res	11	3,447,793		0%		3,360,170	3,360,170	87,623	378,248	(290,625)
Mining	21	15,523,780	12,004,407	0%		2,998	12,007,405	3,516,375	7,851,787	(4,335,411)
Utilities	22	2,855,241		0%		150,000	150,000	2,705,241	2,889,467	(184,226)
Construction	23	7,229,510		0%			0	7,229,510	8,386,658	(1,157,148)
Manufacturing	31-33	21,806,691		0%		6,778,585	6,778,585	15,028,106	8,190,554	6,837,551
Wholesale Trade	42	16,518,432		0%			0	16,518,432	16,698,493	(180,060)
Retail Trade	44-45	24,187,144	8,139,022	0%		3,500	8,142,522	16,044,622	23,849,707	(7,805,085)
Transp & Warehsg	48-49	3,587,594	25	0%			25	3,587,569	2,531,956	1,055,613
Information	51	4,580,971		0%		1,161,534	1,161,534	3,419,437	2,632,627	786,810
Finance & Insurance	52	5,612,131	2,006,882	0%		2,730,523	4,737,405	874,726	507,805	366,921
Real Est, Rent, Leasg	53	11,177,297		0%		10,707,763	10,707,763	469,534	1,813,961	(1,344,427)
Prof & Tech'l Serv	54	10,415,185		2%	242,356		242,356	10,172,829	7,809,511	2,363,318
Mgt of Companies	55	878,117		0%			0	878,117	181,072	697,045
Admin & Waste Serv	56	3,772,128		0%			0	3,772,128	3,229,655	542,473
Educational Services	61	579,936		11%	63,063		63,063	516,873	238,397	278,475
Health & Socl Assist	62	11,425,981		45%	5,165,589	631,728	5,797,317	5,628,664	4,885,259	743,406
Arts & Leisure	71	1,357,139		11%	145,551	176,000	321,551	1,035,588	281,390	754,198
Accom & Food Serv	72	4,496,320		0%	0		0	4,496,320	3,757,768	738,552
Oth Serv except PA	81	3,007,796		23%	682,693		682,693	2,325,103	8,738,329	(6,413,225)
		152,459,186	22,150,336	4%	6,299,252	25,702,801	54,152,389	98,306,797	104,852,644	(6,545,848)

Sources of data: IMPLAN model, 2012 databases; 2012 Economic Census, NM Taxation and Revenue Dept data on statewide gross receipts tax, calendar 2012. TRD Tax Expenditure reports, various miscellaneous data sources.

# Sectoral Composition of Total Private Output Compared with Estimate and TRD Reported Tax Base

	IMPLAN Output Adj for 2012 Economic Census		Estimated Taxable Gross Receipts		TRD 2012 Taxable Gross Receipts	
	\$ Millions	% of Total	\$ Millions	% of Total	\$ Millions	% of Total
Agric & Natl Res	3,552.9	2%	48.0	0%	57.6	0%
Mining	16,749.6	11%	2,732.4	6%	3,624.5	7%
Utilities	3,098.3	2%	1,426.2	3%	2,235.4	5%
Construction	7,312.4	5%	5,257.0	11%	5,423.5	11%
Manufacturing	21,929.9	14%	2,384.3	5%	1,924.8	4%
Trade	42,584.0	27%	12,311.1	25%	14,447.5	29%
Transp & Warehsg	3,660.0	2%	2,060.9	4%	722.5	1%
Information	4,925.5	3%	2,422.1	5%	2,422.6	5%
Fin, Insur, Real Est	18,420.3	12%	794.6	2%	1,252.9	3%
Bus & Professional	15,251.6	10%	9,476.0	19%	6,150.1	13%
Ed & Health	12,103.7	8%	3,963.4	8%	2,365.9	5%
Leisure & Hosp	6,364.3	4%	4,121.1	8%	3,685.8	8%
Oth Serv	3,004.9	2%	2,127.1	4%	4,830.8	10%
	158,957.3	100%	49,124.0	100%	49,143.9	100%

BBER calculations. Excludes Govt and non Naics

# County Gross Receipts Tax Models

## Bernalillo County

Data in \$Millions

Description	Revised	Estimated	Output less	NM Taxation and Revenue Rpt 80				Estimated	Model	
	Output net of Taxes	Total Exempt	Constrain Exempt	Total Gross Receipts	Total Txbl Gross	Total Deduct	Constrain Deductions	Taxable Gross	Over-Estimate Error	
11 Agric & Natl Resour	17	15	2	14	9	5	2	-	(9)	
21 Mining	11	-	11	121	19	102	2	9	(10)	
22 Utilities	477	24	453	826	711	116	244	209	(501)	
23 Construction	2,236	-	2,236	2,162	1,216	946	773	1,463	247	
31-33 Manufacturing	6,555	-	6,555	2,755	378	2,376	5,957	598	220	
42 Wholesale Trade	5,183	-	5,183	4,245	528	3,717	5,183	-	(528)	
44-45 Retail Trade	9,671	914	8,756	7,724	4,063	3,661	3,104	5,652	1,589	
48-49 Transp & Warehsg	991	2	989	286	115	172	526	463	349	
51 Information	2,663	-	2,663	1,036	918	118	1,135	1,528	610	
52 Finance & Insurance	3,426	3,014	412	190	116	75	412	-	(116)	
53 Real Est, Rent, Leasg	2,675	2,233	443	657	257	400	187	255	(2)	
54 Prof & Tech'l Serv	3,435	41	3,394	4,739	2,620	2,119	2,767	627	(1,993)	
55 Mgt of Companies	608	-	608	31	23	8	220	388	365	
56 Admin & Waste Serv	999	-	999	288	195	92	308	690	495	
61 Educational Services	227	91	136	118	109	9	108	28	(81)	
62 Health & Socl Assist	5,244	2,979	2,265	1,620	806	813	1,093	1,172	366	
71 Arts & Leisure	324	598	(273)	132	89	43	(273)	-	(89)	
72 Accom & Food Serv	1,551	-	1,551	1,473	1,380	93	551	1,001	(379)	
81 Oth Serv except PA	710	298	412	2,772	1,490	1,282	237	175	(1,315)	
92 Public Administration	6,206	6,206	-	61	39	22	-	-	(39)	
	53,210	16,415	36,795	31,250	15,082	16,168	22,535	14,260	(822)	-5%

UNM Bureau of Business and Economic Research calculations

# County Gross Receipts Tax Models

## San Juan County

Data in \$millions	Revised Output net of Taxes	Total Exemptions 7-2-29 and 7-9-15	Output less Constrain Exemp	Total Gross Receipts	Total Txbl Gross	Total Deductions	Constrain Deduction	Estim Taxable GR	Model Over- Estim TGR	% Error
Total	8,723	4,613	6,128	6,188	3,509	2,679	2,759	3,369	(140)	-4%
11 Ag, Forestry, Fish & I	66	66	-	2	2	1	-	-	(2)	-
21 Mining	2,410	1,446	964	954	757	197	0	964	207	-
22 Utilities	686	9	677	121	51	69	596	81	30	-
23 Construction	595	-	595	471	378	93	121	474	96	-
31-33 Manufacturing	327	37	290	355	204	151	290	-	(204)	-
42 Wholesale Trade	1,217	-	1,217	1,182	213	969	771	446	233	-
44-45 Retail trade	1,671	518	1,153	1,179	771	407	539	614	(157)	-
48-49 Transportation &	389	0	389	536	60	476	135	255	195	-
51 Information	40	71	-	128	124	4	-	-	(124)	-
52 Finance & insurance	129	305	-	12	9	2	-	-	(9)	-
53 Real estate & rental	346	714	-	79	49	30	-	-	(49)	-
54 Professional- scienti	151	15	136	213	170	43	8	128	(42)	-
55 Management of corr	44	-	44	-	-	-	10	34	34	-
56 Administrative & wa	118	-	118	35	28	6	31	86	58	-
61 Educational svcs	13	10	3	2	2	0	3	-	(2)	-
62 Health & social servi	277	107	171	160	119	41	56	114	(5)	-
71 Arts- entertainment	66	27	39	11	10	1	29	10	(0)	-
72 Accomodation & foc	182	-	182	204	183	21	32	150	(34)	-
81 Other services	179	29	150	519	356	163	137	14	(342)	-
92 Government & non I	730	1,261	-	27	22	5	-	-	(22)	-



# Why IMPLAN?

- Widely used regional economic model that is based on Input-Output analysis.
- BBER holds license and has years of experience using the model
- Model databases, which have been validated, provide reasonable aggregates that can be used in estimating the NM State and local gross receipts tax bases as well as the tax bases for alternative broad-based taxes, e.g. a tax on transactions.
- Data series include data on sales, on inter-business transactions, on exports, and on sales to federal and state and local governments – all critical for this effort.

# The Devil Is in the Detail

- IMPLAN activity not always correctly classified, e.g., Monetary Authority almost \$3 b in activity but no Federal Reserve presence. Overall financial institutions reasonable.
- Misclassification creates problems if specific exemptions or deductions. Can exhaust tax base in a particular industry.
- There are difficulties in aligning GRT exemptions and deductions with specific detailed industries, e.g., deductions for mfg & construction.
- These problems are compounded by the fact that GRT industry codes are self-reported to TRD and un-audited. Export activity may not be reported at all.

# Caveats Apply

- Phase II Gross receipts models have value in the explication of the relation between the underlying economy and tax base and revenues. Our good results to some extent reflect the revenue-estimator's friend, off-setting errors.
- Any simple I-O based model assumes levels of activity unchanged and fixed input coefficients despite what are likely to be substantial changes in the relative prices for goods and services. **This is not a dynamic model.**
- **I-O model estimates of inter-business sales not the same as capturing individual business transactions and having the tax pyramid as move up the stages of production.**
- Any new tax regime will alter incentives and may be expected to result in modifications to how businesses source their inputs as well as to where they locate production.

Interindustry sales are also critical in determining deductions.

Not enough to ask who is selling, whether a non-profit, whether sales are to government, for export... Need to examine what is purchased from which industry and for what purpose...

Here start with IMPLAN data on commodities “used” in production...

# Commodities “Used” in Production of Livestock that may be Eligible for Deductions

Description	Gross Absorption	Gross Inputs	RPC	RPC	Regional Inputs			
Total Commodity Demand	72.26%	\$2,306,088,047	45.32%	32.75%	\$1,045,165,492			
111 Crop Farming	11.70%	\$373,550,039	10.60%	1.24%	\$39,578,764	7-9-58	deduction feed, fertilizaers	
112 Livestock	21.06%	\$672,240,657	85.90%	18.09%	\$577,473,285	7-9-58	auctioneer selling livestock	
115 Ag & Forestry Svcs	1.78%	\$56,743,323	67.32%	1.20%	\$38,196,812	7-9-59	threshing, harvesting, growing, cultivating	
212 Mining	0.12%	\$3,863,708	34.02%	0.04%	\$1,314,397			
221 Utilities	1.37%	\$43,829,736	80.96%	1.11%	\$35,482,155			
230 Construction	0.40%	\$12,618,811	88.81%	0.35%	\$11,206,388			
311 Food products	19.05%	\$608,065,715	19.28%	3.67%	\$117,253,505	7-9-58	feed, fertilizer deductions	
312 Beverage & Tobacco	0.03%	\$889,747	16.43%	0.01%	\$146,173			
313 Textile Mills	0.01%	\$356,216	7.65%	0.00%	\$27,257			
316 Leather & Allied	0.05%	\$1,605,509	1.40%	0.00%	\$22,413			
321 Wood Products	0.02%	\$699,718	23.67%	0.01%	\$165,604			
322 Paper Manufacturing	0.02%	\$612,961	13.84%	0.00%	\$84,846			
323 Printing & Related	0.01%	\$385,733	4.90%	0.00%	\$18,885			
324 Petroleum & coal prod	3.55%	\$113,440,600	2.96%	0.11%	\$3,353,715			
325 Chemical Manufacturing	1.50%	\$48,010,710	2.94%	0.04%	\$1,411,032	7-9-58	feed, fertilizer deductions	
326 Plastics & rubber prod	0.16%	\$5,179,681	4.72%	0.01%	\$244,672			
327 Nonmetal mineral prod	0.00%	\$3,590	46.26%	0.00%	\$1,661			
331 Primary metal mfg	0.01%	\$411,179	5.07%	0.00%	\$20,835			
332 Fabricated metal prod	0.31%	\$9,746,467	8.90%	0.03%	\$867,759			
333 Machinery Mfg	0.36%	\$11,528,036	3.01%	0.01%	\$346,533			
334 Computer & oth electron	0.00%	\$16,210	14.23%	0.00%	\$2,306			
335 Electircal eqpt & appliances	0.05%	\$1,653,426	2.67%	0.00%	\$44,130			
336 Transportation eqipt	0.10%	\$3,312,815	0.88%	0.00%	\$29,061	7-9-62	50% aircraft, vehicle equip not required to be registered	
339 Miscellaneous mfg	0.06%	\$1,825,029	4.81%	0.00%	\$87,801			
42 Wholesale Trade	2.31%	\$73,785,750	60.18%	1.39%	\$44,406,379	7-9-58		
441 Motor veh & parts dealers	0.01%	\$193,836	93.75%	0.01%	\$181,726			
442 Furniture & home furnishings	0.00%	\$47,530	75.09%	0.00%	\$35,689			
443 Electronics & appliances stores	0.00%	\$45,880	62.04%	0.00%	\$28,463			

Source of Data: IMPLAN Databases for NM

# Some Deductions Applicable in Sales to Construction

Description	Gross Absorption	Gross Inputs	RPC	RPC	Regional Inputs		
Total Commodity Demand	57.72%	\$4,220,838,182	37.47%	21.63%	\$1,581,406,924		DEDUCTIONS
111 Crop Farming	0.29%	\$21,285,635	10.60%	0.03%	\$2,255,278		
212 Mining	0.70%	\$50,873,161	34.02%	0.24%	\$17,306,569		?
213 Mining services	0.00%	\$10,109	90.75%	0.00%	\$9,174		
221 Utilities	0.60%	\$43,697,771	80.96%	0.48%	\$35,375,324		
230 Construction	0.19%	\$14,011,153	88.81%	0.17%	\$12,442,885	7-9-52	Sale of cons serv to const ★
313 Textile Mills	0.19%	\$13,999,960	7.65%	0.02%	\$1,071,263	7-9-51	sale of cons materials
321 Wood Products	2.41%	\$176,538,065	23.67%	0.57%	\$41,781,648	Reg 3.2.209.12	for project ok, not forms
322 Paper Manufacturing	0.25%	\$18,466,707	13.84%	0.04%	\$2,556,152		
323 Printing & Related	0.01%	\$662,976	4.90%	0.00%	\$32,458		
324 Petroleum & coal prod	6.73%	\$492,409,060	2.96%	0.20%	\$14,557,395		
325 Chemical Manufacturing	1.27%	\$93,073,964	2.94%	0.04%	\$2,735,439		
326 Plastics & rubber prod	2.04%	\$149,129,010	4.72%	0.10%	\$7,044,401	7-9-51	sale of cons materials
327 Nonmetal mineral prod	3.72%	\$272,040,855	46.26%	1.72%	\$125,832,796	7-9-51	sale of cons materials
331 Primary metal mfg	0.54%	\$39,558,232	5.07%	0.03%	\$2,004,477	7-9-51	sale of cons materials
332 Fabricated metal prod	5.70%	\$416,514,425	8.90%	0.51%	\$37,083,605	7-9-51	sale of cons materials
333 Machinery Mfg	2.26%	\$165,161,099	3.01%	0.07%	\$4,964,741		
334 Computer & oth electron	0.53%	\$38,851,426	14.23%	0.08%	\$5,527,131		
335 Electircal eqpt & appliances	2.37%	\$173,568,856	2.67%	0.06%	\$4,632,515	7-9-51	sale of cons materials
336 Transportation eqpmt	0.70%	\$50,883,129	0.88%	0.01%	\$446,359		
337 Furniture & related prod	0.77%	\$56,028,237	4.74%	0.04%	\$2,653,625		
339 Miscellaneous mfg	0.07%	\$5,253,493	4.81%	0.00%	\$252,742		
42 Wholesale Trade	2.98%	\$217,550,143	60.18%	1.79%	\$130,927,911	7-9-51	sale of cons materials
441 Motor veh & parts dealers	0.69%	\$50,351,506	93.75%	0.65%	\$47,205,642		
442 Furniture & home furnishings	0.17%	\$12,346,467	75.09%	0.13%	\$9,270,785		
443 Electronics & appliances stores	0.16%	\$11,917,987	62.04%	0.10%	\$7,393,538		
444 Bldg materials & garden dealers	0.39%	\$28,343,820	96.97%	0.38%	\$27,485,878	7-9-51	sale of cons materials
445 food & beverage stores	0.54%	\$39,614,990	77.67%	0.42%	\$30,769,284		
446 Health & personal care stores	0.26%	\$18,747,405	75.49%	0.19%	\$14,152,310		
447 Gasoline stations	0.17%	\$12,432,716	99.53%	0.17%	\$12,373,732		
448 Clothing & accessories stores	0.30%	\$22,209,004	72.18%	0.22%	\$16,030,028		
451 Sports- hobby- book & music stores	0.10%	\$7,012,124	84.20%	0.08%	\$5,903,824		
452 General merch stores	0.53%	\$38,569,690	99.28%	0.52%	\$38,292,206	7-9-51	sale of cons materials
453 Misc retailers	0.22%	\$16,085,000	100.00%	0.22%	\$16,085,000		
541 Professional- scientific & tech svcs	8.50%	\$621,471,128	54.32%	4.62%	\$337,559,298	7-9-52	sale of services: no indirect
551 Management of companies	0.23%	\$17,110,515	38.17%	0.09%	\$6,530,912		
561 Admin support svcs	1.22%	\$89,264,257	67.53%	0.82%	\$60,277,929		
562 Waste mgmt & remediation svcs	0.17%	\$12,170,943	74.31%	0.12%	\$9,044,314		

Source of Data: IMPLAN Databases for NM

★ Includes arch, engineering. Excludes general business services like legal, 22 accounting

# Usefulness of IMPLAN for Analyzing Taxation of Inter-Industry Sales & Tax Pyramiding

The model is easy to use and understand. You can pick the level of detail (e.g., 2 or 3-digit NAICS). The model generates data on inputs sourced within the “region” (NM for the State model, Bernalillo Co for BC) versus elsewhere.

Limitations: As illustrated with previous two tables,

- Data is not available for different stages of production
- Data on inputs report totals of each input “used” at some point in producing a particular commodity.
- Would need to undertake a “structural path analysis” to examine all the interactions. Time consuming, tedious, expensive.
- This is a major limitation if want to analyze tax pyramiding or to design a tax that benefits from such (Sharer, Harper)
- Alternative might be to use a computerized general equilibrium (CGE) model.

# Taxation of Health Care Services

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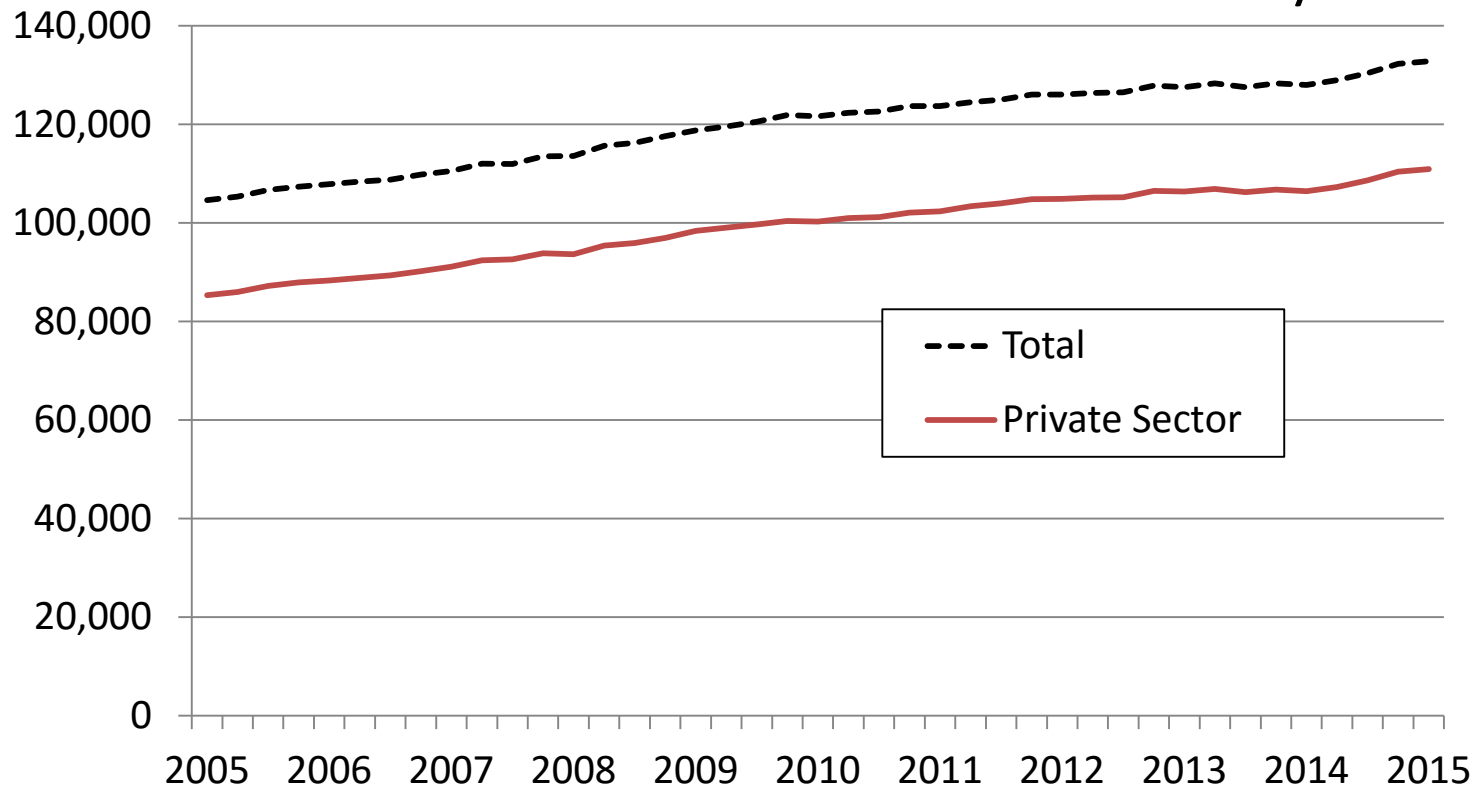
- Role of Public Sector
- Role of Non-Profits
- Purchases
- Tax Expenditures



# Taxation of Health Care Services

## Public Sector Role in Provision of Care

### Health Care and Social Assistance Employment Private Sector Versus Total in the Industry



Source: US Bureau of Labor Statistics, *Quarterly Census of Employment and Wages*

# Taxation of Health Care Services

## Employees in Government Facilities as a % of Total Employees

### NAICS 621 Ambulatory health care services

	Private	Federal	State	Local	All Govt	Govt as % of
2005	38,484	336	924	121	1,381	3.5%
2006	39,521	336	928	120	1,384	3.4%
2007	40,334	320	885	129	1,334	3.2%
2008	40,169	325	903	141	1,369	3.3%
2009	42,072	323	903	144	1,370	3.2%
2010	42,810	322	872	137	1,331	3.0%
2011	44,648	331	795	135	1,261	2.7%
2012	45,632	341	761	140	1,242	2.6%
2013	46,390	339	755	202	1,296	2.7%
2014	47,159	339	753	209	1,301	2.7%

Gov't today accounts for less than 3% of ambulatory care employment; 2.4% in 2014 if include 11,713 self-employed non-employers

### NAICS 622 Hospitals

	Private	Federal	State	Local	F&S Govt	Minimum Govt %
2005	17,441	4,605	6,784	ND	11,389	39.5%
2006	18,617	4,606	6,957	ND	11,563	38.3%
2007	19,342	4,570	7,157	ND	11,727	37.7%
2008	20,504	4,607	7,700	ND	12,307	37.5%
2009	20,760	4,803	8,068	ND	12,871	38.3%
2010	20,829	5,137	8,339	ND	13,476	39.3%
2011	20,898	5,298	8,266	ND	13,564	39.4%
2012	20,987	5,325	8,362	ND	13,687	39.5%
2013	20,745	5,320	8,329	ND	13,649	39.7%
2014	20,756	5,378	8,523	ND	13,901	40.1%

Gov't accounts for about 40% of hospital employment

# Taxation of Health Care Services: Exemptions

## Health Care Services: The Importance of Non Profits

Industry	Revised IMPLAN Output Net of Taxes <sup>1</sup> (\$000)	Receipts of Non Profits	
		% of Output Exempt from Federal Income Tax <sup>2</sup>	Estimated Receipts (\$000)
621 Ambulatory Care	\$4,345,926	10.3%	\$448,008
622 Hospitals	\$5,057,290	76.8%	\$3,884,020
623 Nursing & Residential Care	\$817,215	30.6%	\$249,731
Health Care Services	\$10,220,430	44.8%	\$4,581,759
624 Social assistance	\$1,205,551	59.2%	\$713,141
All Other Non Profits	\$13,298,380	7.6%	\$1,004,351
All Non Profits	\$24,724,361	25.5%	\$6,299,252
Total Revised IMPLAN Output Net of Taxes	\$173,059,186	3.6%	\$6,299,252

1 IMPLAN output adjusted in light of 2012 Economic Census

2 As identified in 2012 Economic Census

# Taxation of Health Care Services

## Sourcing of Inputs by the NM Health Care Industry

### Ambulatory Care: In-State Versus Total Inputs

Industry	Gross Inputs		Regional Inputs	
	(\$000s)	(\$000s)	(\$000s)	% of Total
332 Fab Metal Products	\$ 1,208	\$ 108		9%
336 Trans Equipment	\$ 913	\$ 8		1%
487 Real Estate	\$ 712	\$ 573		80% ←
492 Couriers/Messengers	\$ 705	\$ 390		55%
523 Securities, Oth Fin'l	\$ 577	\$ 260		45% ←
524 Insurance	\$ 547	\$ 192		35% ←
524 Prof, Sci, Tech Serv	\$ 472	\$ 257		54%
541 Admin Support Serv	\$ 445	\$ 301		68%
551 Waste Mgt & Remed	\$ 395	\$ 294		74%
561 Mgt of Companies	\$ 166	\$ 63		38%
562 Utilities	\$ 159	\$ 129		81%
All Other	\$ 4,939	\$ 4,162		84%
Total	\$ 12,928	\$ 7,916		61%

Source: IMPLAN Databases

Non profits should benefit from deductions on NM purchases of goods

# Taxation of Health Care Services

## Sourcing of Inputs by the NM Health Care Industry

### Hospitals: In-State Versus Total Inputs

Industry	Gross Inputs		Regional Inputs	
		(\$000s)	(\$000s)	% of Total
531 Real Estate	\$	235,534	\$ 189,531	80%
325 Chemical Mfg	\$	177,225	\$ 5,209	3%
561 Admin Support Serv	\$	98,947	\$ 66,816	68%
541 Prof Sci & Tech Serv	\$	83,088	\$ 45,130	54%
623 Ambul Health Care	\$	79,502	\$ 65,271	82%
331 Food Products	\$	67,734	\$ 13,061	19%
551 Mgt of Companies	\$	65,242	\$ 24,902	38%
524 Insurance	\$	54,497	\$ 19,161	35%
523 Securities & Oth Fin'l	\$	40,902	\$ 18,477	45%
42 Wholesale Trade	\$	40,681	\$ 24,483	60%
221 Utilities	\$	36,248	\$ 29,344	50%
339 Msc Mfg (339)	\$	33,280	\$ 1,601	5%
811 Repair and Maint	\$	22,918	\$ 20,570	90%
517 Telecommunications	\$	21,309	\$ 17,212	81%
All Other	\$	169,500	\$ 74,585	44%
<b>Total</b>	\$	<b>1,226,607</b>	\$ <b>615,356</b>	<b>50%</b>

Source: IMPLAN Databases

Govt Hospitals and Non profits should benefit from deductions on NM purchases of goods.

# Health Care Industry Expenditures 2014 Estimated Costs

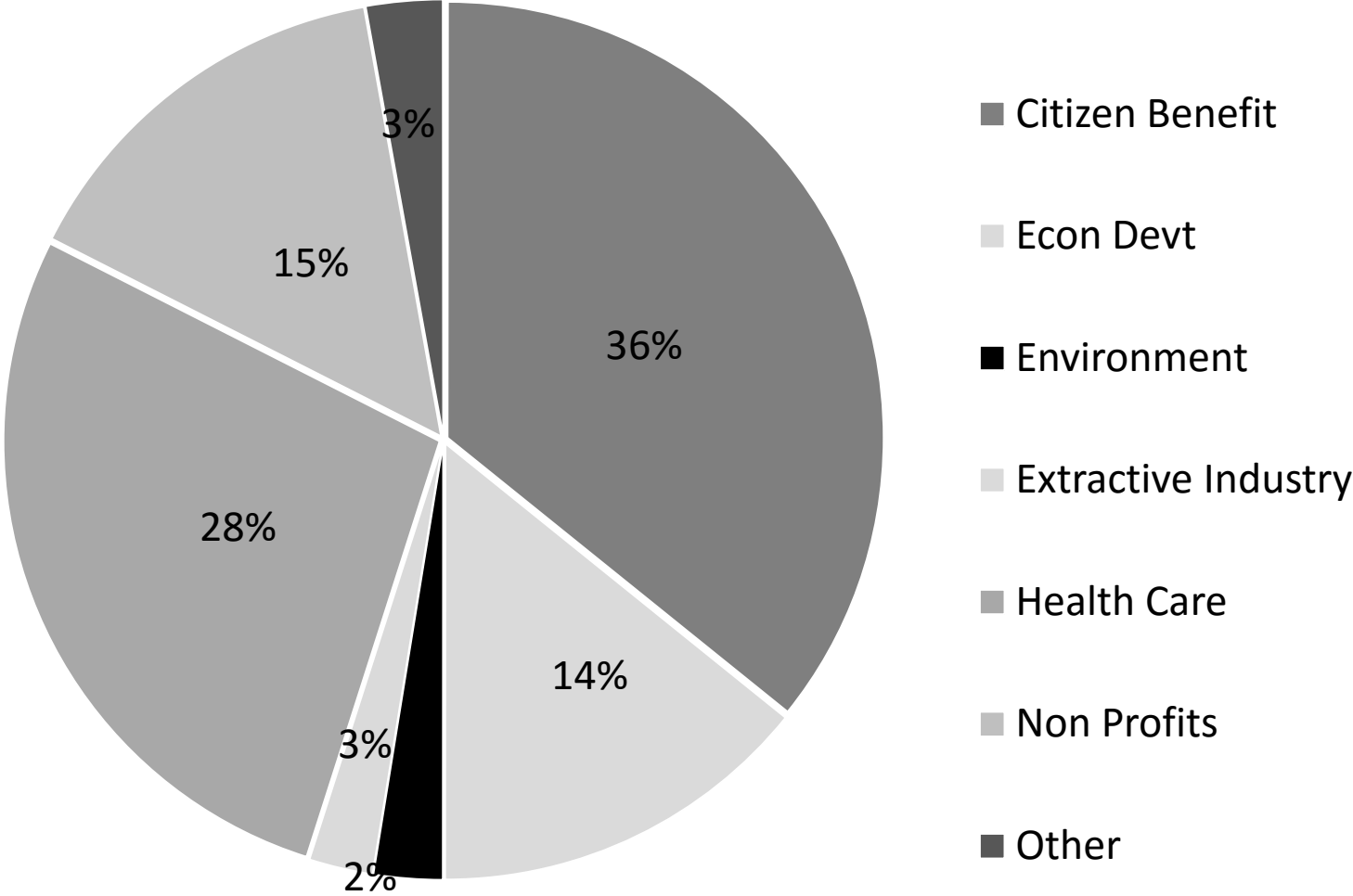
Short Description	Statute	2014 Cost (\$thousands)	Reliability Factor
Health Care Practitioners Deduction from GRT (cost includes hold harmless distributions to local governments)	7-9-93	\$73,235.0	1
Prescription Drugs Deduction from GRT or GGRT	7-9-73.2	\$65,000.0	3
NMMIP Assessment Credit against Insurance Premium Tax	59A-54-10C	\$63,668.1	
Medical Services Deduction from GRT	7-9-77.1	\$52,000.0	3
Hospitals 50% Deduction from GRT	7-9-73.1	\$34,800.0	2
Hospitals Credit against GRT	7-9-96.1	\$12,175.0	1
Rural Health Care Practitioners Credit against PIT	7-2-18.22	\$6,376.8	1
Construction Equipment and Materials for Certain Public Health Care Facilities (Sole Community Providers) Deduction from GRT	7-9-100	\$0.0	1
Services Used in Construction of Certain Public Health Care Facilities (Sole Community Providers) Deduction from GRT	7-9-99	\$0.0	3
Physician participation in cancer treatment clinical trials credit against PIT	7-2-18.27	\$0.0	1
Hearing and Vision Aides Deduction from GRT	7-9-111	Unknown	NDA
<b>TOTAL</b>		<b>\$307,254.9</b>	

Totals do not reflect importance of non-profits in this industry.

Source of data: Pam Stokes, Legislative Council Service, "Tax Deviation Report", June 20, 2016.

<https://www.nmlegis.gov/handouts/RSTP%20062016%20Item%203%202016%20Deviation%20Report.pdf>

# NM Tax Expenditures by Category\*



\*Many tax expenditures arguably fall into more than one category.

# Categorization of NM Tax Expenditures

Many **Citizen Benefit** expenditures are intended to provide direct tax relief either to all citizens, such as the deduction from gross receipts for the sale of food (7-9-92), or to a class of citizens, such as the property tax exemption for veterans (7-37-5). Others are intended to provide benefits to citizens indirectly, such as the Affordable Housing Tax Credit (7-9I-5) and the corporate-supported child care credit (7-2A-14).

**Economic Development** expenditures are primarily designed to stimulate the economy, create jobs and attract industry. These expenditures include the Angel Investment Credit (7-2-18.17), the High-Wage Jobs Tax Credit (7-9G-1) and the film and television credits (7-9F-1 *et seq.*).

Expenditures for the **Environment, Conservation and Renewable Energy** category are designed to promote a cleaner environment, conservation and renewable energy technology. They include the solar market development tax credit (7-2-18.14), the New Sustainable Building Tax Credits (7-2-18.29 and 7-2A-28) and several expenditures involving biodiesel.

**Extractive Industry** expenditures are focused on the industries involved in mining and severing oil, natural gas, uranium, timber, potash and other natural resources.



# Categorization of NM Tax Expenditures

**Health Care Industry** expenditures address a variety of health care related issues, including those intended to retain health care practitioners in the state, such as the health care practitioners' deduction (7-9-93); increase accessibility to health care, such as the Rural Health Care Practitioner Tax Credit (7-2-18.22); and reduce the cost of health care services to patients, such as the hearing and vision aids deduction (7-9-111).

**Non Profits** expenditures have been enacted to benefit charitable organizations that have been granted exemption from the federal income tax as an organization described in Section 501(c)(3) of the Internal Revenue Code of 1986. *Note that many health care providers e.g, Presbyterian Hospital, Federally Qualified Health Centers are non-profits.*

The category **Other** includes expenditures that can't be included in other categories either because the original intent of the expenditure can't be determined or it appears the expenditure was intended to promote or subsidize a particular industry or profession, including aerospace, agriculture, boxing, newspapers and jockeys.

-- Pam Stokes, Legislative Council Service, "Tax Deviation Report", June 20, 2016.

<https://www.nmlegis.gov/handouts/RSTP%20062016%20Item%203%202016%20Deviation%20Report.pdf>

# Alternatives to the Gross Receipts Tax

State-wide model of a Transactions Tax similar to that proposed by Sen Sharer. Model includes an income tax.

1. Building State model using Implan. Model will generate estimates of State General Fund revenues in 2012 that can be compared with actual receipts.

2. Anticipate building county models similar to those have built for the gross receipts tax for Bernalillo, San Juan, Chaves and other counties. Data required has already been assembled.

3. BBER's Implan model and databases are specific to counties and acquisition of models for municipalities is likely to be costly. BBER plans to use the county data and apply to estimating revenues for major cities, like Albuquerque, Las Cruces, etc. For the GRT this could be done using municipal taxes and distributions already in place. For the Sharer model, we would use the tax rates as proposed for counties and municipalities.

4. Results from 3. can be compared with actual distributions to counties and munis. BBER has already put together the data to make these comparisons.