Better Reflecting Transitions in Market Production by Government Functions Over Time: Updating the Classification of State and Local Government Enterprises in the National Income and Product Accounts[1]

Author Tina Highfill, U.S. Bureau of Economic Analysis

Contact tina.highfill@bea.gov

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Abstract Government enterprises are government agencies that operate like market producers by covering a substantial proportion of their operating costs by selling goods and services to the public. The current surplus of state and local government enterprises in the National Income and Product Accounts (NIPAs) was –$17.5 billion in 2020, driven by negative operating surplus for two government functions: housing and urban renewal and public transit. Using Census of Government data for 1967–2017 to better identify government functions that charge economically significant prices and therefore operate like market producers, this paper shows housing and urban renewal and public transit should no longer be classified as state and local government enterprises in the NIPAs as of 1972 and 1982, respectively. Additionally, hospitals and solid waste management should be classified as state and local government enterprises beginning in 1977 and 1992, respectively. This updated reclassification would better reflect changes in market production behavior over time for government functions and result in positive current operating surplus in the NIPAs for state and local government enterprises.

Keywords Macroeconomic data, national accounts, local government, state government, government enterprises

JEL codes C82, E01, H11, H70

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Bureau of Economic Analysis
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1. Introduction

Government enterprises are defined in the National Income and Product Accounts (NIPA) handbook as "government agencies that (1) cover a substantial proportion of their operating costs by selling goods and services to the public and (2) that maintain their own separate accounts" (U.S. Bureau of Economic Analysis, 2019). This definition corresponds with the *System of National Accounts* (*SNAs*) recommendation for identifying quasi-corporations, including government enterprises, as institutions that charge economically significant prices (European Commission et al., 2009). Both the NIPA handbook and *SNAs* operationalize economically significant prices using the ratio of sales charges for a product to its related production costs, specifically, "if the revenue obtained through user-charges covers 50 percent or more of its operating expenses it is classified in the I-O table and the NIPA's [sic] as a government enterprise" (U.S. Bureau of Economic Analysis, 1977).

The NIPAs currently classify as enterprises the following state and local government functions: water and sewerage; gas and electricity; toll facilities; liquor stores; air and water terminals; housing and urban renewal; public transit; lotteries; gaming administered by Indian tribal governments; off-track betting, local parking; and miscellaneous activities. The list of state and local government enterprises used in the NIPAs has been static for decades and requires an update to reflect changes in market production behavior by government functions over that time. In this paper, Census of Governments microdata on government finances are used to update the current list of state and local government enterprises by identifying functions that charge economically significant prices over the 1967–2017 period. The data show housing and urban renewal and public transit should no longer be classified as enterprises as of 1972 and 1982, respectively. Additionally, state and local government hospitals and solid waste management should be reclassified as government enterprises as of 1977 and 1992, respectively. This updated classification would better reflect how these functions have evolved over time in terms of market production behavior and would subsequently result in positive current operating surplus in the NIPAs for state and local government enterprises.

Value added by government enterprises is recorded in the NIPAs in the business sector, together with the value added by private businesses. Sales of products by government enterprises to persons are recorded as personal consumption expenditures (PCE), and those to businesses are recorded as intermediate purchases. Therefore, an accurate accounting of government enterprises is fundamental not only for understanding changes in market behavior for government functions over time, but also for correct measures of PCE and intermediate inputs for businesses. For a comprehensive analysis of the motivation and guidelines for updating government enterprises in the NIPAs, see the paper, "Quasi-Corporations and Institutional Sectors in the U.S. National Accounts" by Rassier, Braybrooks, Chute, and Krakower (2016).

Section 2 of this paper describes the methodology used to identify state and local government enterprises between 1967 and 2017 and also describes the process for developing a production account for these enterprises. Section 3 summarizes the results of this analysis. Section 4 provides context as to what is causing certain government functions to exhibit changes in enterprise behavior over the past few decades and why an update to the NIPA classifications is recommended to better reflect transitions in market production by these government functions over time.

2. Methodology

2.1 Data

2.1.1 Census of Government data

To identify state and local government functions that charge economically significant prices for goods and services sold to the public, operationalized using sales charges and production costs, quinquennial Census of Governments microdata on government finances for state and local government functions were used. Data for local governments cover 1967–2017 and data for state governments cover 1972–2017. The data include records for individual states, counties, municipalities (cities), townships, independent school districts, and special districts.

As defined in the NIPA handbook and *SNAs*, for a government function to be considered a government enterprise, function-level data on both sales charges and expenditures are necessary (this aligns with the second NIPA criterion that a government agency must "maintain their own separate accounts"). Sales charges and expenditures (cost) data are available for the following functions: air transportation, education, electric power utility, gas supply utility, hospitals, housing and community development, liquor stores, miscellaneous commercial activities, natural resources, parking facilities, parks and recreation, regular highways, sea and inland port facilities, sewerage, solid waste management, toll highways, transit systems utility, water supply utility, and unclassified functions (see appendix table 1 for a description of each function).[2] Enterprise activity could not be ascertained for some functions because only expenditures data were available. These functions include central staff services, corrections, employment security administration, financial administration, fire protection, general public buildings, judicial and legal, libraries, police protection, protective inspection and regulation, public welfare, total vendor payments, state share of Medicare part D (prescription drug coverage).

The Census data for 1967–2012 divide revenue into four types: current sales charges, taxes, intergovernmental, and miscellaneous. Expenditure data are also provided by type, including operating, intergovernmental, or capital outlays. Expenditures for current operations include salaries and wages of own officers and employees, supplies, materials, and contractual services except any amounts for capital outlays. Salaries and wages include gross amounts paid for compensation of own officers and employees (prior to deducting for taxes withheld, retirement contributions, charges for subsistence, or other purposes), including both current operations expenditures and capital outlay expenditures.

[2] In the NIPAs, housing and community development is referred to as "housing and urban renewal" and transit system utility as "public transit."

Salaries and wages exclude employer contributions for any type of employee fringe benefit and the value of subsistence, quarters, or other payments in-kind to military or other public employees. Expenditures for current operations also include repair and maintenance services for the upkeep of buildings, infrastructure, and equipment to maintain required standards of compliance for their intended use.

To measure the potential impact of reclassifying state and local government enterprises in the NIPAs, production accounts were also calculated using the function-level Census data. Production accounts are comprised of output, intermediate consumption, value added, compensation, and operating surplus measures. Unfortunately, the 2017 microdata do not include the full financial information present in the older data, notably total revenue, charges, and expenditures values, so production accounts were not calculated for 2017.

2.1.2 BEA industry data

Consumption of fixed capital (CFC) was also estimated for each government function. CFC is a measure of capital used up in production and reflects the decline in the value of the stock of fixed assets due to physical deterioration, normal obsolescence, and accidental damage (U.S. Bureau of Economic Analysis, 2019). Omitting CFC would overestimate the ratio of sales charges to production costs that is used to identify economically significant prices. CFC is not available in the Census data, so it was estimated using BEA data on current-cost depreciation of private fixed assets for similar industries. Many government functions concord directly with BEA industries, such as hospitals, education, and air transportation. For functions that did not have an exact match to industries, the closest industry available in the BEA data was used. See appendix table 2 for the full list of industries used to measure CFC for each government enterprise.

2.2 Methods

2.2.1 Identifying enterprise activity

Corresponding to the NIPA handbook and *SNAs* recommendation for identifying economically significant prices, a state and local government function was classified as an enterprise if its ratio of sales charges to production costs was 0.5 or greater. Sales charges were available directly from the Census data for each function. As a measure of production costs, Census operating expenditures for each function were used, plus an estimate of CFC using BEA data on current-cost depreciation of private fixed assets. To estimate CFC for each function, the share of gross output attributable to CFC for the closest industry available in the BEA data was used (see appendix table 2). As an example, table 1 shows the industry

share of gross output attributable to CFC for private hospitals ranged from 5 to 7 percent between 1967 and 2017, similar to air transportation's share of 8–9 percent over that period. To estimate total production costs, Census operating expenditures for each function were grown by the share of CFC to gross output found in the BEA industry data. The ratio of sales charges to production costs for each function was calculated using the aggregated state and local government values.

Table 1. Current-Cost Depreciation of Private Fixed Assets as a Share of Gross Output for Select Industries and Years Using BEA Industry Data (billions of dollars)

	1967	1992	2017
Hospitals			
Gross output	14.7	301.5	880.2
Current-cost depreciation of private fixed assets	0.9	16.0	61.7
Depreciation's share of gross output	6%	5%	7%
Air transportation			
Gross output	7.8	83.0	222.8
Current-cost depreciation of private fixed assets	0.6	6.5	19.0
Depreciation's share of gross output	8%	8%	9%
Depreciation's share of gross output for all private industries (average)	6%	8%	9%

Note: Hospitals includes data for nursing homes for 1967 and 1992.

2.2.2 Compiling a production account

A production account consists of values for output, intermediate consumption, value added, compensation, and operating surplus. Output was calculated by adding charges and revenue for enterprise functions. Intermediate consumption was calculated as the difference between operating expenditures and compensation for enterprise functions. Operating expenditures were found by subtracting capital outlays and interest expense from direct expenditures. Since compensation is not available by function in the microdata, this was calculated by multiplying total wages by a ratio of direct expenditures for each function to total direct expenditures. Then, to account for compensation attributable to current operating expenditures, compensation was weighted by share of operating expenses to operating expenses plus capital outlays. Value added was calculated by subtracting intermediate consumption from output, and operating surplus was calculated by subtracting compensation from value added. The information needed for a production account is not available using the 2017 Census microdata.

3. Results

3.1 Summary statistics for state and local government finances

Table 2 shows state governments had slightly lower revenue and expenditure totals compared to local governments in 1972, but that share increased over the period, garnering more than half of the revenue and expenditure totals in both 1992 and 2012.[3] State governments generated only about one-third of charges over the 1972–2012 period, remaining mostly stable.

Table 2. States' Share of Total State and Local Government Revenue, Charges, and Expenditures

	1972	1992	2012
Revenue	49%	53%	53%
Charges	34%	30%	33%
Expenditures	48%	51%	55%

Table 3 shows the distribution of revenue, charges, and expenditures by local government type for 1972, 1992, and 2012. Municipalities represented the largest share of local government revenue for all years, though shares decreased between 1972 and 2012, from 36 percent to 32 percent. School districts garnered almost as much revenue as municipalities over the period and also experienced a shrinking share over time. Counties and special districts saw an increase in revenue shares over the period with counties' shares increasing from 21 percent to 23 percent and special districts' shares doubling from 6 to 12 percent. Townships represented a small percentage of revenue, only 3–4 percent from 1972 to 2012. Expenditures shares mostly mirrored revenue shares for all local government types and years. Municipalities also had the largest share of charges, representing 52 percent of the total in 1972 and falling to 44 percent by 2012. Unlike with revenue, special districts had the second largest share of charges after municipalities, increasing from 20 percent to 29 percent over the 40 years.

[3] Tables 2 and 3 only cover 1972–2012 due to unavailable data for 1967 and 2017.

Table 3. Share of Local Government Revenue, Charges, and Expenditures by Type of Local Government

	1972	1992	2012
Revenue ($000s)	$116,985,690	$670,093,995	$1,661,591,286
Counties	21%	23%	23%
Municipalities	36%	34%	32%
School districts	34%	30%	30%
Special districts	6%	10%	12%
Townships	4%	3%	3%
Charges ($000s)	$18,991,092	$141,930,922	$391,854,189
Counties	15%	19%	20%
Municipalities	52%	46%	44%
School districts	11%	6%	5%
Special districts	20%	27%	29%
Townships	2%	2%	2%
Expenditures ($000s)	$120,424,655	$673,127,585	$1,652,392,312
Counties	20%	23%	23%
Municipalities	36%	33%	31%
School districts	33%	30%	31%
Special districts	7%	10%	12%
Townships	3%	3%	3%

Table 4 shows the relative importance of each functions' charges by government type in 2017.[4] Hospitals represented the largest share of charges for state and local governments at 24 percent of the total, followed by education at 17 percent and electric power utility at 12 percent. Over 70 percent of state government charges were attributable to only two functions: education at 45 percent and hospitals at 28 percent. For local governments, hospitals (21 percent) and electric power utility (16 percent) represented the greatest share of charges, though there was wide variation across different types of governments. Hospitals' share of charges for local governments ranged from 1 percent for townships to 30 percent for special districts and 41 percent for counties. Shares for electric power utility ranged from 1 percent for counties to 10 percent for townships and 22 percent for municipalities. Water supply utility and sewerage represented relatively large shares of charges for both municipalities and townships. Counties had 27 percent of charges concentrated in the "unclassified" function.

[4] School districts are excluded from the analysis moving forward because their one function, education, is not considered an enterprise by any measure or classification.

Table 4. Functions' Share of Total Function Charges for Each Type of Government, 2017 (%)

Function	State and local	State	Local	Local			
				Counties	Municipalities	Special districts	Townships
Air transportation	4	1	5	3	6	6	0
Education	17	45	1	3	0	0	4
Electric power utility	12	4	16	1	22	20	10
Gas supply utility	1	0	1	0	2	1	0
Hospitals	24	28	21	41	6	30	1
Housing and community development	1	0	1	0	1	2	0
Liquor stores	1	3	0	1	0	0	0
Miscellaneous commercial activities	1	1	1	0	0	1	1
Natural resources	1	1	1	1	0	1	0
Parking facilities	0	0	1	0	1	0	1
Parks and recreation	2	1	2	2	3	2	6
Regular highways	0	0	0	1	1	0	0
Sea and inland port facilities	1	1	1	0	1	2	0
Sewerage	9	0	13	7	19	8	31
Solid waste management	3	0	4	6	5	1	8
Toll highways	3	4	2	1	1	3	0
Transit system utility	2	2	3	1	3	5	0
Unclassified	10	8	12	27	9	5	17
Water supply utility	10	0	15	5	20	14	20
Total	100	100	100	100	100	100	100

3.2 Ratio of charges to production costs

Table 5 shows the ratio of charges to production costs (operating expenditures plus CFC) for each function for 1967–2017. The data show most functions that were enterprises in 1967 remained enterprises for the next 50 years, with five exceptions. Hospitals and solid waste management transitioned from non-enterprise (general government) to enterprise in 1977 and 1992, respectively. Housing and community development and transit system utility transitioned from enterprise to general government in 1972 and 1982, respectively.

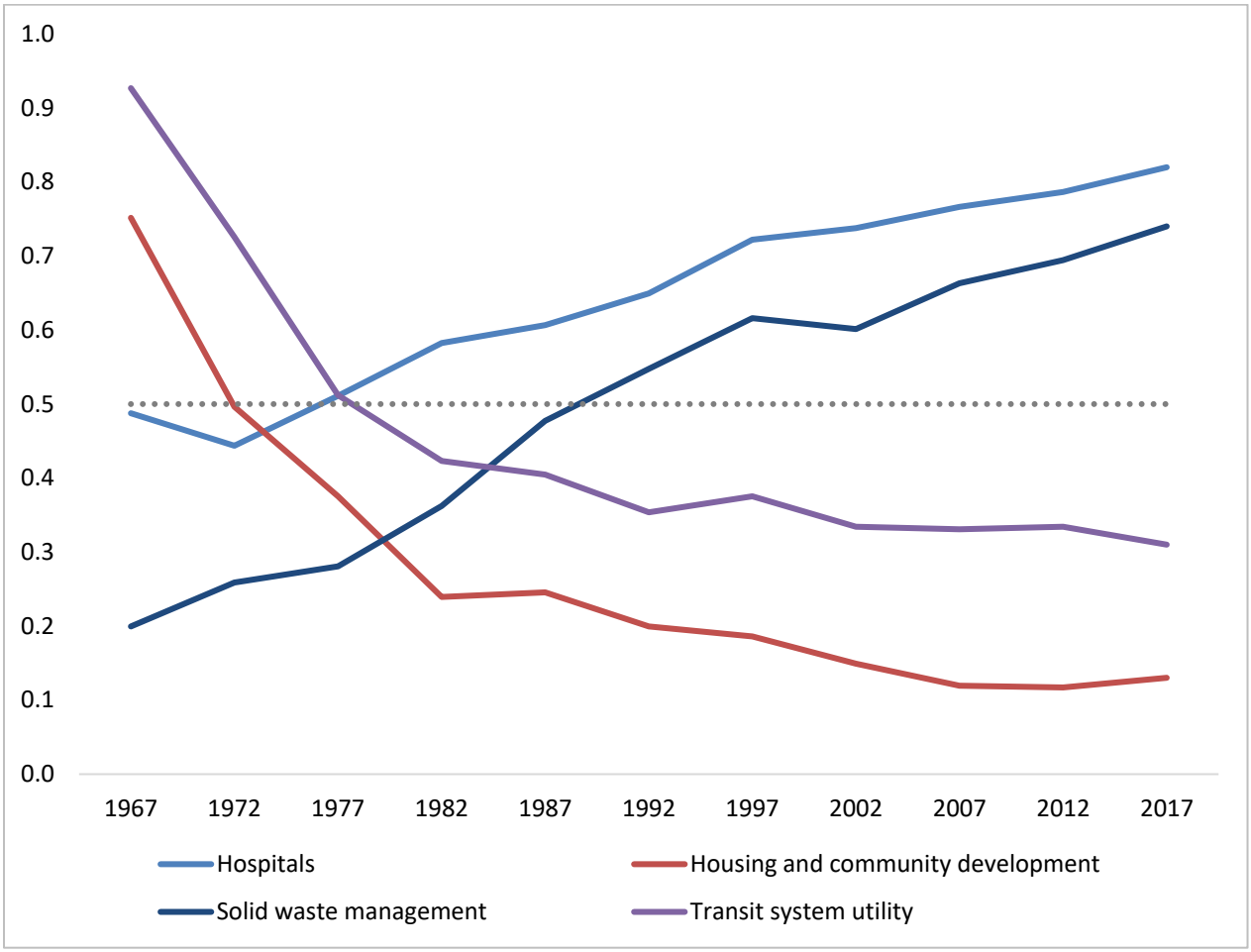
Table 5. Ratio of Charges to Production Costs for State and Local Government Functions, 1967–2017

Function	1967	1972	1977	1982	1987	1992	1997	2002	2007	2012	2017
Air transportation	1.70	1.64	1.56	1.41	1.56	1.55	1.57	1.41	1.49	1.54	1.54
Education	0.07	0.12	0.11	0.11	0.12	0.13	0.14	0.13	0.14	0.14	0.14
Electric power utility	1.53	1.33	1.19	1.15	1.15	1.16	1.18	1.07	1.09	1.07	1.11
Gas supply utility	1.18	1.09	1.04	0.98	0.99	1.03	1.04	0.98	0.67	1.02	0.99
Hospitals	0.49	0.44	0.51	0.58	0.61	0.65	0.72	0.74	0.77	0.79	0.82
Housing and community development	0.75	0.496	0.38	0.24	0.25	0.20	0.19	0.15	0.12	0.12	0.13
Liquor stores	1.18	1.24	1.19	1.14	1.11	1.14	1.17	1.16	1.16	1.18	1.14
Miscellaneous commercial activities	.	.	1.11	1.07	1.06	1.18	1.27	1.08	1.26	1.35	1.02
Natural resources	0.21	0.14	0.15	0.14	0.15	0.16	0.18	0.16	0.17	0.18	0.18
Parking facilities	2.61	1.88	1.61	1.37	1.3	1.65	1.68	1.65	1.99	1.58	1.73
Parks and recreation	0.21	0.21	0.23	0.26	0.29	0.31	0.34	0.31	0.30	0.31	0.31
Regular highways	0.09	0.05	0.03	0.03	0.04	0.02	0.02	0.02	0.03	0.03	0.04
Sea and inland port facilities	1.66	1.32	1.3	1.25	1.28	1.30	1.31	1.28	1.39	1.37	1.41
Sewerage	0.96	1.02	0.90	0.89	1.04	1.14	1.18	1.21	1.21	1.29	1.33
Solid waste management	0.20	0.26	0.28	0.36	0.48	0.55	0.62	0.6	0.66	0.69	0.74
Toll highways	.	.	2.76	2.46	2.28	2.12	2.16	1.98	2.00	2.20	2.66
Transit system utility	0.93	0.73	0.51	0.42	0.40	0.35	0.38	0.33	0.33	0.33	0.31
Unclassified	0.38	0.22	0.20	0.26	0.30	0.35	0.44	0.44	0.46	0.49	0.60
Water supply utility	1.63	1.45	1.24	1.16	1.24	1.2	1.26	1.23	1.22	1.23	1.25

Notes: Functions identified as an enterprise when its ratio of charges to production costs is at least 0.5, highlighted in blue.
State government data unavailable for 1967.

Figure 1 charts these ratios for the relevant functions over time, showing a relatively steady transition for all four functions. The unclassified function also transitioned to enterprise from general government in 2017, but this function is not being considered for reclassification since its composition is variable from year to year.

Figure 1. Ratio of Charges to Production Costs for State and Local Government Functions that Transition Between General Government and Government Enterprise Between 1967 and 2017

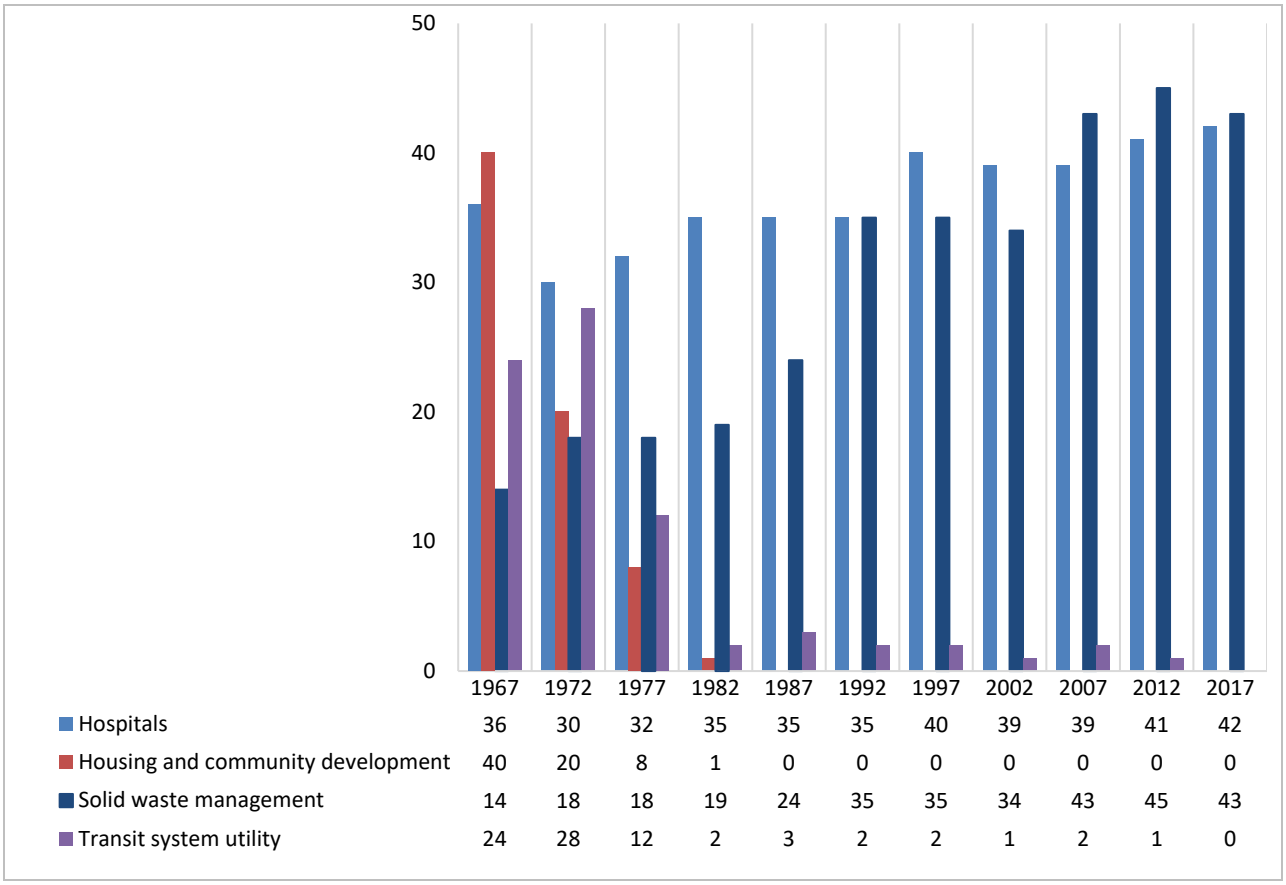


3.2.1 Estimates by state

Figure 2 shows the number of states where the four functions of interest (hospitals, housing and community development, solid waste management, and transit system utility) were charging economically significant prices between 1967 and 2017. The state distribution shows that the transition from enterprise to general government happened relatively swiftly for both housing and community development and transit system utility. Housing and community development went from meeting the

enterprise criteria in 40 states in 1967 to no states by 1987. Likewise, transit system utility met the enterprise criteria in 24 states in 1967, but in only 3 states by 1987. The story is different for hospitals and solid waste management, where many states showed these functions were operating like enterprises for the entire period. Thirty-six states showed hospitals were charging economically significant prices in 1967, increasing to 42 states by 2017.[5] The ratio of charges to production costs for state and local hospitals did not breach 0.5 until 1977, when some of the larger states started to operate like enterprises, most notably New York. For the solid waste management function, 14 states were charging economically significant prices in 1967, increasing to 43 states by 2017.

Figure 2. Number of States Where Selected State and Local Government Functions Meet the Definition of Enterprise, 1967–2017



	1967	1972	1977	1982	1987	1992	1997	2002	2007	2012	2017
Hospitals	36	30	32	35	35	35	40	39	39	41	42
Housing and community development	40	20	8	1	0	0	0	0	0	0	0
Solid waste management	14	18	18	19	24	35	35	34	43	45	43
Transit system utility	24	28	12	2	3	2	2	1	2	1	0

Notes: Functions identified as an enterprise when its ratio of charges to production costs is at least 0.5. State government data unavailable for 1967.

[5] Since state government data are not available for 1967, the number of states charging economically significant prices for this year (36) only reflects values for local government hospitals. In 1972, when both state and local government data are available, only 30 states had a ratio of 0.5 or more. While it seems likely the value for 1967 is an overestimate, this does not change the interpretation of the results.

3.3 Production account for state and local government enterprises

Table 6 shows a production account for state and local government enterprises in 1972, 1992, and 2012 using functions identified as enterprises for each year (i.e., when the ratio of charges to production costs is at least 0.5, corresponding to table 5). This means the 1972 values include transit system utility but exclude housing and community development since its ratio was below 0.5 in 1972. Likewise, the 2012 values include hospitals and solid waste management, but exclude transit system utility and housing and community development. This production account shows output in current dollars was estimated to be $12.2 billion in 1972, growing to $378.1 billion in 2012, or about 1.3 percent of total U.S. output in 2012 (U.S. Bureau of Economic Analysis, 2021a). Between 1972 and 2012, intermediate consumption grew from $5.1 billion to $245.9 billion, value added grew from $7.1 billion to $132.3 billion, compensation grew from $4.1 billion to $91.8 billion, and operating surplus grew from $3.0 billion to $40.4 billion. The operating surplus of over $40 billion in 2012 in this production account is much higher than the –$7.6 billion current surplus in the NIPAs for state and local enterprises, mostly due to the exclusion of transit system utility and housing and community development (U.S. Bureau of Economic Analysis, 2021b).

Table 6. Illustrative Production Account for State and Local Government Enterprises ($000s)

	1972	1992	2012
Output	12,247,770	130,801,102	378,104,891
Intermediate consumption	5,101,504	83,460,580	245,852,546
Value added	7,146,266	47,340,522	132,252,345
Compensation	4,099,447	44,949,332	91,834,719
Operating surplus	3,046,819	2,391,190	40,417,626

4. Discussion

NIPA table 3.8 shows current surplus of state and local government enterprises has been negative since 2003, driven by public transit and housing and urban renewal (U.S. Bureau of Economic Analysis, 2021b). If the functions classified as state and local government enterprises in the NIPAs were updated to reflect changes in market production behavior since 1967, housing and urban renewal and public transit would not be considered enterprises as of 1972 and 1982, respectively, while hospitals and solid waste management would be considered government enterprises as of 1977 and 1992, respectively.

Reclassifying state and local government public transit and housing and urban renewal from government enterprises to general government would better reflect how these functions have evolved over time. In the first half of the 1900s, public transit was dominated by privately run transit (especially streetcars), but when automobiles became more common and populations began moving away from cities and into the suburbs, ridership declined, buses started to become more prevalent, and more distant subway stations needed to be constructed (Young, 2015). State and local governments stepped in when private companies could no longer make a profit (Transportation Research Board and National Research Council, 2001). Housing and urban renewal also underwent substantial changes in the second half of the 1900s. Formalized by a variety of Acts passed by Congress, including the Civil Rights Act of 1964, Housing and Urban Development Act of 1965, and the Housing and Community Development Act of 1974, the focus of housing and urban renewal shifted to subsidies for low-income households and redevelopment of existing neighborhoods and away from demolition of dilapidated properties that made way for the development of higher-income properties (von Hoffman, 2012). Corresponding to these transitions, the current surplus of both public transit and housing and urban renewal in the NIPAs steadily declined since 1960, the first year the data are published. In 1960, the current surplus for public transit was –$0.1 billion and $0.1 billion for housing and urban renewal, but by 2019 the current surplus was –$55 billion for public transit and –$25.1 billion for housing and urban renewal (U.S. Bureau of Economic Analysis, 2021b).

Hospitals and solid waste management have also evolved since the mid-1900s. Hospital services changed significantly as health insurance became the norm and technological advances rapidly emerged, incentivizing hospitals to offer more and costly services to increase reimbursement (Moseley III, 2008). Solid waste management also changed over time in response to growing concerns related to the environment and public health, especially trash collection, landfill maintenance, and recycling services (Starkey and Hill, 1996). Although the mechanism driving the transition to economically significant prices for solid waste management is not as obvious as the other functions, the Census of Government data show average annual charges for this function consistently outpaced operating

expenditures over the 1967–2017 period, with charges growing by 14 percent on average, but average operating expenditures growing by only 9 percent.

Using Census of Government data for state and local governments spanning 1967–2017, this analysis shows housing and urban renewal and public transit ceased charging economically significant prices during the 50-year period. Over the same time span, hospitals and solid waste management began charging economically significant prices. Corresponding to both the NIPA handbook and *SNAs*, these results suggest housing and urban renewal and public transit should no longer be classified as state and local government enterprises as of 1972 and 1982, respectively. Additionally, hospitals and solid waste management should be reclassified as state and local government enterprises as of 1977 and 1992, respectively. This updated reclassification would better reflect changes in market production behavior over time for government functions and result in positive current operating surplus in the NIPAs for state and local government enterprises.

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Appendix

Appendix Table 1. Description of State and Local Government Functions in the Census of Government Financial Microdata – Table Continues

Government function	Description
Air transportation	Construction, maintenance, operation, and support of airport facilities.
Education	Schools, colleges, and other educational institutions (e.g., for blind, deaf, and other handicapped individuals) and educational programs for adults, veterans, and other special classes. Higher Education includes activities of degree-granting post-secondary institutions operated by the state and local governments, except that agricultural extension services and experiment stations are classified under *Natural Resources* and hospitals serving the public are classified under *Hospitals*. Elementary and Secondary Education comprises payments for instructional, support services and other activities of local public schools for kindergarten through high school programs. This includes the operation of public schools, construction of school buildings, purchase and operation of school buses, and other services ancillary to the provision of public schools. Revenue and expenditure for dormitories, cafeterias, athletic events, bookstores, and other auxiliary enterprises financed mainly through charges for services are reported on a gross basis in both higher and elementary-secondary education. Other Education includes state educational administration and services, tuition grants, fellowships, aid to private schools, and special programs.
Electric power utility	Operation and maintenance of electric power system including production or acquisition and distribution of electric power. See under *Utility*.
Gas supply utility	Operation and maintenance of gas supply systems including acquisition and distribution of natural gas. See under *Utility*.
Hospitals	Financing, construction, acquisition, maintenance or operation of hospital facilities, provision of hospital care, and support of public or private hospitals. Own Hospitals are facilities administered directly by the government concerned; Other Hospitals refers to support for hospital services in private hospitals or other governments. However, see *Public Welfare* concerning vendor payments under welfare programs. Nursing homes are included under *Public Welfare* unless they are directly associated with a government hospital.
Housing and community development	Construction and operation of housing and redevelopment projects, and other activities to promote or aid housing and community development.
Liquor stores	Alcoholic beverage distribution facilities operated by governments maintaining alcoholic beverage monopoly systems.
Miscellaneous commercial activities	Provision and operation of commercial facilities not classified under particular functions. Includes a bank (North Dakota), a cement plant, hail insurance systems, and the like.

Appendix Table 1. Description of State and Local Government Functions in the Census of Government Financial Microdata – End of Table

Government function	Description
Natural resources	Conservation, promotion, and development of natural resources, such as soil, water, forests, minerals, and wildlife. Includes irrigation, drainage, flood control, forestry and fire protection, soil reclamation, soil and water conservation, fish and game programs, and agricultural fairs. For the federal government, includes agricultural experiment stations and extension services, farm price stabilization programs, farm insurance and credit activities, and multipurpose power and reclamation projects.
Parking facilities	Construction, purchase, maintenance, and operation of public-use parking lots, garages, parking meters, and other distinctive parking facilities on a commercial basis.
Parks and recreation	Provision and support of recreational and cultural-scientific facilities and activities including golf courses, playfields, playgrounds, public beaches, swimming pools, tennis courts, parks, auditoriums, stadiums, camping areas, recreation piers, marinas, botanical gardens, galleries, museums, and zoos. Also includes building and operation of convention centers and exhibition halls.
Regular highways	Construction, maintenance, and operation of highways, streets, and related structures, including non-toll highways, bridges, tunnels, ferries, street lighting, and snow and ice removal.
Sea and inland port facilities	Construction, maintenance, operation, and support of canals and other waterways, harbors, docks, wharves, and related marine terminal facilities. (Also called “Water Transport and Terminals”).
Sewerage	Provision of sanitary and storm sewers and sewage disposal facilities and services, and payments to other governments for such purposes.
Solid waste management	Street cleaning, solid waste collection and disposal, and provision of sanitary landfills and resource recovery facilities.
Toll highways	Toll turnpikes and toll roads, toll bridges, ferries, and toll tunnels operated by state agencies. Expenditure for this purpose includes only acquisition, construction, and maintenance of state facilities; it does not include any debt service on toll facility debt or any aid to local governments for toll facilities.
Transit system utility	Construction, maintenance, and operation of public mass transit systems—bus, commuter rail, light rail, or subway systems. Excludes systems established solely to transport elementary and secondary school pupils. Ferry systems are classified under *Highways*. See under *Utility*.
Unclassified	All other general charges, not elsewhere classified.
Utility	A government-owned and -operated water supply, electric light and power, gas supply, or transit system. Excludes government revenue, expenditure, and debt relating to utility facilities leased to other governments or persons, and other commercial type activities of governments, such as port facilities, airports, housing projects, radio stations, steam plants, ferries, and the like which are classified as general government activities.
Water supply utility	Operation and maintenance of water supply system including acquisition and distribution of water to the general public or to other local governments for domestic or industrial use. Acquisition and distribution of water for irrigation of agricultural lands are classified under *Natural Resources*. See under *Utility*.

Source: U.S. Census Bureau (2008)

Appendix Table 2. BEA Industries Used to Calculate Consumption of Fixed Capital for Government Functions

Government function	BEA Industry
Air transportation	Air transportation
Education	Educational services
Electric power utility	Utilities
Gas supply utility	Utilities
Hospitals	Hospitals for 1997–2017. Nursing homes are combined with hospitals in BEA's industry tables prior to 1997, so the 1967–1992 estimates also include nursing homes.
Housing and community development	Real estate
Liquor stores	Retail trade
Miscellaneous commercial activities	Average of all industries
Natural resources	Average of all industries
Parking facilities	Other transportation and support activities
Parks and recreation	Amusements, gambling, and recreation industries
Regular highways	Construction
Sea and inland port facilities	Water transportation
Sewerage	Utilities
Solid waste management	Waste management and remediation services
Toll highways	Construction
Transit system utility	Transit and ground passenger transportation
Unclassified	Average of all industries
Water supply	Utilities