Accounting for Special District Governments in the U.S. National Accounts

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Abstract

Special district governments are a type of local government that may embody characteristics of both governments and private businesses and are an important source of public services. Given the combined characteristics of special districts and their economic importance, a complete and consistent economic accounting for special districts that operate like businesses – special district enterprises – is important to the relevance and accuracy of the U.S. national accounts. In this paper, we present a preliminary set of economic accounts for special district enterprises using two different approaches for identifying special district enterprises: by unit and by function. Our results suggest that the identification of enterprises by function rather than by unit yields differences in key economic accounting aggregates. Our results also suggest that some functions currently treated as enterprise functions under the U.S. national accounts existing methodology do not fit the *SNA* criteria for treatment as quasi-corporations. We conclude that identification of enterprises by function may be preferable to identification by unit because the sample selection is more precise. Based on identification by function, measured value-added for enterprises in 2012 is $33.2 billion, of which $16.7 billion reflects compensation and $16.5 billion reflects operating surplus.

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1. Introduction

In the United States, a special district government is a type of local government that is generally established to provide a single service or multiple related services, which differ from other types of governments that serve multiple purposes. Examples of special districts include utilities, transportation infrastructure, natural resource management, parks, libraries, and public health facilities. A special district has sufficient administrative and fiscal autonomy to qualify as an independent government and is generally accountable to the public. While a special district may have authority to tax and may receive revenue from other governments, a significant amount of revenue among special districts may also be generated from sales of services at market equivalent prices. Thus, special districts may embody characteristics of both governments and private businesses from a production point of view.

The number of special district governments in the United States has grown steadily from just over 12,000 in 1952 to just under 38,000 in 2012 according to statistics available from the U.S. Census Bureau. In 2012, their revenue exceeded $200 billion, over half of which was attributable to sales. Also in 2012, their total revenue was about 13 percent of total revenue for all local governments, and their sales revenue accounted for about 30 percent of sales revenue for all local governments.

Given the combined characteristics of special districts and their economic importance, a complete and consistent economic accounting for special districts that operate like private businesses is important to the relevance and accuracy of the U.S. national accounts. Currently, the U.S. national accounts do not limit the inclusion of special districts to a single institutional sector and do not separately identify some transactions – such as property income – for special districts, which may yield two consequences.

First, under international guidelines in the *System of National Accounts* (*SNA*) (European Commission et al., 2009), special districts that operate like private businesses – special district enterprises – qualify for treatment as quasi-corporations and should be included in the business sector (i.e., *SNA* corporations sector), and special districts that operate like government units should be included in the government sector. Under current U.S. measurement practice, special district enterprises are identified by functional classification such as utilities or toll highways rather than by individual characteristics, which may result in some special districts that belong in the business sector being inadvertently included in the government sector or vice versa. While contributions to value-added by special district enterprises are not likely to be affected because value-added is indirectly measured, the current mix of special districts between the business sector and the government sector may yield measures of income attributable to special district enterprises that do not accurately absorb the related value-added. The consequence would generate a statistical discrepancy between measured value-added included in expenditure-based gross domestic product (GDP) and measured compensation and operating surplus included in income-based GDP.

Second, under the current U.S. treatment, some transactions for special districts that operate like private businesses are not separately identified as recommended in the *SNA*. In addition, special districts that operate like private businesses are reflected in the business sector for production measures and in the government sector or business sector for income measures. Thus, not only is the current U.S. sectoring treatment inconsistent with the *SNA*, the current U.S. sectoring treatment is internally inconsistent. The consequence in each case prevents the compilation of complete sets of accounts for institutional sectors as also recommended in the *SNA*.

The inconsistencies between the U.S. national accounts and the *SNA* and the internal inconsistencies in the U.S. national accounts are not limited to special districts. Additional inconsistencies result from enterprise activity in other local governments, including counties, townships, and municipalities, as well as enterprise activity in state governments and the Federal government. However, this paper focuses on an economic accounting picture of special district enterprises and future work will focus on incorporating other government enterprises.[1]

In this paper, we distinguish special district governments that operate like private businesses from those that operate like governments and present a preliminary set of economic accounts for those that operate like private businesses – what we refer to as "special district enterprises" – for five-year intervals from 1992 to 2012. Our results are based primarily on microdata collected on government finances for individual local governments with the U.S. Census of Governments. Results suggest that the identification of enterprises by function rather than by unit yields differences in key economic accounting aggregates. Our results also suggest that some functions currently treated as enterprise functions under the U.S. national accounts existing methodology do not fit the *SNA* criteria for treatment as quasi-corporations. We conclude that identification of enterprises by function may be preferable to identification by unit because the sample selection is more precise. Based on identification by function, measured value-added for enterprises in 2012 is approximately $33.2 billion, of which $16.7 billion reflects compensation and $16.5 billion reflects operating surplus. The results may change once additional data sources are incorporated. While published accounts for special district

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[1] In a recent article on reconciling remaining differences between the *SNA* and the U.S. national income and product accounts, McCulla, Moses, and Moulton (2015) outline the need for research on the sectoral treatment of all U.S. unincorporated enterprises. In related work, Rassier, Braybrooks, Chute, and Krakower (2016) present preliminary analysis of special districts and other unincorporated enterprises owned by different levels of government in the U.S.

governments may never be an objective, a complete and consistent economic accounting for them is a critical step to help improve the relevance and accuracy of the U.S. national accounts.

The next section outlines the recommended treatment for quasi-corporations in the *SNA*. Section 3 explains the current accounting for government enterprises in the U.S. national accounts. Section 4 summarizes the Census government finance data and presents the preliminary accounts for special district enterprises. Section 5 concludes and summarizes remaining work.

2. Recommended Treatment under International Guidelines

The *SNA* framework is designed with a sequence of balanced accounts that include a summary of transactions in production, related income, and capital formation as well as a summary of transactions in financial assets and liabilities that support production and mirror counterpart transactions. The most fundamental unit of observation in the *SNA* is referred to as an institutional unit, and one of the organizing principles of the *SNA* is to group institutional units into institutional sectors and subsectors. In order to qualify as an institutional unit for *SNA* sectoring, a unit must satisfy four criteria that include entitlement to own and exchange goods or assets, independence to incur liabilities and enter into contracts, autonomy to make economic decisions and engage in economic activities, and a complete set of financial accounts.

The *SNA* identifies two main types of institutional units: households and legal or social entities. Legal or social entities include enterprise units, government units, and non-profit institutions. Enterprise units are referred to in the *SNA* as corporations regardless of legal incorporation. Thus, corporations include "legally constituted enterprises" and "unincorporated enterprises" that are organized and operate as businesses. Unincorporated enterprises that satisfy

the *SNA* criteria for an institutional unit are referred to in the *SNA* as quasi-corporations, which may be owned by households, governments, or non-residents.

2.1. Institutional Sectors and Market Producers

The *SNA* framework includes five institutional sectors: non-financial corporations, financial corporations, general government, households, and non-profit institutions serving households (NPISHs). Figure 1 is based on an *SNA* illustrative allocation of units to institutional sectors. The distinction between units classified to one of the corporations sectors and units classified to the general government sector or the NPISH sector is made according to the production basis of the units. The production basis refers to the market or non-market nature of production undertaken by an institutional unit. Market producers provide goods and services to purchasers at "economically significant" prices. In the *SNA*, an economically significant price is a price that has a significant influence on the amounts producers are willing to supply and on the amounts purchasers are willing to buy. Economically significant prices generally cover a majority of the costs of production and may yield a profit or surplus for the unit. In particular, the *SNA* provides the following practical guidance for economically significant prices:

> *"Although there is no prescriptive numerical relationship between the value of output (excluding both taxes and subsidies on products) and the production costs, one would normally expect the value of goods and services sold (the sales) to average at least half of the production costs over a sustained multiyear period."* (*SNA* paragraph 22.29)

> *"Sales are measured before any taxes applicable to the products are added. Sales exclude all payments received from government unless they would be granted to any producer undertaking the same activity. Own account production is not considered as part of sales in this context."* (*SNA* paragraph 22.34)

> *"Production costs are the sum of intermediate consumption, compensation of employees, consumption of fixed capital, and other taxes on production. Further, if the unit is to be treated as a market producer, a return to capital is included in production costs. Subsidies on production are not deducted."* (*SNA* paragraph 22.35)

While the *SNA* does not include net interest charges in production costs, the *European System of Accounts* (*ESA*) (European Commission, 2013) provides the following counterparts to *SNA* paragraphs 22.34 and 22.35:

> *"For the market/non-market test, sales of goods and services correspond to sales receipts, in other words to the market output (P.11) increased by payments for non-market output (P.131), if any. Own-account production is not considered as part of sales in this context. Sales exclude also all payments received from government unless they are granted to other producers undertaking the same activity."* (*ESA* paragraph 20.30)

> *"Production costs are the sum of intermediate consumption, compensation of employees, consumption of fixed capital and other taxes on production. For the purpose of the market/non-market test, production costs are increased by the net interest charge and decreased by the value of any imputed production, notably own-account production. Subsidies on production are not deducted."* (*ESA* paragraph 20.31)

Market producers are classified to the non-financial corporations sector or the financial corporations sector with a separate public subsector recommended for market producers controlled by government. Non-market producers are classified to the general government sector or the NPISH sector.

2.2. Quasi-Corporations

The *SNA* concept of quasi-corporations is intended to classify to the corporations sectors those unincorporated enterprises that do not have a legal status separate from their owners but are nevertheless engaged in market production and have similar objectives, functions, and behaviors of corporations as opposed to the household, government, or non-resident units that own them. In practice, the lack of legal status can complicate the identification of quasi-corporations. However, the *SNA* emphasizes that unincorporated enterprises must satisfy the four criteria for an institutional unit in order to be treated as quasi-corporations and, thus, classified to the corporations sectors. In particular, the *SNA* emphasizes the necessity of a complete set of financial accounts, including income and capital flows between an enterprise and

its owner and including a balance sheet, for treating unincorporated enterprises as quasi-corporations.

Given the challenges associated with identifying quasi-corporations, the *SNA* provides additional recommendations on classifying unincorporated enterprises owned by governments. First, the *SNA* makes clear as follows that there is no condition under which an enterprise is deemed to be legally separate from its government owner:

> *"When a government unit wishes to intervene in the sphere of production it has three options: a) it may create a public corporation whose corporate policy, including pricing and investment, it is able to control; b) it may create an NPI that it controls; [or] c) it may produce the goods or services itself in an establishment that it owns but that does not exist as a separate legal entity from the government unit itself."* (*SNA* paragraph 4.120)

As a result, the *SNA* specifies the following three criteria under which a government quasi-corporation should be recognized:

> *"However, a government establishment, or group of establishments engaged in the same kind of production under common management, should be treated as a quasi-corporation if the following three criteria hold: a) the unit charges prices for its outputs that are economically significant; b) the unit is operated and managed in a similar way to a corporation; and c) the unit has a complete set of accounts that enable its operating surpluses, savings, assets and liabilities to be separately identified and measured. Such quasi-corporations are market producers that are treated as separate institutional units from the government units that own them. They are classified, sectored and sub-sectored in the same way as public corporations."* (*SNA* paragraph 4.121)

In addition, the *SNA* provides further clarification on the enterprise's independence from its government owner:

> *"In order to be treated as a quasi-corporation the government must allow the management of the enterprise considerable discretion not only with respect to the management of the production process but also the use of funds. Government quasi-corporations must be able to maintain their own working balances and business credit and be able to finance some or all of their capital formation out of their own savings, depreciation reserves or borrowing. The ability to distinguish flows of income and capital between quasi-corporations and government implies that their operating and financing activities are not fully integrated with*

*government revenue or finance statistics in practice, despite the fact that they are
not separate legal entities." (SNA paragraph 4.122)*

Finally, the *SNA* clarifies its sectoring recommendation for an enterprise that is not independent

of its government owner:

> *"Producer units of government that cannot be treated as quasi-corporations, like
> all unincorporated enterprises that cannot be separated from their owners,
> remain in the same institutional unit as the owner, in this case within the general
> government sector. They are likely to consist largely, or entirely, of non-market
> producers: that is, producers most or all of whose output is supplied to other
> units free, or at prices that are not economically significant...However, it is
> possible for an unincorporated enterprise within a government to be a market
> producer. The example often quoted is that of a bookshop within a museum."*
> (*SNA* paragraph 4.123)

Paragraphs 4.121 – 4.123 imply that the most important determinants of a government

quasi-corporation are engagement in market production and the ability to distinguish flows of

income and capital between the enterprise and the government owner. In other words,

economically significant prices and a complete set of financial accounts can be used in practice

to classify a government unincorporated enterprise. Thus, units owned by governments are

classified to the general government sector if they do not charge economically significant prices

or if they do not have a complete set of financial accounts, and units owned by governments are

classified to the corporations sectors if they charge economically significant prices and they have

a complete set of financial accounts.

2.3. Institutional Sectors for Special District Governments

Special district governments fit the criteria for either the *SNA* corporations sectors or the

SNA general government sector. For all special district governments, a set of financial accounts

is available for individual units from the Census of Governments. The availability of financial

accounts on individual units engaged in a single function is unique to special district

governments and not available for single functions of other types of governments in the Census

of Governments. The financial accounting data for special district governments provide a complete accounting of revenue that includes taxes, intergovernmental receipts, sales charges, interest receipts, and other sources. The financial accounting data also provide expenditures that include intergovernmental payments, operating expenses (i.e., materials, supplies, and wages), outlays for capital improvements, interest paid, and other disbursements. The balance sheet components include debt and cash and securities assets but do not include non-financial assets and related depreciation. Thus, the financial accounting data contain some gaps in information important to economic accounts, but they do include information on flows of income and capital between special district governments and other government units.

The financial accounting data also contain information to identify special district governments engaged in market production as well as those not engaged in market production. In particular, data on sales charges and operating expenses are available to assess whether a given unit charges economically significant prices.

We use the financial accounting data to identify special district enterprises based on market production and to construct a set of preliminary economic accounts for them.

3. Current Treatment in the U.S. National Accounts

In the U.S. national accounts, special district governments are currently included in measures with all state and local governments—there is no separate accounting for special district governments. There is a separate accounting for state and local government units that engage in market production – referred to as "government enterprises" – and for state and local government units that engage in non-market production. Identification of government enterprises is made based on functions at the aggregate level of total state and local governments. The accounting for state and local government enterprises is not complete because the U.S.

national accounts do not separately identify property income flows or intergovernmental flows for government enterprises since the flows have not been separately identified from the general government in current source data. In addition, the current institutional sector treatment of state and local government enterprises is not internally consistent for different economic measures. In particular, production measures are included in the business sector while income measures are included in the government sector or business sector. Likewise, the current function-level identification of state and local government enterprises is not necessarily accurate—some government enterprises that belong in the business sector may be included in the government sector and vice versa. Moreover, an inaccurate mix of state and local government enterprises between the business sector and the government sector may yield inaccurate measures of operating surplus for government enterprises.

Value-added, compensation, and operating surplus of state and local government enterprises are currently measured independently in the U.S. national accounts. Value-added is measured using sales, which are recorded as personal consumption expenditures for household purchases. Business purchases from government enterprises are recorded as intermediate consumption. The value-added is included in the business sector and not separately recorded for government enterprises. Compensation is measured as the sum of wages and salaries and supplements. Separate estimates of compensation are made for government enterprises and general government units. Compensation for all government units – enterprise and non-enterprise – is included in the government sector. Operating surplus for government enterprises is measured as the difference between sales and production costs for functions that have been identified as enterprise functions. The following functions have been identified as enterprise functions in the U.S. national accounts: air and water terminals, gas and electricity, housing and

urban renewal, liquor stores, public transit, toll facilities, water and sewerage, and other, which consists of lotteries, gaming administered by Indian tribal governments, off-track betting, local parking, and miscellaneous activities. Operating surplus is shown in the government sector in some presentations and in the business sector in other presentations. If enterprise functions have been misidentified or if functions are inaccurately assigned to state and local government units, the measured value-added attributable to state and local government enterprises may not be accurately absorbed by the measured compensation and operating surplus, resulting in a statistical discrepancy.

4. Data and Preliminary Results for Special District Enterprises

The goal of this paper is to present a preliminary set of economic accounts for special district enterprises. This work is one step required to achieve a complete and consistent economic accounting for government-owned quasi-corporations in the U.S. national accounts, and future work will focus on incorporating other government enterprises, including units engaging in enterprise activity in other local governments, state governments, and the Federal government. The rest of this section briefly describes the data on special district enterprises, summarizes the identification of special district enterprises, discusses the sample selection and summary statistics, and presents a preliminary set of economic accounts for special district enterprises.

4.1. Data

We primarily use microdata collected on government finances for individual local governments with the Census of Governments. The data include records on individual counties, municipalities, townships, independent school districts, and special districts. The data span 1967 to 2012, with data from the quinquennial censuses of governments for years ending in 2 and 7

and data from annual surveys of government finances since 1970 (i.e., there are no data available for 1968 or 1969). The scope of the data includes coverage for revenue, expenditures, debt, and cash and security holdings. Revenue data are provided by source such as taxes, intergovernmental, current sales charges, or miscellaneous. Expenditure data are provided by function such as hospitals, highways, or parks and by type such as operating, intergovernmental or capital outlays. Appendix table A1 provides detail on revenue by source and expenditure by type. The data on debt include a breakdown between short-term and long-term, and end-of-year balances are provided for long-term debt with separate data on amounts issued and retired during the year. The data on cash and security holdings are shown by purpose such as sinking funds and bond funds.

For special districts, the data are particularly useful for identifying units engaged in enterprise activity and for compiling a preliminary set of economic accounts because each special district generally satisfies the *SNA* criteria for an institutional unit. However, even the microdata are an incomplete source for some balance sheet measures and for measures of capital consumption. In addition, alternative source data for some measures such as compensation offer more reliable measurement than the Census government finance data. Nevertheless, where possible, we rely solely on the Census government finance data for the preliminary set of economic accounts presented here.

For now, we limit our use of the Census government finance data to Census of Government years since 1992: 1992, 1997, 2002, 2007, and 2012. Appendix table A1 provides a selection of variables from the Census government finance data and our proposed treatment for each variable based on *SNA* recommendations.

4.2. Identifying Special District Enterprises

To identify special districts engaged in market production, we generate proxy ratios of output to production costs using the Census government finance data to determine units charging economically significant prices. As a measure of output, we use current sales charges for utilities and non-utilities. As a measure of production costs, we use operating expenditures plus net interest paid (i.e., interest payments minus interest receipts). While current sales charges are an adequate proxy for output, the operating expenditures data do not include amounts for consumption of fixed capital as recommended in the *SNA*. In addition, operating expenditures do not include a return to capital as recommended in the *SNA*. As a result, the proxy ratios may be overstated in some cases. Thus, we also consider other sources of information where possible. We identify special district enterprises from two different perspectives: by function and by unit. The second perspective is a departure from current practice in the U.S. national accounts, which limits the identification of government enterprises to specific functions.

Identifying by Function

For each special district, the data include the primary function in which a unit is engaged. Table 1 shows a list of 34 functions with summary descriptions. Five of the functions are only available for 2007 and 2012: miscellaneous commercial, correctional institutions, police protection, public welfare institutions, and toll highways. Prior to the 2007 Census of Governments, special districts engaged in any of those five functions were not separately identifiable, and were classified under a different function. Two of the functions describe units engaged in financing: industrial development and mortgage credit. If a special district is engaged in more than one function, the district is simply classified as multi-function with no attempt to determine a primary function because of data limitations.

To identify enterprise functions, figure 2 presents ratios of current sales charges to operating expenditures by function for three different metrics. The sample weighted average is a ratio of the sum of current charges for all special districts classified under a given function to the sum of operating expenditures (including net interest paid) for those special districts. The unit-level simple average and median are the simple average or median of ratios of current charges to operating expenditures calculated for each unit. For all three metrics, we calculate a five-year simple average for 1992, 1997, 2002, 2007, and 2012. Since operating expenditures exclude components of production costs recommended in the *SNA* (i.e., consumption of fixed capital and capital services), we also calculate ratios of current sales charges to total revenue by function presented in figure 3. Based on the ratios in figure 2 and figure 3, we also confirm the functions that appear to be enterprise functions with the descriptions summarized in table 1.

Our preferred metric for identifying enterprise functions is the five-year sample weighted average presented in figure 2, which is generally supported by the other five-year metrics in figure 2 and figure 3 as well as the descriptions in table 1. Overall, none of the ratios for the functions we identify as enterprise functions falls near the *SNA* threshold of 50 percent—the ratios are decisively above or below 50 percent. The medians do fall below 50 percent for a few functions, including industrial development, mortgage credit, and multi-function districts, which is not a concern since the median is a measure of dispersion. The following is our final list of enterprise functions, which includes 14 of the 34 functions to which special districts are classified: air transportation facilities, electric utilities, gas utilities, hospitals, irrigation, miscellaneous commercial, mortgage credit, parking facilities, public welfare institutions, sewerage utilities, solid waste management, toll highways, water transportation facilities, and water utilities. In addition to these 14 single function districts, we also count a multi-function

district as an enterprise if its ratio of output to production costs is greater than 75 percent, which includes approximately half of multi-function districts. The list of enterprise functions is summarized in table 2.

Identifying by Unit

To identify special district enterprises by unit, we simply use the ratio of output to production costs calculated at the unit level. Since operating expenditures exclude components of production costs recommended in the *SNA* (i.e., consumption of fixed capital and capital services), we use a higher ratio threshold than recommended in the *SNA*. In particular, instead of using a 50 percent threshold, we identify special district enterprises as those special districts with ratios greater than 75 percent.

Comparison of Enterprises Identified by Function and by Unit

Table 3 draws a comparison by year of special district enterprises identified by function to special district enterprises identified by unit. The table includes ratios of enterprises identified by unit to enterprises identified by function for five different measures: number of units, total revenue, current charges, total expenditures, and operating expenditures. While the number of enterprises identified by unit is lower than the number identified by function for all years except 1997, the ratios for the other measures generally indicate reasonable comparability. In particular, the ratios for total revenue and total expenditures indicate that the aggregate measures for enterprises identified by unit are within 5 – 10 percent of those identified by function in each year. Likewise, the ratios for current sales charges and operating expenditures indicate that the aggregate measures for enterprises identified by unit are within 5 – 10 percent of those identified by function in each year. To determine whether differences exist for key economic accounting

aggregates, we compile for each year a set of preliminary economic accounts for special district enterprises identified by function and for special district enterprises identified by unit.

4.3. Sample Selection and Summary Statistics

Table 4 summarizes the number of special district units with enterprises identified by function and by unit for each Census of Governments year. In each year, the number of enterprises (line 3) after excluding non-enterprises (line 2) is less than one-third of the total number of units (line 1). Table 4 also shows a breakdown by function for units identified as enterprises. By far, the highest concentration of enterprises is engaged in water utility functions (line 19). Large numbers of enterprises are also classified as air transportation facilities, hospitals, irrigation districts, multi-function districts, sewerage utilities, and solid waste management. In addition, a large number of special district enterprises that are identified by unit are not classified to a function that is considered by our analysis to be an enterprise function (line 20). Thus, the differences between the number of enterprises identified by function and by unit are relatively large.

We limit the special district enterprises included in the preliminary economic accounts to non-financial units. Thus, we exclude from the data units classified under mortgage credit. Figures 4a and 4b demonstrate that these financial districts represent less than 1% of total revenue among all special districts and even among special district enterprises.

Table 5 presents summary statistics directly from the Census government finance data for our sample of special district enterprises for a single year—2012. The mean and standard deviation for each variable demonstrate similar financial characteristics between the typical

enterprise identified by function and the typical enterprise identified by unit.[2]   Under total

revenue (line 1), about 84 percent of revenue is sourced from current sales charges (line 16) and

utility charges (line 26). The remaining revenue is primarily sourced from intergovernmental

receipts, property taxes, interest charges, and miscellaneous revenue not elsewhere classified.

Under total expenditures (line 28), about 69 percent of expenditures are incurred on current

operations (line 33), including salaries and wages (line 34). The remaining expenditures are

incurred on capital outlays, interest payments on debt, and intergovernmental payments.

4.4. Preliminary Economic Accounts for Special District Enterprises

Table 6 presents the *SNA* sequence of accounts for non-financial special district

enterprises identified by function, and table 7 presents the sequence for non-financial special

district enterprises identified by unit. The estimates are nominal—they have not been adjusted

for price changes. In addition, there are a number of *SNA* measures that require source data other

than Census government finance data for accurate estimation, which we have marked with an

asterisk (*) in anticipation of incorporating alternative source data—the measures include

distributed income of corporations (line 20), subsidies on products (line 34), net social

contributions (line 41), capital transfers receivable (line 54), capital transfers payable (line 55),

consumption of fixed capital (line 59), and changes in inventories (line 60). Likewise, there are

a number of *SNA* measures that do not appear relevant for special district enterprises, which we

have marked with a dash (-). All measures in table 6 and table 7 are sourced from the Census

government finance data. The only notable Census government finance variables that we have

not attempted to include in the preliminary accounts are intergovernmental revenue and

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[2] Mean comparison tests are not calculated between the two groups because of significant overlap. Of the 10,517 enterprises identified by function and 10,023 enterprises identified by unit, 7,827 are identified by both function and unit.

intergovernmental expenditures, which require further information to accurately allocate to *SNA* measures.

Since we do not deflate the measures in table 6 and table 7, we do not provide an intertemporal comparison for any of the *SNA* measures. However, there are some comparisons between the identification of enterprises by function and the identification by unit worth drawing for the *SNA* balancing items and other measures. First, value-added (line 5), operating surplus (line 16), entrepreneurial income (line 28), balance of primary income (line 37), disposable income (line 49), saving (line 52), and net lending/borrowing (line 61) are all higher in each year for enterprises identified by unit. Second, the higher balances for enterprises identified by unit generally result from higher output generated by current sales charges (line 1) and lower costs incurred for intermediate consumption (line 2), compensation (line 7), and capital outlays net of property sales (line 58). However, net interest paid (line 24 minus line 19) by enterprises identified by function is higher in each year except 1997. Third, even though net lending/borrowing (line 61) is higher in each year for enterprises identified by unit, both approaches to identification indicate that special district enterprises are net borrowers from other sectors and subsectors (with the exception of 1997). Likewise, in contrast to surplus of state and local government enterprises currently published in the U.S. national accounts, which turn negative between 2002 and 2007, the operating surplus that results in each year under both approaches to identification of enterprises in our sample is persistently positive.[3] Overall, the results indicate that measured value-added for enterprises identified by function in 2012 is

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[3] Surplus for state and local government enterprises is published in table 3.8 of the U.S. national accounts. The composition of government enterprises in the U.S. national accounts and enterprises in our sample is quite different for two reasons. First, in addition to including state government enterprises, the local government enterprises in the U.S. national accounts include enterprises that exist in general local governments (i.e., counties, townships, and municipalities). Our sample is limited to special districts. Second, there are two meaningful differences in our identification of enterprises. In particular, both mass transit utilities and housing and urban renewal are treated in the U.S. national accounts as enterprise functions, but we exclude them as enterprise functions. Units classified to both functions yield significant negative surplus.

approximately $33.2 billion, of which $16.7 billion reflects compensation and $16.5 billion reflects operating surplus. For enterprises identified by unit in 2012, value-added is approximately $36.1 billion, of which $16.4 billion reflects compensation and $19.7 billion reflects operating surplus. For all years – 1992, 1997, 2002, 2007, 2012 – measured value-added, compensation, and operating surplus for non-financial enterprise districts are less than 0.4 percent of their counterpart measures published in the U.S. national accounts.

Given the compositional differences between the samples of enterprises identified by function and by unit, the results in table 6 and table 7 imply that the lower number of enterprises identified by unit reflect more economic activity than their counterparts identified by function. This implication is generally a result of units classified under either the other single function or the school building authority function being left out of the sample of enterprises identified by function but being included in the sample of enterprises identified by unit. While the individual units may fit the *SNA* criteria for quasi-corporations based on economically significant prices and a complete set of financial accounts, there is one additional consideration in *SNA* paragraph 22.33 that calls into question whether units classified under the school building authority function can be treated as quasi-corporations. Paragraph 22.33 asserts that units that primarily serve government with no competition from other producers – which is the case according to the Census descriptions of special district functions – should be treated as general government rather than as quasi-corporations regardless of whether they sell products at economically significant prices. Thus, information on functional classification in addition to economically significant prices and a complete set of financial accounts appears useful for a more precise sample selection based on *SNA* recommendations.[4]

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[4] One disadvantage of using functional classification to identify enterprises is that functions may change over time.

5. Preliminary Conclusions and Remaining Work

This paper presents a preliminary set of economic accounts for special district enterprises using microdata collected on government finances for individual governments with the Census of Governments. Results suggest that the identification of enterprises by function, which is the current measurement practice in the U.S. national accounts, rather than by unit yields differences in key economic accounting aggregates. However, our results also suggest that some functions currently treated as enterprise functions in the U.S. national accounts do not fit the *SNA* criteria for treatment as quasi-corporations. We conclude that identification of enterprises by function may be preferable to identification by unit because the sample selection is more precise. Based on identification by function, measured value-added for enterprises in 2012 is approximately $33.2 billion, of which $16.7 billion reflects compensation and $16.5 billion reflects operating surplus. The results may change once additional data sources are incorporated.

There are at least three areas that require further work. First, intergovernmental revenue and intergovernmental expenditures in the Census government finance data need to be allocated to *SNA* measures. Second, the accounts require estimates of capital stock and consumption of fixed capital, which may be best made for all local enterprises rather than specifically for special district enterprises. Likewise, the preliminary compensation measures based on Census government finance data should be replaced with measures based on the Quarterly Census of Employment and Wages. Third, source data and a measurement methodology need to be developed for a set of economic accounts on other local government units engaged in enterprise activity (i.e., counties, townships, and municipalities).

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Figure 1: Modified *SNA* Illustrative Allocation of Units to Institutional Sectors
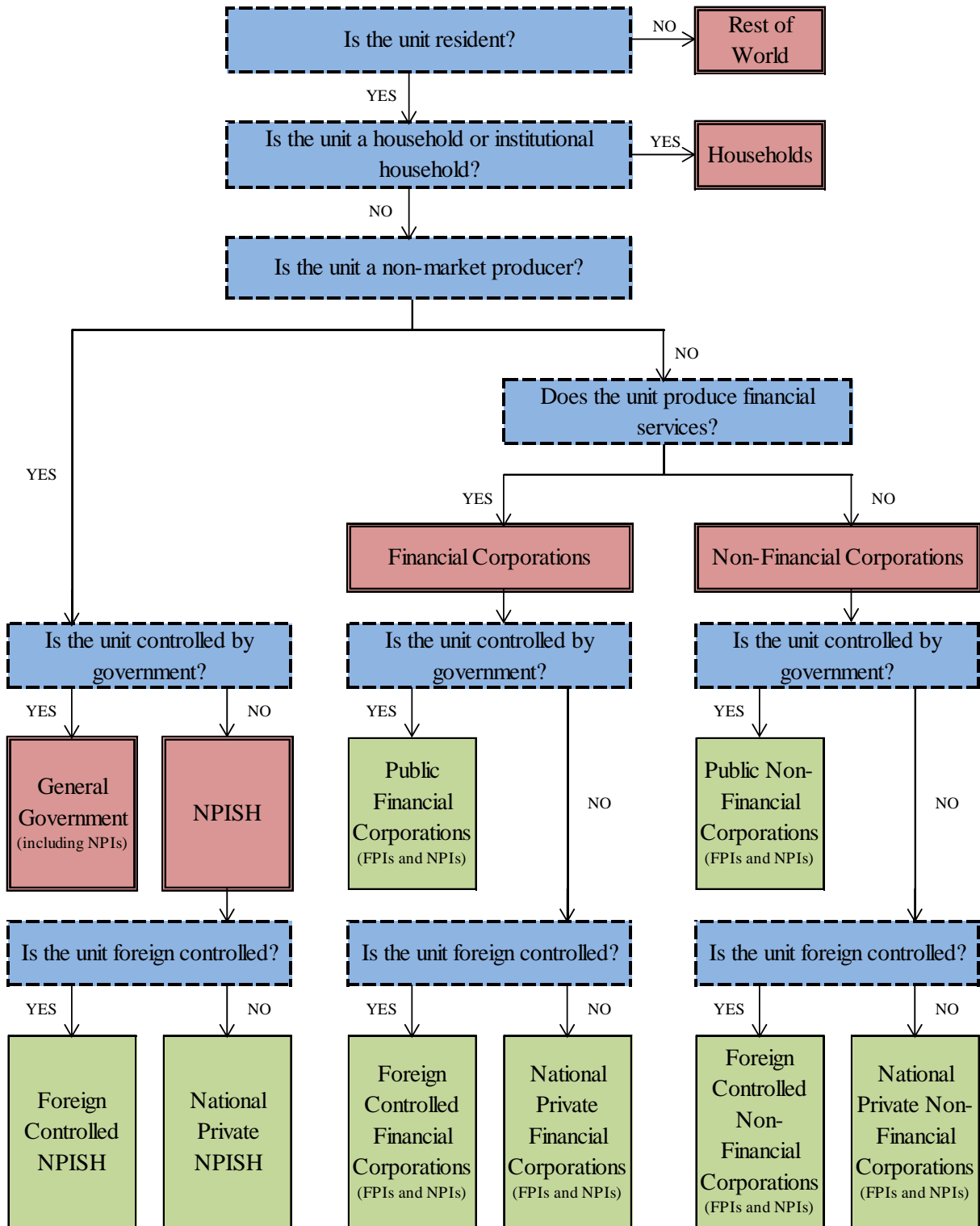
Source: Authors' adaptation based on figure 4.1 of the *SNA*.
Note: Decision points are colored blue, institutional sectors are colored red, and institutional subsectors are colored green.

Figure 2: Ratios of Current Charges to Operating Expenditures by Function
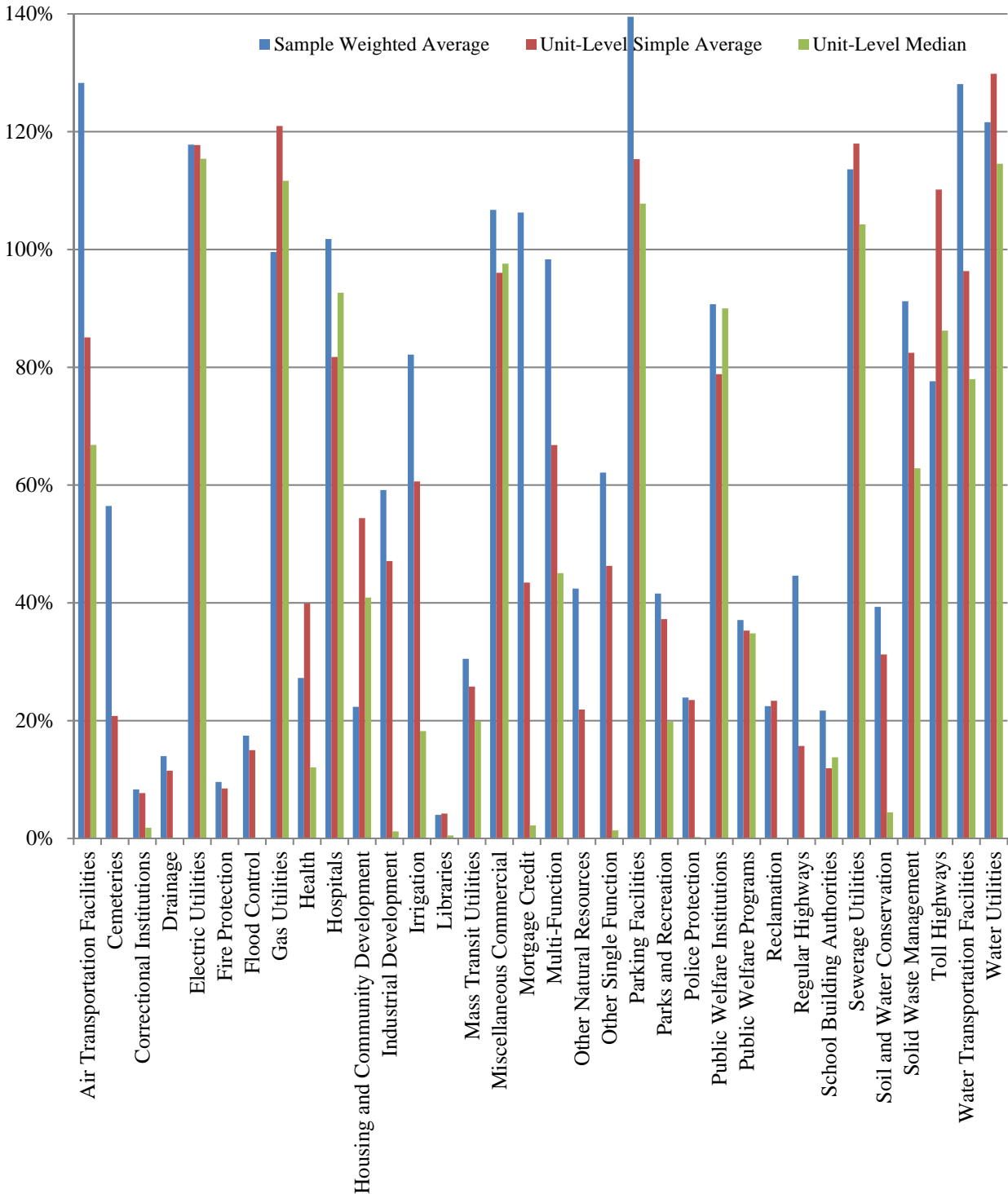
Source: Authors' calculations based on Census Bureau's Census of Governments individual governments database.
Note: Weighted averages are determined from sums of current charges and operating expenditures across all units in the sample. Simple averages and medians are determined from unit-level ratios Winsorized at the 1st and 99th percentiles. Ratios shown are a five-year average for 1992, 1997, 2002, 2007, and 2012.

Figure 3: Ratios of Current Charges to Total Revenue by Function
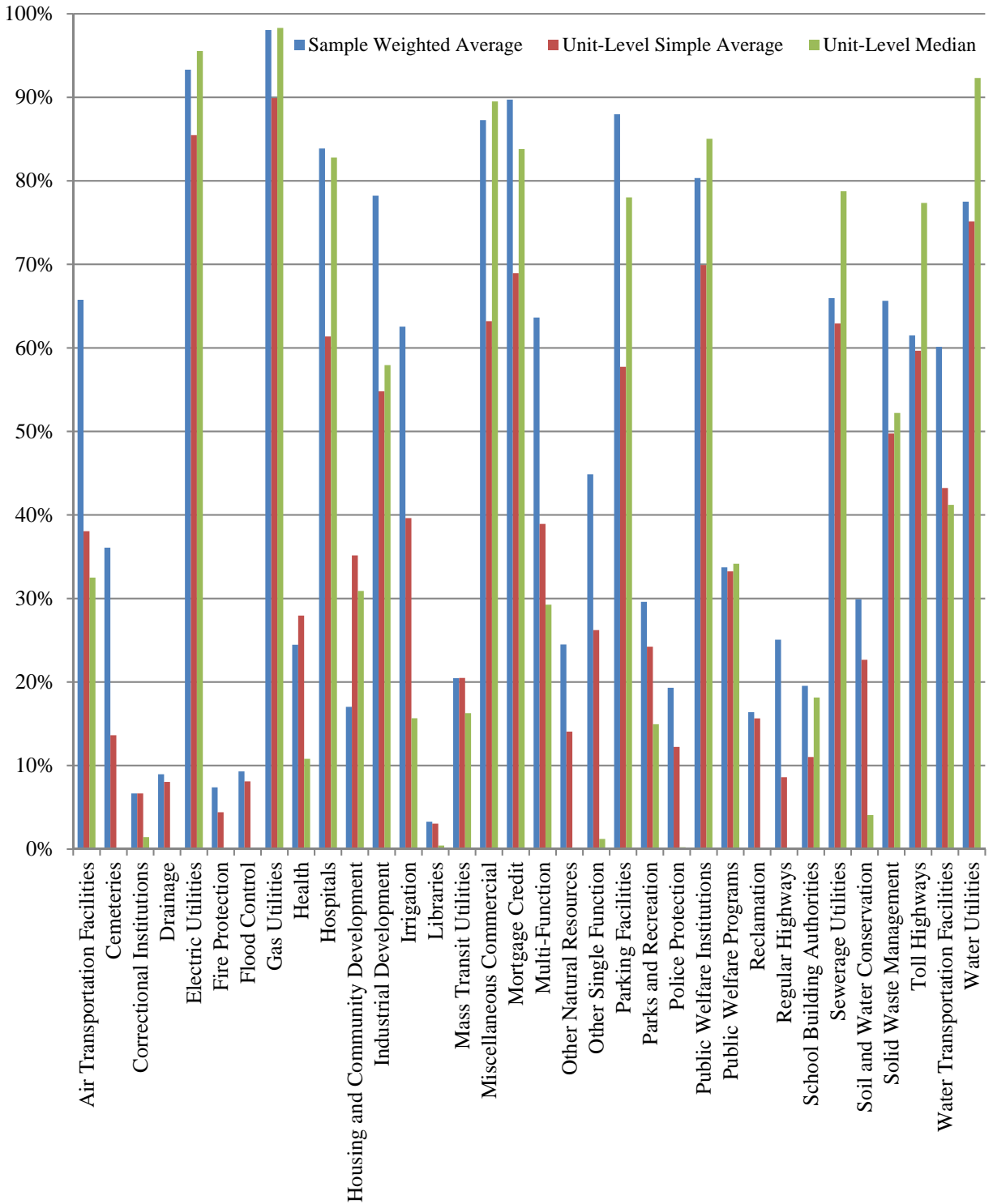
Source: Authors' calculations based on Census Bureau's Census of Governments individual governments database.
Note: Weighted averages are determined from sums of current charges and operating expenditures across all units in the sample. Simple averages and medians are determined from unit-level ratios Winsorized at the 1st and 99th percentiles. Ratios shown are a five-year average for 1992, 1997, 2002, 2007, and 2012.

Figure 4a: Shares of Total Revenue by Function for All Special Districts, 2012

Hospitals 17.9%

All Other 25.5%

Mass Transit Utilities 13.1%

Financial 0.3%

Water Utilities 5.7%

Multi-Function Non-Enterprise 5.7%

Multi-Function Enterprise 11.2%

Housing and Community Development 10.2%

Electric Utilities 10.4%

Source: Authors' calculations based on Census Bureau's Census of Governments individual governments database.

Figure 4b: Shares of Total Revenue by Function for Special District Enterprises, 2012

Financial 0.1%

All Other 8.8%

Air Transportation Facilities 4.6%

Sewerage Utilities 5.4%

Hospitals 32.1%

Water Utilities 10.2%

Electric Utilities 18.6%

Multi-Function Enterprise 20.1%

Source: Authors' calculations based on Census Bureau's Census of Governments individual governments database.

Table 1: Descriptions of Special District Functions

Line	Function	Description
1	Air Transportation Facilities	Construction, maintenance, operation, and support of airport facilities.
2	Cemeteries	Development, maintenance, operation, and support of public cemeteries.
3	Correctional Institutions	State prisons, reformatories, houses of correction, and other state institutions for the confinement and correction of convicted persons and juveniles. Includes only state-operated facilities. Excludes cost of maintaining prisoners in institutions of other governments.
4	Drainage	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.
5	Electric Utilities	Government-owned operation and maintenance of electric power system including production and acquisition and distribution of electric power.
6	Fire Protection	Firefighting organization and auxiliary services; fire inspection and investigation; support of volunteer fire forces; and other fire prevention activities. Includes cost of firefighting facilities, such as fire hydrants and water, furnished by other agencies of the government.
7	Flood Control	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.
8	Gas Utilities	Government-owned operation and maintenance of gas supply systems including acquisition and distribution of natural gas.
9	Health	Outpatient health services, other than hospital care, including public health administration, research and education, categorical health programs, treatment and immunization clinics, nursing, environmental health activities such as air and water pollution control, ambulance service if provided separately from fire protection services, and other general public health activities such as mosquito abatement. School health services provided by health agencies (rather than school agencies) are included here. Sewage treatment operations are classified under "sewerage".
10	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. 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.
11	Housing and Community Development	Construction and operation of housing and redevelopment projects and other activities to promote or aid housing and community development.
12	Industrial Development	Generally includes industrial development authorities, business district authorities, downtown business district authorities, and economic development authorities, which are established to promote commercial activity through financing investment and lines of credit for businesses and organizations.

Source: Census Bureau definitions for federal, state, and local governments and Census Bureau *Government Finance and Employment Classification Manual* (2006).
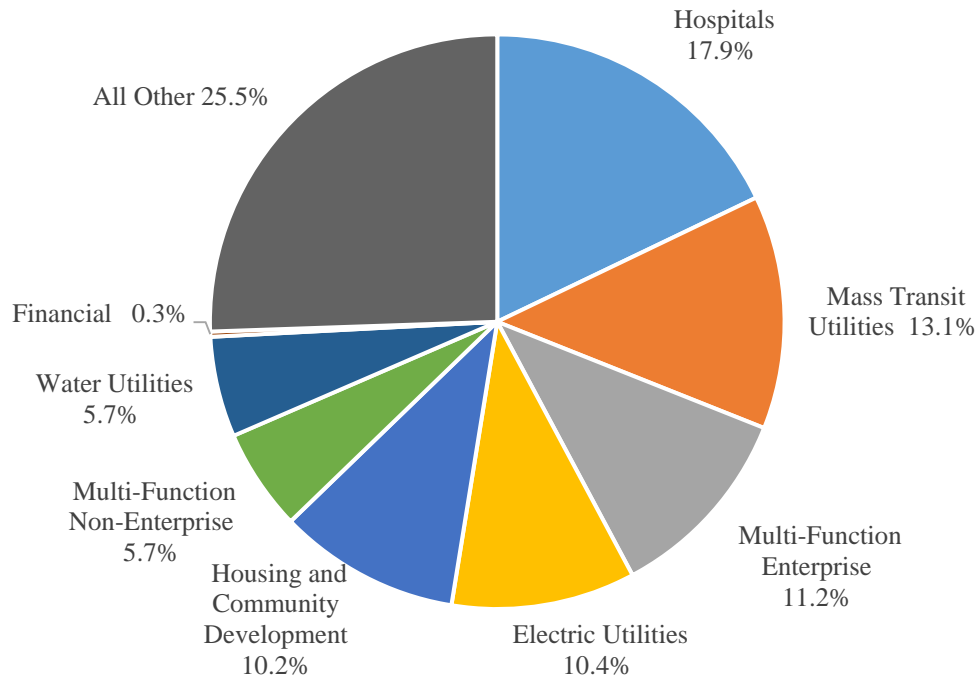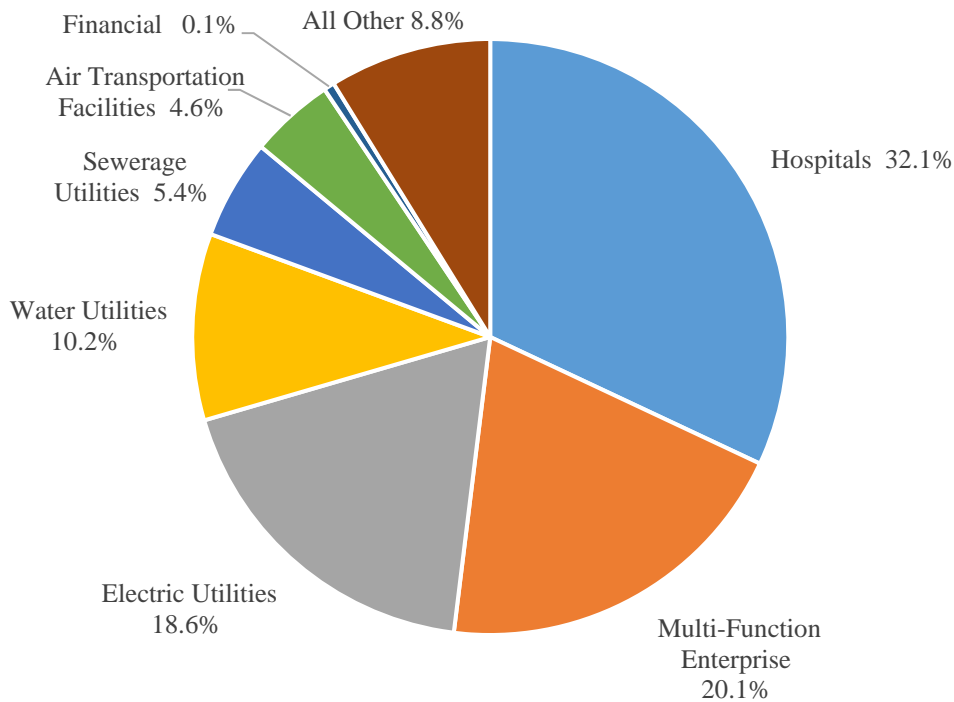Note: Miscellaneous commercial, correctional institutions, police protection, public welfare institutions, and toll highways are only available for 2007 and 2012.

Table 1 (continued): Descriptions of Special District Functions

Line	Function	Description
13	Irrigation	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.
14	Libraries	Provision and support of public library facilities and services.
15	Mass Transit Utilities	Government-owned 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".
16	Miscellaneous Commercial	Provision and operation of commercial facilities not classified under particular functions. Includes Bank of North Dakota, a cement plant, hail insurance systems, and the like.
17	Mortgage Credit	Generally includes housing finance authorities or housing finance corporations, which are chartered authorities established to help meet the affordable housing needs of residents. They administer a wide range of affordable housing and community development programs.
18	Multi-Function	N/A
19	Other 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.
20	Other Single Function	N/A
21	Parking Facilities	Construction, purchase, maintenance, and operation of public-use parking lots, garages, parking meters, and other distinctive parking facilities on a commercial basis.
22	Parks and Recreation	Provision and support of recreational and cultural-scientific facilities and activities including golf courses, play fields, playgrounds, public beaches, swimming pools, tennis courts, parks, auditoriums, stadiums, auto camps, recreation piers, marinas, botanical gardens, galleries, museums, and zoos. Also includes building and operation of convention centers and exhibition halls.
23	Police Protection	Preservation of law and order and traffic safety. Includes police patrols and communications, crime prevention activities, detention and custody of persons awaiting trial, traffic safety, and vehicular inspection.
24	Public Welfare Institutions	Provision, construction, and maintenance of nursing homes and welfare institutions owned and operated by a government for the benefit of needy persons (contingent on their financial or medical need) and veterans.
25	Public Welfare Programs	Support of and assistance to needy persons contingent upon their need.
26	Reclamation	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.
27	Regular Highways	Construction, maintenance, and operation of highways, streets, and related structures unrelated to toll facilities, including highways, bridges, tunnels, ferries, street lighting, and snow and ice removal. Highway policing and traffic control are classified under "police protection".

Source: Census Bureau definitions for federal, state, and local governments and Census Bureau *Government Finance and Employment Classification Manual* (2006).

Note: Miscellaneous commercial, correctional institutions, police protection, public welfare institutions, and toll highways are only available for 2007 and 2012.

Table 1 (continued): Descriptions of Special District Functions

Line	Function	Description
28	School Building Authorities	Financing and construction of educational facilities for leasing to public school systems.
29	Sewerage Utilities	Provision of sanitary and storm sewers and sewage disposal facilities and services and payments to other governments for such purposes.
30	Soil and Water Conservation	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.
31	Solid Waste Management	Street cleaning, solid waste collection and disposal, and provision of sanitary landfills.
32	Toll Highways	Construction, maintenance, and operation of highways, streets, and related structures for toll facilities, including highways, bridges, tunnels, ferries, street lighting, and snow and ice removal. Highway policing and traffic control are classified under "police protection".
33	Water Transportation Facilities	Construction, maintenance, operation, and support of canals and other waterways, harbors, docks, wharves, and related marine terminal facilities.
34	Water Utilities	Government-owned 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".

Source: Census Bureau definitions for federal, state, and local governments and Census Bureau *Government Finance and Employment Classification Manual* (2006).

Note: Miscellaneous commercial, correctional institutions, police protection, public welfare institutions, and toll highways are only available for 2007 and 2012.

Table 2: Special District Enterprise Functions

Line	Function
1	Air Transportation Facilities
2	Electric Utilities
3	Gas Utilities
4	Hospitals
5	Irrigation
6	Miscellaneous Commercial
7	Mortgage Credit
8	Multi-Function District Enterprises
9	Parking Facilities
10	Public Welfare Institutions
11	Sewerage Utilities
12	Solid Waste Management
13	Toll Highways
14	Water Transportation Facilities
15	Water Utilities

Source: Authors' determination based on ratios of current charges to total revenue and current charges to operating expenditures and based on Census Bureau's descriptions of special district functions.

Table 3: Ratios of Measures for Special District Enterprises Identified by Unit to Special District Enterprises Identified by Function

Line	Measure	1992	1997	2002	2007	2012
1	Number of Units	0.857	1.061	0.934	0.926	0.937
2	Total Revenue	0.952	0.991	0.970	0.954	0.987
3	Current Charges	1.027	1.043	1.030	0.993	1.034
4	Total Expenditures	0.930	0.982	0.969	0.913	0.973
5	Operating Expenditures	0.977	1.008	0.992	0.912	0.999

Source: Authors' calculations based on Census Bureau's Census of Governments individual governments database.

Table 4: Number of Special District Units with Enterprises Identified by Function and by Unit

Line		1992 Function	1992 Unit	1997 Function	1997 Unit	2002 Function	2002 Unit	2007 Function	2007 Unit	2012 Function	2012 Unit
1	Total	31,555	31,555	34,683	34,683	35,052	35,052	35,566	35,566	37,760	37,760
	Of which:										
2	Non-Enterprise Units	22,992	24,103	25,058	24,276	25,349	25,797	25,345	25,949	27,243	27,737
3	Enterprise Units	8,563	7,452	9,625	10,407	9,703	9,255	10,221	9,617	10,517	10,023
	Of which:										
4	Air Transportation Facilities	435	177	476	210	510	256	490	248	479	252
5	Electric Utilities	155	129	139	133	150	135	154	137	156	138
6	Gas Utilities	52	41	48	44	50	46	57	54	58	57
7	Hospitals	733	490	762	462	711	421	671	431	647	401
8	Irrigation	792	301	808	355	837	296	827	303	894	302
9	Miscellaneous Commercial	0	97	0	231	0	163	297	287	406	324
10	Mortgage Credit	30	3	28	3	26	4	39	9	39	9
11	Multi-Function Districts	721	721	1,270	1,270	1,350	1,350	1,711	1,711	1,806	1,806
12	Parking Facilities	100	52	69	36	46	29	32	22	36	23
13	Public Welfare Institutions	0	11	0	31	0	35	51	30	54	37
14	Sewerage Utilities	1,715	917	1,998	1,364	2,004	1,354	1,867	1,404	1,868	1,383
15	Solid Waste Management	393	182	479	245	455	204	425	197	446	224
16	Toll Highways	0	0	0	0	0	0	15	9	22	13
17	Water Transportation Facilities	135	54	138	76	159	85	162	91	133	70
18	Water Utilities	3,302	2,091	3,410	2,730	3,405	2,725	3,423	2,915	3,473	2,871
19	Non-Enterprise Functions	0	2,186	0	3,217	0	2,152	0	1,769	0	2,113

Source: Authors' calculations based on Census Bureau's Census of Governments individual governments database.

Table 5: Summary Statistics for Non-Financial Special District Enterprises, 2012 (thousands USD, except number of observations)

Line	Census Variable	Identified by Function Mean	Identified by Function Std. Dev.	Identified by Unit Mean	Identified by Unit Std. Dev.
1	Total Revenue	10,909.6	92,002.2	11,354.2	94,961.8
2	Total Taxes	387.6	3,566.2	299.1	3,063.2
3	Property Taxes	362.8	3,496.0	283.5	3,019.2
4	Sales Taxes	12.1	619.7	6.7	423.9
5	Total License Taxes	3.0	109.6	2.4	102.0
6	Occupation Licenses	0.0	0.0	0.0	0.2
7	Total Income Taxes	0.0	0.0	0.0	0.0
8	Death and Gift Taxes	0.0	0.0	0.0	0.0
9	Document Transfer Taxes	0.0	0.0	0.0	0.0
10	Severance Taxes	0.0	0.0	0.0	0.0
11	Taxes NEC	9.7	217.7	6.4	114.5
12	Total IG Revenue	759.1	10,687.1	583.8	10,237.4
13	from Federal Government	287.9	8,047.9	263.4	8,106.4
14	from State Government	247.1	3,795.7	190.3	2,699.4
15	from Local Government	224.0	4,068.0	130.1	3,559.5
16	Total Current Charges	5,292.3	63,622.4	5,910.0	66,531.5
17	Total Miscellaneous Revenue	597.3	7,320.4	513.1	7,102.4
18	from Special Assessments	88.9	895.8	70.7	863.1
19	from Sales of Property	37.9	1,996.3	38.7	2,045.5
20	from Interest Charges	226.1	2,787.8	199.3	2,668.4
21	from Fines and Forfeits	1.5	49.6	1.2	38.9
22	from Rents and Royalties	4.0	273.4	3.7	279.5
23	from Lottery	0.0	0.0	0.0	0.0
24	NEC	239.0	5,337.8	199.4	5,100.5
25	Liquor Stores Revenue	0.0	0.0	0.0	0.0
26	Total Utility Charges	3,854.6	47,951.3	4,028.6	49,128.4
27	Total Insurance Trust Revenue	18.8	629.8	19.7	645.5
28	Total Expenditures	11,001.5	99,897.8	11,287.4	102,772.8
29	Total IG Expenditures	139.9	3,764.6	135.7	3,843.5
30	to Federal Government	0.0	0.0	0.0	0.0
31	to State Government	22.9	595.1	19.7	583.1
32	to Local Government	117.0	3,347.1	116.0	3,420.8
33	Total Current Operating Expenditures	7,574.1	64,871.5	7,960.0	67,364.4
34	Total Salaries and Wages	2,076.5	23,850.1	2,110.6	24,361.7
35	Total Capital Outlays	2,294.7	37,331.0	2,265.1	38,154.3
36	Total Assistance and Subsidies	0.0	0.0	0.0	0.0
37	Total Interest on Debt	992.2	10,930.2	926.0	10,904.3
38	Total Insurance Trust Benefits	0.6	20.4	0.6	20.9
39	Number of observations	10,478		9,975	

Source: Authors' calculations based on Census Bureau's Census of Governments individual governments database.

Table 6: Accounts for Non-Financial Special District Enterprises Identified by Function (billions USD)

Line	SNA Code		1992	1997	2002	2007	2012
		Production Account					
1	P1	Output	32.5	42.2	54.8	79.8	95.8
2	P2	Less: Intermediate consumption	19.0	24.2	34.0	54.7	62.7
3	D21	Plus: Taxes on products	-	-	-	-	-
4	D31	Less: Subsidies on products	-	-	-	-	-
5	B1g	Equals: Value-added, gross	13.5	18.1	20.8	25.1	33.2
		Generation of Income Account					
6	B1g	Value-added, gross	13.5	18.1	20.8	25.1	33.2
7	D1	Less: Compensation of employees	6.7	8.1	10.8	14.7	16.7
8	D11	Wages and salaries	5.0	6.1	8.0	10.5	11.5
9	D12	Employers' social contributions	1.7	2.0	2.8	4.2	5.2
10	D2	Less: Taxes on production	0.0	0.0	0.0	0.0	0.0
11	D21	Taxes on products	-	-	-	-	-
12	D29	Other taxes on production	0.0	0.0	0.0	0.0	0.0
13	D3	Plus: Subsidies on production	0.0	0.0	0.0	0.0	0.0
14	D31	Subsidies on products	-	-	-	-	-
15	D39	Other subsidies on production	0.0	0.0	0.0	0.0	0.0
16	B2g	Equals: Operating surplus, gross	6.8	10.0	10.0	10.4	16.5
		Entrepreneurial Account					
17	B2g	Operating surplus, gross	6.8	10.0	10.0	10.4	16.5
18	D4	Plus: Property income receivable	3.1	3.4	4.0	4.8	2.4
19	D41	Interest	3.1	3.4	4.0	4.7	2.4
20	D42	Distributed income of corporations	*	*	*	*	*
21	D44	Investment income	-	-	-	-	-
22	D45	Rent	0.0	0.0	0.0	0.1	0.0
23	D4	Less: Property income payable	6.8	7.0	7.5	8.4	10.4
24	D41	Interest	6.8	7.0	7.5	8.4	10.4
25	D42	Distributed income of corporations	-	-	-	-	-
26	D44	Investment income	-	-	-	-	-
27	D45	Rent	0.0	0.0	0.0	0.0	0.0
28	B4g	Equals: Entrepreneurial income, gross	3.2	6.4	6.4	6.7	8.5

Source: Authors' calculations based on Census Bureau's Census of Governments individual governments database.
Note: Data fields marked with an asterisk (*) require source data other than the Census Bureau's Census of Governments individual governments database. Data fields marked with a dash (-) do not appear relevant for special district enterprises.

Table 6 (continued): Accounts for Non-Financial Special District Enterprises Identified by Function (billions USD)

Line	SNA Code		1992	1997	2002	2007	2012
		Allocation of Other Primary Income Account					
29	B4g	Entrepreneurial income, gross	3.2	6.4	6.4	6.7	8.5
30	D2	Plus: Taxes on production	1.6	2.3	2.6	3.6	4.1
31	D21	Taxes on products	0.0	0.0	0.0	0.1	0.1
32	D29	Other taxes on production	1.6	2.3	2.5	3.5	3.9
33	D3	Less: Subsidies on production	0.0	0.0	0.0	0.0	0.0
34	D31	Subsidies on products	*	*	*	*	*
35	D39	Other subsidies on production	0.0	0.0	0.0	0.0	0.0
36	D42	Less: Distributed income of corporations	0.0	0.0	0.0	0.0	0.0
37	B5g	Equals: Balance of primary income, gross	4.8	8.7	9.0	10.3	12.6
		Secondary Distribution of Income Account					
38	B5g	Balance of primary income, gross	4.8	8.7	9.0	10.3	12.6
39		Plus: Current transfers receivable	0.0	0.0	0.0	0.0	0.0
40	D5	Current taxes on income, wealth, etc.	0.0	0.0	0.0	0.0	0.0
41	D61	Net social contributions	*	*	*	*	*
42	D62	Social benefits other than social transfers in kind	-	-	-	-	-
43	D7	Other current transfers	0.0	0.0	0.0	0.0	0.0
44		Less: Current transfers payable	0.1	0.1	0.1	0.1	0.0
45	D5	Current taxes on income, wealth, etc.	0.0	0.0	0.0	0.0	0.0
46	D61	Net social contributions	-	-	-	-	-
47	D65	Social benefits other than social transfers in kind	0.1	0.1	0.1	0.1	0.0
48	D7	Other current transfers	0.0	0.0	0.0	0.0	0.0
49	B6g	Equals: Disposable income, gross	4.7	8.6	8.9	10.2	12.6
		Use of Disposable Income Account					
50	B6g	Disposable income, gross	4.7	8.6	8.9	10.2	12.6
51	D8	Less: Adj. for change in pension entitlements	-	-	-	-	-
52	B8g	Equals: Saving, gross	4.7	8.6	8.9	10.2	12.6
		Capital Account					
53	B8g	Saving, net	4.7	8.6	8.9	10.2	12.6
54	D9r	Plus: Capital transfers receivable	0.7*	1.1*	1.4*	3.1*	3.4*
55	D9p	Less: Capital transfers payable	*	*	*	*	*
56	B101	Equals: Chg. in net worth due to saving and cap. trans.	5.4	9.7	10.3	13.4	16.0
57	P5n	Less: Capital formation, net	9.0	9.8	12.6	20.8	23.6
58	P51g	Gross fixed capital formation	9.0	9.8	12.6	20.8	23.6
59	P51c	Less: Consumption of fixed capital	*	*	*	*	*
60	P52	Plus: Changes in inventories	*	*	*	*	*
61	B9	Equals: Net lending (+) / net borrowing (-)	-3.6	-0.1	-2.3	-7.4	-7.6

Source: Authors' calculations based on Census Bureau's Census of Governments individual governments database.
Note: Data fields marked with an asterisk (*) require source data other than the Census Bureau's Census of Governments individual governments database. Data fields marked with a dash (-) do not appear relevant for special district enterprises.

Table 7: **Accounts for Non-Financial Special District Enterprises Identified by Unit (billions USD)**

Line	SNA Code		1992	1997	2002	2007	2012
		Production Account					
1	P1	Output	33.3	44.1	56.5	79.3	99.1
2	P2	Less: Intermediate consumption	18.5	24.4	34.1	49.3	63.0
3	D21	Plus: Taxes on products	-	-	-	-	-
4	D31	Less: Subsidies on products	-	-	-	-	-
5	B1g	Equals: Value-added, gross	14.8	19.7	22.4	29.9	36.1
		Generation of Income Account					
6	B1g	Value-added, gross	14.8	19.7	22.4	29.9	36.1
7	D1	Less: Compensation of employees	6.5	8.2	10.5	14.1	16.4
8	D11	Wages and salaries	4.9	6.2	7.7	10.0	11.3
9	D12	Employers' social contributions	1.6	2.0	2.7	4.1	5.1
10	D2	Less: Taxes on production	0.0	0.0	0.0	0.0	0.0
11	D21	Taxes on products	-	-	-	-	-
12	D29	Other taxes on production	0.0	0.0	0.0	0.0	0.0
13	D3	Plus: Subsidies on production	0.0	0.0	0.0	0.0	0.0
14	D31	Subsidies on products	-	-	-	-	-
15	D39	Other subsidies on production	0.0	0.0	0.0	0.0	0.0
16	B2g	Equals: Operating surplus, gross	8.3	11.6	11.9	15.9	19.7
		Entrepreneurial Account					
17	B2g	Operating surplus, gross	8.3	11.6	11.9	15.9	19.7
18	D4	Plus: Property income receivable	2.6	3.0	3.6	4.1	2.0
19	D41	Interest	2.6	3.0	3.6	4.1	2.0
20	D42	Distributed income of corporations	*	*	*	*	*
21	D44	Investment income	-	-	-	-	-
22	D45	Rent	0.0	0.0	0.0	0.0	0.0
23	D4	Less: Property income payable	5.9	6.4	6.5	7.3	9.2
24	D41	Interest	5.9	6.4	6.5	7.3	9.2
25	D42	Distributed income of corporations	-	-	-	-	-
26	D44	Investment income	-	-	-	-	-
27	D45	Rent	0.0	0.0	0.0	0.0	0.0
28	B4g	Equals: Entrepreneurial income, gross	5.0	8.2	9.0	12.7	12.5

Source: Authors' calculations based on Census Bureau's Census of Governments individual governments database.
Note: Data fields marked with an asterisk (*) require source data other than the Census Bureau's Census of Governments individual governments database. Data fields marked with a dash (-) do not appear relevant for special district enterprises.

Table 7 (continued): Accounts for Non-Financial Special District Enterprises Identified by Unit (billions USD)

Line	SNA Code		1992	1997	2002	2007	2012
		Allocation of Other Primary Income Account					
29	B4g	Entrepreneurial income, gross	5.0	8.2	9.0	12.7	12.5
30	D2	Plus: Taxes on production	1.1	1.6	1.9	2.7	3.0
31	D21	Taxes on products	0.0	0.0	0.1	0.1	0.1
32	D29	Other taxes on production	1.1	1.6	1.8	2.6	2.9
33	D3	Less: Subsidies on production	0.0	0.0	0.0	0.0	0.0
34	D31	Subsidies on products	*	*	*	*	*
35	D39	Other subsidies on production	0.0	0.0	0.0	0.0	0.0
36	D42	Less: Distributed income of corporations	0.0	0.0	0.0	0.0	0.0
37	B5g	Equals: Balance of primary income, gross	6.1	9.8	10.9	15.4	15.5
		Secondary Distribution of Income Account					
38	B5g	Balance of primary income, gross	6.1	9.8	10.9	15.4	15.5
39		Plus: Current transfers receivable	0.0	0.0	0.0	0.0	0.0
40	D5	Current taxes on income, wealth, etc.	0.0	0.0	0.0	0.0	0.0
41	D61	Net social contributions	*	*	*	*	*
42	D62	Social benefits other than social transfers in kind	-	-	-	-	-
43	D7	Other current transfers	0.0	0.0	0.0	0.0	0.0
44		Less: Current transfers payable	0.1	0.1	0.1	0.1	0.0
45	D5	Current taxes on income, wealth, etc.	0.0	0.0	0.0	0.0	0.0
46	D61	Net social contributions	-	-	-	-	-
47	D65	Social benefits other than social transfers in kind	0.1	0.1	0.1	0.1	0.0
48	D7	Other current transfers	0.0	0.0	0.0	0.0	0.0
49	B6g	Equals: Disposable income, gross	6.0	9.7	10.8	15.3	15.5
		Use of Disposable Income Account					
50	B6g	Disposable income, gross	6.0	9.7	10.8	15.3	15.5
51	D8	Less: Adj. for change in pension entitlements	-	-	-	-	-
52	B8g	Equals: Saving, gross	6.0	9.7	10.8	15.3	15.5
		Capital Account					
53	B8g	Saving, net	6.0	9.7	10.8	15.3	15.5
54	D9r	Plus: Capital transfers receivable	0.5*	0.9*	1.2*	2.6*	2.7*
55	D9p	Less: Capital transfers payable	*	*	*	*	*
56	B101	Equals: Chg. in net worth due to saving and cap. trans.	6.5	10.6	12.0	17.8	18.2
57	P5n	Less: Capital formation, net	8.1	9.8	12.4	19.8	22.2
58	P51g	Gross fixed capital formation	8.1	9.8	12.4	19.8	22.2
59	P51c	Less: Consumption of fixed capital	*	*	*	*	*
60	P52	Plus: Changes in inventories	*	*	*	*	*
61	B9	Equals: Net lending (+) / net borrowing (-)	-1.6	0.8	-0.4	-2.0	-4.0

Source: Authors' calculations based on Census Bureau's Census of Governments individual governments database.
Note: Data fields marked with an asterisk (*) require source data other than the Census Bureau's Census of Governments individual governments database. Data fields marked with a dash (-) do not appear relevant for special district enterprises.

Table A1:   Selection of Census Government Finance Variables with Proposed *SNA* Treatment

Line	Census Variable	Proposed SNA Treatment
1	Total Revenue	See detail
2	Total Taxes	See detail
3	Property Taxes	Other taxes on production
4	Sales Taxes	Taxes on products
5	Total License Taxes	Other taxes on production
6	Occupation Licenses	Output
7	Total Income Taxes	Current taxes on income, etc.
8	Death and Gift Taxes	Capital transfer
9	Document Transfer Taxes	Output
10	Severance Taxes	Taxes on products
11	Taxes NEC	Other taxes on production
12	Total IG Revenue	See detail
13	from Federal Government	Subsidies on products, current transfer, capital transfer
14	from State Government	Subsidies on products, current transfer, capital transfer
15	from Local Government	Subsidies on products, current transfer, capital transfer
16	Total Current Charges	Output
17	Total Miscellaneous Revenue	See detail
18	from Special Assessments	Capital transfer
19	from Sales of Property	Gross fixed capital formation
20	from Interest Charges	Property income
21	from Fines and Forfeits	Other current transfer
22	from Rents and Royalties	Property income
23	from Lottery	Output
24	NEC	Capital transfer, current transfer, property income
25	Liquor Stores Revenue	Output
26	Total Utility Charges	Output
27	Total Insurance Trust Revenue	Net social contributions, property income
28	Total Expenditures	See detail
29	Total IG Expenditures	See detail
30	to Federal Government	Subsidies on products, current transfer, capital transfer
31	to State Government	Subsidies on products, current transfer, capital transfer
32	to Local Government	Subsidies on products, current transfer, capital transfer
33	Total Current Operating Expenditures	Intermediate consumption, compensation
34	Total Salaries and Wages	Compensation
35	Total Capital Outlays	Gross fixed capital formation
36	Total Assistance and Subsidies	Other current transfers
37	Total Interest on Debt	Property income
38	Total Insurance Trust Benefits	Social benefits other than social transfers in kind

Source: Authors' proposals based on descriptions in Census Bureau's *Government Finance and Employment Classification Manual* (2006).