

Fiscal Futures Project Documentation: November 2016

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The Fiscal Futures Project, which began in 2008, is dedicated to informing the public and policymakers in Illinois about long-term budget issues. The Fiscal Futures Project has developed and refined two important tools over the last eight and one-half years.

- All Funds Budget Database: A broadly comprehensive measure of the Illinois budget with component spending and revenue categories that are consistently defined over time.
- Fiscal Futures Model: A computer program that uses the All Funds Budget Database and the REAL model to project Illinois state spending and revenue streams into the future under current or alternative policies.

This report documents the detailed definitions, assumptions and sources of information used by the most recent versions of the database and the model. The material is organized in the following sections.

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I. The All Funds Budget

I.A. Rationale for Using All Funds versus General Funds Budget 1

In most reporting by the Illinois State Comptroller and in most political and public discussion of the Illinois state budget, the concept of General Funds is used. We report a more inclusive concept which we call "All Funds." Illinois has 4 General Funds, but over 700 funds in total (over 900 across the years in our database).

Some reporting by the Comptroller covers "Total Appropriated and Non-Appropriated Funds," but that measure includes some double counting of revenues that flow through multiple funds in the same year. Also, the appropriated vs. non-appropriated distinction does not indicate whether the resources or spending is a true state resource or function. In some instances, appropriations are made from special funds that hold locally levied taxes. And some non-appropriated funds hold state levied taxes. The Governor's Operating Budget reports All Appropriated Funds, but the same caveats apply to this measure.

Since our All Funds measure includes funds that hold state resources, eliminates local resources, and corrects for inaccurate reporting practices (e.g., double-counting, fund-shifting, and year-to-year reporting changes), we argue that our more inclusive concept better represents the total burdens and benefits of state government to taxpayers and residents.

For a detailed rationale of our choice to concentrate on All Funds versus General Funds see our "Why Ignore or half of the Illinois state budget picture? Consolidation of General and Special Fund Reporting," (July 2011). The rationale in broad terms is as follows.

Background: General Funds

There are four General Funds in the State of Illinois system:

- General Revenue Fund (0001)
- General Revenue–Common School Special Account Fund (0005)
- Common School Fund (0412)
- Education Assistance Fund (0007)

Each fund has specified revenue sources. Illinois appears to be fairly unique in that it has multiple General Funds, while most states have just one fund, and also in that transportation expenditures do not come out of the General Funds.

¹ In previous reports we have used the label "Consolidated Funds" for what we have come to call "All Funds."

² Available at: http://igpa.uillinois.edu/report/why-ignore-over-half-illinois-state-budget-picture

Fewer Categories in General Funds versus All Funds

If analysis were limited to the General Funds, it would eliminate several important categories of revenues and expenditures, for example: major portions of the transportation budget; debt service; transfers of revenue back to local governments; many programs financed by federal funds.

Increased Volatility in Components of General Funds versus All Funds

There are many instances in which the state pays for something differently from one year to the next. Looking at just General Funds makes year-to-year changes appear larger than they really are. For example, a federal program deposits money into a special state fund that is used in one year, and the next year the same programmatic expenditure may come from the General Funds instead—what appears to be an increase in spending is not. Similarly, a reassignment of a programmatic expenditure from a General Fund to a special fund would make spending appear to go down when it does not.

Reported Totals for General Funds include Transfers from or to Non-General Funds

Some reported General Fund receipts include transfers in from non-general funds and some reported General Fund expenditures are transfers to non-general funds. Any change over time in which transfers in or out are included would obscure the magnitude of changes in the state's budget situation. The more inclusive is the budget concept, the greater is the extent to which inter-fund transfers will net out.

I.B. Criteria for Inclusion of Individual Funds in the All Funds Budget

In the previous section we explained why our All Funds concept gives a better picture of the state's true fiscal situation that the commonly reported, but narrower and inconsistently defined over time, General Funds. The word "all," however, is a slight misnomer. Whereas the overwhelming majority of Illinois' 700+ funds are included in our "All Funds" measure, some are not. The starting point for our list of all funds is all appropriated funds, but, for the reasons listed below, we exclude a handful of appropriated funds and include a number of non-appropriated funds.

Criteria used to determine whether to include a fund in the Fiscal Futures All Funds Budget.

Criterion 1: INCLUDE IF the fund collects a state-levied tax.

The state collects both state-levied taxes and locally levied taxes (typically local-option sales and utility taxes). The state collects and returns local taxes to the local governments. Upon receipt, local tax revenues are deposited into specifically-designated, non-appropriated state trust funds. In cases where the state is solely acting as a collection agent for a local taxing body, this

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receiving trust fund, its revenue and distribution (expenditure) is NOT counted in our analytical frame. If the tax is collected for the state, the fund and its revenue IS counted in our analytical frame.

Criterion 2: INCLUDE IF the fund supports a state function.

Non-appropriated funds may support state functions such as education, social services, transportation, public facilities, regulation, natural resources, and law enforcement. Generally these are trust funds that hold federal dollars for a specified state project or purpose. This category of *non-appropriated* funds is essentially the same as a large group of *appropriated* state and federal trust funds. Because we are counting federal dollars as revenue, it would be inconsistent to count the appropriated funds, but not the non-appropriated funds that do essentially the same thing.

Criterion 3: EXCLUDE IF the fund is a holding fund for individuals.

Many funds are used to hold monies that belong to individuals, not the state. Most of these funds are non-appropriated, but some are appropriated. Examples of appropriated funds that we exclude from the frame are child support collection funds or employee pension own-contribution funds. These funds are holding money that belongs to an individual and will be returned to the person, or used for a payment on behalf of that person, at a later date.

Criterion 4: EXCLUDE IF the fund's expenditures or revenues have been counted elsewhere (i.e., avoid double-counting).

In some cases, funds receive and disburse money that was already counted as revenues to or expenditures from other funds. For example, the Commercial Consolidation Fund is a huge fund that distributes state benefit payments to individuals, service providers, and local governments by direct deposit. Payments into this fund are counted, distributions from this fund are not.

Criterion 5: EXCLUDE IF the fund holds designated user fees targeted for a specific purpose that is not a public function (conduit).

Typically we have excluded non-appropriated funds that hold designated user fees that are directed to a specific purpose that is not a necessary public function. These funds can be considered a conduit and we did not add these to the frame. For example, we exclude Fund 0098, which collects fees from harness race entrants at the state fair and then pays them out to race winners.

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Criterion 6: INCLUDE IF the fund collects a user fee that supports a large, important state function (state function trumps user fee).

Non-appropriated funds that are supported by user fees AND perform a state function (e.g., transportation) ARE counted in the frame. The rationale for this is that the state function would have to be performed even if the user fee and the fund structure did not exist. The biggest example is the Illinois State Toll Highway Revenue Fund, which collects tolls and supports the expansion and maintenance of Illinois toll roads.

Criterion 7: EXCLUDE IF unclear information, dead fund, small amounts.

Some funds are defunct, and our historical information on fund descriptions does not include pre-2005 designations.³ Fund numbers are re-used, making it impossible to determine the original purpose of some older, defunct funds. These funds generally appear to be very small. Because we are projecting forward from the most recently completed fiscal year, we assumed that these funds would not be in the frame.

http://cgfa.ilga.gov/Upload/May%202013%20New%20Funds%20Supplemental%20Report.pdf

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³ The source of our historical information on funds is Commission on Government Forecasting and Accountability (2005) *Facts on Funds*. Available at.

http://cgfa.ilga.gov/Upload/FACTS_ON_FUNDS.pdf Note that there are also two newer publications available now, Facts on Funds New Funds Update (May 2013) available at http://cgfa.ilga.gov/Upload/FACTS_ON_FUNDS.pdf Note that there are also two newer publications available now, Facts on Funds New Fund

I.C. Source of Data for All Funds Database

Information for the Fiscal Futures all funds database comes from detailed information provided by the Illinois Comptroller's office. Currently the database includes 190,000 individual records for fiscal years 1998 to 2016.⁴

Expenditure data. The principal information included in each spending record is *fiscal year*, *fund, agency*, and *object*. There are 141,283 spending records after an initial data cleaning stage. The key measure (explained below) to aggregate spending into categories is the state *agency* responsible for the expenditure. At this stage, there are 129 separate agencies in the dataset.⁵ The next section deals with collapsing those into a smaller number of categories that are comprehensive and consistently defined across years.

Revenue data. The principal information included in each revenue record is *fiscal year, fund, agency* and *source*. There are 48,370 revenue records after an initial data cleaning stage. Information from the Comptroller's website is used to collapse the 2,137 detailed *source* codes into 33 broader revenue_type codes, which are listed in the next section.⁶

Each of the expenditure and receipts categories in the All Funds budget of the Fiscal Futures Project are listed below. The entries include a longer, more descriptive version of the title or a list of the major component agencies or revenue sources included (in order of size). The descriptions and listings are not exhaustive and do not include many of the smaller components.

I.C.I. Expenditure Categories

In this section we describe the specific expenditure categories used in the Fiscal Futures model. In most cases the expenditure category is synonymous with a named state "department," "branch," "agency," "board," or "commission," each given a unique *agency* code. But there are some important budget categories that merit separate analysis even though they are reported as part of the operating budgets for multiple departments or agencies. So the first five expenditure categories are "quasi-agencies" representing spending for pensions, debt service, state employee healthcare, Medicaid, and transfers of revenue to local government. The next block of expenditure categories represent unique *agency* codes in the source data. The final group are aggregations of a number of smaller agencies into a single category.

⁴ In previous versions of the model, partially aggregated data was gathered by hand from Comptroller's website and PDF files of their publication *Detailed Annual Report*. See, for example, *Fiscal Futures Documentation: January* 2015, http://igpa.uillinois.edu/report/fiscal-futures-project-documentation-january-2015.

⁵ This general description of the data processing leaves out many, many small steps taken to deal with missing codes, cross-year coding differences, and the like.

⁶ Again, this description ignores the many actions taken to make revenue coding comprehensive and consistent across years. Particularly difficult is distinguishing net new revenue to the state from inter-fund transfers from one fund to another.

- **Quasi-Agencies.** *Object-of-expenditure* codes and other information is used to <u>remove</u> these categories of spending from other agency budgets and report it <u>separately</u>.
- **901. Pension Contributions.** State payments to the following pension systems:
 - 593. Teachers Retirement System (TRS)
 - 589. State Employee Retirement System (SERS)
 - 693. State University Retirement System (SURS)
 - 275. Judges Retirement System (JRS)
 - 131. General Assembly Retirement System (GARS)
- **903. Debt Service.** Principal and interest payment on both short-term and long-term debt. We do not include escrow payments.
- **904. State Employee Health Care.** Sum of expenditures for "health care coverage as elected by members per state employees group insurance act." The payments are made from the Health Insurance Reserve Fund. We subtract the share that came from employee contributions.
- **945. Medicaid.** That portion of the Healthcare and Family Services (or Public Aid in earlier years, *agency* code 478) budget for Medical (*appr_organization* code 65) for awards and grants (*object* codes 4400 and 4900).

The Affordable Care Act of 2010 (ACA) authorized extension of Medicaid eligibility to most adults with incomes up to 138 percent and Illinois opted in effective January 1, 2014. The federal match rate for newly eligible recipients is: 100 percent through 2016; 95 percent in 2017; 94 percent in 2018; 93 percent in 2019; and 90 percent in 2020 and thereafter. We estimated the amount spent on ACA-eligible Medicaid in FY 2014-2016 from several sources⁷ in order to separate this portion from the rest Medicaid spending that is subject to different match rates.

970. Transfer of Revenue to Local Governments. The share of certain taxes levied statewide at a common rate and then transferred to local governments. (Purely local-option taxes levied by specific local governments with the state acting as collection agent are *not* included in the model.)

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⁷ The Civic Federation (2014, May 15). Illinois Medicaid Enrollment under Affordable Care Act Exceeds Projections. Retrieved January 16, 2015, from http://www.civicfed.org/iifs/blog/illinois-medicaid-enrollment-under-affordable-care-act-exceeds-projections;

Illinois Department of Healthcare and Family Services (n.d.). New Medicaid Clients under Affordable Care Act: Explanation of Enrollment Numbers. Retrieved January 16, 2015, from

http://www2.illinois.gov/hfs/SiteCollectionDocuments/ACA ExplanationEnrollmentNumbers.pdf;

Illinois Department of Healthcare and Family Services (2014, March 26). Illinois Department of Healthcare and Family Services Fiscal Year 2015 Budget Overview. Retrieved January 16, 2015, from http://www2.illinois.gov/hfs/sitecollectiondocuments/fy2015budgetbriefing.pdf

The five corresponding revenue-source items are:

- 02. Local share of Personal Income Tax (at the 3.0% rate)
- 06. Local share of General Sales Tax (1.25% rate)
- 03. Personal Property Replacement Tax on Business Income
- 12. Personal Property Replacement Tax on Public Utilities
- 09. Local share of Motor Fuel Tax

Single agencies. After removal of items described above. Ignoring name changes.

- **402. Aging**, Department of
- **406. Agriculture**, Department of (includes: 538. Farm Development Authority; 556 Rural Bond Bank)
- 416. Central Management Services
- 418. Children and Family Services, Department of
- 420. Commerce and Community Affairs, Department of
- **422.** Natural Resources, Department of
- 426. Corrections, Department of
- **427.** Employment Security, Department of
- 444. Human Services, Department of
- 478. Healthcare & Family Services, Department of (net of 945. Medicaid)
- **482.** Public Health, Department of
- **492. Revenue**, Department of
- **494.** Transportation, Department of
- **532.** Environmental Protect Agency (includes 531. Environmental Trust Fund Commission)
- 557. Illinois State Toll Highway Authority
- **586. Illinois State Board of Education** (net of special education funds to 945. Medicaid). Called "959. K-12 Education" in the model.
- 684. Illinois Community College Board
- 691. Illinois Student Assistance Commission

Combination of multiple smaller agencies. (Does not list predecessor agencies with similar names.)

910. Legislative. Combination of

- 101. General Assembly
- 102. Office of the Legislative Inspector General
- 103. Office of the Auditor General
- 105. Commission on Government Forecasting & Accountability (COGFA)
- 107. Commission on Intergovernmental Cooperation
- 108. Legislative Information System
- 109. Legislative Audit Commission
- 110. Legislative Printing Unit
- 112. Legislative Research Unit

- 115. Legislative Reference Bureau
- 120. Legislative Ethics Commission
- 140. Pension Laws Commission
- 155. Legislative Space Needs Commission
- 156. Office of the Architect of the Capitol
- 167. Joint Committee on Administrative Rules

920. Judicial. Combination of

- 201. Supreme Court
- 202. Attorney Registration and Disciplinary Commission
- 203. Board of Admissions to the Bar
- 205. Clerk of the Supreme Court
- 210. Supreme Court Historic Preservation Commission
- 215. Appellate Court District 1
- 225. Appellate Court District 2
- 235. Appellate Court District 3
- 245. Appellate Court District 4
- 255. Appellate Court District 5
- 285. Judicial Inquiry Board
- 290. State Appellate Defenders Office
- 295. State's Attorneys Appellate Prosecutor
- 528. Court of Claims

930. Elected Officers. Combination of

- 310. Governor
- 330. Office of the Lt. Governor
- 340. Office of the Attorney General
- 350. Secretary of State
- 360. Illinois Office of the Comptroller
- 370. State Treasurer's Office

941. Public Safety. Combination of

- 425. Department of Juvenile Justice
- 466. Military Affairs
- 473. Nuclear Safety
- 493. Department of State Police
- 546. Illinois Criminal Justice Information Authority
- 569. Law Enforcement Training and Standards Board
- 578. Prisoner Review Board
- 583. Sex Offender Management Board
- 588. Illinois Emergency Management Agency
- 591. Illinois State Police Merit Board
- 592. Office of the State Fire Marshal

944. Business & Professional Regulation. Combination of

- 440. Department of Financial and Professional Regulation
- 446. Department of Insurance
- 524. Illinois Commerce Commission
- 563. Illinois Workers' Compensation Commission

946. Capital Improvement. Combination of

- 511. Capital Development Board
- 554. Illinois Sports Facilities Authority
- 574. Metropolitan Fair and Exposition Authority
- 598. Upper Illinois River Valley Development Authority

948. Other Departments. Combination of

- 442. Department of Human Rights
- 445. IL Power Agency
- 452. Department of Labor
- 458. Illinois Lottery
- 497. Department of Veterans Affairs
- 507. Governor's Office of Management and Budget

949. Other Boards & Commissions. Combination of

- 503. Illinois Arts Council
- 509. Office of the Executive Inspector General
- 510. Executive Ethics Commission
- 517. Illinois Civil Service Commission
- 525. Drycleaner Commission
- 526. Deaf and Hard of Hearing Commission
- 527. Comprehensive Health Insurance Board
- 529. East St. Louis Financial Advisory Authority
- 534. Health Information Exchange Authority
- 537. Guardianship and Advocacy Commission
- 540. Illinois Health Care
- 541. Historic Preservation Agency
- 542. Human Rights Commission
- 548. Illinois Education Labor Relations Board
- 555. Illinois State Board of Investments
- 558. Illinois Council on Developmental Disabilities
- 559. Illinois Violence Prevention Authority
- 562. Procurement Policy Board
- 564. Illinois Independent Tax Tribunal
- 565. Illinois Gaming Board
- 567. Liquor Control Commission

- 568. IL Charter Schools Commission
- 571. Medical Center Commission
- 575. Prairie State 2000 Authority
- 579. Illinois Racing Board
- 580. Property Tax Appeal Board
- 585. Southwestern Development Authority
- 587. Illinois State Board of Elections
- 590. Illinois Labor Relations Board
- **960. University Education.** State contributions to higher education. Note this does not include the entire budget of the schools, only the amount they get from the state.
 - 601. Board of Higher Education
 - 608. Chicago State University
 - 612. Eastern Illinois University
 - 616. Governors State University
 - 620. Northeastern Illinois University
 - 628. Western Illinois University
 - 636. Illinois State University
 - 644. Northern Illinois University
 - 664. Southern Illinois University
 - 676. University of Illinois
 - 692. Illinois Math and Science Academy
 - 695. State Universities Civil Service Merit Board

I.C.II. Revenue Categories

Revenue categories are aggregated under the following revenue type codes.

- **02. Individual Income Taxes**. Gross of the one-tenth local share. Net of current year expenditures <u>from</u> (<u>not</u> receipts allocated <u>to</u>) the Income Tax Refund Fund (0278).
- **03. Corporate Income Taxes**. Gross of the personal property replacement tax levied on businesses. Net of current year expenditures <u>from</u> (<u>not</u> receipts allocated <u>to</u>) the Income Tax Refund Fund (0278).
- **06. Sales Taxes**. Collections of the general sales and use tax at the 6.25 percent rate —1.25 of which is remitted to local governments and 5.00 of which is retained by the state. The Fiscal Futures project does not include the collections at the 1.0 percent rate that applies only to food and drugs and goes to local governments (deposited in the State and Local Sales Tax Reform Fund).
- **09. Motor Fuel Tax**. Gross of the portion transferred to local governments. Net of current-year expenditures for refunds.
- **12. Public Utility Taxes**. Gross of the Personal Property Replacement Tax on public utilities that is transferred to local governments.
- 15. Cigarette Taxes.
- 18. Liquor Gallonage Taxes.
- **21. Inheritance Tax**. Net of current-year expenditures for refunds.
- **24. Insurance Taxes, Fees & Licenses**. Net of current-year expenditures for refunds.
- 27. Corporate Franchise Taxes & Fees.
- 31. Medical Provider Assessments.
- 33. Lottery Receipts.
- **35. Other Taxes**. Net of current-year expenditures for refunds.
- 36. Receipts From Revenue Producing.
- 39. Licenses, Fees & Registrations.

- 42. Motor Vehicle & Operators.
- 48. Riverboat Wagering Taxes.
- 54. Gifts and Bequests.
- **57. Federal Other.** Comptroller codes <u>all</u> federal sources as 57. Fiscal Futures creates separate codes for Medicaid (58) and Transportation grants (59) and reports the residual as Other (57).
- **58. Federal Medicaid**. Detailed source codes are used to identify federal receipts of the Department of Healthcare and Family Services (agency 478) attributable to Medicaid.
- **59. Federal Transportation**. Federal receipts of the Department of Transportation (agency 494).
- **78. All Other Sources**. Expanded to include the following smaller sources:
 - 30. Horse Racing Taxes & Fees.
 - 60. Other Grants and Contracts.
 - 63. Investment Income.
 - 75. Inter-Agency Receipts. (Only from Funds excluded from Fiscal Futures)

Not included in Fiscal Futures:

- 32. Garnishment-Levies. (State is fiduciary, not beneficiary.)
- 45. Student Fees-Universities. (Excluded from state-level budget.)
- 51. Retirement Contributions (of individuals and non-state entities).
- 66. Proceeds, Investment Maturities. (Not sustainable flow.)
- 72. Bond Issue Proceeds. (Not sustainable flow.)
- 75. Inter-Agency Receipts. (Except from Funds excluded from Fiscal Futures)
- 79. Cook County Intergovernmental Transfers. (State is not beneficiary.)
- 98. Prior Year Refunds.

II. The Fiscal Futures Model

II.A. Overview of the Fiscal Futures Model

As represented in Figure 1, the Fiscal Futures Model uses historical data on each All Funds budget category, and past and projected values of economic "driver" variables to generate projections of Total Revenue, Total Spending, and the Budget Gap between them for future years.

The Structural Budget Gap

According to the *Illinois Constitution* (Art. VIII, Sec. 2): "Appropriations for a fiscal year shall not exceed funds estimated by the General Assembly to be available during that year." "Funds estimated to be available" is interpreted to include expected revenue from taxes and fees as well as preexisting asset balances or new borrowing. There is, however, a big difference between financing current spending with the annual flow of tax and fee collections versus paying with asset balances that may have been accumulated over a number of prior years or taking on new debt that will have to be paid over a number of future years. The state's underlying fiscal condition is better measured by comparing spending to the annual flow of taxes and fees while ignoring the one-time use of asset balances or new borrowing.

Also, relying on "funds estimated to be available" before the fiscal year begins allows optimistic revenue projections to meet the balanced budget requirement, even if actual revenue at the end of the fiscal year turn out to be much lower than the rosy-scenario estimates. The state's underlying fiscal condition is better measured by comparing actual spending to actual revenue.

We define the budget gap as: Budget Gap = Total Revenue – Total Spending.

The budget is balanced if the gap is zero, if: Total Revenue = Total Spending.

A positive gap is called a surplus and occurs if: Total Revenue > Total Spending.

A negative gap is called a deficit and occurs if: Total Revenue < Total Spending.

By using "total revenue" instead of "total funds available including account balances and the proceeds of new borrowing," this measure focuses on *sustainable* revenue and thus the underlying fiscal condition. A better name for the concept might be "structural budget gap," as in other studies that attempt to measure or project state spending levels compared to sustainable revenues using the concept of a "structural deficit."

PROJECTION ACOUISITION COMPILIATION ESTIMATION SIMULATION Budget Detailed data on all Consolidate multiple category Identify relevant state funds for past amounts policy alternative funds into unified budget years from budget separated into Select drivers for each Changed Illinois Office of consistently defined budget category budget Comptroller (IOC)¹ budget categories **Projected** Model policy category growth Relate growth in change as dollar, Past driver variable amounts amounts rates category to growth in proportional, Demographic and drivers & constant Use most recent formula, or other economic "driver" value for budget Projected future values for driver variables change in affected variables, past and category, projected budget category projected, from Real growth rates, and **Economics Applications** projected driver Laboratory (REAL) variables to get projected future Scheduled future Future debt service & pension payments budget category payments for debt amounts service and pensions from Commission on Add scheduled Government and Fiscal payments to get Accountability (COGFA), Governor's Total Expenditures, Office of Management Total Receipts, and Budget (OMB), or & Budget Gap in Comptroller (IOC) each future year

Figure 1: IGPA Fiscal Futures Model Flow Chart

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II.B. Model Specifications and Recent Results

Budget Data

The first step in building the Fiscal Futures Model is to gather historical data for the 700-fund All Funds budget and group it into a meaningful set of budget receipt and expenditure categories that are consistently defined over time.

The first column of Table 1 lists the sixteen categories of revenue in the Fiscal Futures Model database. The first column of Table 2 lists the seventeen categories of spending. (For details on which subcategories, agencies or funds are grouped under these categories see Section I.C, above).

The Illinois Office of the Comptroller's *Detailed Annual Report* is the source for this information for FY 1997 to 2013. Information on the Comptroller's website is used for 2014. FY 2015 is estimated from the enacted budget. (For citation of specific sources see Section II.C, below.)

Economic and Demographic Driver Variables, Model Estimation, and Projection

The Regional Economics Applications Laboratory (REAL) of the University of Illinois supplies the Fiscal Futures Project with detailed historical and forecast data from their model of the Illinois economy. Each budget component is assigned one or more of these driver variables, such as the growth in statewide personal income.

The second column in Tables 1 and 2 lists the drivers and projection method for each category of revenue and spending. There are three projection methods, depending on the category.

- 1. For most categories, the historical relationship between growth in the budget category and growth in the driver variable(s) is statistically estimated. The estimated relationship is combined with REAL projections of the economic and demographic drivers to generate projections of that revenue or spending category in each future year.
- 2. For some, especially smaller components with big ups and downs over the years, no obvious statistical relationship with drivers could be found, so the category is set to grow at the same rate as a driver, e.g., the rate of price inflation or personal income.
- 3. For state payments to public pension systems, future payments based on existing law are taken from official projections. For debt service in future years for already issued bonds, obligations are set by the bond contract and summarized in official sources.

After each individual budget category is projected for each year, Total Revenue, Total Spending and the Budget Gap are calculated.

Projected Amounts and Growth Rates from Most Recent Model

Table 3 for revenues and Table 4 for expenditures show the FY 2016 projected amounts and the FY 2016 to FY 2026 average annual growth rates projected by the January 2015 model.

Table 1: Fiscal Futures Model Revenue Projection Specifications — Growth in revenue category is driven by growth in indicated variables

Code	Revenue category	Driver(s)		
02	Individual Income Taxes*	growth in personal income (after adjust receipts for tax rate, personal exemptions & tax credits)**		
03	Corporate Income Taxes*	set to grow at CPI inflation plus population growth (i.e., fixed in real-per-capita terms)		
06	Sales Taxes*	growth in consumption net of services**		
09	Motor Fuel Tax*	set to grow same rate as CPI inflation		
12	Public Utility Taxes*	growth in personal income**		
15	Cigarette Taxes	growth in personal income**		
18	Liquor Gallonage Taxes	growth in personal income**		
21	Inheritance Tax	growth in personal income**		
24	Insurance Taxes, Fees & Licenses	growth in personal income**		
27	Corp Franchise Taxes & Fees	growth in personal income**		
31	Medical Provider Assessments	set to fixed share of projected Medicaid spending		
33	Lottery Receipts	set to grow same rate as CPI inflation		
35	Other Taxes	growth in personal income**		
36	Receipts From Revenue Producing Activities	growth in personal income**		
39	Licenses, Fees & Registrations	growth in personal income**		
42	Motor Vehicle & Operators	growth in personal income**		
48	Riverboat Wagering Taxes	set to grow same rate as CPI inflation		
54	Gifts And Bequests	set to grow same rate as CPI inflation		
57	Federal Other	set to grow at CPI inflation plus population growth (i.e., fixed in real-per-capita terms)		
58	Federal Medicaid	set to share of projected Medicaid spending, adjusted to reflect decline in match rate for ACA		
59	Federal Transportation	set to fixed share of projected Transportation spending		
78	All Other Sources	set to grow same rate as personal income		

Source: IGPA Fiscal Futures Model, November 2016

^{*}Includes local government share.

^{**}Constant and percentage change of driver variables are regressed on the percentage change in the budget category using data from 1998 through most recent (with percentage changes measured as the change in the natural log). Future values of budget categories are projected using estimated coefficients and projected values of the driver variables

Table 2: Fiscal Futures Model Spending Projection Specifications — Growth in spending category is driven by growth in indicated variables

Code	Spending category	Driver(s)	
402	Aging	growth in personal income**	
406	Agriculture	growth in personal income**	
416	Central Management	growth in personal income**	
418	Children & Family Services	growth in personal income**	
420	Commerce & Community Affairs	growth in personal income**	
422	Natural Resources	growth in personal income**	
426	Corrections	growth in personal income**	
427	Employment Security	growth in number unemployed**	
444	Human Services	growth in personal income**	
478	Healthcare & Family Services Net of Medicaid	growth in personal income**	
482	Public Health	growth in personal income**	
492	Revenue	growth in personal income**	
494	Transportation	growth in personal income**	
532	Environmental Protect Agency	growth in personal income**	
557	Toll Highway Authority	growth in personal income**	
684	Community College Board	growth in personal income**	
691	Student Assistance Commission	growth in personal income**	
901	State Pension Contribution	as scheduled	
903	Debt Service	as scheduled	
904	State Employee Healthcare	growth in personal income & growth in health care output**	
910	Legislative	growth in personal income**	
920	Judicial	growth in personal income**	
930	Elected Officers	growth in personal income**	
941	Public Safety	growth in personal income**	
944	Business & Profession Regulation	growth in personal income**	
945	Medicaid	set to grow same rate as personal income plus "Medicaid excess cost growth" (from CBO)	
946	Capital Improvement	growth in personal income**	
948	Other Departments	growth in personal income**	
949	Other Boards & Commissions	growth in personal income**	
959	K-12 Education	set to grow same rate as personal income plus growth in population age 5-17	
960	University Education	growth in population age 18-24**	
970	Local Government Revenue Share	same as "parent" revenue categories	

Source: IGPA Fiscal Futures Model, November 2016

**Constant and percentage change of driver variables are regressed on the percentage change in the budget category using data from 1998 through most recent (with percentage changes measured as the change in the natural log). Future values of budget categories are projected using estimated coefficients and projected values of the driver variables.

Table 3: Fiscal Futures Model Revenue Projection Results

Code	Revenue category	FY16 Amount (\$ millions)	Average Annual Growth Rate FY17-FY27 (percent)
02	Individual Income Taxes*	11,950	1.6%***
03	Corporate Income Taxes*	2,915	2.3%***
06	Sales Taxes*	11,307	3.0%
09	Motor Fuel Tax*	1,335	1.9%
12	Public Utility Taxes*	1,406	1.7%
15	Cigarette Taxes	845	-1.3%
18	Liquor Gallonage Taxes	288	0.8%
21	Inheritance Tax	291	3.8%
24	Insurance Taxes, Fees & Licenses	519	8.2%
27	Corp Franchise Taxes & Fees	216	3.7%
31	Medical Provider Assessments	2,257	4.6%
33	Lottery Receipts	1,303	1.9%
35	Other Taxes	715	6.4%
36	Receipts From Revenue Producing Activities	2,197	6.5%
39	Licenses, Fees & Registrations	1,220	7.9%
42	Motor Vehicle & Operators	1,552	4.4%
48	Riverboat Wagering Taxes	443	1.9%
54	Gifts And Bequests	937	1.9%
57	Federal Other	5,904	2.9%
58	Federal Medicaid	10,156	4.5%
59	Federal Transportation	2,155	6.9%
78	All Other Sources	1,670	3.4%

Source: IGPA Fiscal Futures Model, November 2016

^{*}Includes local government share.

^{***}Includes scheduled cut in tax rate on January 1, 2025

Table 4: Fiscal Futures Model Spending Projection Results

Code	Spending category	FY15 Amount (\$ billions)	Average Annual Growth Rate FY17-FY27 (percent)
402	Aging	1,032	8.9%
406	Agriculture	68	0.6%
416	Central Management	720	4.3%
418	Children & Family Services	1,118	-0.7%
420	Commerce & Community Affairs	994	2.0%
422	Natural Resources	289	3.1%
426	Corrections	1,380	2.1%
427	Employment Security	218	1.8%
444	Human Services	5,854	2.4%
478	Healthcare & Family Services Net of Medicaid	373	5.0%
482	Public Health	396	5.8%
492	Revenue	433	1.0%
494	Transportation	4,343	4.1%
532	Environmental Protect Agency	617	3.0%
557	Toll Highway Authority	1,894	11.1%
684	Community College Board	381	1.7%
691	Student Assistance Commission	560	1.3%
901	State Pension Contribution	6,719	2.5%
903	Debt Service	4,050	-5.2%
904	State Employee Healthcare	2,070	5.9%
910	Legislative	91	3.2%
920	Judicial	397	2.4%
930	Elected Officers	797	4.6%
941	Public Safety	768	4.2%
944	Business & Profession Regulation	256	3.0%
945	Medicaid	16,914	4.6%
946	Capital Improvement	747	7.2%
948	Other Departments	1,085	7.7%
949	Other Boards & Commissions	239	3.1%
959	K-12 Education	8,903	4.0%
960	University Education	1,308	0.3%
970	Local Government Revenue Share	6,283	2.9%

Source: IGPA Fiscal Futures Model, November 2016

Estimation and Projection Periods (for November 2016 version of the model)

- Relationship between growth in revenue category and growth in driver variables is estimated for FY 1998 to 2016
- Relationship between growth in spending category and growth in driver variables is estimated for FY 1998 to 2015
- The projection period for growth in each revenue category is FY 2017 to 2027
- The projection period for growth in each spending category is FY 2016 to 2027

II.C: Data Sources

Illinois budget data for FY 1998 to FY 2016

Obtained from Illinois Office of the Comptroller as described in section I.C above.

Future pension payments:

Illinois Commission on Government Forecasting and Accountability (COGFA), *Illinois State Retirement Systems Financial Condition as of June 30, 2015* (March 2016), http://cgfa.ilga.gov/Upload/FinConditionILStateRetirementSysMar2016.pdf

Future debt service payments for already existing debt:

State of Illinois, *General Obligation Bonds*, *Series of June* 2016—Official Statement, https://www.illinois.gov/gov/budget/capitalmarkets/RecentBondSales/State%20of%20Illinois,%20General%20Obligation%20Bonds,%20Series%20of%20June%202016%20-%20Official%20Statement.pdf

Medicaid cost growth ("Underlying Excess Cost Growth Used in Health Care Cost Projections"):

U.S. Congressional Budget Office, The 2016 Long-Term Budget Outlook (July 12, 2016), at: https://www.cbo.gov/publication/51580

Economic and demographic variables for Illinois, historical and projected, provided by

Regional Economics Applications Laboratory (REAL) of the University of Illinois (www.real.illinois.edu/) using their "Illinois Regional Economic Model," last revised June 12, 2015.