

Sales Tax Forecasting and Analysis by Industry Type The Florida Model

Bob McKee
Chief Economist
Florida Department of Revenue



Sales Tax in Florida

- 6% Statewide Rate
- Up to 3.5% local option at county level
 - No county has more than 1.5% in place
- In 2015-16 Total Sales Tax collections were \$26.345 B
 - \$2.2 B was Local Option Sales Tax
 - 83.5% or \$21.998 B was General Revenue
 - Sales Tax General Revenue was 77.7% of total General Revenue

Sales Tax from an Economic Perspective

- Taxes multiple types of transactions
 - Sales of Tangible Personal Property (Include registered vehicles, vessels and aircraft and include items where the business entity is the final consumer)
 - Transient Rentals
 - License to Use Real Property for Commercial Purposes (Commercial Rent)
 - Admissions
 - Sales of Prepared Food
 - Hot prepared
 - Prepared to be eaten on premises
 - Sales of certain services
 - Sales of Non-Residential Electricity

Sources of Data for Sales Tax

- DR-1 Registration Form
 - Registration required for each physical location (except transient rentals)
 - Data includes North American Industrial Classification System (NAICS) code
- DR-15 Sales Tax Return
 - Data includes the following transaction types:
 - Sales/Services
 - Taxable Purchases (Use Tax)
 - Transient Rental
 - Commercial Rental
 - Food and Beverage Vending
- DR-15EZ Sales Tax Return for certain small taxpayers
 - Does not provide transaction types
 - Can only be used if tax collected the prior year was less than \$200,000

Tracking of Sales Tax Activity

- Kind Codes
 - Department developed business activity code
 - Data from 1964 forward
 - Reliable data from February 1993 forward
 - Assigned based on information obtained in registration of taxpayers
 - Today assigned primarily based on North American Industrial Classification System (NAICS) codes
 - 86 codes numbered 1 to 99
 - Certain codes are not used, or have been collapsed into other codes over time

Economic Groups

- Sales tax is tracked and forecasted using 6 economic groups
 - Consumer Non-Durables (\$7.0 B in 2015-16)
 - Tourism and Recreation (\$5.3 B in 2015-16)
 - Autos and Accessories (\$4.2 B in 2015-16)
 - Other Consumer Durables (\$1.6 B in 2015-16)
 - Building Investment (\$1.4 B in 2015-16)
 - Business Investment (\$4.6 B in 2015-16)

Method of Assignment into Economic Groups

- Collections are assigned to Economic Group based on transaction type and business kind code
- Step 1 – Assignment by transaction type
 - Transaction type Taxable Purchases is assigned to Business Investment without regard to the reporting entity's kind code
 - Transaction type Commercial Rental is assigned to Business Investment without regard to the reporting entity's kind code
 - Transaction type Transient Rental is assigned to Tourism and Recreation without regard to the reporting entity's kind code
 - Transaction type Food and Beverage Vending is assigned to Consumer Non-Durables without regard to the reporting entity's kind code
- Step 2 – Assignment by Kind Code
 - Collections not assigned in Step 1 are assigned to Economic Group based on Kind Code

Consumer Non-Durables

Code	Description	Code	Description	Code	Description
1	Grocery Stores	44	Florist	72	Repair of Tangible Personal Property
2	Meat Markets, Poultry	45	Fuel Dealers, LP Gas Dealers	75	Trade Stamp Dealers (redemption centers)
3	Seafood Dealers	46	Funeral Directors, Monuments, Supplies, Cemeteries	76	Nurseries and Landscaping, Supplies, Tree Experts
4	Vegetable and Fruit Markets, Fruit Juice Stands	47	Scrap Metal, Junk Yards, Salvaged Material	77	Vending Machines (tangible property sales)
5	Bakeries, Baking & Selling, Selling	48	Itinerant Vendors, Peddler, Direct Sales	78	Importing and Exporting
6	Delicatessens	49	Laundry, Linen, Cleaning Services	81	Schools and Colleges
7	Candy, Confectionery, Sundries, Concession Stands	51	Horse, Cattle and Pet Dealers, Equipment & Supplies	84	Utilities, Electricity or Gas
10	Clothing Stores, Alterations	53	Shoe Repair Shops, Shoe Shine Parlors	87	Motion Picture Industry
11	Shoe Store	54	Storage and Warehouse	90	Flea Market
20	General Merchandise Stores, Survival Kits	57	Social, Fraternal, Commercial Clubs & Assoc.	92	Other Professional Services
21	Second-Hand Stores, Antique Shops	64	Bottlers (beer and soft drinks)	94	Other Industrial Services
22	Dry Good Stores, Sewing, Needlework and Piece Goods, Linens	65	Pawn Shops	98	Commercial Fisherman
41	Barber and Beauty Shop, Reducing, Hot Tubs	66	Communications, Telephone, Telegraph, Graphic Arts – Printing, Publishing,	99	Miscellaneous, Swimming Pool Supplies
42	Book Stores	68	Engraving		

Tourism and Recreation

Code	Description
8	Restaurants, Lunchrooms, Catering Service
9	Taverns, Night Clubs, Bars, Liquor Stores
39	Hotels, Rooming Houses, Apartments, Tourist courts
43	Cigar Stands, Tobacco Shops
52	Photographers, Photo and Art Equipment & Supplies
55	Gift, Card, Novelty, Hobby, Stationery and Toy Stores, Stationary etc
56	Newsstands, Magazines, Subscriptions, Periodicals
59	Admissions (Pool rooms, rides, theatres, dances, theme parks)
60	Holiday Season Vendors, Christmas Trees
61	Rental of Tangible Personal Property
83	Privately Operated Parking Lots, Boat Docking and Storage (Marines)
89	Exempt Facility

Autos and Accessories

Code	Description
23	Motors Vehicle Dealers, Trailers, Campers
24	Auto Accessories, Tires, Parts, (trailers) Auto
25	Filling and Service Stations, Car Wash
26	Garages, Auto Paint and Body Shops

Other Consumer Durables

Code	Description
18	Hardware, Paints, Light Machinery, Bicycle
27	Aircraft Dealers
28	Motorboats, Yachts, Marine Parts, Accessories
29	Furniture Stores, New and Used
30	Household Appliances, Dinnerware, etc
32	Music Stores, Radios, Electronic Stores

Building Investment

Code	Description
33	Building Contractors (roads and realty)
34	Heating, Air Conditioning, Insulation
35	Electrical and plumbing, Well Drilling, Pipes
36	Decoration, Painting and Papering, Drapery
37	Roofing and Sheet Metal
38	Lumber and Building Materials, Pre-Fab bldgs
62	Fabrication and Sales of Cabinets, Windows,
74	Top Soil, Clay, Sand, Fill Dirt

Business Investment

Code	Description
17	Fertilizer Stores, Feed, Seed
19	Farm Implements and Supplies and Equipment
31	Store and Office Equipment
50	Machine Shops, Foundries, Iron Work (Ornamental)
58	Industrial Machinery
63	Manufacturing, Processing, Mining
67	Transportation – Railroads, Airlines, Bus and
69	Insurance, Banking, Savings and Loan Research
70	Sanitary and Industrial Supplies
71	Packaging Materials – Paper, Box Bag Dealers, Containers
73	Advertising – Outdoor Signs and Billboards
79	Medical, Dental, Surgical, Optical, Hospital Supplies
80	Wholesale Dealers
82	Lease or Rentals of Office Space and Commercial Retails
93	Other Personal Services

Forecasting Sales Tax

- Florida has a consensus estimating process
 - 4 principals that must agree on the official forecasts
 - Principals are professional staff of the Executive Office of the Governor, Florida House of Representatives, Florida Senate and the Office of Economic and Demographic Research
 - Principals are presented with three independent forecasts
 - Executive Office of the Governor
 - Office of Economic and Demographic Research
 - Department of Revenue
 - A five year forecast is developed for each of the six economic groups
 - Input data comes from National Economic Conference, Florida Economic Conference and Florida Demographic Conference
 - Principals agree on forecasts for input variables
 - Forecasters use the same time series forecasts for exogenous variables
 - Model development and specification determined by analysts

Key Exogenous Variables

Consumer Non-Durables

- Population Growth
- Consumer Price Index
- Florida Personal Income
- Florida Employment
- Number of Visitors (Tourists)

Tourism and Recreation

- Number of Visitors by Air
- Number of Visitors by Car
- Domestic Visitors
- Canadian Visitors
- Overseas Visitors
- Florida Personal Income
- Exchange rates
- US Disposable Income
- Gas Prices
- US Employment

Key Exogenous Variables - Continued

Autos and Accessories

- Population Growth
- New Light Truck Registrations
- New Light Auto Registrations
- Florida Personal Income
- National Consumption of Motor Vehicles and Parts
- Age of Rolling Stock
- Florida Household Disposable Income
- Gas Prices
- Florida Employment

Other Consumer Durables

- Housing Starts
- Population growth
- Florida Personal Income
- Prime Rate
- National Consumption of Consumer Durables
- Florida Household Disposable Income
- Florida Employment
- Florida Households

Key Exogenous Variables - Continued

Business Investment

- Prime Rate
- Oil Price per Barrel
- Non-Residential Property Appreciation
- US Corporate Profits
- Florida Employment

Building Investment

- Housing Starts
- Florida Private Construction expenditures
- Florida Public Construction expenditures
- Conventional Mortgage Rates
- Florida Personal Income

Lessons Learned

- Carefully examine the assignment into economic groups
 - Once included – very difficult to revise without affecting data continuity and impacting degrees of freedom
 - Improper assignment can distort results
- Constantly review business activity assignment when working with data in order to improve data going forward

Questions?

Contact -
Bob McKee
(850) 717-6159
mckeebob@dor.state.fl.us

