

Cook County Revenue Forecasting Commission

July 2, 2019

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President, Cook County Board of Commissioners



Agenda



1. Area of Focus
2. Methodology Approach
3. Home Rule Tax Types
4. Forecasting methodologies and assumptions
5. Future tax types

Area of Focus



1. Cook County has over 60 different revenue sources that are in the following categories and account for \$5.6 Billion in FY2019:
 - a. Home Rule Taxes (Property, Sales and other Excise taxes)
 - b. Fees & Licenses (includes Special Purpose Revenues)
 - c. Grants, Other Government Reimbursements & Miscellaneous
2. The Bureau of Finance is responsible for forecasting the County's Home Rule Taxes
3. Fee generating agencies and departments, that include the separately Elected Offices and the Health System are responsible for estimating fees and licensing revenues
4. The Revenue Forecasting Commission will focus its efforts mainly on the Home Rule Taxes that are over \$30 Million, which account for \$1.5 Billion in revenues

Methodology Approach



1. Factors to consider
 - i. Historical Trends
 - ii. Economic Trends
 - iii. Regulatory Impacts
 - iv. Management Initiatives
2. Look at different trends based on longevity of data set:
 - i. Compounded Annual Growth Rates
 - ii. Linear Regression Analysis
3. Review tail events like rate increases or management initiatives (audits) that may skew data in a given year and smooth those out
4. Tend to be more conservative when trends are indicating growth and moderate when trends indicate a decline
5. For new revenue start off with an independent study or other jurisdiction's projections and adjust it for County population

401155-County Sales Tax



Revenue Source	2019	2020	2021	2022	2023	2024
Sales Tax (In Millions)	831.8	852.6	877.1	898.9	921.1	944.0

Methodology:

- Considered multiple sources including Federal Reserve, Survey of Professional Forecasters and The Wall Street Journal's Survey of Economists
- Adjusted Fed GDP for average historical error.

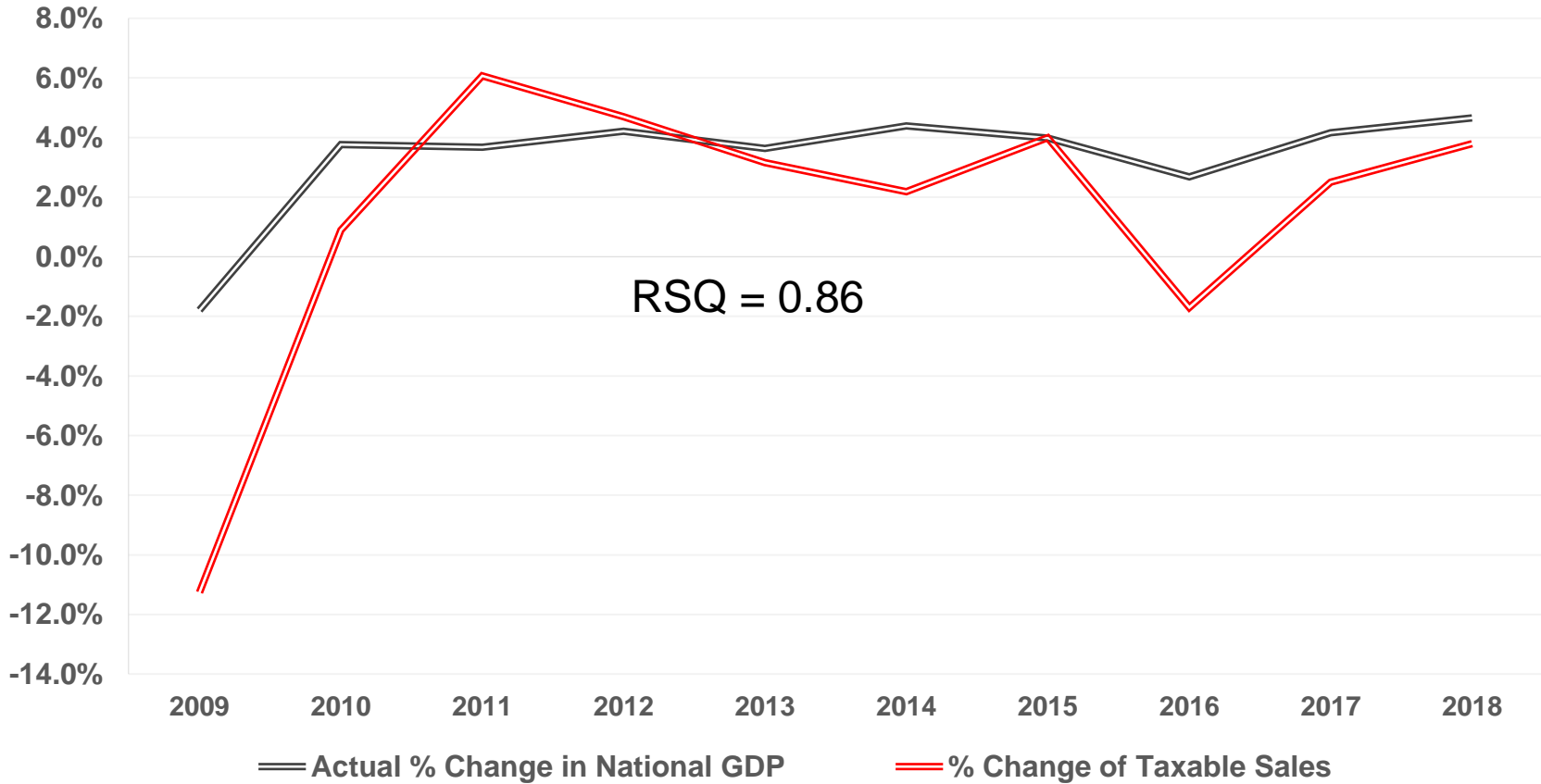
Assumptions:

- A high correlation (RSQ of .86) between National GDP and the change in Sales tax provides significant confidence in this method.
- However, Mid-west growth lags the nation by about 0.5%

401155-County Sales Tax cont.



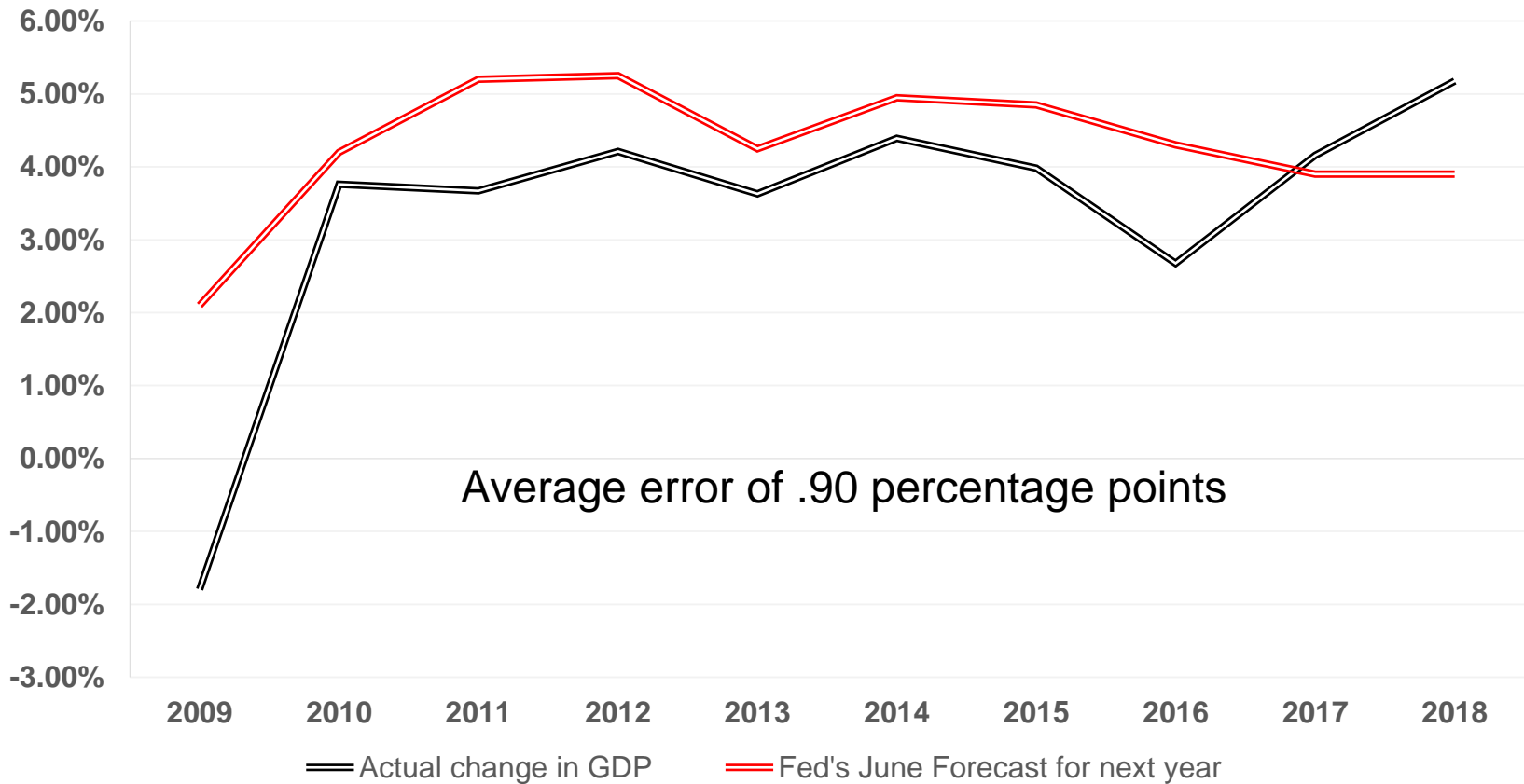
CORRELATION BETWEEN CHANGE IN ACTUAL SALES AND CHANGE IN NATIONAL GDP



401155-County Sales Tax cont.



ACTUAL CHANGE IN NATIONAL GDP VS FEDERAL RESERVE JUNE PROJECTION



400015-Property Taxes



Revenue Source	2019	2020	2021	2022	2023	2024
Property Tax (In Millions)	767.9	775.3	780.15	785.2	790.3	795.6

Methodology:

- The County's Base Property Tax levy is \$720.4 million and has not changed since 1996.
- Starting in 2012 the County began realizing the additional revenue associated with expiring TIFs, Incentives and Construction of New Properties.
- The 2020 estimate is based on the cumulative value of the above since 2012 plus the County's share for 2018 as published by the Cook County Clerk.

Assumptions:

- Accordingly, the County will receive .00489 (Our Agency Rate) of the 1.5 billion EAV of the above. (See New Property Report).
- 2020 Property tax revenues will be approximately equal to the 2018 tax year published by the Clerk in June of this year.

400015-Property Taxes



Revenue Source	2019	2020	2021	2022	2023	2024
Property Tax (In Millions)	767.9	775.3	780.15	785.16	790.30	795.56

Out Year Methodology:

- Property Tax Base, Expiring TIFs, and Expiring Incentives are not projected to increase at this time.

Out Year Assumptions:

- New Property is projected to increase at the same rates as sales tax in accordance with economic growth and inflation.

401175-County Use Tax



Revenue Source	2019	2020	2021	2022	2023	2024
Use Tax (In Millions)	81.9	79.0	78.5	78.0	77.5	77.0

Methodology:

- Review 5 year historical trend with and without compliance related collections
- Review estimates for future new cars sales (Center for Automotive Research estimates, Feb. 2019)
- Look at general economic outlook (purchaser potential)
- Review any legislative changes
- Factor in any compliance initiatives or system changes

Assumptions:

- Compliance related collections for Individual Use Tax will decrease based on volume available to take to OCA and Tax Intercept
- Minor downturn in overall new car sales as market has peaked and is on a slightly down plateau

401175-County Use Tax



Revenue Source	2019	2020	2021	2022	2023	2024
Use Tax (In Millions)	81.9	79.0	78.5	78.0	77.5	77.0

Out Year Methodology:

- Considered, a 7 Year Linear regression, 10 year CAGR, and 3 year CAGR.
- Selected the 3 year CAGR

Out Year Assumptions:

- FY 2020 projection provided by DOR was used as the base
- Use tax is more likely to decline, than increase particularly when we take into consideration management initiatives

401195-Gasoline / Diesel Tax



Revenue Source	2019	2020	2021	2022	2023	2024
Gas/Diesel Tax (In Millions)	94.2	93.2	92.7	92.2	91.7	91.2

Methodology:

- Review 5 year historical trend with and without compliance related collections
- Look at general economic outlook (travel)
- Review any significant changes in industry/technology
- Review any legislative changes
- Factor in any compliance initiatives

Assumptions:

- State tax increase will negatively impact our revenue, but due to a very inelastic market, only minimally (US Energy Information Administration data)
- Overall gradually declining revenue source
- Potential easing of MPG requirements may slow slight declines related to increased fuel efficiency in the longer term

401195-Gasoline / Diesel Tax cont.



Revenue Source	2019	2020	2021	2022	2023	2024
Gas/Diesel Tax (In Millions)	94.2	93.2	92.7	92.2	91.7	91.2

Out Year Methodology:

- Considered a 7 Year linear regression, 20 year CAGR and 3 year CAGR
- All of which yielded results with little variation consistent with DOR assertion of inelasticity.
- Selected the 20 year CAGR as it projected the more moderate decline.

Out Year Assumptions:

- Gas tax revenues will continue to fall in accordance with the 20 year trend.
- Ostensibly due to more fuel efficient vehicles

401215-Alcoholic Beverage Tax



Revenue Source	2019	2020	2021	2022	2023	2024
Alcoholic Bev. Tax (In Millions)	37.9	37.0	36.8	36.5	36.3	36.1

Methodology:

- Review 5 year historical trend with and without compliance related collections
- Look at general economic outlook (purchaser potential)
- Review any significant changes in industry
- Review any legislative changes
- Factor in any compliance initiatives

Assumptions:

- Trend toward boutique brewers/distillers will continue, albeit still a relatively small portion of overall market
- Compliance will continue to monitor new producers
- Success of local sports franchises give small boost to market
- Overall gradually declining revenue source

401215-Alcoholic Beverage Tax cont.



Revenue Source	2019	2020	2021	2022	2023	2024
Alcoholic Bev. Tax (In Millions)	37.9	37.0	36.8	36.5	36.3	36.1

Out Year Methodology:

- Considered a 7 year linear regression, 7 year CAGR and 3 year CAGR
- Selected the 3 year CAGR as the more conservative option.

Out Year Assumptions:

- Trend toward boutique brewers/distillers will continue, but still a relatively small portion of overall market

401355-Amusement Tax



Revenue Source	2019	2020	2021	2022	2023	2024
Amusement Tax (In Millions)	39.8	39.3	40.0	40.7	41.5	42.6

Methodology:

- Review 5 year historical trend with and without compliance related collections
- Look at general economic outlook (purchaser potential)
- Look for any new venues that will have a significant impact
- Review any legislative changes
- Factor in any compliance initiatives

Assumptions:

- Success of local sports franchises should yield one or more playoff teams in a major sport
- Slowly increasing prices at sports venues and live theaters
- Potential decline in movie theaters as no scheduled releases in the major film franchises in 2020
- Compliance targets likely to be smaller than in past

401355-Amusement Tax cont.



Revenue Source	2019	2020	2021	2022	2023	2024
Amusement Tax (In Millions)	39.8	39.3	40.0	40.7	41.5	42.6

Out Year Methodology:

- Considered a 10 year linear regression, 10 year CAGR and 3 year CAGR
- Opted for the 3 year CAGR as the more conservative option

Out Years Assumptions:

- Slowly increasing prices at sports venues and live theaters

401375-Parking Lot and Garage Operation



Revenue Source	2019	2020	2021	2022	2023	2024
Parking Tax (In Millions)	50.4	48.5	49.4	50.2	51.1	52.0

Methodology:

- Review 5 year historical trend with and without compliance related collections
- Look at general economic outlook (tourism)
- Review any significant changes in industry
- Review any legislative changes
- Factor in any compliance initiatives

Assumptions:

- State tax increase will negatively affect our revenue, but its a moderately inelastic market (Concas & Nayak: A Meta Analysis of Parking Price Elasticity; 2012)
- While parts of the industry slowly increase prices for premium spaces, facilitators have begun to drive down mid and lower tier parking prices through online offers
- While compliance targets are likely to be smaller than in past, they are still somewhat plentiful and will continue to be a focus for staff

401375-Parking Lot and Garage Operation cont.



Revenue Source	2019	2020	2021	2022	2023	2024
Parking Tax (In Millions)	50.4	48.5	49.4	50.2	51.1	52.0

Out Year Methodology:

- Considered a 10 year linear regression, 10 year CAGR and 3 year CAGR
- Currently considering 3 year CAGR as the most moderate

Out Year Assumptions:

- A slight increase is consistent with DOR's assumptions

401435-Cigarette Tax



Revenue Source	2019	2020	2021	2022	2023	2024
Cigarette Tax (In Millions)	110.7	103.00	99.6	96.4	93.3	90.2

Methodology:

- Review 5 year historical trend with and without compliance related collections
- Look at general economic outlook (purchaser potential)
- Review any significant changes in industry
- Review any legislative changes
- Factor in any compliance initiatives

Assumptions:

- State tax increase will negatively affect our revenue, but this a moderately elastic market (WHO data and internal data)
- State “Raise the Age” legislation will significantly impact consumption
- Overall usage continues to decline after a small uptick earlier this decade
- Compliance continues to be very difficult with smuggling of product from nearby states with significantly lower tax rates

401435-Cigarette Tax cont.



Revenue Source	2019	2020	2021	2022	2023	2024
Cigarette Tax (In Millions)	110.7	103.00	99.6	96.4	93.3	90.2

Out Years Methodology:

- Considered 10 year CAGR, 3 Year CAGR
- Reviewed the average decline during periods of a rate increase
- Reviewed the average “natural” decline of sales over the past four years
- (-3.24%)

Out Years Assumptions:

- Selected average natural decline of about 3.2% for 2021-2024

401555-Hotel Accommodations Tax



Revenue Source	2019	2020	2021	2022	2023	2024
Hotel Tax (In Millions)	33.3	33.8	34.0	34.9	35.8	36.7

Methodology:

- Review 5 year historical trend with and without compliance related collections
- Look at general economic outlook (tourism)
- Review any significant additions to inventory
- Review any legislative changes
- Factor in any compliance initiatives

Assumptions:

- Compliance targets are generally smaller as the look-back period is short (tax enacted in 2016) and major taxpayers tend to be in substantial compliance

401555-Hotel Accommodations Tax cont.



Revenue Source	2019	2020	2021	2022	2023	2024
Hotel Tax (In Millions)	33.3	33.8	34.0	34.9	35.8	36.7

Out Years Methodology:

- Considered Flat and Based on GDP
- Options limited due to short look back period.
- Settled on GDP

Out Years Assumptions:

- Tax enacted in 2016
- Should be more closely tied to GDP

Cannabis Tax (New for FY2020)



Revenue Source	2019	2020	2021	2022	2023	2024
Cannabis Tax (In Millions)	3.3	TBD	TBD	TBD	TBD	TBD

Methodology:

- Used Illinois Economic Policy Institute's study on impact of legalizing Marijuana in Illinois
- Adjust for County population (41% of state)

Assumptions:

- 1.5% rate (County has the authority to tax up to 3%)
- Quarter of collection due to State process

Out Years Methodology:

- Grow with regular inflation

Out Years Assumptions:

- Assume long term forecast for inflation 2%

Sports Gambling Tax (New for FY2020)



Revenue Source	2019	2020	2021	2022	2023	2024
Sports Gambling Tax (In Millions)	3.2	TBD	TBD	TBD	TBD	TBD

Methodology:

- Use State of IL projections
- Adjust for County population (41% of state)

Assumptions:

- State rollout for implementation is on track

Out Years Methodology:

- Grow with regular inflation

Out Years Assumptions:

- Assume long term forecast for inflation 2%