



NEW YORK CITY COMPTROLLER
SCOTT M. STRINGER

Impact of Hybrid Work on NYC Sales Tax Revenue

Presented to Federation of Tax Administrators October 19, 2021

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Overview

- ▶ Pandemic has likely changed where people will work with far reaching implications on the economy and tax base.
- ▶ The consensus is that there will be more work from home, an average of 2 days per week in NYC
- ▶ Many unanswered questions relating to this potential change
 - Will homes become the new office ?
 - Will reduced commute times change where workers live and how they commute to work?
 - *Where will workers spend their income and will they change their spending patterns now that they are working more from home and? What is the resulting impact on NYC Sales Tax Revenue?*



Methodology

1. Where do people in the City workforce work and reside ?
2. Who will be able to work remotely and how many workers will want to work remotely ?
3. How much do workers spend at the workplace and how will spending change ?
4. Calculate results based on average of 2 days per week work from home
5. Sensitivity of results to baseline assumptions (risks/offsets)

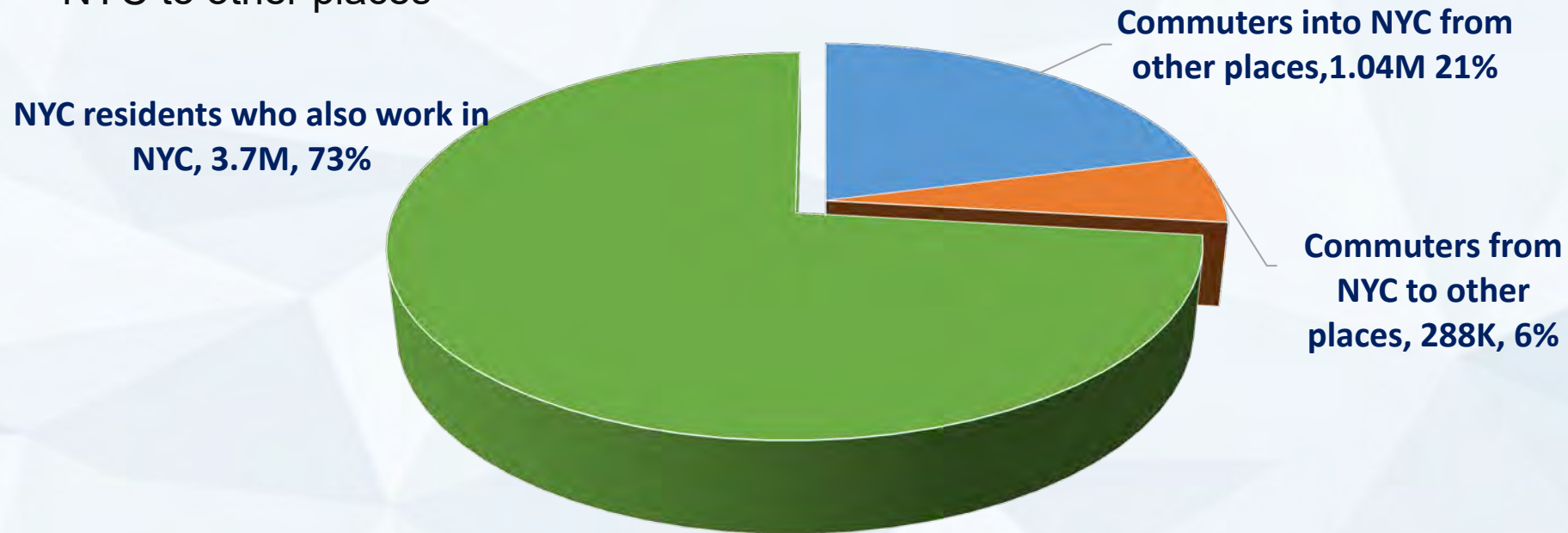


1) Background on NYC workforce: Where do people work and reside



NYC Workforce

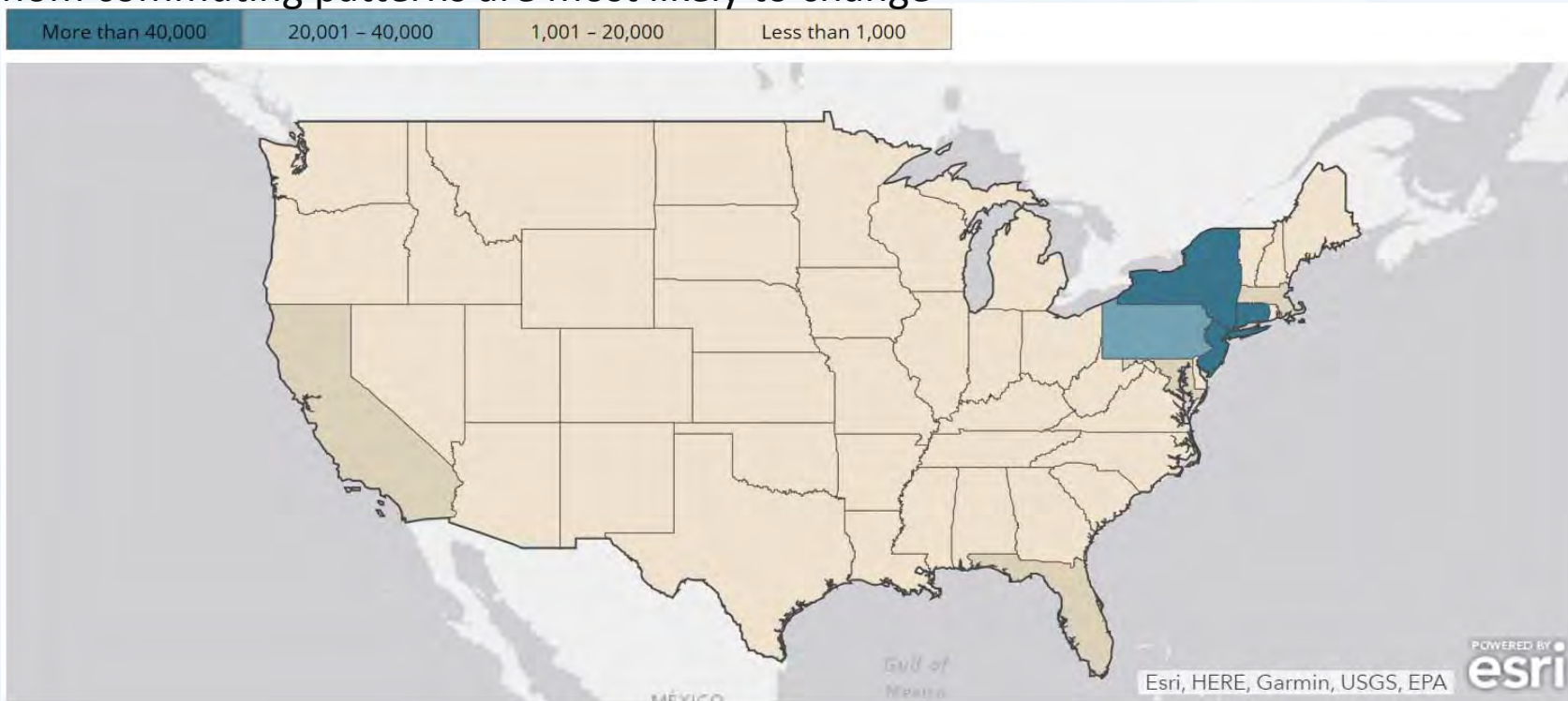
- ▶ The vast majority – 73% – of workers live and work in NYC.
- ▶ A significant percentage commute into the City (21%), while a small percentage (6%) commute from NYC to other places



Source: 2019 American Community Survey, author's calculations

Commuters into NYC

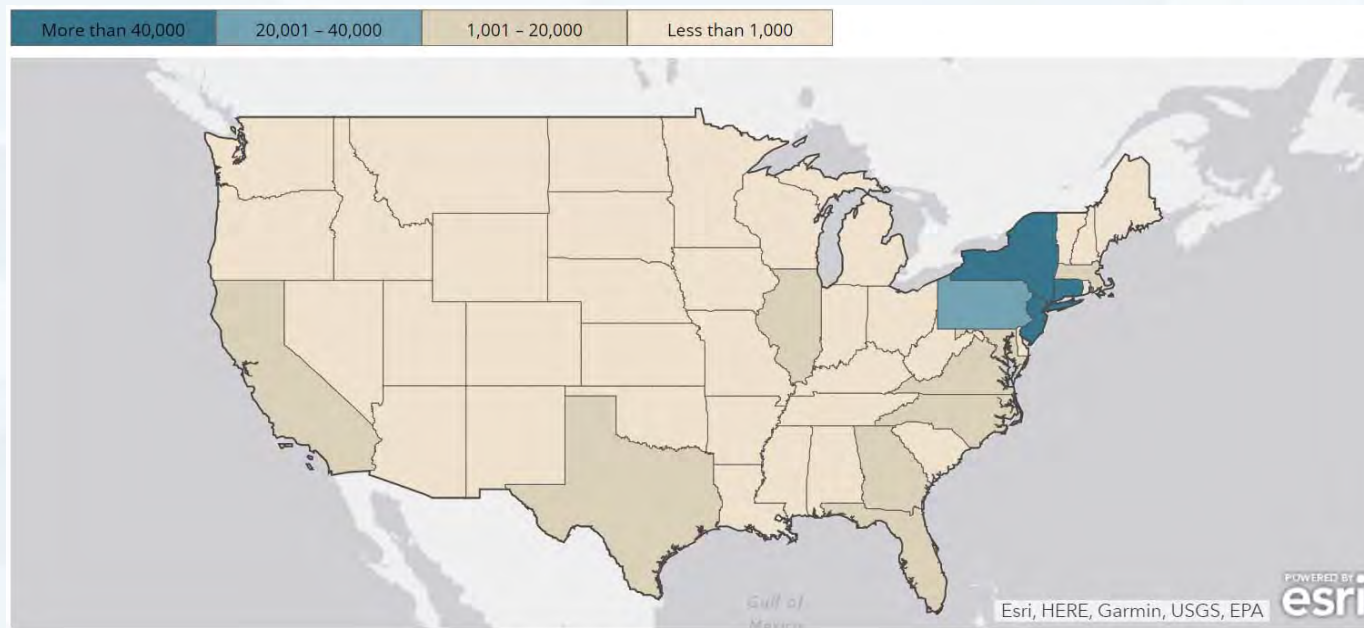
- The vast majority of commuters, almost 97%, into NYC come from neighboring NYS counties and States-CT, NJ PA.
- Analysis focuses on the 1.0 million commuters in the Northeast Acela train corridor connecting DC to Boston for whom commuting patterns are most likely to change



Source: 2019 ACS

Most commuters from NYC work in nearby counties and states

- Similarly, the vast majority of commuters from NYC commute to neighboring state and counties and analysis focuses on the 277k Amtrak Corridor commuters



Source: PIT Population Study data prepared in the Office of Tax Policy Analysis, author's calculations

2) Who will be able to work remotely and how many workers will want to work remotely ?



Of the 3.7M NYC resident workers, 48% are employed in industries where work from home is viable

Industry	Employment	Ability to Telework %*	Total Potential Telework Employment
Agriculture	3,064	16%	490
Construction	208,298	22%	45,826
Manufacturing	105,253	37%	38,944
Retail, Wholesale and Transportation	634,710	28%	177,719
Information, Finance and Prof Services	1,008,901	74%	746,587
Education & Health	990,650	50%	495,325
Arts, Entertainment	397,417	21%	83,458
Other Services	194,415	56%	108,872
Public Admin	147,315	55%	81,023
TOTAL before adjustment	3,690,023	48%	1,778,243
Adjustment for those not choosing to telework**			1,600,419

*"Ability to work from home: evidence from two surveys and implications for the labor market in the COVID-19 pandemic," US Bureau of Labor Statistics, Monthly Labor Review June 2020, NLSY79 Survey . Comptroller Calculations

**We assume that 10 percent of the total workers who can work remotely will choose not to for various reasons, they like they office, peer pressure etc.

Most commuters into NYC are employed in high paying industries that work in offices where work from home is more viable

Industry	Employment	Ability to Telework %*	Total Potential Telework Employment
Agriculture	435	16%	70
Construction	79,453	22%	17,321
Manufacturing	36,372	37%	13,312
Retail, Wholesale and Transportation	136,685	28%	38,067
Information, Finance and Prof. Serv.	407,076	74%	300,016
Education & Health	209,447	50%	104,095
Arts, Entertainment	51,994	21%	10,659
Other Services	30,301	56%	16,817
Public Admin	60,382	55%	33,150
TOTAL before adjustment	1,012,145	53%	533,505
Adjustment for those not choosing to telework**			480,154

*"Ability to work from home: evidence from two surveys and implications for the labor market in the COVID-19 pandemic," US Bureau of Labor Statistics, Monthly Labor Review June 2020, NLSY79 Survey . Comptroller Calculations

**We assume that 10 percent of the total workers who can work remotely will choose not to for various reasons, they like they office, peer pressure etc.

Less than half of NYC commuters are employed in high paying industries that work in offices where work from home is more viable

Industry	Employment	Ability to Telework %*	Total Potential Telework Employment
Agriculture	233	16%	37
Construction	13,949	22%	3,041
Manufacturing	23,983	37%	8,778
Retail, Wholesale, Transportation	59,716	28%	16,631
Information, Finance and Prof Services	65,940	74%	48,598
Education & Health	64,868	50%	32,239
Arts, Entertainment	26,608	21%	5,455
Other Services	16,862	56%	9,358
Public Admin	5,070	55%	2,783
TOTAL before adjustments	277,229	46%	126,921
Adjustment for those not choosing to telework**			114,228

*"Ability to work from home: evidence from two surveys and implications for the labor market in the COVID-19 pandemic," US Bureau of Labor Statistics, Monthly Labor Review June 2020

**We assume that 10 percent of the total workers who can work remotely will choose not to for various reasons, they like they office, peer pressure etc.



3) How much do workers spend at the workplace and how will spending change ?



Assumptions on Changes in Spending due to Remote Work

- ➔ **Workers who work and live in the City will continue to spend money in the City, replacing spending at the office with spending close to home**
 - 1-for-1 substitution, taxable to taxable. NO DIRECT IMPACT on City sales tax revenue.
 - NO Change in number of commuters or City residents as a result of lower commuting
- ⬇ **Workers who commute to the City will replace spending at their City location with spending close to home outside the City**
- ⊕ **Workers who commute from the City will replace spending outside the City office with spending close to home**



How much do NYC office workers typically spend per week?

- ▶ Almost \$353 per week on average*
- ▶ This may seem like a lot but it includes, transportation and parking, services like gyms as well as occasional purchases of clothing and other goods, and for food, drink and other entertainment.
- ▶ **Notes on spending**
 - Local sales tax rate is 4.5 percent
 - NYC does not have a different tax rate for food away from home and other taxable items.
 - Shift from taxable food away from home to tax exempt groceries may be offset by shift from non-taxable public transit to taxable goods
 - *Parking – while some people may be driving and parking fewer times in the City others may choose to start driving or use taxable options such as for-hire vehicles (e.g., Uber)

*SOURCE: ICSC ...



4) RESULTS



Sales and Sales Tax Impact

Commuters Into City	
Total commuters who work remotely	480,154
Weekly Spend	\$353
Total Annual Spend (assuming 48 work weeks)	\$8,124,922,694
Total days not at office	2
Annual Spending Reduction per day not at office	\$1,624,984,539
Tax Revenue Loss	\$146,248,608

Commuters from City	
Total commuters who work remotely	114,228
Weekly Spend	\$353
Total Annual Spend (assuming 48 work weeks)	\$1,932,908,337
Total days not at office	2
Annual Spending Increase per day not at office (\$386,581,667
Tax Revenue Gain	\$34,792,350

- Overall net loss: **\$111 million**
- Only 1.5 percent of \$7.4 billion in projected sales tax revenue

5) Sensitivity of results to baseline assumptions (Risks/Offsets)



Risks and Offsets

- ↓ Reduced commuting could cause existing City residents to relocate outside the City as commuting become less burdensome
- ↓ Similarly, long 4 day stretches of WFH (Friday to Monday) allow City residents to spend more time outside the City
- ↑ Assumed spending occurs in a linear fashion, so 2 days at home implies a 2/5 reduction in spending for all categories (clothing, drinks after work). These may be more lumpy and could still occur even if days at workplace are reduced
- ↑ More people who can work from home choose not to. We assumed 10 percent would opt not to work from home. It could be higher

Acknowledgments

The New York City Comptroller, Scott Stringer, is the City's Chief Financial Officer

- ▶ The Comptroller safeguards the City's fiscal health, roots out waste, fraud and abuse in local government, and ensures that municipal agencies serve the needs of all New Yorkers.

<https://comptroller.nyc.gov/>

Thanks for reviews and comments :

- ▶ Preston Niblack, Deputy Comptroller for Budget, Office of the NYC Comptroller
- ▶ Norton Francis, Deputy CFO at DC ORA
- ▶ *Questions/Comments contact sgiache@comptroller.nyc.gov*

