

# ORANGE & ROCKLAND

## 2024 IMPACT STUDY

---

July 2025

 Orange & Rockland

HR&A



### Economic Power New Yorkers New Jerseyans Expect

Orange and Rockland Utilities delivers some of the nation's most reliable energy to 825,000 people and 32,000 businesses in Orange, Rockland and Sullivan counties in New York, and in Bergen, Passaic and Sussex counties in New Jersey — a powerful economic engine for the communities we serve.

Like the people in our service territory, the people of our company are New Yorkers and New Jerseyans. We live here, go to school, build our lives, and raise our families here. To measure the company's impact on the people and communities we serve, we worked with industry leader HR&A Advisors. Here's what we found.

### Fueling and Strengthening the Economy

In 2024, we generated \$1.9 billion in total economic output in the areas we serve, which reflects the market value of the services we provided, and amounts to 1% of our service territory's gross domestic product.

Every dollar Orange & Rockland spends [fuels the dynamic economies](#) of New York and New Jersey and helps local residents thrive. Our unmatched, around-the-clock reliability is the foundation of our region's economic strength, resilience, and prosperity.

The company creates and sustains thousands of well-paying, local jobs, spurs millions of dollars in economic activity throughout the region, and generates millions of dollars in New York and New Jersey state tax revenue.

In everything we do, we work in partnership. We partner with local elected officials, businesses, strategic nonprofits, community groups, and all our stakeholders to improve the quality of life and livelihoods of New Yorkers and New Jerseyans through economic growth and safe, reliable, and increasingly [clean energy](#).

### **Growing Local Businesses**

Orange & Rockland spent \$174 million in 2024 on contracts with New York State and New Jersey businesses.

\$65 million of our contracts are with small businesses, a 91% increase since 2022. Nearly half of all Orange & Rockland contracts in New York and New Jersey are with small businesses, and the average contract size is about \$563,000.

We partner with businesses of all sizes and backgrounds, bringing a wide range of skills and perspectives to our work. These relationships expand opportunities, support our sustainability goals, and strengthen our commitment to a resilient and forward-looking supply chain.

### **Creating and Sustaining High-Quality Jobs in New York and New Jersey**

Orange & Rockland supports 3,300 jobs in New York and New Jersey, including 1,200 jobs at the company. That's 1 in 450 jobs in our service area, a 6% increase since 2022.

Every time we hire a local vendor, as part of our \$174 million in contracts with New York and New Jersey businesses in 2024, we're supporting local businesses and the jobs they create.

Orange & Rockland itself employs a robust workforce. The company provides stable, high-quality, well-paying jobs for 1,200 people — the vast majority of whom are New Yorkers and New Jerseyans. More than 96% of Orange & Rockland employees live in New York and New Jersey.

Most of our employees also went to school here. More than 91% of Orange & Rockland employees graduated from New York- or New Jersey-based colleges and universities, and 41% graduated from State University of New York schools and New Jersey public colleges/universities.

Many company employees advance their careers without a college degree, including workers in union jobs. Half of Orange & Rockland employees are union members, almost 2.5 times the energy-industry average. We work with Local 503 of the International Brotherhood of Electrical Workers to ensure jobs are high quality, safe, and sustaining.

Our employees also tend to stay at the company nine years longer than the energy-industry average and advance their careers through internal promotions, a sign of job satisfaction.

### Support for Low-and Moderate-Income Customers

Orange & Rockland helps low-to-moderate income New Yorkers pay their energy bills through the Energy Affordability Program. In 2024, the company provided \$22 million to reduce the bills of 16,200 low-income customers.

### Providing Significant Tax Revenues to Both States

Orange & Rockland pays a substantial share of the total tax revenues for both New York and New Jersey. In 2024, the company contributed \$185 million in taxes and fees in New York and New Jersey — up 7% in the last year. Our tax payments are sufficient to pay 2,200 public school teachers or 2,750 social workers in the region.

Out of the \$185 million in direct taxes to New York and New Jersey, we contribute about \$90 million in local taxes, which include:

- \$52 million to Rockland County
- \$35 million to Orange County
- \$1.7 million to Sullivan County
- \$675K to Bergen County
- \$35K to Passaic County

### Helping New Yorkers and New Jerseyans Thrive

Orange & Rockland's vital role in growing and energizing the economy and improving the quality of life for residents in our service territory continues to grow every year. For years to come, for both [New York](#) and [New Jersey](#), we plan to continue to:

- Strategically and equitably invest to strengthen and expand our energy systems for reliability and clean energy
- Create and sustain thousands of well-paying, local jobs
- Spur millions of dollars in economic activity
- Generate millions of dollars in tax revenue
- Invest millions of dollars to grow local businesses and support the most vulnerable New Yorkers and New Jerseyans

**Orange and Rockland Utilities, Inc.** (O&R) has significant positive impacts at the state and local levels in New York and New Jersey.

This report summarizes O&R's impacts in 2024 and offers select comparisons to the 2022 and 2023 Impact Studies. It includes impacts in **four major areas**:

 <b>ECONOMY</b>	 <b>TAXES</b>	 <b>JOB</b> S	 <b>EQUITY</b>
<p><b>O&amp;R</b> contributes significantly to the NY and NJ economies, generating thousands of jobs and billions of dollars in economic activity.</p>	<p><b>O&amp;R</b> contributes millions of dollars in state and local taxes, helping fund the services that support NY and NJ.</p>	<p><b>O&amp;R</b> is powered by New Yorkers and New Jerseyans and provides quality, family-sustaining jobs for their workforce.</p>	<p><b>O&amp;R</b> supports customers in disadvantaged communities in New York and New Jersey through programs such as the Energy Affordability Program, which provides financial assistance on customer bills.</p>

### About the Study's Author

HR&A Advisors, Inc. (HR&A) is an employee-owned company that advises public, private, non-profit, and philanthropic clients on how to increase opportunity and advance quality of life in cities. With offices in New York, Atlanta, Dallas, Los Angeles, Raleigh, Washington, DC and the San Francisco Bay Area, HR&A has helped hundreds of clients over the past 45 years create vital places, build more equitable and resilience communities, and understand the economic and social impacts of their actions.

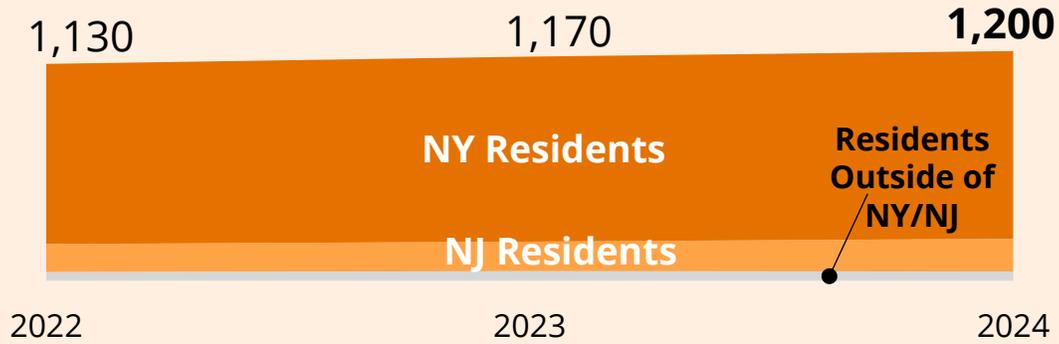
**Orange and Rockland Utilities, Inc.** (O&R) has significant positive impacts at the state and local levels in New York and New Jersey.

 <b>ECONOMY</b>	 <b>TAXES</b>	 <b>JOBS</b>	 <b>EQUITY</b>
<ul style="list-style-type: none"> <li>• <b>\$1.9B total economic output</b> (equivalent to 1% of Service Territory* GDP)</li> <li>• <b>3,300 jobs</b> (equivalent to 1 in 450 Service Territory jobs)</li> <li>• <b>\$174M in contracts with NY and NJ businesses</b> (\$26M increase from 2023)</li> <li>• <b>\$65M in contracts with NY and NJ diverse and small businesses</b> (12% increase from 2023)</li> <li>• <b>116 vendor contracts with NY and NJ diverse and small businesses</b> (45% of total)</li> </ul>	<ul style="list-style-type: none"> <li>• <b>\$185M fiscal contribution in NY and NJ</b> (7% increase since 2023)</li> <li>• <b>\$159M fiscal contribution in NY</b> (state and local taxes)</li> <li>• <b>\$26M fiscal contribution in NJ</b> (state and local taxes)</li> </ul>	<ul style="list-style-type: none"> <li>• <b>96%</b> of employees are <b>NY or NJ residents</b></li> <li>• <b>16% higher retention rate</b> than industry average</li> </ul>	<ul style="list-style-type: none"> <li>• <b>16.2K</b> low-income customers receiving utility bill discounts through the Energy Affordability Program (EAP)</li> <li>• <b>\$22M</b> in utility bill discounts provided to low-income customers from EAP</li> </ul>

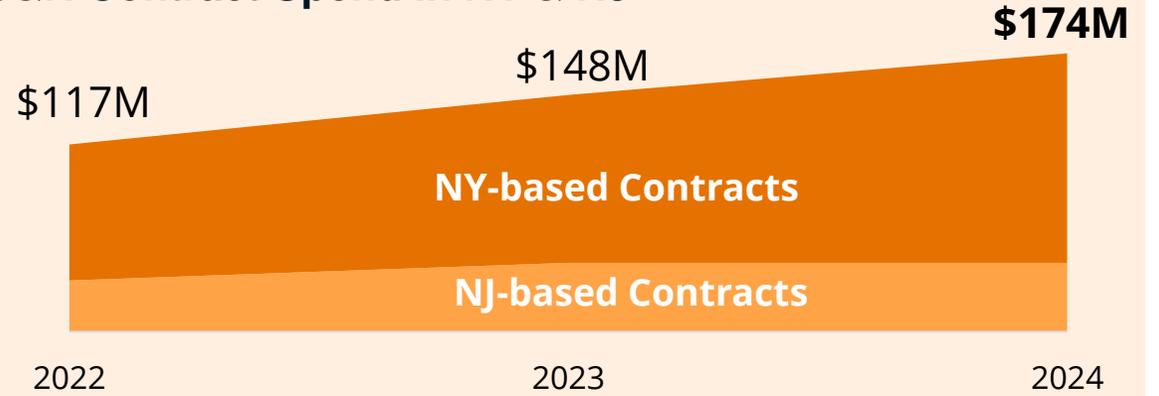
\*The Service Territory includes the six counties in which O&R operates: Orange, Rockland, Sullivan, Bergen, Passaic, Sussex  
 Source: For more information, see [questions 8-11](#), [12-14](#), and [15-19](#) in the FAQ.

**Orange and Rockland Utilities, Inc.** (O&R) has significant positive state and local impacts in New York and New Jersey.

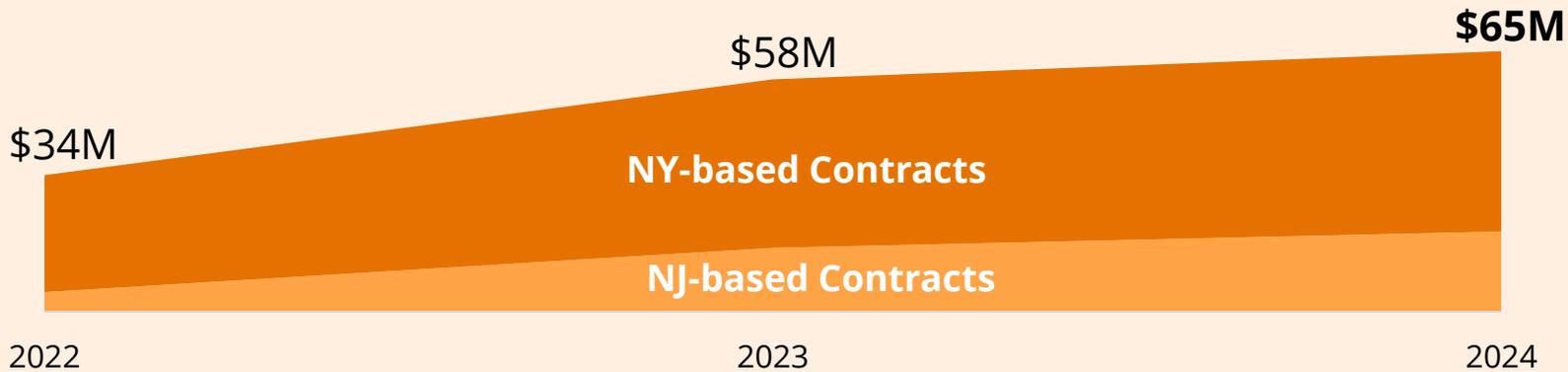
### O&R Local Employment



### O&R Contract Spend in NY & NJ



### O&R Contract Spend w/ Diverse and Small Businesses in NY & NJ



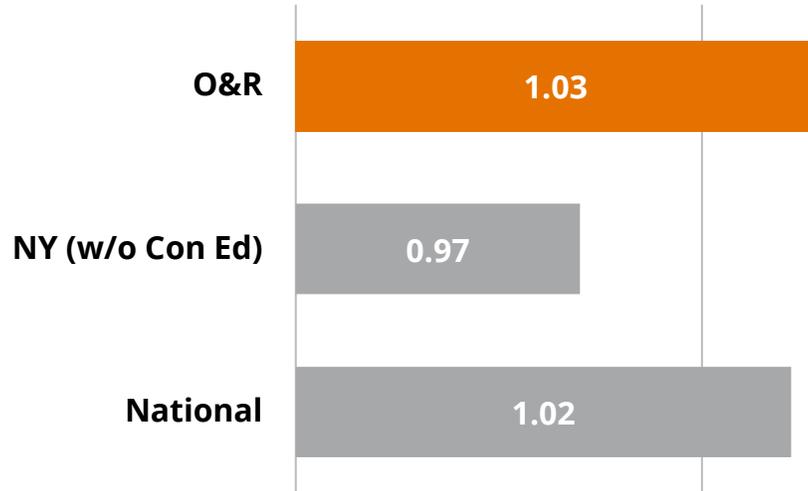
**+91%**

Increase in diverse and small business contract spending since 2022

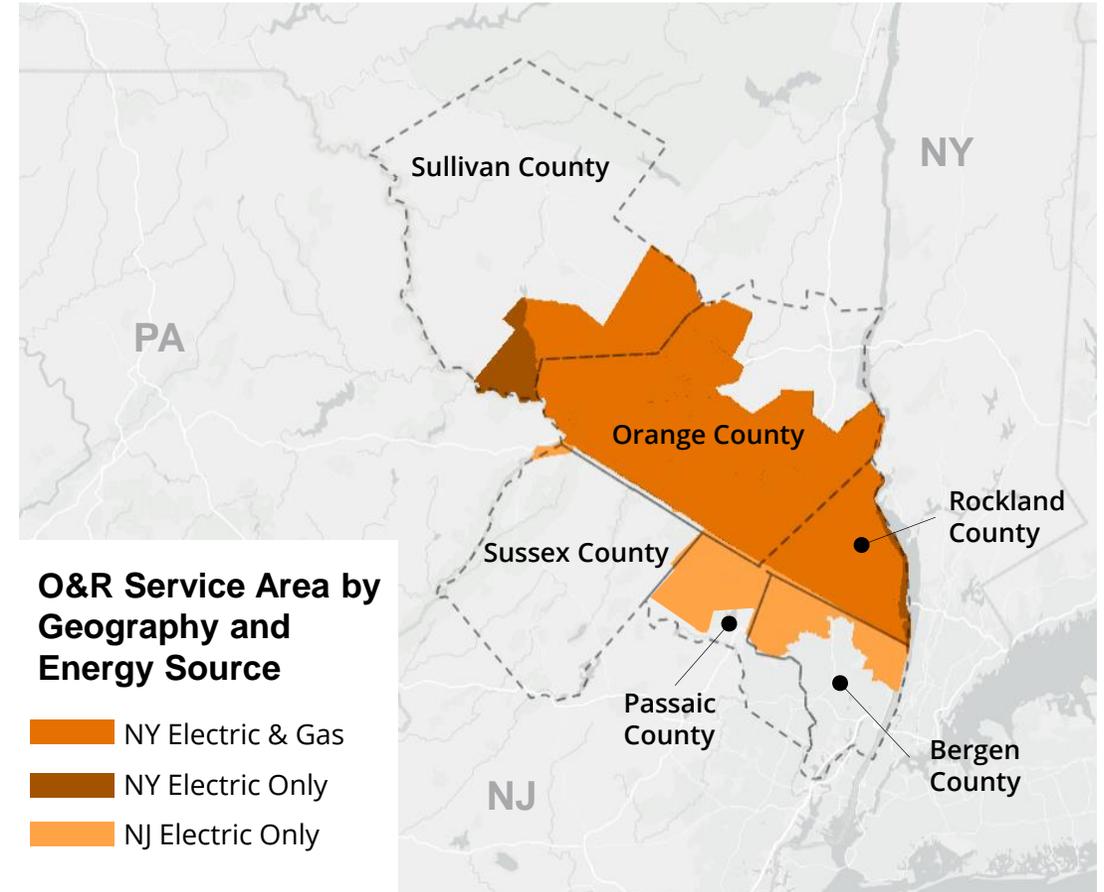
## BACKGROUND

O&R provides energy to approximately **825,000 people and 32,000 businesses** with interruption rates comparable to national averages.

### Average Annual Number of Electricity Interruptions per Customer (2024)



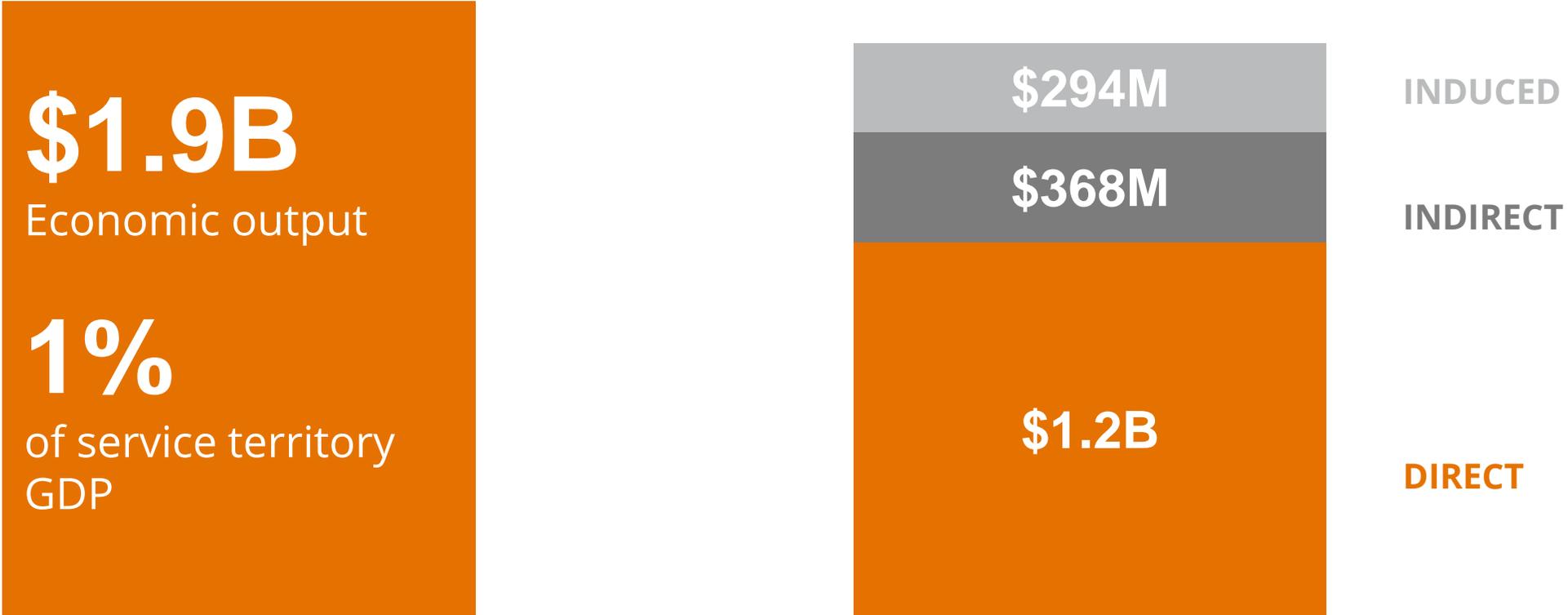
***On average, Con Edison customers experienced 1.03 electricity interruptions in 2024***



Source: 2024 Service Reliability data from Con Edison; U.S. Census Bureau, American Community Survey (5-Year Estimates), 2018-2022; 2024 Data Axle. For more information, see [questions 20-22](#) in the FAQ.

# ECONOMY

O&R's total economic output was **\$1.9 billion** in 2024, accounting for 1% of the GDP in its service territory.



Note: The Service Territory includes Orange, Rockland, Sullivan, Bergen, Passaic, and Sussex Counties, which had a combined GDP of \$181B in 2023, the most recent available IMPLAN data.

Source: HR&A Analysis; Con Edison; IMPLAN. For more information, see [questions 23-24](#) in the FAQ.

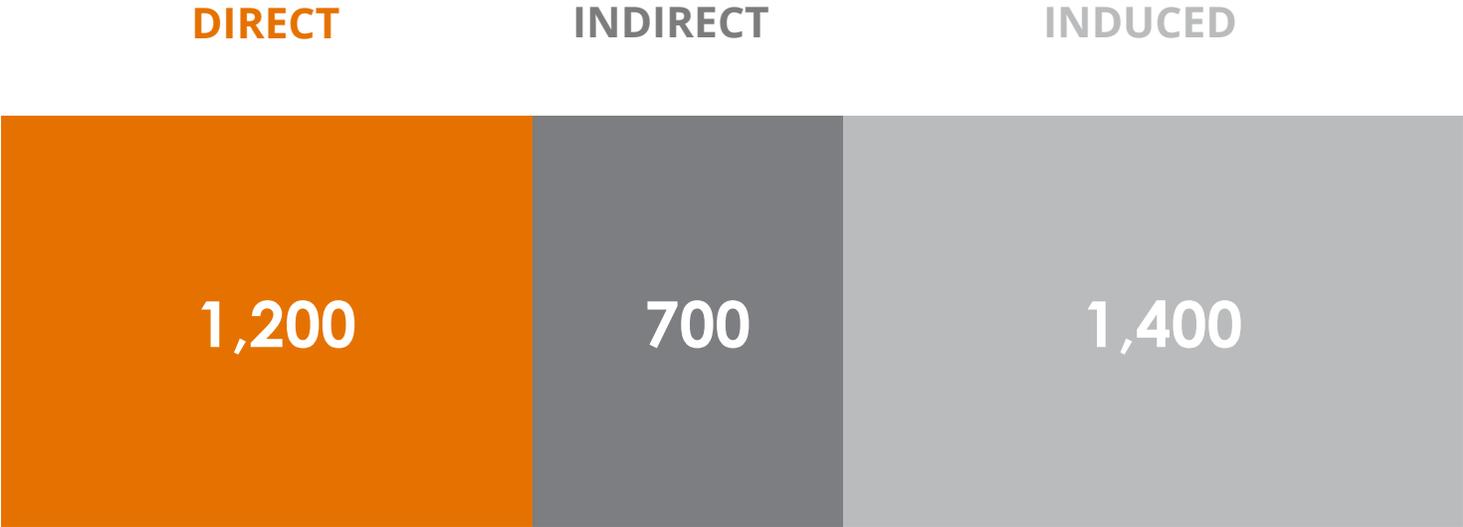
O&R supports **3,300 jobs** in NY and NJ, including **1,200 workers directly employed** by the utility.

**3,300**  
Jobs

**1 in 450**  
Jobs in service territory

---

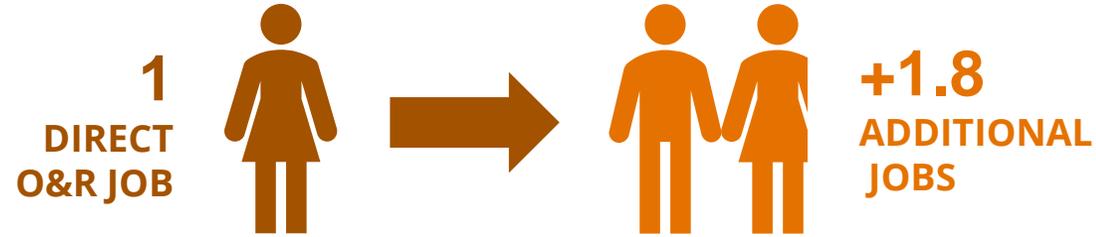
**70 (+6%)**  
Additional direct jobs added since 2022, including 30 (+3%) in the last year



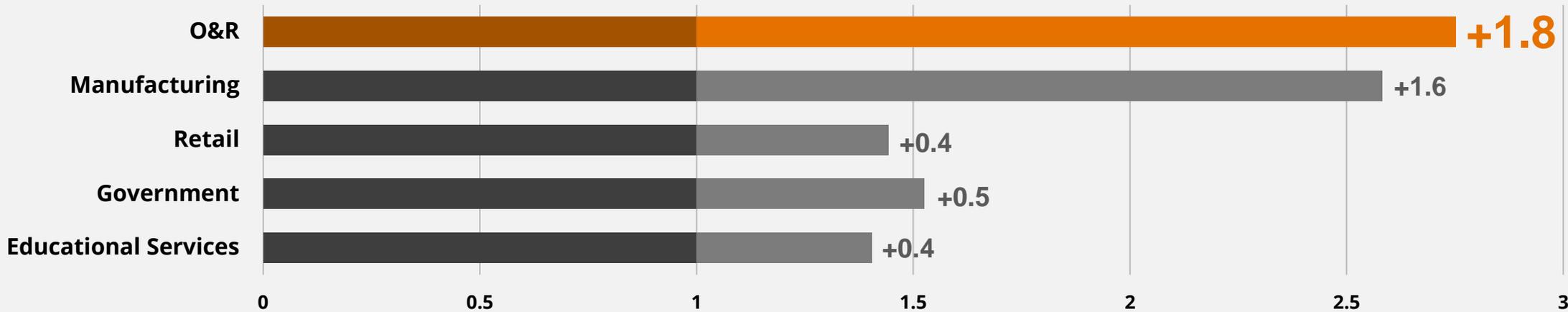
Note: 1.5M total Service Territory jobs in 2023, the most recent available IMPLAN data. Out of O&R's 1,196 employees, 15 employees work part-time.

Source: HR&A Analysis; Con Edison; IMPLAN. For more information, see [questions 25-27 in the FAQ](#).

For every **1** O&R employee, the company's economic activity supports another **1.8 jobs** in NY and NJ.



O&R's **1.8 multiplier jobs is higher** than that of other high-multiplier industries like manufacturing (+1.6), and about four to five times that of government (+0.5) or education (+0.4).



*Note: The O&R job multiplier is higher than the multiplier reported in the CECONY Impact Study because the O&R Impact Study has a larger study area—NY and NJ combined, compared to only NY for the CECONY study—and therefore captures more multiplier economic activity.*

*Source: HR&A Analysis; Con Edison; IMPLAN. For more information, see [questions 28-32](#) in the FAQ.*

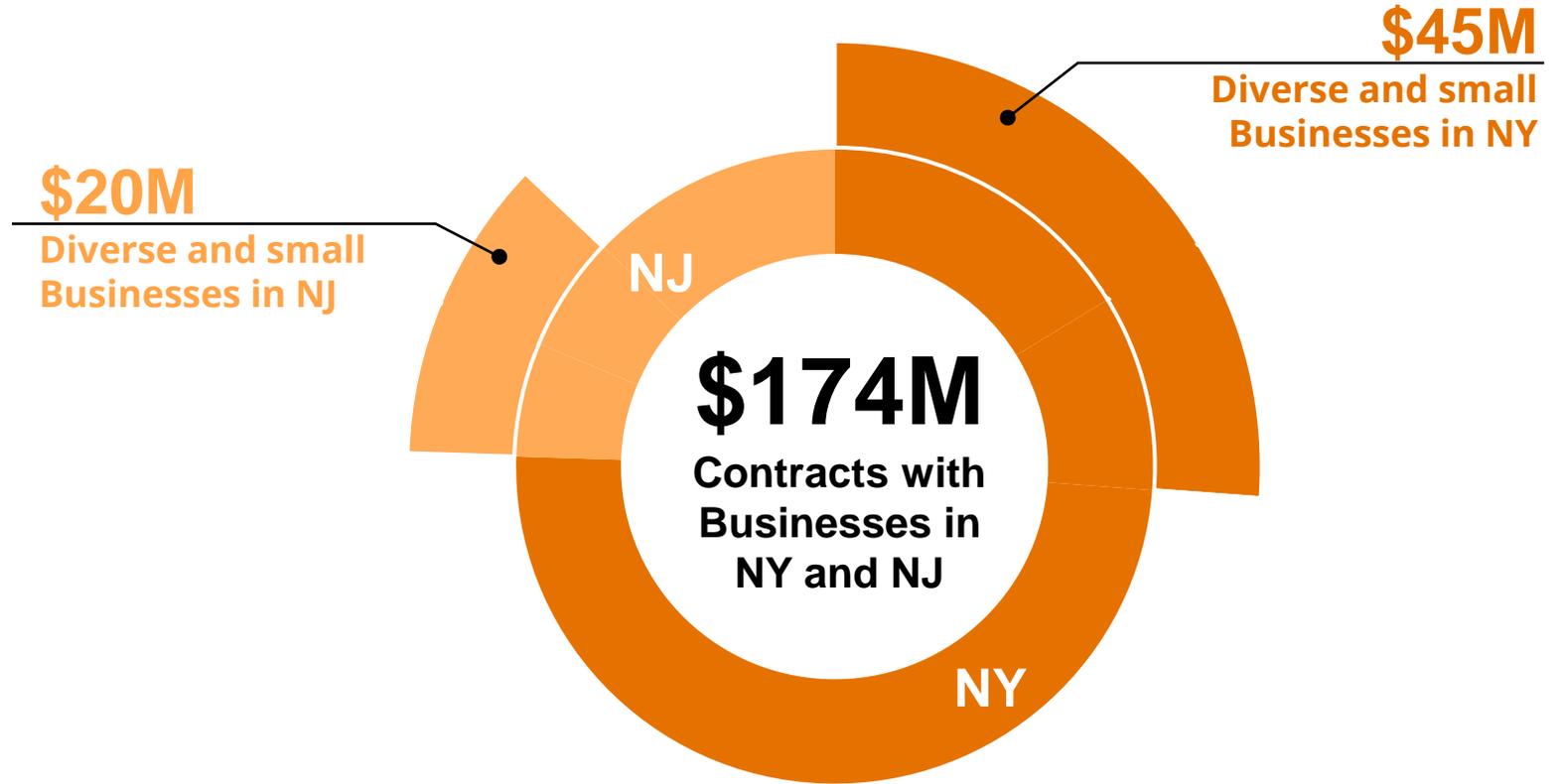
O&R's **\$174 million** in contract spending reached companies big and small, with **\$45 million in NY** and **\$20 million in NJ** spent on diverse and small businesses.

**\$65M**

of in-state contracts went toward diverse and small businesses based in NY and NJ

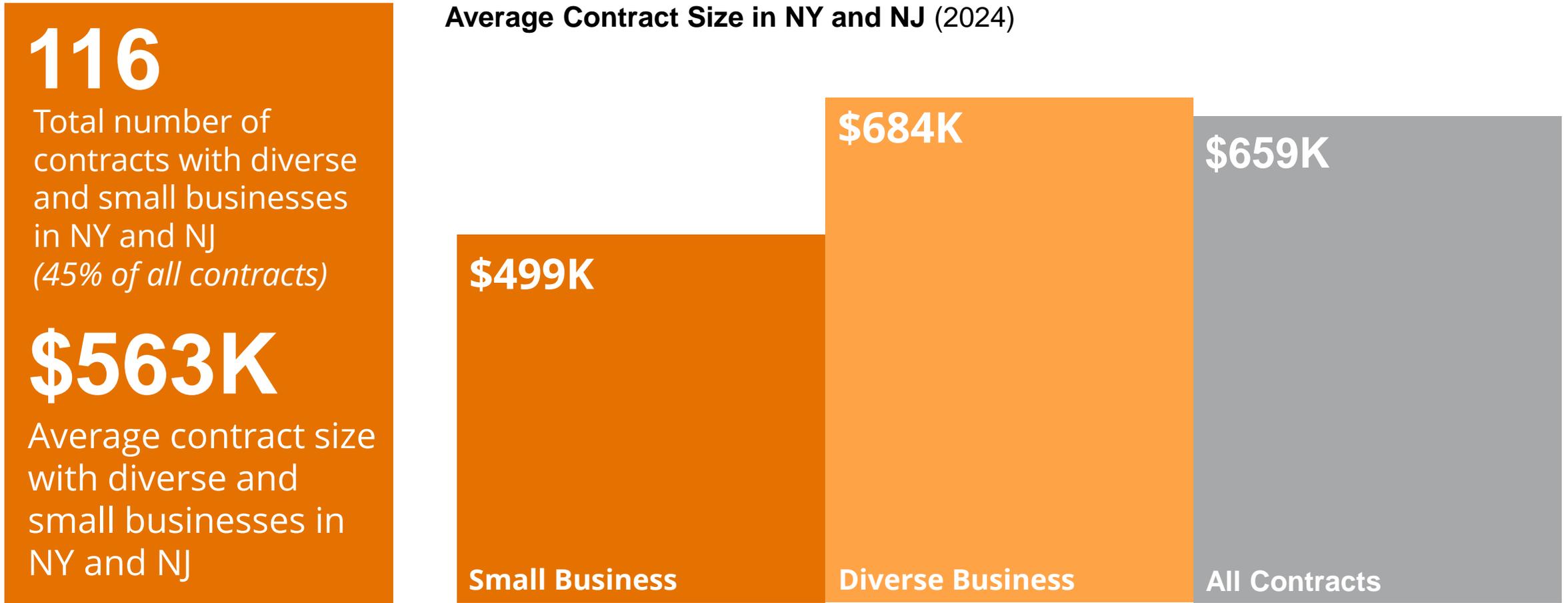
**\$31M (+91%)**

increase in contract spending with diverse and small business in NY and NJ since 2022, including \$7M (+12%) increase in the last year



Source: Con Edison Contracting Department. For more information, see [questions 33-34](#) and [35](#) in the FAQ.

O&R had **116 contracts** with diverse and small businesses in New York or New Jersey in 2024. The average contract size with diverse and small businesses was approximately **\$536,000**.



Source: Con Edison Contracting Department. For more information, see [questions 33-34](#) and [35](#) in the FAQ.

# TAXES

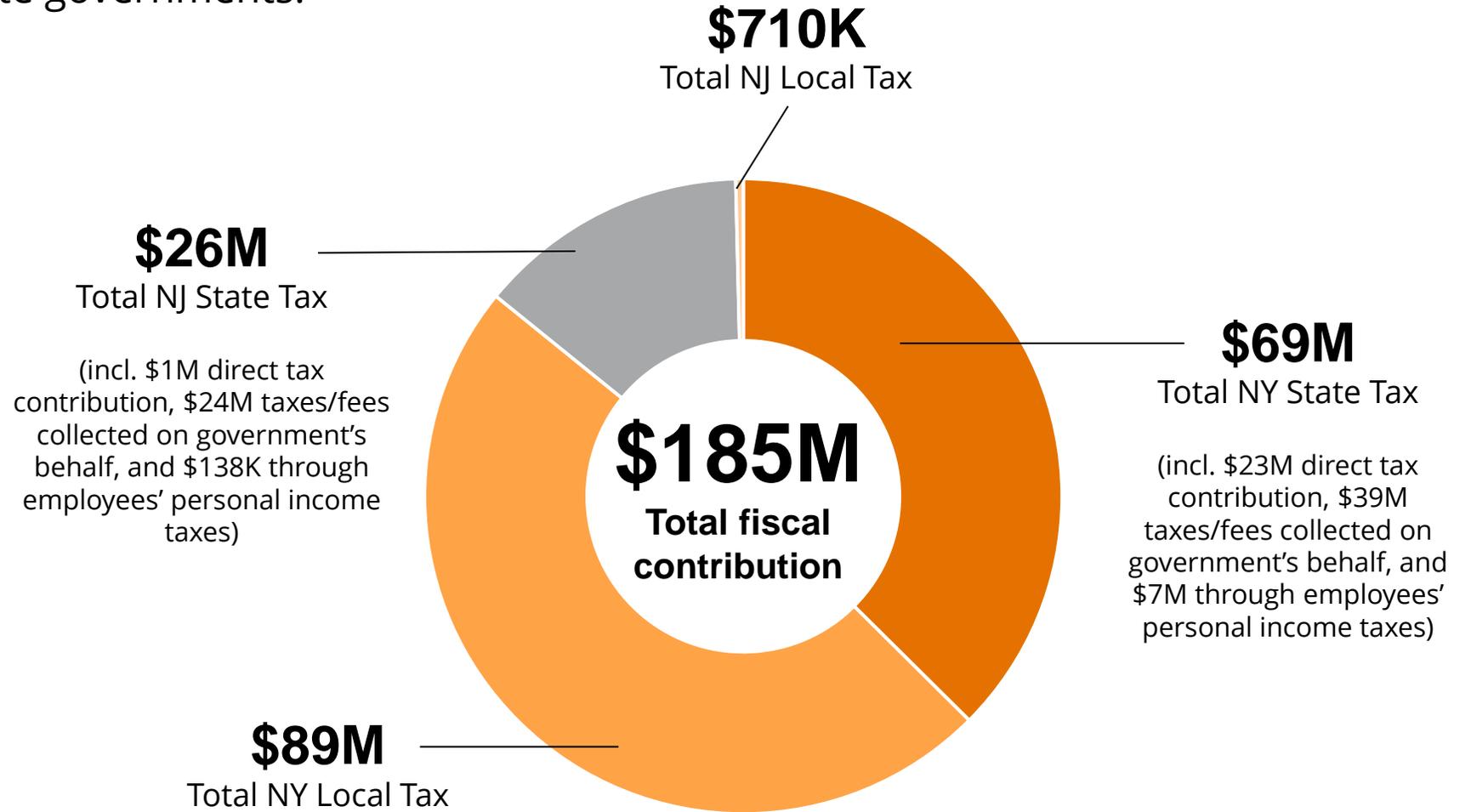
O&R contributed **\$185 million** of taxes and fees to taxing authorities in NY and NJ in 2024, of which **\$95 million** went to the state governments.

**\$185M**  
of fiscal contribution in NY and NJ

---

**\$12M (+7%)** increase in fiscal contribution to NY and NJ in the last year

**\$95M**  
of taxes and fees paid to NY and NJ state governments



Source: HR&A Analysis; Con Edison; NYS Department of Taxation and Finance; NJ Treasury Division of Taxation. For more information, see [questions 36-37](#) in the FAQ.

O&R's **\$185 million** in fiscal contributions in NY and NJ is sufficient to **pay 2,200 public school teachers** or **2,750 social workers** in the region.



or



*Note: Based on median earnings per K-12 teacher (\$84,800) and social worker (\$67,700) in the combined New York and New Jersey region.*

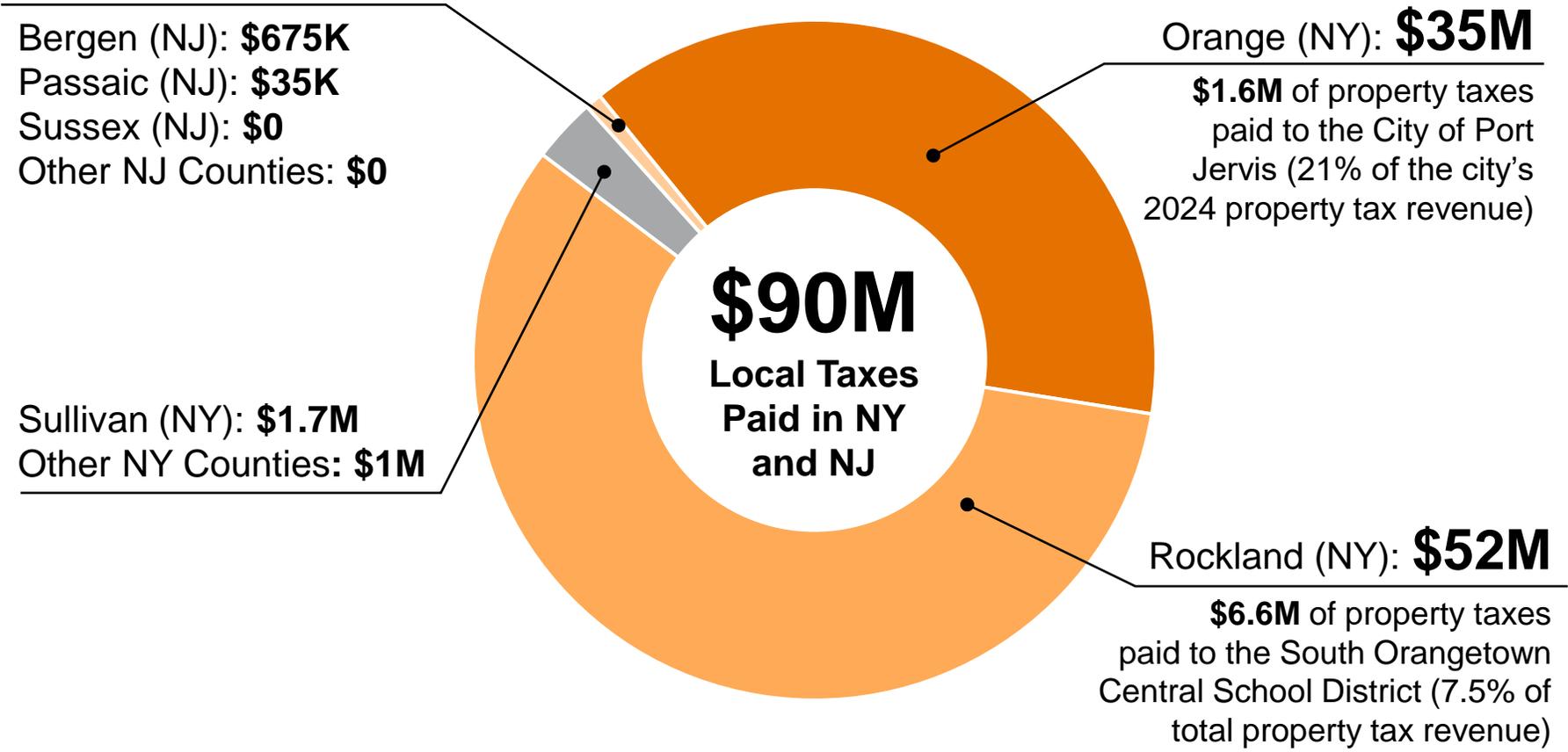
*Source: Lightcast, 2024. For more information, see [question 38](#) in the FAQ.*

Out of O&R's **\$185 million** total fiscal contribution, O&R contributes about **\$90 million in local taxes** in NY and NJ counties.

**\$90M**  
of total local taxes  
are paid in NY + NJ  
counties

---

**\$4M (+5%)** increase in local  
taxes paid to NY and NJ  
counties in the last year



Source: HR&A Analysis, Con Edison, 2024; City of Port Jervis 2024 Council Approved Budget; South Orangetown CSD 2024-2025 Budget Book. For more information, see [question 39](#) in the FAQ.

Pension funds based in NY and NJ representing **over 2.5 million** current and former **public sector employees benefit from the dividends and value appreciation** of Con Edison stock.

**NY- and NJ-Based Pension Funds – Members/Beneficiaries\* (2024)**

	# of Members/Beneficiaries
New York State Teachers’ Retirement System	455K
New York State Common Retirement Fund	1.2M
State of New Jersey Common Pension Fund	837K+
<b>Total</b>	<b>2.5M+</b>

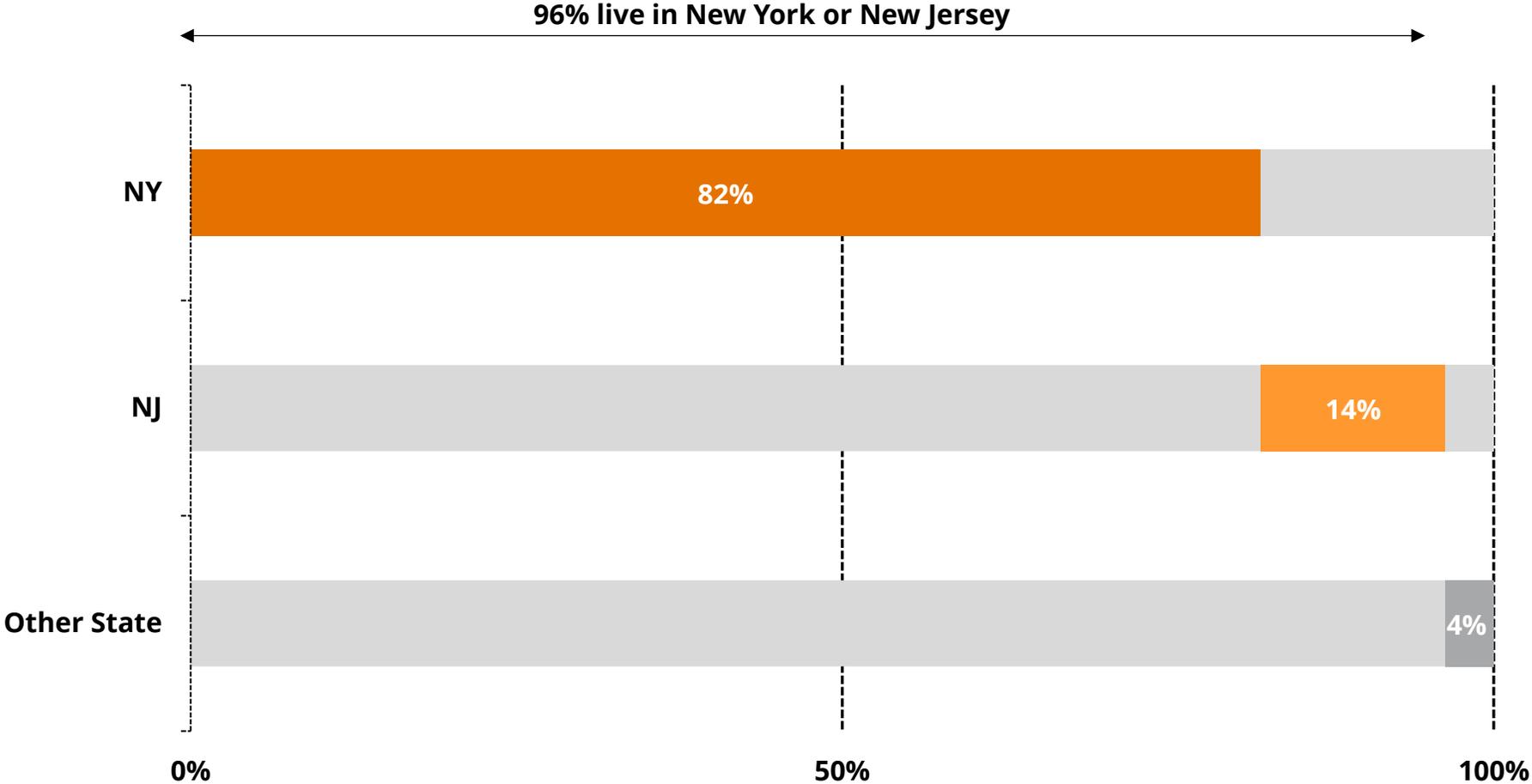
Source: Con Edison; [New York State Teachers’ Retirement System](#); [New York State Common Retirement Fund](#); New Jersey Treasury: Division of Investment .  
For more information, see [questions 40-41 in the FAQ](#).

# JOBS

1,150 O&R employees (over 96%) live in NY or NJ.



**1,150**  
of 1,200 O&R  
Employees live in  
NY or NJ

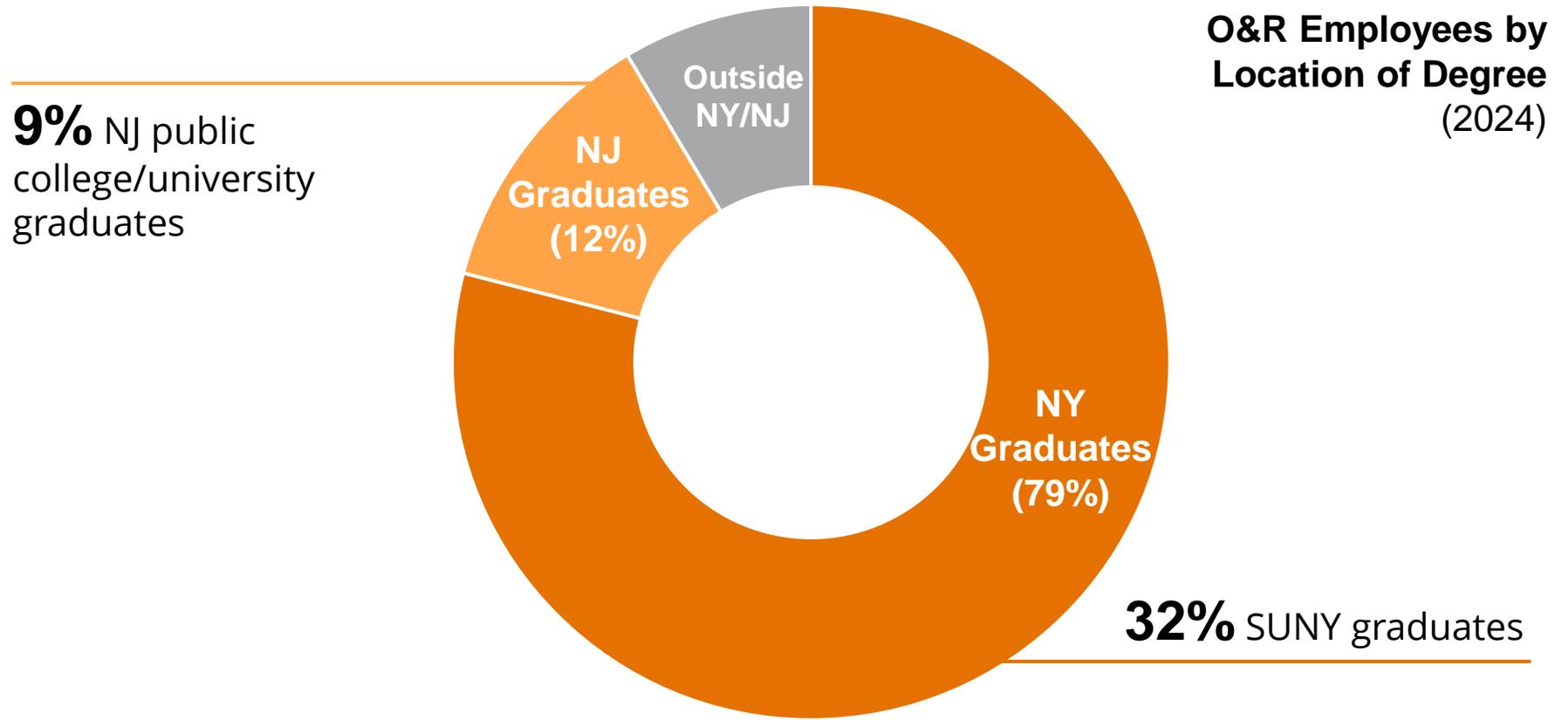


Source: Con Edison HR Department. For more information, see [questions 42-43 in the FAQ](#).

Nearly all (91%) of O&R employees are **graduates of NY- or NJ-based higher education institutions**, with a significant share graduating from SUNY or NJ's public colleges and universities.

**91%**  
of employees graduated from NY or NJ higher education institutions

**\$140K**  
in tuition aid provided to O&R employees in 2024

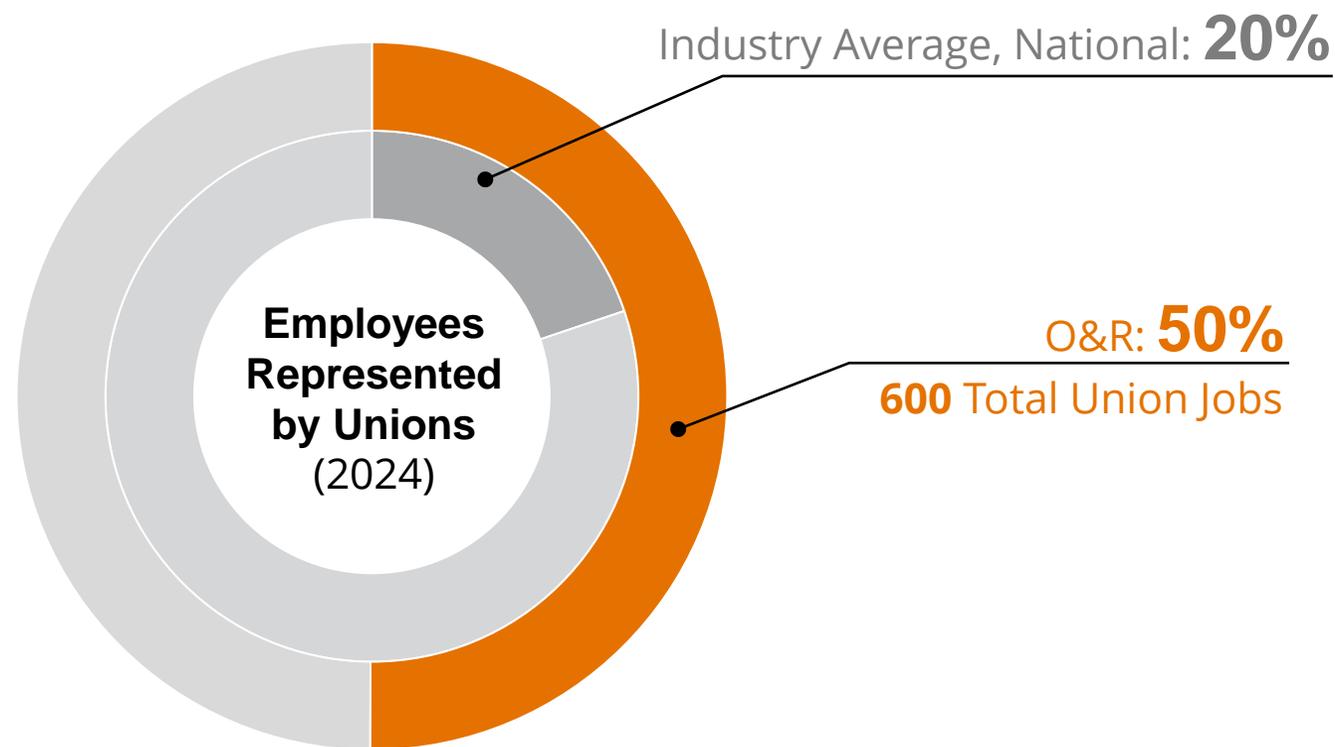


\*Based on Con Edison data on 386 degrees awarded to a sample of 393 O&R employees. Note that employees may have graduated from multiple institutions. An employee that graduated from at least one NY-based institution was counted as an "NY graduate," for example.

Source: Con Edison HR Department. For more information, see [questions 44-45](#) and [46](#) in the FAQ.

O&R works with organized labor—International Brotherhood of Electrical Workers Local 503—to ensure jobs are **high quality, safe, and family-sustaining**,

O&R's **50%** union representation is  
**2.5x**  
the industry average



Source: Con Edison; U.S. Bureau of Labor Statistics, [Utilities industry summary](#). For more information, see [question 48-49](#) in the FAQ.

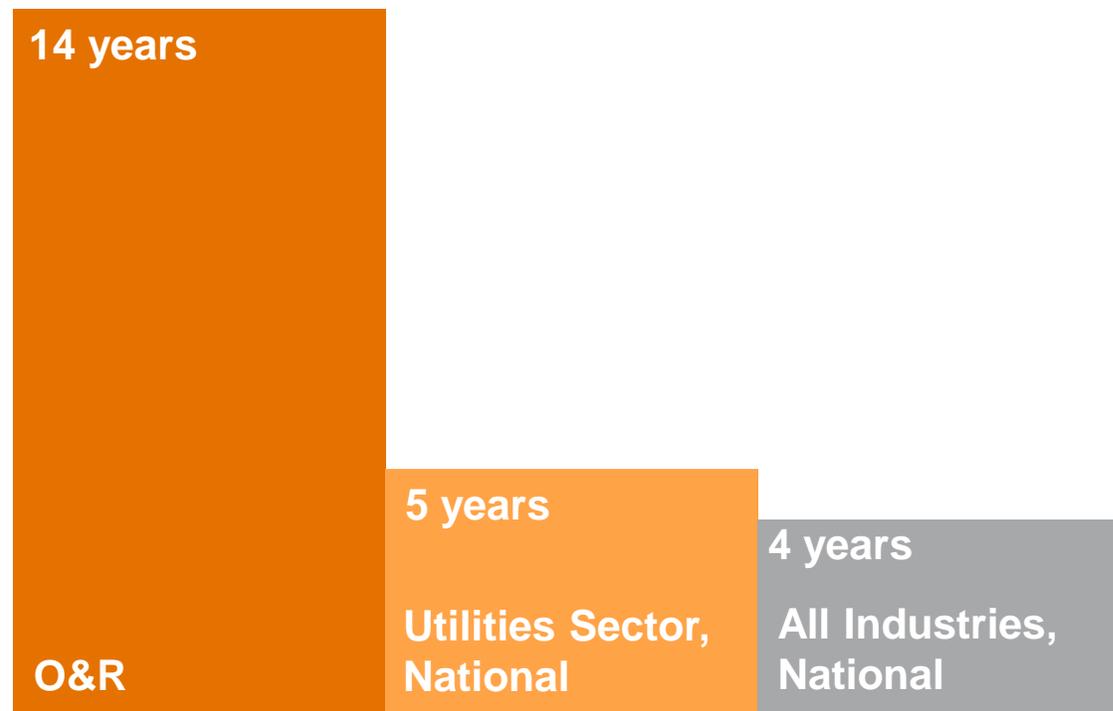
As a sign of employee satisfaction, O&R employees tend to **stay at the company 9 years longer** than the average worker in the utilities sector, **advancing their careers** through internal promotions.

O&R employees stay at the company **9 years** longer than the industry average

Retention Rate (2024)

O&R  
**95%**  
vs.  
Utilities Industry, National  
**82%**

Median Tenure of Employees (2024)



Source: Con Edison HR Department; U.S. Bureau of Labor Statistics, [Median years of tenure with current employer by industry](#); Lightcast, 2024. For more information, see [question 50-51](#) in the FAQ.

# EQUITY

O&R helps low to moderate incomes New Yorkers **pay their energy bills** through the Energy Affordability Program.



## Financial Assistance

**16,200**

Low-income customers in New York receiving bill discounts from O&R's Energy Affordability Program in 2024

**\$22M**

In bill discounts provided by O&R in 2024 through the Energy Affordability Program

*Source: O&R Energy Affordability Program December 2024 Monthly Report. For more information, see [question 54](#) in the FAQ.*

# ACKNOWLEDGEMENTS

The following Con Edison departments provided information that served as the foundation for the analysis.

- Accounts Payable
- Finance
- Geographic Information Systems
- Human Resources
- Investor Relations
- Learning & Inclusion
- Quality Excellence & Data Analytics
- Rate Engineering
- Supply Chain
- Tax
- Treasury



 Orange & Rockland

HR&A

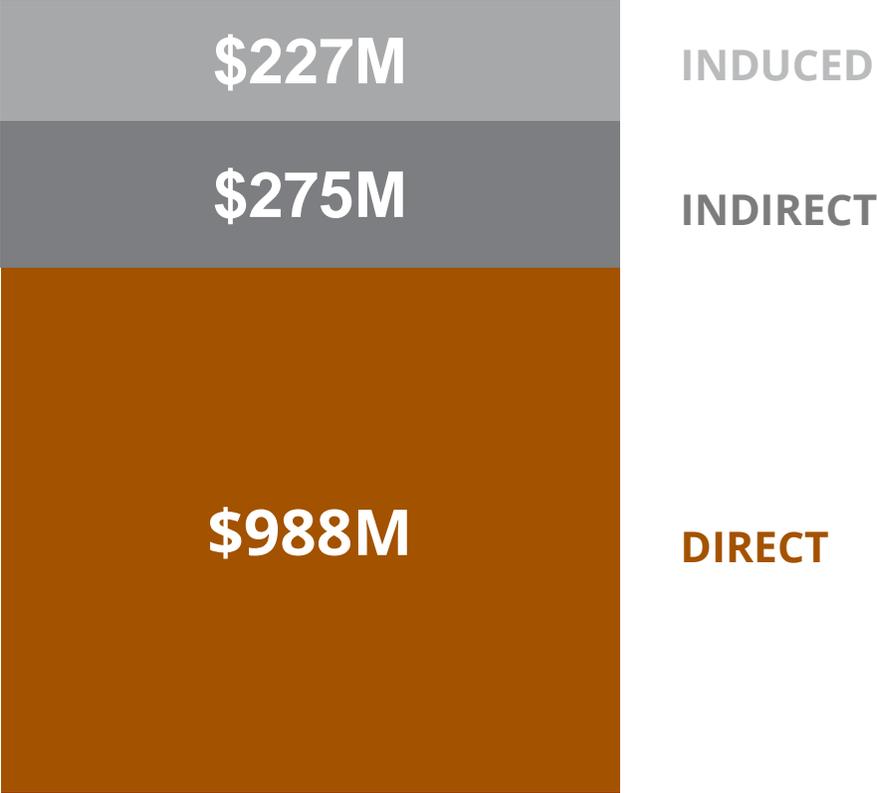
# **APPENDIX:**

## **State-Specific Summaries**

O&R directly spent **\$988 million** in NY in 2024, supporting businesses and households that spend an **additional \$502 million** in the state.

**\$1.5B**  
Economic output

Equivalent to:  
**3%**  
of NY service  
territory GDP



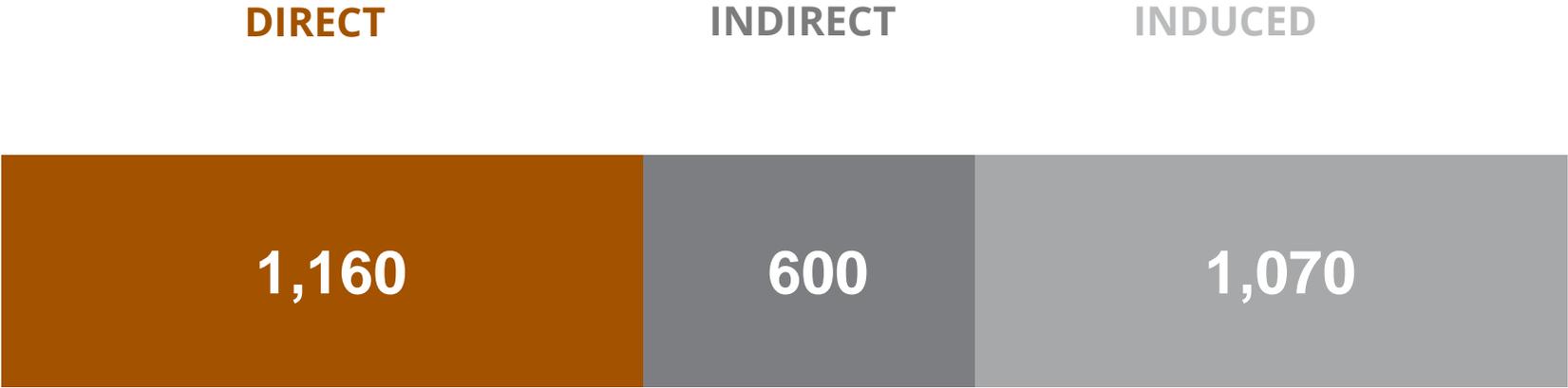
Note: The NY Service Territory includes Orange, Rockland, and Sullivan Counties which have a combined GDP of \$53B according to the most recent available IMPLAN data

Source: HR&A Analysis; Con Edison; IMPLAN

O&R directly employs **1,160 people** in NY, and its spending generates an **additional 1,670 jobs** in the state.

**2,830**  
Jobs

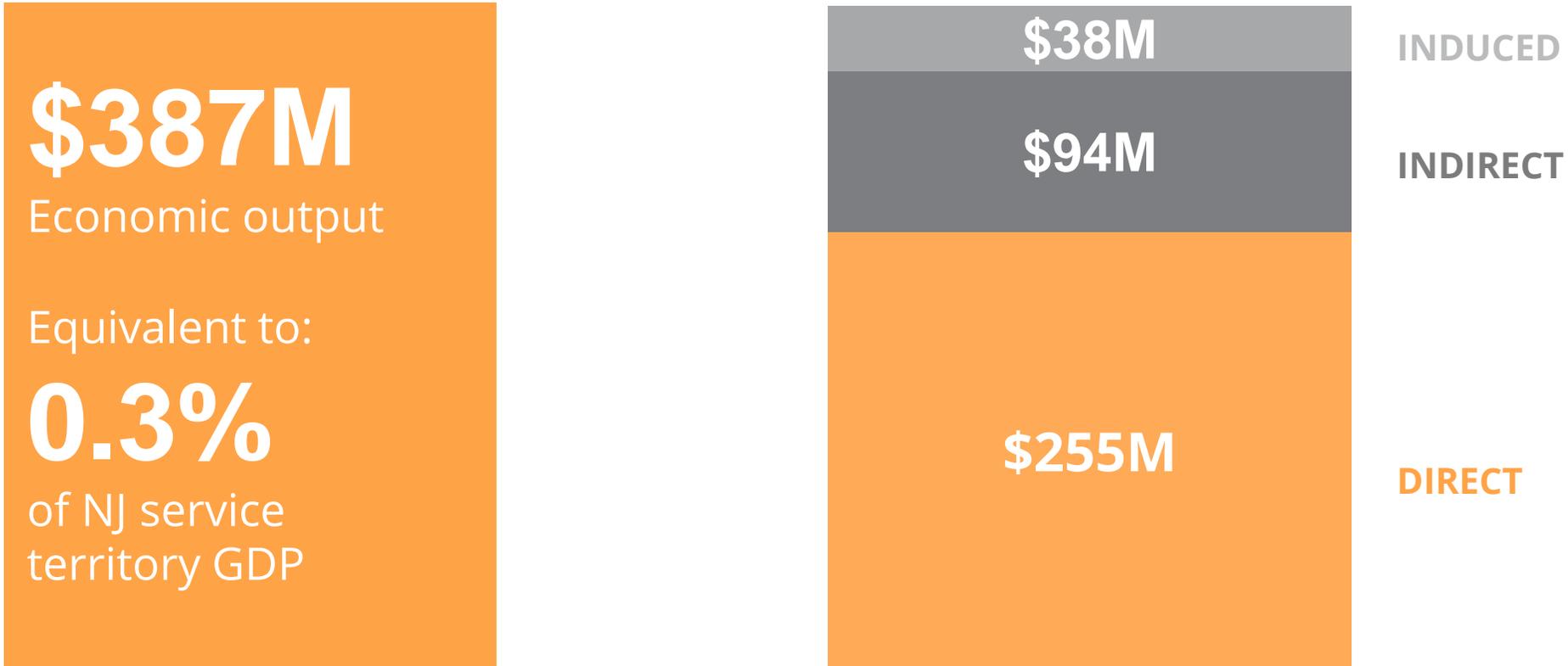
Equivalent to:  
**1 in 160**  
jobs in NY service territory



Note: 452K total NY Service Territory jobs according to the most recent available IMPLAN data

Source: HR&A Analysis; Con Edison; IMPLAN

O&R directly spent **\$255 Million** in NJ in 2024, supporting businesses and households that spend an **additional \$132 million** in the state.



Note: The NJ Service Territory includes Bergen, Passaic, and Sussex Counties which have a combined GDP of \$128B according to the most recent available IMPLAN data

Source: HR&A Analysis; Con Edison; IMPLAN

O&R directly employs **30 people** in NJ, and its spending generates an **additional 280 jobs** in the state.

**310**  
Jobs

Equivalent to:  
**1 in 3,000**  
jobs in NJ service territory



Note: 1M total NJ Service Territory jobs according to the most recent available IMPLAN data.

Source: HR&A Analysis; Con Edison; IMPLAN

# FAQ

## Background & Overall Methodology

### 1. What is HR&A?

HR&A Advisors, Inc. (HR&A) is an employee-owned company advising public, private, non-profit, and philanthropic clients on how to increase opportunity and advance quality of life in cities. We believe in creating vital places, building more equitable and resilient communities, and improving people's lives. HR&A has served as economic development advisors for over 200 cities and 580 projects, including economic impact studies for the High Line, Cornell Tech, WeWork, Airbnb, New York City Tech Ecosystem, Lincoln Center, and New York State film production tax credits.

### 2. What is the purpose of the Con Edison 2024 Impact Study?

Con Edison contracted with HR&A to develop a comprehensive benefits narrative describing the various ways its utilities generate economic and fiscal impacts. HR&A crafted the original impact report for the Con Edison Company of New York (CECONY) in 2021 and for Orange and Rockland Utilities (O&R) in 2022. In 2023, HR&A updated the reports for CECONY and O&R as well as created a third report focused on the combined impacts of both utilities. This year's study updates the impact findings from prior reports using 2024 data.

This document (i.e., the O&R version of the 2024 Study) highlights O&R's performance metrics; quantifies the economic and fiscal impact of the utility; and contextualizes findings among larger trends in the local and national energy sector. Utilizing a range of quantitative and qualitative data sources, the report demonstrates how O&R delivers significant benefits as a local business, employer, taxpayer, and energy provider across its service territory and the broader region.

The primary intended audience is government stakeholders, including regulators, agencies, and elected officials at state and local levels. However, findings may be useful in communications with other stakeholders including customers, employees, retirees, unions, shareholders, industry associations, civic organizations, and public media.

### 3. Why does the 2024 Impact Study include three reports? What is this version of the report?

The 2024 Impact Study is comprised of three reports: one report on CECONY's impacts in New York, one report on O&R's impacts in New York and New Jersey, and a third report on the combined impacts of both utilities in New York (referred to as the "CECONY + O&R report"). HR&A created separate reports for each utility, given that the relevant stakeholders and audiences for CECONY and O&R may differ significantly. The CECONY + O&R report provides an understanding of the aggregate impact of the utilities for corporate-level strategic planning and communications.

This report is the O&R version of the 2024 Impact Study.

### 4. What resources did HR&A use to develop its findings?

HR&A used data sources including IMPLAN and Lightcast. IMPLAN (formerly IMpact Analysis for HR&A Advisors, Inc.

PLANning) is a widely recognized modeling tool, which generates estimates of indirect and induced employment and output based on economic activity occurring in a specific geography. Lightcast (formerly EMSI) is a data provider that offers detailed and comprehensive employment estimates by industry and occupation.

In addition, HR&A used reports and datasets from the U.S. Bureau of Labor Statistics, U.S. Census Bureau, Data Axle, New York State (NYS) Department of Labor, NYS Department of Tax and Finance, New Jersey Treasury Division of Taxation, New Jersey Department of Labor and Workforce Development, City of Port Jervis Budget Department, South Orangetown Central School District Business and Operations Department, and the websites of the following pension funds: New York State Teachers' Retirement System, New York State Common Retirement Fund, and State of New Jersey Common Pension Fund. Additionally, HR&A analyzed reports and datasets provided by Con Edison related to employment, financial performance, tax liability, service reliability, contract spending, and clean energy/electric infrastructure program spending.

### 5. Do the findings in the O&R report relate only to the utility, or to their entire parent company, Con Edison, Inc.?

The findings relate only to O&R, except for select analyses for which we were unable to calculate utility impacts separately from those of the parent company, Con Edison, Inc. based on available data (i.e., benefits to public pension funds). To make the distinction, "Con Edison" is used when describing operations or impacts related to the parent company, whereas "O&R" is used otherwise, as appropriate.

### 6. What is the timeline for which impacts are measured in this report?

Unless otherwise noted, HR&A estimated the impact of O&R during the 2024 calendar year. When benchmarking against other data, HR&A utilized 2024 data if available, or otherwise data for the next most recent year from the relevant source.

### 7. What is the geographic scope of this report?

See Question 3. Unless otherwise noted, the O&R report focuses on the utility's impacts in New York and New Jersey. O&R's service territory includes one-half of Orange County, all of Rockland County, and 9,300 customers in Sullivan County in New York; as well as parts of Bergen, Passaic, and Sussex Counties in New Jersey.

## Overview

### [Report Page 2](#)

#### **8. How does the report estimate O&R's impact on economic output and Gross Domestic Product (GDP)?**

Using O&R's direct spending on operations and capital investment as an input, HR&A used IMPLAN's input-output economic model to evaluate the company's economic impact in NY and NJ. Leading public and private sector organizations across the United States use the industry-standard IMPLAN model to conduct economic impact analyses. IMPLAN traces the pattern of commodity purchases and sales between industries that are associated with each dollar's worth of a product or service sold to a customer, analyzing interactions among 528 industries for a specific geography, with assumptions about spending that takes place outside of the geography. In addition to overall economic spending, the IMPLAN input-output model also produces estimates of the number of jobs supported and employee compensation.

Economic impacts are comprised of direct impacts (i.e., effects from spending immediately associated with O&R) as well as multiplier or spinoff activity. Multiplier or spinoff activity includes: 1) indirect economic impacts caused by additional business spending stimulated by direct economic spending during construction and operating activities (i.e., supplier business operations) and 2) induced economic impacts stimulated by additional household spending due to wages from the direct and indirect activity.

In aggregate, direct, indirect, and induced spending is equivalent to O&R's total impact on economic output within the defined geography (i.e., the NY and NJ combined region). The report benchmarks O&R's economic output using IMPLAN's estimates of GDP by state and county.

#### **9. How does the report estimate the total number of jobs in NY and NJ?**

The report uses job estimates provided by IMPLAN, an industry-leading provider of economic impact data and analytical applications. See Question 8 of the FAQ for more information about IMPLAN.

#### **10. Why did employment impacts decline compared to the 2023 report?**

Economic impact analysis, including employment impacts, are based on multipliers (see Question 34 for more information about multipliers). IMPLAN updates multipliers on an annual basis, based on data sources provided by the U.S. Bureau of Economic Analysis (BEA), U.S. Census Bureau, and U.S. Bureau of Labor Statistics (BLS) (see Question 8 for more information on IMPLAN and, this article for more detail on data sources: <https://support.implan.com/hc/en-us/articles/115009674688-Introduction-to-IMPLAN-Data-and-Data-Sources>). Changes in multipliers reflect shifts in the regional economy, which are in turn influenced by national and global macroeconomic trends.

Although direct employment increased between the 2023 and 2024 Impact Studies, total employment decreased because the increase in direct jobs was not sufficient to overcome the decrease in multiplier (i.e., indirect and induced) jobs. Specifically, the decrease in indirect multipliers was driven in a large part by shifts in the professional services, administrative services, and transportation industries. For example, one direct job in the natural gas distribution industry resulted in the creation of 0.24 indirect jobs in the employment services industry in the NYS economy in the 2023 Study. In the 2024 Impact Study, the same one job resulted in the creation of just 0.15 indirect jobs, representing a 38% decline in multiplier impacts.

The decrease in induced multipliers was strongly influenced by shifts in the healthcare, retail trade, and personal care services industries. For example, one direct job in the electric transmission and distribution industry led to the creation of 0.39 induced jobs in the healthcare sector in the 2023 Study, compared to 0.33 induced jobs in the 2024 Study, representing a 15% decline in multiplier impacts.

While these dynamics are complicated, the multiplier changes are consistent with economic trends such as the shift to remote work and greater reliance on non-local, online services.

#### **11. How does the report measure O&R's contract spend?**

Con Edison provided contract spending information by geography. Geographic categories included O&R's service territory counties (Orange, Rockland, Sullivan, Bergen, Passaic, Sussex), the rest of NY (excluding Orange, Rockland, and Sullivan), the rest of NJ (excluding Bergen, Passaic, and Sussex), and outside of NY or NJ.

Con Edison provided data on individual procurement-card (P-Card) transactions in 2024. HR&A categorized O&R P-Card transactions by county based on reported vendor information and geographic identifiers, including vendor address, city, state, and zip code. Using the U.S. Department of Housing and Urban Development, Office of Policy Development and Research's zip code to county crosswalk, HR&A allocated P-Card spending to O&R's service territory counties. HR&A also removed all negative transaction values (i.e., credits) from the P-Card dataset to focus the analysis solely on dollars spent in 2024.

## 12. How does the report define diverse and small businesses?

Con Edison provided the number of contracts and contract spending totals broken out by categories of businesses, including diverse and small business (excluding diverse businesses). The diverse business classification follows the United States federal definitions of Minority- or Woman-Owned Business Enterprises (M/WBE). The small business classification also follows the federal definition.

P-Card spending data included the following classifications, which we categorized into diverse and small business categories to the extent possible, as described below:

- Con Edison provided individual P-Card transactions that had the following classifications for the businesses at which the transaction took place:
  - SBA Registered Indicator (SBA): Indicates that the business is a small business.
  - Woman Owned Indicator (W): Indicates that the business is primarily woman-owned.
  - Small Disadvantaged Business Indicator (SDB): Indicates that the business is both a small business and primarily minority-owned.
- HR&A assigned transactions to contract spending M/WBE and Small Business categories based on combinations of the above classifications:
  - All Small Businesses –If either SBA or SDB are true
  - Small Business Only (excl. M/WBE) – If SBA is true, but W and SDB are both false
  - Small Business and Woman-Owned Only (excl. MBE) – If SBA and W are both true, but SDB is false
  - Small Business and Minority-Owned Only (excl. WBE) – If W is false and SDB is true
  - Small Business, Minority-Owned, and Woman-Owned – If W and SDB are both true
  - Non-Small Business and Woman-Owned – If SBA and SDB are false and W is true

## 13. How does the report estimate O&R's impact on local and state fiscal revenue?

O&R's fiscal impact includes direct tax contributions to government (i.e., corporate income tax, property tax, payroll tax, revenue tax, sales tax on company purchases, and others taxes); taxes and fees collected on behalf of governments (i.e., sales tax on customer bills and regulatory fees and assessments); and personal income taxes paid by O&R's employees, calculated based on an average salary of \$126,752 and place of work of employees (i.e., NY vs. NJ), according to HR information provided by Con Edison. The report uses information on tax rates by jurisdiction and

deductions from the NYS Department of Taxation and Finance and NJ Treasury's Division of Taxation to estimate personal income taxes paid by O&R's employees. Note that NYS deductions are based on 2022, which represents the most recent year for which data is available. All other tax rates and deductions reflect 2024 data. The report benchmarks O&R's fiscal impact against state tax collections data for Fiscal Year 2023-2024, sourced from the NYS Department of Taxation and Finance and NJ Department of Treasury.

## 14. How does the report estimate the number of teachers that could be supported by O&R's direct tax contribution?

HR&A sourced median earnings data for teachers and social workers from Lightcast, a leading national provider of employment data and economic impact analysis. Lightcast gathers and integrates labor market data from a wide array of sources, including the U.S. Bureau of Labor Statistics Quarterly Census of Employment and Wages (QCEW) and Occupational Employment Statistics (OES), U.S. Bureau of Economic Analysis, O\*NET, U.S. Census Bureau American Community Survey (ACS) and County Business Patterns (CBP), and state departments of labor. Integrating data from multiple sources allows Lightcast to provide a broad accounting of employment that is unavailable from any one traditional source.

HR&A estimated the median annual earnings of public school teachers in the combined NY and NJ region based on data for four occupations from the Standard Occupational Classification (SOC) system, a federal statistical standard used by federal agencies to classify workers into occupational categories for the purpose of collecting, calculating, or disseminating data. The four occupations are (excluding special education teachers): kindergarten teachers (SOC code 25-2012), elementary school teachers (SOC code 25-2021), middle school teachers (SOC code 25-2022), and secondary school teachers (SOC code 25-2031). Using a weighted average based on the number of teachers in each occupation employed in the NY and NJ region, we calculated per-teacher annual earnings to be \$84,832. The median annual earnings for social workers (\$67,743) aligns fully with one SOC code: 21-1020.

We divided the O&R total fiscal contribution in the combined two-state region to derive public school teacher and social worker equivalencies. Note that median annual earnings includes wages, salaries, and supplements, including contributions for employee pension funds, insurance funds, and other forms of government social insurance. The equivalencies do not account for **other costs associated with hiring, training, retaining, and supporting such jobs.**

### **15. How does the report estimate the share of workers by geography?**

Con Edison provided anonymized data on where O&R employees live. Geographic categories for place of residence included the six counties in O&R's service territory, other NY counties, other NJ counties, and outside of NY/NJ. For place of work, O&R employees were distinguished by state of employment, either NY or NJ.

### **16. How does the report estimate employee salaries based on their educational attainment?**

Con Edison's HR Department provides data on employee salaries by educational attainment based on a sample of 381 O&R employees.

### **17. How does the report calculate retention rate?**

Con Edison provided the retention rate for O&R. The report sourced total (annual) separation rates of the utilities industry (NAICS Code 22) from Lightcast (see Question 14 for a description of Lightcast).

### **18. How does the report estimate the number of customers receiving bill discounts through the Energy Affordability Program?**

HR&A sourced the number of participants (and total bill discounts) from O&R's December 2024 EAP monthly report, publicly filed with the New York Public Service Commission. We did not receive data on bill discounts provided to NJ customers.

### **19. How does the report measure change in impacts over time?**

The report compares O&R's impacts in 2024 to corresponding impacts in the 2023 and 2022 O&R impact reports. Certain change-over-time comparisons are excluded from the report, because the change is negligible or negative. However, a more comprehensive set of statistics on changes in impacts over time is tracked in O&R Key Summary Statistics (2022-2024) for reference.

#### **[Report Page 4](#)**

### **20. How does the report estimate the number of people served by O&R?**

The report uses Esri Business Analyst platform to calculate the total population within the O&R service territory. Esri Business Analyst sources the total population count from the 2018-2022 ACS 5-Year data, which is the most recent data available on the Esri platform at the time of analysis.

### **21. How does the report estimate the number of businesses served by O&R?**

The report uses Esri Business Analyst platform to calculate the total number of businesses within

the O&R service territory. Esri Business Analyst sources the total business count from 2024 Data Axle, which is the most recent data available on the Esri platform at the time of analysis.

### **22. How does the report estimate the customer interruption rate per 1,000 customers served?**

The customer interruption rate is based on the system average interruption frequency index (SAIFI), which is the average number of times that a utilities system customer experiences an outage during a specified period (in this case, a year). O&R's customer interruption rate for the NY and NJ combined region as well as national and NY (without Con Edison) benchmarks were provided directly by Con Edison. Note that the national benchmark is from 2023, which represents the most recent year for which data is available.

## **Economy**

### **[Report Page 6](#)**

### **23. How does the report estimate O&R's impact on NY and NJ's overall economic output?**

See Question 8.

### **24. What are examples of direct, indirect, and induced economic output impacts from O&R spending?**

Direct economic output is spending by O&R on operations and capital projects. For example, expenses related to servicing gas pipes are a component of direct spending. Indirect economic output refers to spending by businesses supported by O&R direct spending. If O&R hires a law firm within the region for legal services, the law firm's spending attributable to O&R would constitute indirect economic output. Induced economic output is generated through household spending by O&R employees as well as the employees at suppliers whose earnings are attributable to O&R. If employees at O&R and the law firm spend income that is attributable to O&R at a restaurant within the region, that spending constitutes induced economic output.

### [Report Page 7](#)

#### **25. How does the report estimate O&R's impact on the total number of jobs in NY and NJ?**

See Question 9.

#### **26. Why did employment impacts decline compared to the 2023 report?**

See Question 10.

#### **27. What are examples of direct, indirect, and induced jobs attributable to O&R?**

Direct jobs include workers that are directly employed by O&R, such as distribution mechanics. Indirect jobs refer to employment supported by O&R's spending on other businesses. For example, an engineer at a power generation facility that supplies the O&R distribution system with energy would be considered an indirect job. Induced jobs are generated through household spending by O&R workers. For example, O&R employees spend some of their household income (i.e., earnings from O&R) on groceries, supporting grocery store clerks, which represent induced jobs. For the purposes of this report, HR&A replaced IMPLAN's direct employment estimates (which are based on direct spending inputs) with actual employee numbers provided by Con Edison but kept IMPLAN's estimates for indirect and induced employment.

### [Report Page 8](#)

#### **28. What is an economic multiplier and how is it calculated?**

Economic multipliers refer to additional economic impacts created in the economy as a result of direct economic activity in a particular region's economy. The report uses the IMPLAN input-output economic model to calculate the relationship between direct impacts (i.e., O&R's spending and employment), indirect impacts (i.e., effects from business spending resulting from direct O&R activity), and induced impacts (i.e., effects from household income spending resulting from direct and indirect activity). An economic multiplier is the ratio of direct impact to the sum of indirect and induced impacts. The "multiplier effect" refers to the additional jobs that are created as a result of this ripple effect: Indirect jobs are precipitated by business spending from O&R; Induced jobs are precipitated by household spending resulting from O&R. For example, a spending multiplier of 2.7 would mean that every dollar O&R spends results in an additional \$1.70 being spent elsewhere in the local or regional economy.

#### **29. What is O&R's state employment multiplier based on?**

O&R's state employment multiplier is based on additional jobs created in the economy as a result of O&R's direct spending in NY and NJ (see Question 28 for more information on economic multipliers). Using the IMPLAN input-output economic model to calculate indirect and induced

jobs, HR&A determined the ratio of direct jobs to multiplier jobs in the state (see Question 27 for more information on direct, indirect, and induced jobs).

#### **30. What does it mean for one industry to have a higher job multiplier than another?**

If Industry A has a higher job multiplier than Industry B, it means that the creation of 1 job in Industry A yields a greater number of indirect and induced jobs (i.e., multiplier jobs) within a geography compared to Industry B (see Question 28 for more information on economic multipliers).

#### **31. What does it mean for O&R jobs to lead to multiplier jobs in other sectors?**

It means that on average, the O&R spending associated with creating one O&R job leads to the creation of additional jobs in the regional economy (see Question 27 for examples of direct, indirect, and induced jobs). Multiplier jobs are distributed across several sectors, and more jobs may be created in some sectors over others. The report uses the IMPLAN input-output economic model to calculate the creation of multiplier jobs by sector.

#### **32. Why did the employment multiplier decline compared to the 2023 report?**

See Question 10.

### [Report Page 9-10](#)

#### **33. How does the report define diverse and small businesses?**

See Question 12.

#### **34. How does the report calculate average contract size?**

For this year's report, Con Edison provided the total number of vendor contracts in 2024 by county and business type (e.g., small business, M/WBE, etc.). To calculate the average contract size, HR&A divided the total contract spending by the total number of vendor contracts for each business type category.

**35. How does contract and P-Card spend vary by borough/county?**

Based on the location of suppliers, O&R's total contract and P-Card spend is as follows:

Geography	Amount	Share of Total
NY	\$131,035,870	37%
Orange County	\$14,669,856	4%
Rockland County	\$22,005,393	6%
Sullivan County	\$20,556	<1%
Other NY	\$58,821,490	17%
NYC	\$35,518,575	10%
NJ	\$42,508,641	12%
Bergen County	\$3,467,898	1%
Passaic County	\$110,909	<1%
Sussex County	\$21,069	<1%
Other NJ	\$38,908,765	11%
Outside of NY/NJ	\$179,394,355	51%
<b>Total</b>	<b>\$352,938,865</b>	<b>100%</b>

Diverse business refers to federally certified Minority- or Women-Owned Business Enterprises (M/WBE). M/WBE contract spend by state/county is:

Geography	Amount	Share of Total
NY	\$17,266,307	41%
Orange County	\$3,597,028	9%
Rockland County	\$9,780,034	23%
Sullivan County	-	0%
Other NY	\$1,528,936	4%
NYC	\$2,360,309	6%
NJ	\$10,114,665	24%
Bergen County	\$2,346,275	6%
Passaic County	\$305	<1%
Sussex County	-	0%
Other NJ	\$7,768,085	19%
Outside of NY/NJ	\$14,495,281	35%
<b>Total</b>	<b>\$41,876,253</b>	<b>100%</b>

Small business contract spend by state/county is:

Geography	Amount	Share of Total
NY	\$28,171,262	54%
Orange County	\$3,957,496	8%
Rockland County	\$10,343,823	20%
Sullivan County	\$2,674	<1%
Other NY	\$12,175,706	23%
NYC	\$1,691,564	3%
NJ	\$10,040,619	19%
Bergen County	\$150,980	<1%
Passaic County	\$29,521	<1%
Sussex County	\$4,276	<1%
Other NJ	\$9,855,842	19%
Outside of NY/NJ	\$13,843,207	27%
<b>Total</b>	<b>\$52,055,088</b>	<b>100%</b>

**Taxes**

**Report Page 12**

**36. How does the report estimate O&R's impact on local and state fiscal revenue?**

See Question 0.

**37. Why are taxes grouped by direct tax contribution, other taxes/fees collected on behalf of governments, and employees' personal income tax payments?**

The report categorizes tax payments into these three groups based on differences in the taxpaying entity. Direct tax contribution refers to taxes that O&R pays directly to governments. Other taxes/fees refer to taxes that customers pay, which are collected by O&R on behalf of governments. Personal income tax payments refer to taxes that employees pay directly to governments.

**Report Page 13**

**38. How does the report estimate the number of public school teachers and social workers that could be supported by O&R's direct tax contribution?**

See Question 14.

**Report Page 14**

**39. How does the report estimate O&R’s impact on local taxes?**

Con Edison provided internal data on property tax payments, which HR&A benchmarked to FY 2024 financial statement and budget reports published by respective school district and local government websites. We selected the City of Port Jervis in Orange County, NY, and South Orangetown Central School District in Rockland County, NY as benchmarks due to O&R’s significant tax contributions to these local taxing entities.

**Report Page 15**

**40. How are pension fund members/beneficiaries defined?**

A member or beneficiary of a pension fund may be actively working and contributing to the fund; retired and collecting from the fund; or holding deferred benefits from the fund.

**41. How does the report estimate the number of members/beneficiaries associated with shareholding public sector pension funds?**

The report sources estimates of pension plan membership from the [New York State Common Retirement Fund](#), [New York State Teachers Retirement System](#), and the [State of New Jersey Common Pension Fund D](#).

**Jobs**

**Report Page 17**

**42. How does the report estimate the share of workers by geography?**

See Question 15.

**43. Where do O&R employees live by state/county?**

Geography	Amount	Share of Total
NY	982	82%
Orange County	452	38%
Rockland County	308	26%
Sullivan County	37	3%
Other NY (incl. NYC)	185	15%
NJ	170	14%
Bergen County	107	9%
Passaic County	7	1%
Sussex County	11	1%
Other NJ	45	4%
Outside NY/NJ	44	4%
<b>Total</b>	<b>1,196</b>	<b>100%</b>

The number and share of employees working in each state are as follows:

State	Employees	Share of Total
New York	1,163	97%
New Jersey	33	3%

**Report Page 18**

**44. What data source does the report use to analyze the educational attainment of O&R employees?**

Con Edison provided internal data on educational degree and alma mater for a sample of 386 unique O&R employees. Based on this sample, HR&A determined the share of degree-holding employees and the distribution of alma maters by location. Note that the internal education dataset did not originally include information on the location of the degree awarding institutions. HR&A categorized institutions by city, state, and county as well as their designation as a SUNY or NJ public college/university.

**45. What is the distinction between employees and degrees?**

Con Edison provided internal data on 580 degrees awarded to O&R employees. Those 580 degrees correspond to 386 unique O&R employees, since several O&R employees hold more than one degree.

**46. What is the breakdown of graduates by geography?**

The breakdown of graduates by geography of education institution is as follows:

State	Graduates	Share of Total
New York	305	79%
New Jersey	48	12%
Other State	33	9%

**Report Page 19**

**47. What data source does the report use to analyze employee salaries and educational attainment?**

See Question 17.

**Report Page 20**

**48. What is the benchmark for industry union representation based on?**

The U.S. Bureau of Labor Statistics compiles data on union membership as a share of the total industry workforce.

**49. Where do union employees live by state/county?**

The number and share of union employees living in each state/county is as follows:

Geography	Amount	Share of Total
NY	525	88%
Orange County	278	46%
Rockland County	166	28%
Sullivan County	23	4%
Other NY (incl. NYC)	58	10%
NJ	50	8%
Bergen County	38	6%
Passaic County	-	<1%
Sussex County	6	1%
Other NJ	6	1%
Outside NY/NJ	24	4%
<b>Total</b>	<b>599</b>	<b>100%</b>

**Report Page 21**

**50. How does the report calculate retention rate?**

See Question 17.

**51. What are industry and overall workforce benchmarks for median tenure of employees based on?**

The U.S. Bureau of Labor Statistics compiles data on median tenure of employees by industry. The median tenure we assumed for this report was 4 years for all industries and 5 years for the utilities sector.

**Report Page 22**

**52. How does the report estimate the demographic breakdown of O&R employees?**

Con Edison provided internal data on the breakdown of O&R employees by gender and race, which HR&A benchmarked to national estimates from Lightcast. See Question 14 for more information on Lightcast.

**53. What is the demographic breakdown of O&R employees by gender and race?**

The breakdown of employees by gender are as follows:

Gender	Employees	Share of Total
Female	328	27%
Male	867	72%

The breakdown of employees by race are as follows:

Race/Ethnicity	Employees	Share of Total
Asian	50	4%
Black/African American	104	9%
Hispanic/Latino	186	16%
White	830	69%
Multiple	11	1%
Other	15	1%

**Equity**

**Report Page 24**

**54. What is the source for the information on the Energy Affordability Program (EAP)?**

See Question 18.