

# Addressing Workforce Challenges:

## Promising Trends in Policy, Practice, and Research

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# NATIONAL CORE INDICATORS®— *NATIONWIDE PICTURE OF STAFF STABILITY*

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NASDDDS & HSRI





# AGENDA


- Why address LTC Workforce Issues?
- Setting the Stage: Key DSP Workforce Data within I/DD Systems
  - NCI Staff Stability Survey
  - Context data
  - Outcome Data
  - Contributing Factor Data



# SETTING THE STAGE: KEY DSP WORKFORCE DATA WITHIN I/DD SYSTEMS



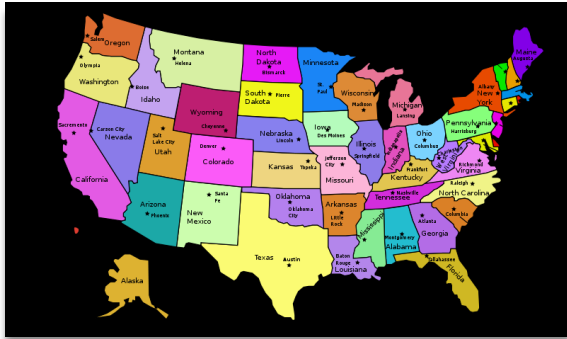
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# What is the National Core Indicators® (NCI®) Staff Stability Survey?

- One of five tools in the NCI suite for state DD agencies
- 2014 developed with states, service provider agencies, ANCOR and the Univ. of Minnesota Institute for Community Inclusion
- Focus on stability and quality of DSP workforce (state and national level)
- Standardized measures and calculations to monitor priority data points: wages, turnover, vacancies, and employee benefits/environment

# Staff Stability 2019 Basics



26 States + DC

AL, AZ, CO, CT, DC, DE, GA,  
IL, IN, KY, LA, MD, MO, NC,  
NE, NJ, NV, NY, OH, OR, SC,  
TN, TX, UT, VT, WY



3,604 Service  
Providers



Median number of DSPs  
employed by agencies in  
the participating states:  
24

**Medians range  
from 12-156**

# CONTEXT DATA

Agency characteristics-size based on number of DSPs employed (provides key to improvement approaches)

On Average:

46.6% employ 1-20 DSPs

16.8% employ 21-40 DSPs

7.3% employ 41-60 DSPs

29.3% employ 61 or more DSPs

**Notably, 63.4% of all providers participating in the survey employ 40 or fewer DSPs**

In one state, 12.1% of responding agencies employ 1-20 DSPs

In another state, 63.7% of responding agencies employ 1-20 DSPs





# Types of supports provided by Responding Agencies

- 56.0% reported providing **residential** supports (Range: 27.7% to 94.8%)
- 64.8% reported providing **in-home** supports (Range 22.6% to 93.3%)
- 64.6% reported providing **non-residential** supports (Range 34.7% to 100.0%)
- **25.8% of providers reported providing all three types of supports, while 40.7% reported providing only one type**

# OUTCOME DATA

# Turnover

## Turnover rate: 42.8%

- (State range from 23.8% to 64.8%)
- 6 states reported <50% turnover rate



## Tenure (**Employed DSPs**)

- Tenure of DSPs employed as of Dec. 31, 2019

	Less than 6 months	6-12 months	12-24 months	24-36 months	36+ months	N
AVG	17.7%	16.4%	17.6%	11.8%	36.5%	3376

Notes: Each agency's turnover rate is calculated as (total separated DSPs in past year)/(total direct support staff as of December 31, 2019). Formulas for tenure were based on the number of DSPs in each time range who separated from employment between Jan 1 and Dec. 31, 2019

# Tenure (Separated DSPs)

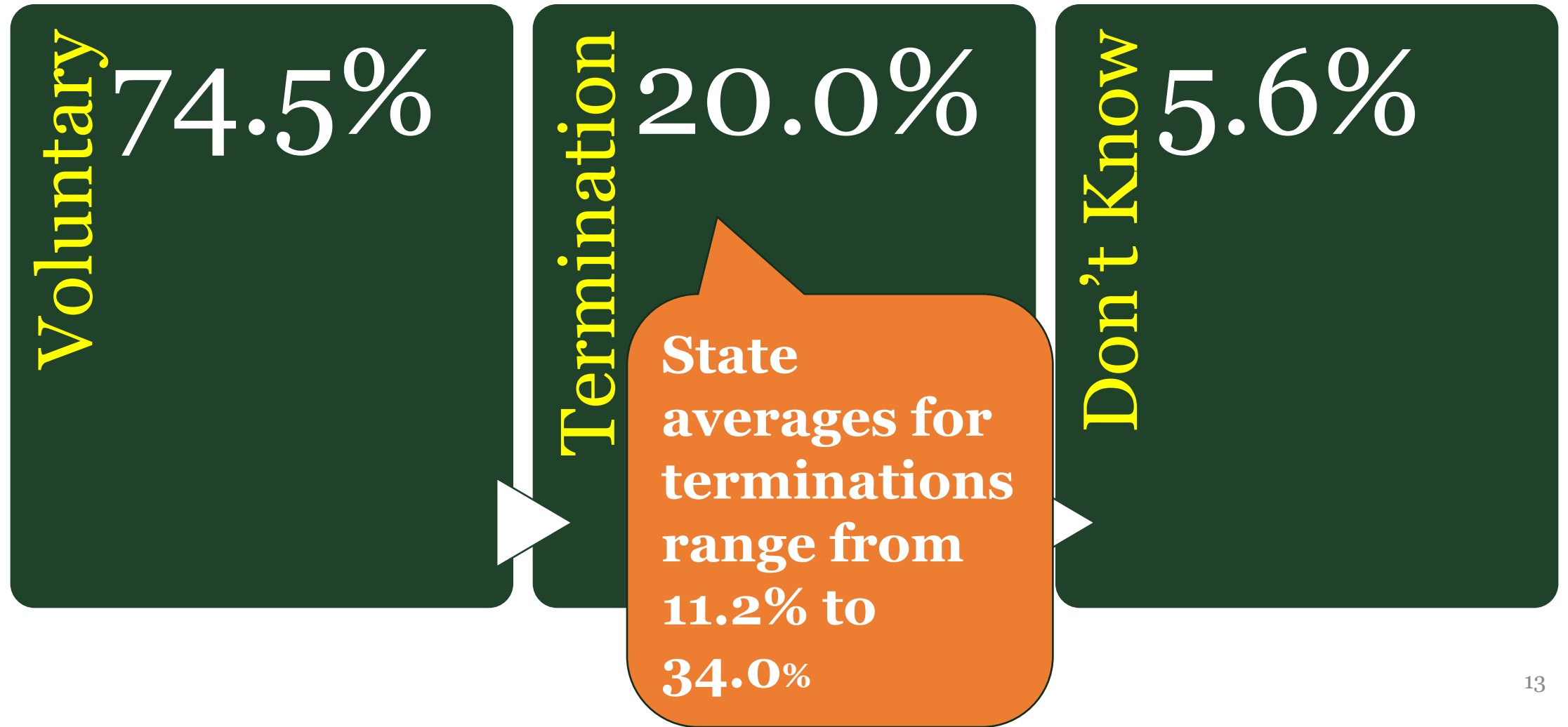
- Tenure Among Separated DSP Employees (Left Between Jan. 1, 2019 and Dec. 31, 2019)

	Less than 6 months	6-12 months	12-24 months	24-36 months	36+ months	% of agencies reporting at least 1 DSP separation	N
AVG	32.7%	17.8%	13.8%	6.6%	12.0%	82.9%	3233

**Nearly 51% of employees who separate from agencies do so within the first 12 months of employment**



# Reasons for separation





# **CONTRIBUTING FACTOR DATA**

Across all service types, responding agencies paid a **median hourly wage of \$12.00.**



## Wages

When broken out by service type, median hourly wages were:

**\$11.90** for DSPs  
providing  
**residential** supports

**\$11.50** for DSPs  
providing **in-home**  
supports

**\$12.50** for DSPs  
providing **non-  
residential** supports

## Paid Time Off

69.5% of responding providers provided any paid time off to DSPs

- Two methods of paid time off are typically reported –
  - **Pooled Time Off** meaning the specific purpose or reason is not explicitly tracked
  - **Tracked Time off**, meaning the time is tracked as either sick time, vacation time, or personal time off. Agencies were asked to report their method and the specific data.

**40.2%** of responding providers offered pooled paid time off to some or all DSPs.

Of those not using the pooled method:

**61.8%** offered paid sick time to some or all DSPs.

**75.8%** offered paid vacation time to some or all DSPs.

**40.2%** offered paid personal time to some or all DSPs.



# Additional Data Available on Responding Providers

COVID-19 related questions in  
current survey!

- # of adults supported in each support type (residential, in-home, non-residential)
- Changes in number of adults enrolled in or approved for services
- % Full time/% part time
- Vacancy rates
- Starting wages (for each support type)
- Wages as a % of state minimum wage
- % regular vs. % overtime wages
- Offer Health Care Benefits and any eligibility requirements including dental/vision coverage offered.
- Bonuses paid to employees
- Employer sponsored retirement benefits offered / available
- Other benefits- tuition reimbursement, flex spending accounts, health incentives

# How are other states using data?

OH created innovation grants for providers which resulted in groundbreaking practices to retain DSPs

PA is offering small grants to providers willing to try something new, and share their learning.

TN used data as evidence to advocate for a rate increase. Then used NCI to determine whether rate increase went to wages.

UT uses NCI data to advocate for, and assess outcomes of a wage increase

# Thank You.

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# Predictors of annual and early separations among Direct Support Professionals

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# Background

- Direct support professionals (DSPs) provide a broad range of supports in a variety of settings to people with intellectual and developmental disabilities (IDD).
- These supports enable people to live, work, and participate in their communities (Centers for Medicare and Medicaid Services, 2014).
- Despite the crucial importance, high rates of annual turnover among DSPs in organizations that employ them have been documented for decades (Hewitt et al., 2018).
- The shortage of a qualified, competent, and stable DSP workforce curtails peoples' opportunities in the community.

# Purpose

- To examine the impact of organizational- and state-level factors on DSP turnover.
  - factors that vary within a provider organization, such as wages.
  - factors that vary between states, such as Medicaid expenditures.

# Research Questions

1. What are the organizational-level predictors of turnover, as controlled for by vacancy rate, number of services provided, and organizational size?
2. What state factors are related to organizational-level predictors of turnover, as controlled for by vacancy rate, number of services provided, and organizational size?

# National Core Indicators-Staff Stability Survey

- The National Core Indicators (NCI) is an initiative of the National Association of State Directors of Developmental Disabilities Services (NASDDDS) and the Human Services Research Institute (HSRI).
- In 2014, NCI began collecting organizational level data on the direct support workforce.
- The NCI Staff Stability Survey was developed in collaboration with the National Direct Service Resource Center to assess critical and relevant information about DSP workforce stability, wages, benefits, and recruitment and retention strategies (NCI, 2014).



# Data

- Data were collected from 20 states (AL, AZ, CT, GA, HI, IL, IN, MD, MO, NE, NY, OH, OR, PA, SC, SD, TN, TX, UT, VT) and the District of Columbia that voluntarily participated in the NCI program in 2016.
- Across the states, 3,222 provider agencies completed the 2016 Staff Stability Survey. Due to missing data, the listwise number of providers assessed for this study was 1,410 for early turnover and 1,618 for annual turnover.

# Turnover Outcomes

- Annual turnover was computed using a formula for annual crude separation rate, which is calculated using three variables:
  - the number of DSPs who left their position for any reason in the calendar year
  - divided by the total number of DSPs employed plus the number of DSP vacancies.
- Early separations was computed by dividing the number of DSPs who left their position within 6 months of hire in the calendar year by the total number of DSPs who left their position that same year.
- Both were multiplied by 100 to get a percent.
- 25% and 20% were the average annual and early turnover across all organizations included in this analysis

# Predictors and Covariates

- Organizational-level predictors included DSP wages, paid time off offered, annual overtime hours, health insurance offered, part-time ratio.
- Covariates included vacancy rate, the number of service types, and staff size.
- State-level variables included the ratios of living arrangements common within each state (e.g. percent living with family), per capita spending, unemployment rates, and whether or not a state chose to expand Medicaid.

# Analysis

- Descriptive statistics and hierarchical linear modeling (HLM) were computed using HLM 7.0
- HLM models were used to examine the effect of predictors across two levels of analysis on the two workforce outcomes of early and annual turnover.
- Restricted maximum likelihood (RML) was used as the estimation method because of the relatively small sample size for the level-two predictors.

# Results

- Higher annual DSP turnover was significantly related to
  - lower DSP wages,
  - not offering health insurance at the organizational level,
  - lower percentages of people living in individualized settings, and
  - lower per capita Medicaid spending at the state level.
- Early turnover indicated turnover was significantly related to
  - not offering paid time off and health insurance,
  - higher vacancy rates,
  - higher proportion of part-time DSPs, and
  - lower overall staff sizes at the organizational level.
- Early turnover was NOT associated with state factors



# Implications and Conclusions

- This is the first study using NCI Staff Stability Survey data (or any similar data) for systematic analysis across multiple states.
- At the organizational level, the results indicate that wages and benefits are critical factors to retaining DSPs in their positions.
- Early turnover seems to also be impacted by vacancy rates and more part-time staff, suggesting initial pressure on new DSPs may increase turnover.

# Implications and Conclusions

- At the state level, living in individualized settings may decrease turnover due to increased satisfaction for the individuals supported and better relationships with DSPs
- Lower per capita Medicaid spending may lead to better wages and conditions, thus decreasing turnover.
- These are important factors for both states and organizations to address.

## Future Directions

- Longitudinal analyses are needed to better understand the causal relationship between these factors and turnover.
- Additional variables likely to influence retention and turnover should be included in future studies (e.g. organizational support of DSPs).
- Further analyses should examine the uptake of health insurance by DSPs, and survey where DSPs are receiving health insurance, if not from their employer.
- Analyses with a larger number of states would provide information that is more generalizable



# Factors that Influence the Tenure of DSPs in NYS

*An empirical analysis of  
2018 NCI Staff Stability data*

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# New York State NCI Staff Stability Survey

Year Survey  
Administrated:

2017

2018

2019

2020

Data represents  
the Calendar Year:

2016

2017

2018

2019

Provider  
Response Rate:

79.1%

89.0%

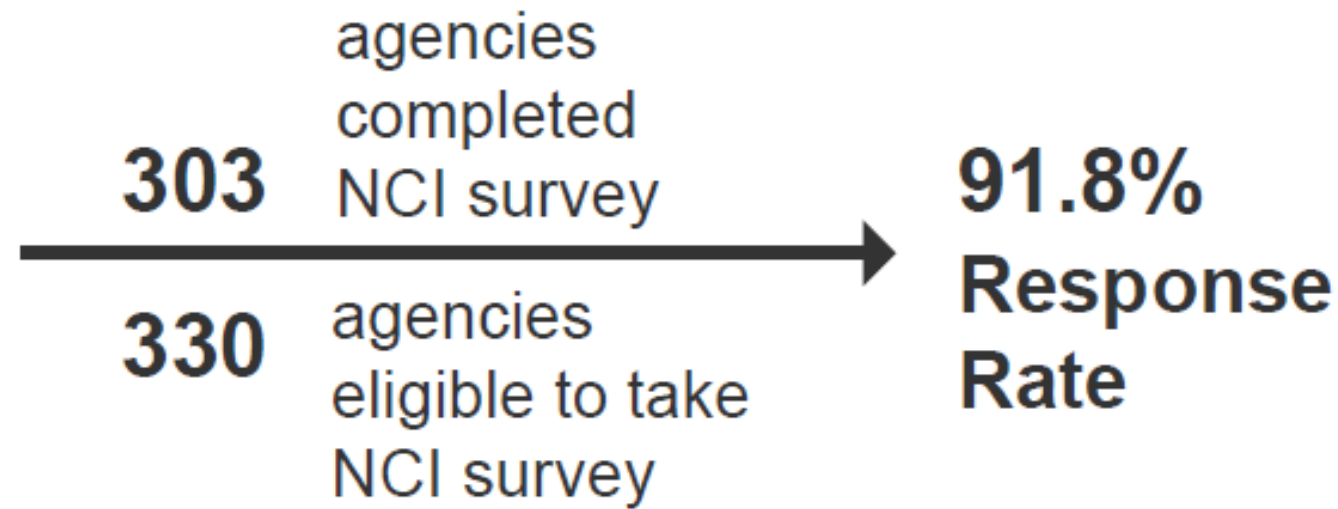
91.8%

75.2%



Office for People With  
Developmental Disabilities

# New York State 2018 NCI Staff Stability Survey

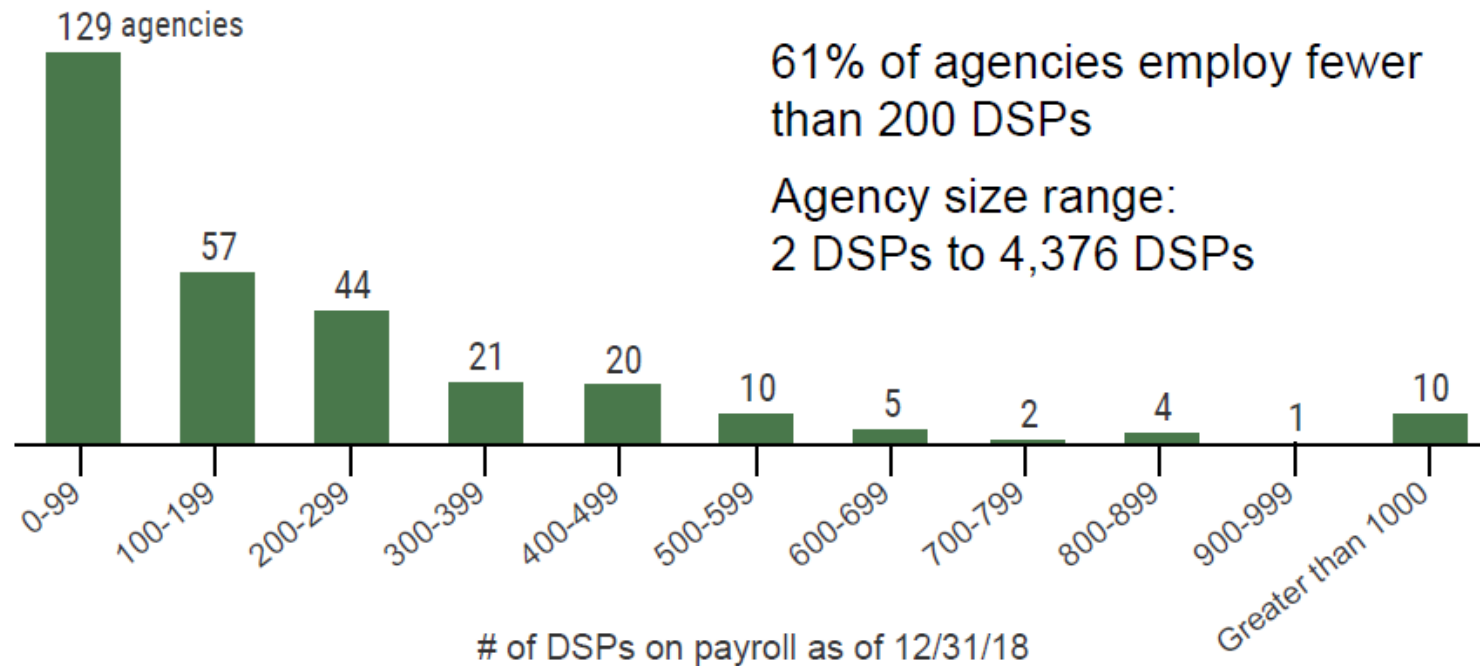


**72,252** Direct Support Professionals (DSPs) were employed among 303 participating agencies in NYS in 2018



# 2018 NCI Staff Stability Survey Participating Agencies in NYS

## AGENCY SIZE





# New York State 2018 NCI Staff Stability Survey

## TURNOVER RATE

NYS Turnover Rate: **35.29%**



**1 in 3**  
**DSPs left the workforce**  
**in 2018**

National Turnover Rate: 48.50%

OPWDD Regions	Turnover Rate
Region 1	40.59%
Region 2	39.15%
Region 3	29.48%
Region 4	34.40%
Region 5	39.01%

*The data gathered refers to the period between Jan. 1, 2018 and Dec. 31, 2018.*



**Office for People With  
Developmental Disabilities**

# New York State 2018 Staff Stability Survey

## NYS WAGES

Wages Ranged  
from:  
**\$11 to \$24.21**

Average  
Hourly Wage:

**New York State:**  
**\$14.50**

**National:**  
**\$12.26**

## WAGES BY NYS MINIMUM WAGE REGIONS

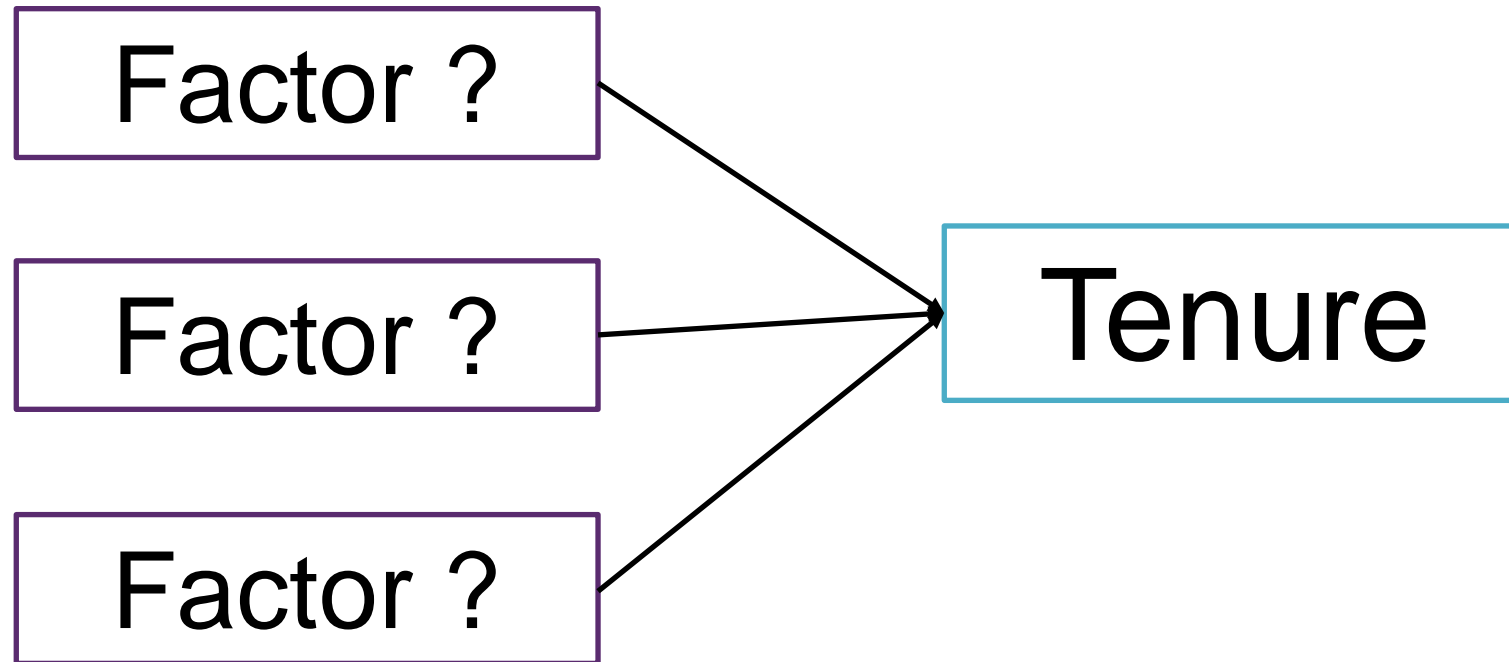
Minimum Wage Region*	# of Agencies	Minimum Wage	Range of Wages Paid	Average Wage Paid
Long Island & Westchester	42	\$11.00	\$12.25 - \$24.21	\$15.61
NYC Big	100	\$13.00	\$11.00 - \$21.43	\$15.11
NYC Small	4	\$12.00	\$13.20 - \$14.00	\$13.61
Rest of NYS	140	\$10.40	\$11.00 - \$20.25	\$13.66

\* NYS has multiple minimum wage regions. The *NYC Small* minimum wage region includes agencies that employ 10 or fewer employees. *NYC Big* includes agencies that employ 11 or more employees.



# The Research Question:

What factors influence the tenure of DSPs in 2018?

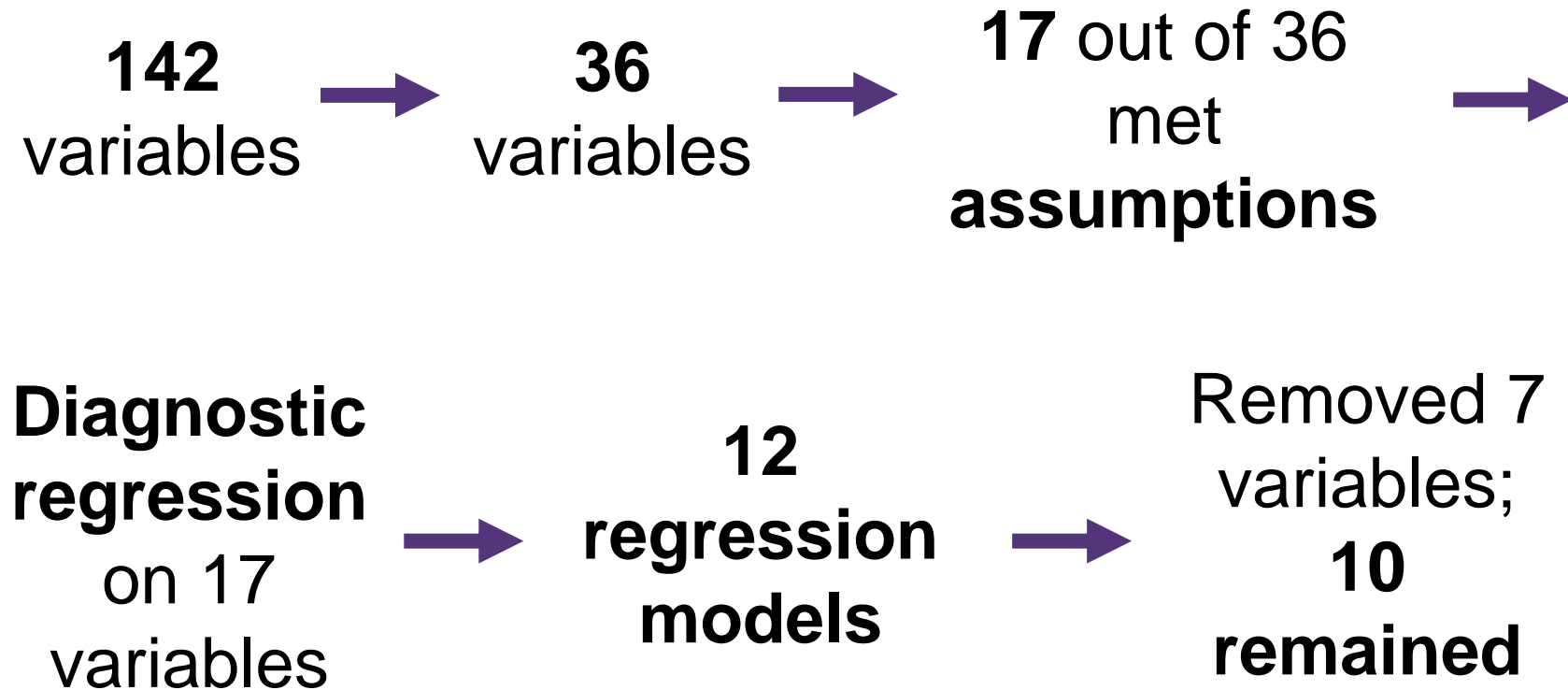


# Data Preparation

303 provider agencies responded to 2018 Staff Stability Survey.

Data cleaning and organizing resulted in the current study with sample of 272 provider agencies.

# Data Preparation



**10 variables used in statistical analysis**

# Data Preparation and Analysis

## Data Preparation

**Missing Data:** Multiple imputation and MCAR Test

Percent missingness was **2.75%** (504 values) across 113 cases/ agencies

## Data Analysis

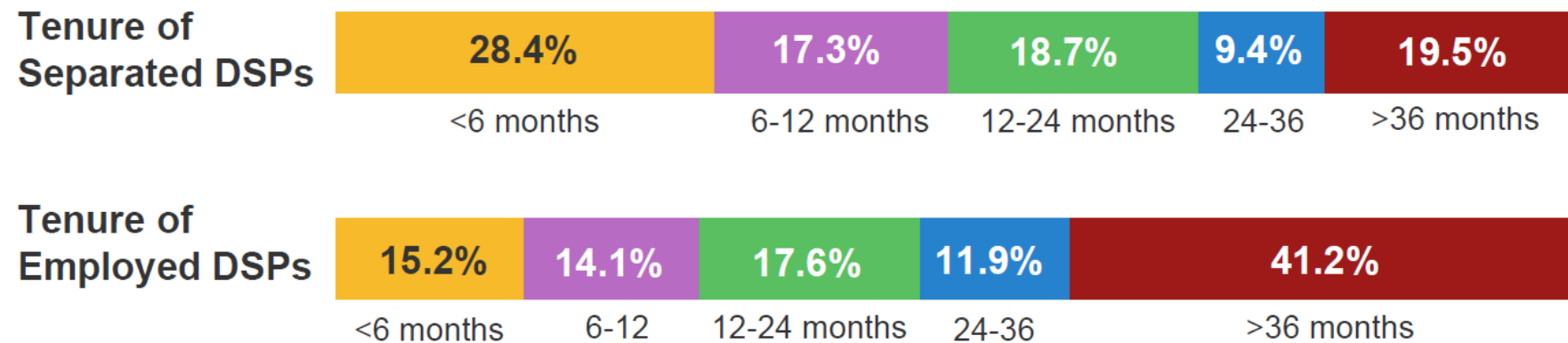
**A Multiple Linear Regression (MLR) analysis** was conducted to investigate the relationship that the **10 IVs** of interest/focus variables have with **tenure** (i.e., tenure index score for the agency).

# Dependent Variable

**Tenure**

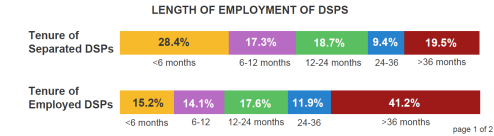
Length of time DSPs  
employed

## LENGTH OF EMPLOYMENT OF DSPS



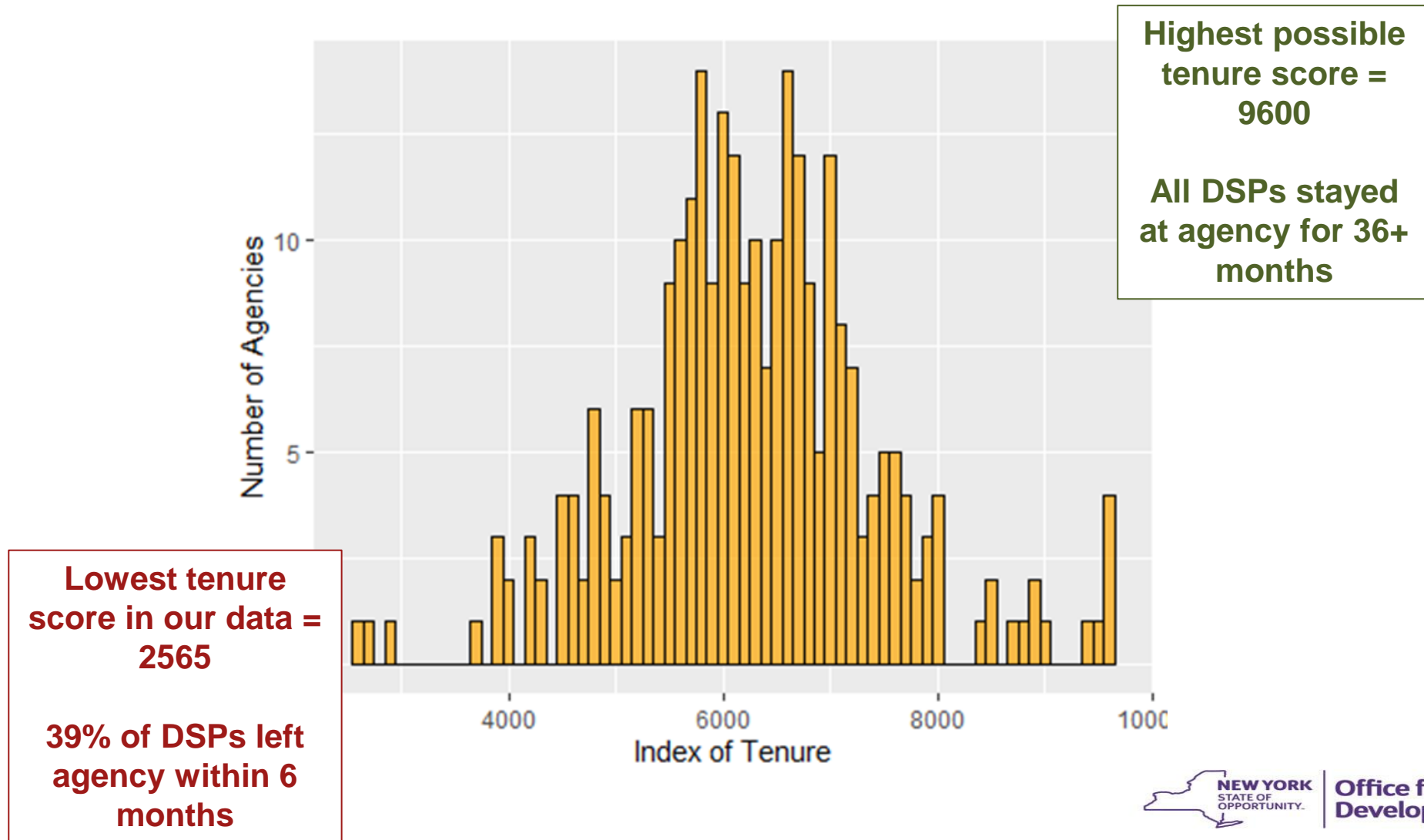


# Dependent Variable



Agency Name	Existing variable	Index multiplier	Tenure Index
Agency A Tenure of <u>Separated</u> DSPs	% of DSPs employed less than 6 months	1	Sum of scores
	% of DSPs employed between 6-12 months	6	
	% of DSPs employed more than 12-24 months	13	
	% of DSPs employed more than 24-36 months	24	
	% of DSPs employed more than 36 months	36	
Agency A Tenure of <u>Employed</u> DSPs	% of DSPs employed less than 6 months	48	
	% of DSPs employed between 6-12 months	60	
	% of DSPs employed more than 12-24 months	72	
	% of DSPs employed more than 24-36 months	84	
	% of DSPs employed more than 36 months	96	

# Dependent Variable



# Independent Variable

## Wage Index

**Current wage** compared to **minimum wage** is included to calculate wage index.

**Starting wage** compared to **current wage** is included to calculate wage index.

# Independent Variable

## Bonus

Did your agency give bonuses to DSPs?

Yes

121 Agencies  
(41%)

No

173 Agencies  
(59%)

# Independent Variable

Number of DSPs per Front Line Supervisor

10 or less  
DSPs per FLS

138 Agencies  
(50%)

More than 10  
DSPs per FLS

139 Agencies  
(50%)

# Independent Variables

Post-Secondary Education Benefit  
Health Incentives Program Benefit  
Recruitment Incentives  
Disability Insurance  
Paid Job-Related Training Benefit  
Flexible Spending Account Benefit

Binary variable:

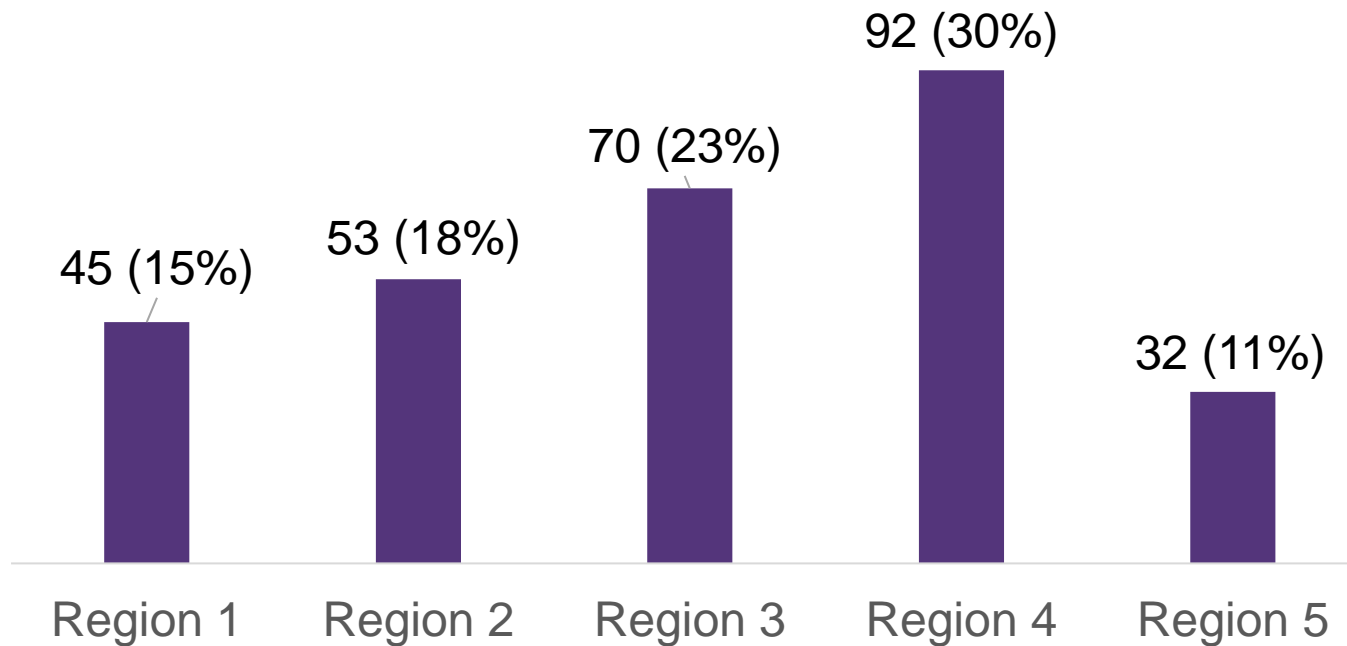
Yes – benefit offered to DSPs

No – benefit not offered to DSPs

# Controlled Variable

## DDRO Region

Number of Agencies by DDRO Region





# Multiple Linear Regression

Wage Index

Bonus

Number of DSPs per Front Line Supervisor

Post-Secondary Education Benefit

Health Incentives Program Benefit

Recruitment Incentives

Disability Insurance

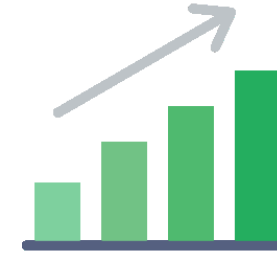
Paid Job-Related Training Benefit

Flexible Spending Account Benefit

DDRO Region (Controlled Variable)

Tenure

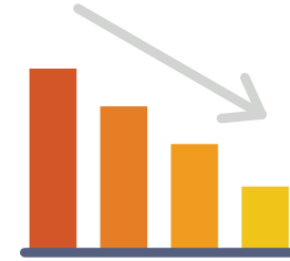
# Results



**Higher tenure** was associated with:

1. Wage Index
2. Flexible spending account
3. At least one bonus paid to DSP
4. Post-secondary education benefits
5. Disability insurance
6. Having 10 or less DSPs per FLS

# Results



**Lower tenure** was associated with:

1. Recruitment incentives
2. Job-related training
3. Health incentives

# Interpretation of Results

1. **Wages** have the **strongest** and far **greater** effect (one-third of all explained variance) on tenure of DSPs at New York State provider agencies.
2. **Benefits** when paired with a competitive wage seem to impact DSP tenure.
3. **Workload** and **size** of workforce at the agency seems to impact DSP tenure.

# Strengths of NCI Staff Stability Survey

Represent approximately **80% of New York State Medicaid** providers serving the IDD population, and large-scale information about the DSP workforce.

Many provider-level variables → **objective** variables (do you provide...?, how many receive...?)

# Moving forward, NYS will gather:

**Demographic information** on DSPs (e.g., race and gender)

Information on **wrap-around supports** offered to DSPs (e.g., child care, food supports)

More information on what **post-secondary education** benefits, **flexible spending** benefits, and **disability insurance** benefits look like