NEW JERSEY ADVANCED MANUFACTURING
Why New Jersey for ADVANCED MANUFACTURING?

We are a state of innovators. From the incandescent light bulb to ground-breaking cancer research, New Jersey has been and remains, a place where human ingenuity flourishes.

- Phil Murphy
Governor

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**Connected location with distinct infrastructure assets**

- Reach a third of US consumers within a 1-day drive of New Jersey
- Enjoy unmatched regional and global connectivity with unparallel access to the Northeast Corridor and ~600 nonstop flight destinations¹
- Take advantage of the largest port on the East Coast and our best-in-class digital infrastructure

**Innovative manufacturing ecosystem**

- Join a diverse and growing ecosystem of 2,500+ advanced manufacturing firms that call NJ home and are doubling down here
- Locate in the center of a robust Mid-Atlantic advanced manufacturing economy, focused in the sectors that matter most, and offering real local advantages
- Benefit from Governor Murphy’s pro-growth manufacturing agenda and an ecosystem of supports

**Full breadth of manufacturing talent**

- Access 245,000+ high-skilled and blue collar manufacturing workers needed across your business
- Get access to a talent pool that is highly diverse and truly global
- Tap into NJ’s robust workforce pipeline including 150+ higher education institutions

**A place for every employee**

- Offer employees access to the #2 ranked pre-K-12 education system in the nation
- Provide employees with a choice of commutable city, small town, country, and coastal living
- All this at a fraction of the cost of New York and Philadelphia – and just a short train ride away

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¹ Includes Newark Liberty International Airport, Philadelphia International Airport, John F. Kennedy International Airport, and LaGuardia International Airport
CONNECTED LOCATION WITH DISTINCT INFRASTRUCTURE ASSETS

1/3rd of the US within a 1-day drive

At the heart of the Northeast Corridor with access to the #1 airport system in the US

Rail and road networks connecting Maine to Florida with the #1 port on the East Coast in the #1 digitally-connected state

1 Includes Newark Liberty International Airport, Philadelphia International Airport, John F. Kennedy International Airport, and LaGuardia International Airport.
There are many benefits of operating in New Jersey. We bring in paper from all over the world, so it’s important for us to be near the major ports. We also ship internationally, so we must be close to proficient transportation. We’re located less than an hour from airports and New York City.

- Lisa Hirsh
   President and CEO
   Accurate Box Company

33% of the entire US pop. within a 1-day driving shift

~1 day drive

~half day drive

~107 million

People – and thousands of retailers and suppliers – within an 11-hour drive

Source: Experian

1 From Port Newark Container Terminal; 11 hours represents the maximum number of hours for a typical truck driver shift
Day trips by train to Washington DC and Boston

At the heart of the Northeast corridor, next to NYC and Philadelphia

- **Newark** to New York: ~20 min
- **New York** to **Boston**: ~4 hours
- **Newark** to Trenton: ~40 min
- **Trenton** to Philadelphia: ~1.5 hours
- **Philadelphia** to Baltimore: ~2 hours
- **Baltimore** to Washington, DC: ~3 hours
- **Washington, DC** to New York: ~2 hours

**$2.8 trillion**
GDP within 150 miles\(^1\)
(15% of US)

**38 million**
consumers\(^1\)
within 150 miles

\(^1\) Includes the GDP and population of counties whose centers are within 150 miles of New Jersey

Source: Moody’s Analytics
Easy access to employees, clients, and customers across the globe

340+ NONSTOP DOMESTIC DESTINATIONS

260+ NONSTOP INTERNATIONAL DESTINATIONS

SOURCE: Dilo Mi - Includes Newark Liberty International Airport, Philadelphia International Airport, John F. Kennedy International Airport, and LaGuardia International Airport
Unmatched physical infrastructure assets

- Busiest airport system\(^1\) in the US
- \#1 largest port on the East Coast (Port of Newark)
- 5 strategically located Foreign Trade Zones throughout the State

1 Includes Newark Liberty International Airport, Atlantic City International Airport, JFK International Airport, LaGuardia Airport and Philadelphia International Airport

SOURCE: 2018 Port Performance Report, Department of Transportation; State of NJ Business Portal, Airports International Council (ACI)
Best-in-class Digital Infrastructure

#1
in % of population with access to wired broadband of 25 mbps or faster (99.1%)

#2
in average download speed (59.4 mbps)

#2
in % of population with access to fiber-optic internet (66.2%)

SOURCE: Broadbandnow.com, retrieved in June 2019; #1 average download speed in Maryland (~60.3 mbps) and #1 in % access to fiber is Rhode Island (~85%)
INNOVATIVE MANUFACTURING ECOSYSTEM

RICH, DIVERSE AND GROWING ECOSYSTEM OF 2,500+ ADVANCED MANUFACTURING FIRMS

STRATEGIC ADVANTAGES WITHIN A ROBUST REGIONAL MANUFACTURING ECONOMY

A CLEAR, PRO-GROWTH COMMITMENT TO ADVANCED MANUFACTURING WITH REAL SUPPORTS IN PLACE
Home to leading advanced manufacturing companies

2,500+ advanced manufacturing firms in NJ

- Biopharma & medical device
  - MERCK
  - Johnson & Johnson
  - Novo Nordisk
  - Celgene

- Chemical
  - PBE
  - AKCRS Chemicals
  - Old Bridge

- Food
  - Unilever
  - Pinnacle
  - Nestlé HealthScience
  - Goya

- Computer & electronic product
  - Siemens
  - Crestron

- Fabricated metal
  - Metal Fab
  - Flame Cut Steel Inc.
  - Integrity M technologies

- Machinery
  - Sandvik Coromant
  - Imperial
  - Flaherty Machine & Manufacturing

- Other advanced manufacturing
  - Lockheed Martin
  - Pace Glass Recycling
  - Lamatec

Select examples

Note: Companies on map reflect a sample of companies HQ in New Jersey from Capital IQ | 1 Based on number of firms - defined as an organization consisting of one or more domestic establishments in the same state and industry that were specified under common ownership or control

SOURCE: Capital IQ, 2016 Statistics of U.S. Businesses (SUSB)
A diverse advanced manufacturing economy that is on the rise

INNOVATIVE MANUFACTURING ECOSYSTEM

GDP growth in NJ advanced manufacturing since 2013

$37B (6.8% of total GDP)

6.3%

SOURCE: Moody's Analytics
Leading companies are doubling down here

New 100,000 sq. ft. facility with office and meeting space and aerospace application center

Global high technology engineering group

New 18,000 sq. ft. facility in Irvington, with new machinery to help expand services

Metal components manufacturer

Doubling of zinc sulfate manufacturing capacity in Old Bridge, NJ

Largest American cooper and zinc compound manufacturer

Major expansion, creating 410 advanced manufacturing jobs in Kearny, NJ

Technology and supply chain manufacturing startup

Purchase of 96 acres of land in Bordentown to build a 1,300,000 sq. ft distribution center

Multinational automotive manufacturer

Purchase of 96 acres of land in Bordentown to build a 1,300,000 sq. ft distribution center

Large defense contractor

Commitment to add 300 engineering and other high-paying jobs in South Jersey

Metal components manufacturer

Doubling of zinc sulfate manufacturing capacity in Old Bridge, NJ

Largest American cooper and zinc compound manufacturer

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Major expansion, creating 410 advanced manufacturing jobs in Kearny, NJ

Technology and supply chain manufacturing startup

New 250,000 sq. ft processing plant in Andover Township (world’s largest glass recycling facility)

Glass recycling technology provider

NOT EXHAUSTIVE

SOURCE: Company press releases; Note Sandvik expansion occurred in 2014
Located in a robust Mid-Atlantic manufacturing economy and focused in the sectors that matter most

$270+ billion in advanced manufacturing GDP across the Mid-Atlantic¹

77% of advanced manufacturing GDP across the Mid-Atlantic¹ concentrated in 5 sectors

Percent of advanced manufacturing GPD, 2018

- Biopharma & medical device: 26% (Mid-Atlantic), 43% (NJ)
- Computer & electronic product: 16% (Mid-Atlantic), 7% (NJ)
- Chemical: 14% (Mid-Atlantic), 18% (NJ)
- Food: 11% (Mid-Atlantic), 10% (NJ)
- Fabricated metal: 10% (Mid-Atlantic), 5% (NJ)
- All other: 23% (Mid-Atlantic), 17% (NJ)

¹ Includes New Jersey, Massachusetts, Pennsylvania, New York, Maryland, Virginia, Connecticut, Rhode Island, Delaware

SOURCE: Economic Modeling Specialists Intl. (EMSI)
Among the best places in the Mid-Atlantic to create products and get them to customers quickly

Abundant manufacturing spaces to create...

<table>
<thead>
<tr>
<th>State</th>
<th>Total Industrial Manufacturing Square Footage, 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pennsylvania</td>
<td>289 M</td>
</tr>
<tr>
<td>New York</td>
<td>259 M</td>
</tr>
<tr>
<td><strong>New Jersey</strong></td>
<td><strong>162 M</strong></td>
</tr>
<tr>
<td>Massachusetts</td>
<td>125 M</td>
</tr>
<tr>
<td>Connecticut</td>
<td>122 M</td>
</tr>
<tr>
<td>Virginia</td>
<td>107 M</td>
</tr>
<tr>
<td>Rhode Island</td>
<td>39 M</td>
</tr>
<tr>
<td>Maryland</td>
<td>39 M</td>
</tr>
<tr>
<td>Delaware</td>
<td>13 M</td>
</tr>
</tbody>
</table>

...and an ability to get products to customers fast

- **#1** port on the East Coast, with nearly 2X the volume of Virginia
- **#2** distribution and warehousing capacity in the Mid-Atlantic (680+ million sq. ft)

Source: CoStar, 2Q 2019; United States Department of Transportation
Governor Murphy’s economic development plan for the future

Investing in **PEOPLE**, including robust workforce supports to train the workers of the future

Supporting **INNOVATION** by creating clear sector priorities and specific programs to support companies within those sectors

Investing in **COMMUNITIES**, including making significant investments in expanding New Jersey’s robust infrastructure and invigorating its cities

**MAKING GOVERNMENT WORK BETTER** by reducing the time, cost, and complexity of doing business in New Jersey

SOURCE: NJEDA, Stronger and Fairer Economy Plan
We have the supports needed to help advanced manufacturing companies thrive

TAILORED WORKFORCE PROGRAMS

Pro-action Education Network

COMMUNITY COLLEGE CONSORTIUM

FOR WORKFORCE & ECONOMIC DEVELOPMENT

Bridging the Skills Gap

SUPPORTS FOR INNOVATION AND RESEARCH

Center for Manufacturing Systems

Makerspaces across the State

ECOSYSTEM OF ADVANCED MANUFACTURING SUPPORT

A NETWORK OF SUPPORTIVE INSTITUTIONS AND PROGRAMS

NJMEP

Helping New Jersey Manufacture Success

NJIT

New Jersey Institute of Technology

The New Jersey Advanced Manufacturing Institute

University Industry Partnership

Bergen Makerspace

Makerspace

New Jersey Institute of Technology

choose: newjersey

 NJEDA

16
245,000+ Advanced manufacturing workers at the ready

36% female share of advanced manufacturing workforce (vs. 27% nationally)

150+ higher education institutions supporting range of workforce needs

LARGE AND ACCESSIBLE TALENT POOL

TRULY DIVERSE POPULATION

PIPELINE OF TOP TALENT
Hundreds of thousands already working in New Jersey’s advanced manufacturing industry

NJ distribution of occupations in the manufacturing sector

% of NJ employment in the manufacturing by occupation, 2018

- Production: 46%
- Sales: 5%
- Managers: 6%
- Transportation & material moving: 10%
- Other: 13%
- Administrative & financial: 15%
- Architecture & Engineering: 5%
- Other: 45%

~245,000 Manufacturing industry workers


1 Of the 16% in the other category, 45% are in medical equipment and supplies, 18% in glass and glass products, 12% in other motor, 12% petroleum and coal, 7% electrical equipment, 6% aerospace product and parts, and 12% other motor vehicle

We’re proud to continue contributing to the manufacturing comeback...in Trenton and the launch of our new division allows us to hire new employees while maintaining the loyal and multi-generational workforce who have made Switlik the continuing success it is today.

- Stanley Switlik II
CEO
Switlik Survival Products

choose: newjersey NJEDA
Deep pool of advanced manufacturing workers at the ready

113,000 workers employed in production occupations

12,000+ first-line supervisors projected to grow 3% in the next decade

11,000+ assemblers projected to grow 5% in the decade

MA PA NY
-3% -2% -1%
-15% -11% -9%

1 Includes production occupations within manufacturing only | 2 Includes first-line supervisors of production and operating workers across sectors | 3 Includes assemblers and fabricators, all other, including team assemblers across sectors

SOURCE: Economic Modeling Specialists Intl. (EMSI)
Diverse talent needed to compete in a globally diverse world

WHERE DIVERSITY THRIVES...

OVERALL RACIAL AND ETHNIC DIVERSITY

MOST ETHNICALLY DIVERSE CITY IN THE US (JERSEY CITY)

SPEAK A LANGUAGE OTHER THAN ENGLISH AT HOME

AND INTERNATIONAL RESIDENTS ARE WELCOME (~2 MILLION OF THEM!)

FOREIGN-BORN RESIDENTS HAVE A BACHELOR’S DEGREE OR HIGHER

IN K-12 STUDENTS ENROLLED IN FOREIGN LANGUAGE CLASSES

1 United States average is 32%
Access to 150+ premier higher education institutions

$6.6 billion
R&D expenditures

150+
institutions in the region

25
Doctoral universities

#1
University in the country and
3 of top 10

1 New Jersey region includes New Jersey state, New York-Newark-Jersey City, NY-NJ-PA MSA and Philadelphia-Camden-Wilmington, PA-NJ-DE-MD MSA
2 Includes universities under Carnegie classification: Doctoral Universities: Very High Research Activity, Doctoral Universities: High Research Activity
3 Includes Princeton, Columbia University and University of Pennsylvania

SOURCE: Carnegie Classification of Higher Education Institutions, Higher Education Research and Development Survey (National Science Foundation), The Integrated Postsecondary Education Data System (IPEDS), US News
A PLACE FOR EVERY EMPLOYEE

TRANSLIT-RICH, DIVERSE NEIGHBORHOODS

Newark

BUSTLING, GROWING CITIES

Montclair

Jersey City

COLLINGSWOOD

Hoboken

COASTAL ENCLAVES

Princeton

ACCESSIBLE, SMALL TOWNS

Ocean City

Asbury Park
Montclair

A safe and vibrant suburb with incredible schools, world-class dining options, and direct access to New York City.

- 17 miles from Midtown Manhattan
- 86% bachelor’s degree or higher
- Top 20 suburb in America to raise a family
- 12.5 student-teacher ratios
- 7 Parks and nature reserves

Source: TownFacts, Niche, Township of Montclair

1 Refers to Upper Montclair specifically. Parks include Anderson Park, Yantacaw Brook Park, the Bonsal Nature Reserve, Mountainside Park, the Presby Memorial Iris Gardens, and parts of Mills Reservation and Brookdale Park.
The #2 Pre-K-12 education system in the country

ranked in Pre-K-12 education\(^1\)

Compared to...

2 of the top 30 school districts

10 PA
25 NY
33 TX
37 CA

2 of the top 20 high schools in the US

\(^1\) Score based on pre-Kindergarten enrollment, NAEP scores, 8th grade English scores, pre-K quality score, and college readiness. Massachusetts is ranked #1.

SOURCE: US News, Niche
A short train ride from New York City but significantly more affordable

If your income in Manhattan is...

~$100,000 after taxes

Moving to Newark would get you...

~$200,000 of purchasing power

Access to New York City and all of its amenities at a fraction of the cost

**Easy access to New York City...**

Weekday commute time to Midtown Manhattan (Penn Station), minutes

- **Montclair** ~1 hour
- **Hoboken** 18m
- **Upper West Side** 19m
- **Upper East Side** 20m
- **Downtown Brooklyn** 28m
- **Newark** 26m

**...at New Jersey prices**

<table>
<thead>
<tr>
<th>Destination</th>
<th>Median market rent ($ per month, 2019)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NEW YORK</strong></td>
<td></td>
</tr>
<tr>
<td>Midtown Manhattan</td>
<td>$4,637</td>
</tr>
<tr>
<td>Upper West Side</td>
<td>$4,249</td>
</tr>
<tr>
<td>Upper East Side</td>
<td>$4,081</td>
</tr>
<tr>
<td>Downtown Brooklyn</td>
<td>$3,030</td>
</tr>
<tr>
<td><strong>NEW JERSEY</strong></td>
<td></td>
</tr>
<tr>
<td>Hoboken</td>
<td>$2,817</td>
</tr>
<tr>
<td>Montclair</td>
<td>$2,457</td>
</tr>
<tr>
<td>Jersey City</td>
<td>$2,087</td>
</tr>
<tr>
<td>Newark</td>
<td>$1,533</td>
</tr>
</tbody>
</table>

**SOURCE:** Google Maps estimates via public transportation at 8:00 am on Monday morning; in cases where time range is provided, estimate uses average of low and high range; rent data from Zillow Rent Index (April 2019); not standardized by square feet or number of bedrooms given sample size (not able to get more detailed estimates for Montclair or Newark)
Endless opportunities for leisure

- 130 miles of coastline
- 400+ Lakes, pond & reservoirs
- 28 State parks
- 216 golf courses
- 16 theme parks
- 10 sports stadiums
- 3 ski mountains
- #1 beach town in America
- 9,000 farms
- 930 miles of hiking
- 144 Museums
- 55 Historical sites
- 4 Zoos and botanical gardens

1 America's Happiest Seaside Town

SOURCE: Stockton University, State of New Jersey Department of Environment Protection, GolfMax, FunNewJersey.com, Coastal Living, Department of State, Division of Travel and Tourism, State of New Jersey, New York-New Jersey Trail Conference, JerseyFresh, Institute of Museum and Library Services
A progressive agenda that helps attract diverse, highly-skilled talent

Governor Murphy Signs Executive Order Creating Future of Work Task Force
October 5, 2018. 3:09 pm | In

TRENTON – Governor Phil Murphy today signed an Executive Order establishing the Future of Work Task Force, charged with studying how technological innovation will impact the development of jobs and New Jersey’s economy. He also announced that the task force will be chaired by Chief Innovation Officer Dr. Beth Simone Noveck. The Governor previewed this task force in the Economic Development Strategic Plan he unveiled on Monday.

New Jersey advances plans for 330,000 zero-emission vehicles by 2025

In his first bill signing, Murphy restores funding for Planned Parenthood
By KATHERINE LANDERGAN | 02/21/2018 01:06 PM EST

Governor Murphy Signs Legislation to Make Student Loans More Affordable
04/25/2019

Two New Laws Help Borrowers of NJCLASS Loans Manage their Student Debt and Repair their Credit Scores
TRENTON – Governor Murphy today signed two pieces of legislation to assist student loan borrowers who are struggling with repayment.
A true partner for your business with supports to help at every stage

**GET STARTED**
Targeted financing programs for young companies

**GET ESTABLISHED**
Innovative supports for growth companies

**GROW**
Venture funding and loan programs to help companies scale

"The support we’ve received from the State has not only helped us grow, but has enabled us to enhance our platform, thereby helping more advisors and investors."

John Michel  
CEO, CircleBlack

"The NJEDA has been instrumental in supporting our growth, and we are confident that our participation in NJ Ignite will allow us to draw new tenants to Indiegrove."

Zahra Amanpour  
Founder, Indiegrove
We’d love to connect with you!

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