Making New Jersey the safest and most equitable place in the nation to give birth and raise a baby.
This publication was co-funded by The Nicholson Foundation and the Community Health Acceleration Partnership (CHAP).

The Nicholson Foundation is a private foundation based in Newark, New Jersey. It funds strategies that inform policy and transform service delivery systems in health and early childhood. The Nicholson Foundation is dedicated to improving the health and well-being of vulnerable populations in the state.

The Community Health Acceleration Partnership (CHAP) works to build stronger and more effective community health systems through catalytic investments and strategic engagement.

Published: January 2021

# TABLE OF CONTENTS

I. Acknowledgements ....................................................................................................................5  
II. Letter from the First Lady of New Jersey Tammy Snyder .......................................................... 6  
III. Navigating The Strategic Plan Documents ............................................................................. 7  
IV. Executive Summary .................................................................................................................. 9  
V. Recommendations At A Glance ............................................................................................16  
VI. Maternal And Infant Health Primer: The Urgent Need For Action .....................................23  
   Context of Maternal Health in New Jersey ..................................................................................23  
   Life Course Exposures and Pregnancy Outcomes ......................................................................26  
   Context of Infant Health in New Jersey .....................................................................................27  
   Role of Racism in Maternal and Infant Health .........................................................................29  
   Social Determinants of Health ..................................................................................................31  
   The Context of Maternity Care: Listening to Women’s Voices .......................................................32  
VII. Addressing The Challenge: A Transformative Strategy .......................................................34  
   Setting a Common Vision: The Ecosystem Map .......................................................................34  
   Becoming the Safest Place to Give Birth: What Will New Jersey Need? .................................36  
   Creating Health Supporting Communities: Place-based Community Pilots ..............................36  
   Who Should Be Involved in Making New Jersey the Safest Place to Give Birth? .....................37  
   Areas of Opportunity: The Nine Transformative Action Areas ................................................39  
VIII. The Nurture NJ Strategic Plan Recommendations ............................................................41  
   1. Build racial equity infrastructure and capacity ......................................................................42  
   2. Support community infrastructures for power-building and consistent engagement in decision-making .................................................................................................................................45  
   3. Engage multiple sectors to achieve collective impact on health ........................................47  
   4. Shift ideology and mindsets to increase support for transformative action ..........................50  
   5. Strengthen and expand public policy to support conditions for health in New Jersey ..........52  
   6. Generate and disseminate information for improved decision-making ..............................57  
   7. Change institutional structures to accommodate innovation ..............................................60  
   8. Address the social determinants of health .........................................................................65
TABLE OF CONTENTS

9. Improve the quality of care and service delivery to individuals ................................................................. 68
IX. Implementation And Evaluation Of The Nurture NJ Strategic Plan .......... 73
X. Appendices ............................................................................................................................................. 80
   A. Nurture NJ Key Milestones .................................................................................................................. 81
   B. Index of Recommendations Relevant to Each Stakeholder Group .................................................. 89
   C. Nurture NJ Companion Document Table of Contents ...................................................................... 91
   D. Nurture NJ Year-One Playbook Table of Contents .......................................................................... 93
I. Acknowledgements

Partners
The following New Jersey State government agencies and departments provided invaluable contributions:
the Office of First Lady Tammy Murphy, Department of Health, Department of Children and Families,
Department of Human Services, Department of State, Department of Treasury, Department of Labor,
Department of Community Affairs, New Jersey Housing Mortgage and Finance Agency, Board of Public Utilities,
Department of Agriculture, Department of Banking and Insurance, Department of Corrections, Department of
Education, Department of Environmental Protection, Department of Transportation/NJ Transit, New Jersey
Economic Development Authority, Motor Vehicle Commission, the Office of the Attorney General, the
Office of Information Technology, and the Office of the Secretary of Higher Education.

Critical Stakeholders
We would also like to thank the over 100 critical stakeholders ranging from hospital systems,
to providers, to experts, to advocates, to most importantly mothers, and more from across New Jersey
for their contribution to this project.

Editorial and graphic design was provided by LINK Strategic Partners, a national communications and
stakeholder engagement firm. By understanding and respecting communities, LINK helps to create and apply
the right tools and strategies to translate challenges into opportunities for hyperlocal success.

This Strategic Plan was written by:

- Vijaya K. Hogan, MPH, DrPH
- Elizabeth S. Lee, MPA
- Lisa A. Asare, MPH
- Bahby Banks, PhD, MPH
- Luz E. Benitez Delgado, MBA, NCC
- Debra Bingham, DrPH, RN, FAAN
- Pauline E. Brooks, PhD
- Jennifer Culhane, MPH, PhD
- Monica Lallo, EdD, MPA, MPM
- Esther Nieves, MA, MS
- Diane L. Rowley, MD, MPH
- Patricia H. Karimi-Taleghani, BA, MA, C.Phil
- Shanta Whitaker, PhD, MPH
- Tiffani D. Williams, BA, BSN, RN, CBG
- Jatesha “Jaye” Madden-Wilson, LPN
Dear Nurture NJ Partners:

After more than two years of work, I am thrilled to share New Jersey’s maternal and infant health Strategic Plan with you.

Currently, New Jersey is ranked 47th in the nation for maternal deaths and has one of the widest racial disparities for both maternal and infant mortality. A Black mother in New Jersey is seven times more likely than a white mother to die from maternity-related complications, and a Black baby is over three times more likely than a white baby to die before his or her first birthday. This disturbing reality is a result of nothing other than institutional racism. These unacceptable statistics represent the real families who inspire our work. As we continue our effort, we must treat this crisis as if every mother we lose is our mother, and every baby we lose is our baby.

To this end, on Maternal Health Awareness Day 2019, I launched Nurture NJ, our statewide awareness campaign committed to both reducing maternal and infant mortality and morbidity and also ensuring equitable care among women and children of all races and ethnicities. This campaign focuses on improving collaboration and programming between all departments, agencies and stakeholders to achieve our goal of making New Jersey the safest and most equitable place in the nation to give birth and raise a baby.

In addition to our ongoing efforts — which include the Governor’s 32 pieces of maternal and infant health legislation, funding for groundbreaking programs and policies, our annual Black Maternal and Infant Health Leadership Summit and our Family Festival event series — it is our great hope that this work continues beyond our Administration. To ensure this is the case and set up New Jersey for long-term success, we have partnered with the Nicholson Foundation, and the Community Health Acceleration Partnership and other foundations dedicated to the health of New Jersey to develop this comprehensive Strategic Plan which includes specific, actionable recommendations for all stakeholders. This plan was developed by a team of national experts led by Dr. Vijaya Hogan, a perinatal epidemiologist with decades of experience researching and tackling these issues.

The Nurture NJ Strategic Plan is the culmination of over a year of in-person and virtual meetings with our departments and agencies, health systems, physicians, doulas, community organizations, and most importantly, mothers and their families. It is designed to make transformational change in a system that has historically failed our mothers and babies. Accordingly, the plan requires all sectors — health, education, housing, business, government, justice and more — to play an integral role in its realization. Ultimately, the success of this plan relies on the partnership and collaboration of all stakeholders.

Together, we have made so much progress over these past few years, so just imagine what lies ahead for New Jersey’s families when we solve this crisis. With our families intact and healthy, the next generation of New Jerseyans will be supported by a bedrock of stability that will help them thrive well into adulthood.

I look forward to continuing our work to make New Jersey the safest place in the nation to deliver and raise a baby.


First Lady of New Jersey
Nurture NJ is the First Lady of New Jersey’s initiative, which aims to reduce maternal and infant mortality and morbidity and ensure equity in care and in outcomes for mothers and infants of all ethnic groups. The Nurture NJ Strategic Plan consists of three interrelated documents meant to advance Nurture NJ and achieve its strategic goals. These documents are:

1. The Nurture NJ Strategic Plan. This document contains all the Nurture NJ Strategic Plan Recommendations. While a summary of the recommendations is included in the Appendix, the recommendations are detailed on pages 41-72. The recommendations are preceded by summary background information on the challenges facing New Jersey with respect to maternal and infant health, racial inequities, and the key approaches to achieving the Nurture NJ goals. The recommendations are targeted to all public and private agencies and organizations, community-based organizations, business leaders and employers, funders, members of communities most affected by disparities in maternal and infant outcomes, and to all residents of New Jersey. With such a broad audience, there may be terms used in this and other documents that are unfamiliar. Readers should refer to the Glossary contained in the Nurture NJ Companion Document: A Deeper Dive for definitions.

2. The Nurture NJ Strategic Plan Companion Document: A Deeper Dive into Data and Key Concepts (The Companion Document). This Companion Document contains background papers that lay a foundation for understanding the context, impetus, and history of the need for the transformative recommendations of Nurture NJ. This document provides a thorough background on the data, key concepts, science, language, and references through which the recommendations can be understood in context. The Companion Document will be useful when applying for grants to support implementing the components of the Strategic Plan in communities. The Companion Document also contains a comprehensive plan for monitoring and evaluating an initiative like the Nurture NJ Strategic Plan.

3. The Nurture NJ Year-One Playbook and Toolkit. The Year-One Playbook and Toolkit includes suggested foundational activities that should take place in Year-One for each stakeholder group. To support these activities, it includes curated, newly developed or adapted implementation tools, resources, and guides to facilitate navigation of the pathways to actualize the Year-One activities. Stakeholders can make use of these tools to assist in translation of the Strategic Plan into action.

Even with the support of the Playbook and tools, there is no set recipe for how to implement the recommendations in this Plan. Each stakeholder, agency or organization has its own strengths and limitations and these need to be factored into the development of agency-specific initiatives to accomplish this work. This work is necessarily transformative. Organizational and structural limitations should not be allowed to impede the work but need to be addressed with a transformative response. A transformative response entails modifying the organizational structures to accommodate innovation or partnering with other stakeholders who can fill the gaps to achieve

The state has the fourth highest maternal mortality rate out of 50 states and Black women in New Jersey experience seven times the rate of death from pregnancy-associated causes compared to their white counterparts.
outcomes. The existing structures and processes are perfectly designed to get the results they are currently getting, and this is what the Strategic Plan aims to change.

A Note on Language
The Nurture NJ Strategic Plan uses language conventions that are intended to be universal and inclusive. In this plan, we use the phrase “maternal and infant health” to refer to the health of pregnant individuals, which can include cis gender females, non-binary individuals, and transgender men, and their biological infants. We do not assume that all individuals that give birth to a child will care for that child, so we refer to caregivers, partners and spouses, and the plan intends to address their well-being as well.

Methodology
Following First Lady Tammy Murphy’s announcement of Nurture NJ in January of 2019, her office initiated a multi-pronged, multi-agency approach to improve maternal and infant health among New Jersey women and infants. This multi-sector formative stage laid the foundation for subsequent collaboration and is an important part of the methodology of the Strategic Plan’s development. High-profile events – including the annual Black Maternal and Infant Health Leadership Summit; the First Lady’s Family Festivals; quarterly interdepartmental maternal and infant health meetings; and one-on-one meetings with key stakeholders and experts by the First Lady – raised consciousness about the challenges the State faces in maternal and infant health disparities, and generated commitment and productive action on the part of various stakeholders and communities.

In November 2019, a team of multidisciplinary experts was assembled to guide the development of a science-based, comprehensive, and actionable plan focused on equity and improved outcomes for all women and infants. The initial timeline was nine months from start to implementation of the Plan but was extended six months to accommodate disruptions caused by the COVID-19 pandemic. The strategic planning team attempted to model equity, community engagement, power-building and multisector partnership throughout the development process, as these are integral components of the Plan. The equity approach is informed by critical race theory, which includes identifying and addressing the effects of historical racism that is currently embedded in institutions and impacts life experiences for people of color.

The Strategic Planning process entailed:
1. An initial formative stage to develop interest, partnerships and common language;
2. Review of the scientific evidence on state-of-the-art methods for addressing inequities in maternal and infant health;
3. Development of an “Ecosystem Map” as a reference for stakeholders to understand the structural conditions necessary to achieve Nurture NJ’s goals for healthy communities, healthy behaviors, respectful and effective clinical practice and equitable outcomes;
4. Integration of pre-existing work focused on developing a clinical blueprint for improved maternal health using quality improvement methods;
5. A statewide scan of existing state departments and agencies, organizations and stakeholders that directly or indirectly impact maternal and infant health;
6. Interviews with officials in eighteen state departments and agencies; seventy-five leading health providers, advocates, academic researchers, professional organizations, specialty task forces, funders; and a range of community-based and community-serving organizations;
7. Four in-person dialogue groups with resident women in South New Jersey and the coast (n=40), and four virtual dialogues with women in northern New Jersey (n= 30);
8. Development of action areas for improving maternal and infant health and eliminating disparities, aligned with identified state needs based on interviews and dialogues;
9. Wide distribution of multiple Strategic Plan drafts to stakeholders across the state, with feedback provided verbally and in writing.

Based on the comprehensive stakeholder participation in the planning process, the final Strategic Plan is considered to be a collaboratively developed product.
IV. Executive Summary

The United States has the worst maternal mortality rate among all comparable economically developed member countries of the Organization for Economic Cooperation and Development (OECD). Thirty-six countries comprise the OECD, and the US ranks the highest in maternal mortality. Within this global context, New Jersey’s maternal health outcomes and disparities are among the worst in the US. The state has the fourth highest maternal mortality rate out of the fifty states; only Indiana, Georgia and Louisiana have higher rates. When looking at the demographic breakdown of the rates in New Jersey, Black women in New Jersey experience seven times the rate of death from pregnancy-associated causes compared to their white counterparts.

For infant mortality, the US again ranks poorly internationally—33rd out of 36 OECD countries. While New Jersey as a whole has the 5th best overall infant mortality rate among the 50 states, its challenge with respect to infant mortality is the unacceptable disparity: Black women in New Jersey experience a 3.5 times higher rate of infant death compared to white women (2017 data, courtesy of New Jersey State Health Assessment Data (NJ SHAD)) and Hispanic women in New Jersey experience twice the rate of infant mortality compared to white women (NJ SHAD 2016-2018, 3-year rates). While nationally, Native American women experience high rates of infant mortality, the population numbers in New Jersey are too small to tabulate a rate. Over a five-year period from 2014-2018, there were 335 live births to Native American women in the state and one infant death.1
First Lady of New Jersey Tammy Murphy officially launched Nurture NJ in early 2019 as a statewide initiative committed to reducing maternal and infant mortality and morbidity, as well to ensuring equity in maternal and infant morbidity and mortality for Black and Brown women in the state. Nurture NJ is a multi-pronged, multi-agency initiative that aims to make New Jersey the safest place in the nation to give birth and raise a baby, and to eliminate the state’s racial disparities.

In the Fall of 2019, the First Lady convened a team of national experts to create a Strategic Plan for Nurture NJ that would document the existing need, survey current efforts, and define a course for lasting, transformative change. She did so with the understanding that such an ambitious initiative would require significant policy changes in the social, political, and economic arenas. Improved maternal and infant health outcomes in the state will only be possible when the racial inequities in health are eliminated. Health equity, in turn, can only occur when racial equity is achieved in all three arenas. Looming over this, however, was the knowledge that the State as a whole must be prepared to confront its racial disparities.

As the strategic planning unfolded, national events exploded, fixing the nation’s attention on racism and racial and ethnic inequities. Before the end of the first quarter of 2020, the country was beset by a global pandemic of COVID-19 that has killed far too many people in New Jersey and worldwide [over 20,000 deaths in New Jersey, 400,000 US deaths, and 2 million deaths worldwide as of this printing]. Black populations experienced a disproportionate amount of illness and death from COVID-19. Black New Jersey residents comprise 13 percent of the total state population but comprise 17 percent of all COVID-19 deaths in the state.

Then, in May 2020, George Floyd was murdered by a policeman in Minnesota. The combination of these two events, COVID-19 and George Floyd’s murder, mark a moment in history when many Americans witnessed, and could no longer deny, the depth of structured racial inequities in a country they assumed to be “post-racial”. Those on the frontlines of racial justice prior to this moment lost patience with the slow—or non-existent—progress in remediating racial oppression. Communities across the country and across New Jersey gathered in the streets to protest the structural racism affecting Black people with regard to policing. The state of maternal and infant health in New Jersey, with the
extreme disparities in maternal and infant morbidity and mortality, reflects these same forces as they play out in the reproductive lives of women. This Strategic Plan offers channels through which to act.

This is not the first attempt to address these issues. New Jersey has been setting ambitious goals for decades. In the fall of 1996, a Blue-Ribbon Panel on Black Infant Mortality was convened to formally study the problem of infant mortality in New Jersey. The Panel developed a series of recommendations to address the high rates of Black infant mortality. Meanwhile, Healthy New Jersey 2000 set a goal to decrease Black infant mortality from the 1996 rate of 16.3 per 1000 live births to 11.0 deaths per 1000 live births by 2000. That target wasn’t reached until 2011—11 years after the target date. By 2017, seventeen years after the expectation of reaching a rate of 11.0 deaths per 1000 live births, the Black infant mortality rate in New Jersey was 9.4 per 1000 live births, marginally surpassing the goal set in 2000 (see Table 1).

New Jersey as a whole ranks more favorably than the US average on a number of social and health indices, but the overall numbers mask the experience of Black and Brown people in the state. In a recent report, New Jersey ranks as the eighth healthiest state overall, up from eleventh in 2018 and twenty-second in 2000, which consistently puts it among the states with the largest improvements. However, in key indicators (see Table 2), Black and Brown New Jersey residents fare worse than other populations in the state. There are considerable disparities by race/ethnicity in poverty, unemployment and per capita income.

The disparities in maternal and infant outcomes are not the result of differences in genes or behavior, but the

Table 1: Infant Outcomes

<table>
<thead>
<tr>
<th></th>
<th>US</th>
<th>NJ</th>
<th>NJ BLACK</th>
<th>NJ WHITE</th>
<th>NJ HISPANIC</th>
<th>NJ ASIAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infant Mortality Rate</td>
<td>5.8</td>
<td>4.5</td>
<td>9.4</td>
<td>2.7</td>
<td>4.8</td>
<td>3.2</td>
</tr>
<tr>
<td>Premature Birth</td>
<td>9.9 (CDC)</td>
<td>9.5</td>
<td>13.5</td>
<td>8.2</td>
<td>9.8</td>
<td>8.9</td>
</tr>
</tbody>
</table>

Sources: National Vital Statistics Reports, Vol. 68, No. 13, November 27, 2019
NJ SHAD (2017)

Table 2: Social Determinants of Health

<table>
<thead>
<tr>
<th></th>
<th>US</th>
<th>NJ</th>
<th>NJ BLACK</th>
<th>NJ WHITE</th>
<th>NJ HISPANIC</th>
<th>NJ ASIAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population Distribution by Race/Ethnicity</td>
<td>--</td>
<td>--</td>
<td>12.8%</td>
<td>54.6%</td>
<td>20.6%</td>
<td>9.7%</td>
</tr>
<tr>
<td>Percent Below 100% FPL (2018)</td>
<td>13.1</td>
<td>9.5</td>
<td>16.1</td>
<td>5.5</td>
<td>17.1</td>
<td>7.1</td>
</tr>
<tr>
<td>Unemployment Rate (2018)</td>
<td>4.9</td>
<td>4.9</td>
<td>9.0</td>
<td>4.1</td>
<td>4.6</td>
<td>4.3</td>
</tr>
<tr>
<td>Per Capita Income (2018)</td>
<td>$33,831</td>
<td>$42,815</td>
<td>$29,459</td>
<td>$52,084</td>
<td>$24,983</td>
<td>$50,446</td>
</tr>
<tr>
<td>Food Insecurity (2017)</td>
<td>12.5%</td>
<td>9.6%</td>
<td></td>
<td></td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

Source: NJ SHAD (2018)
result of the different historic, social, economic, and health environments experienced by Black and Brown women. These economic and social differences matter for health, they are determinant of health, and as long as they exist, so will the disparities in maternal and infant health.

The last 25 years have seen little impact on improving maternal health, reducing maternal morbidity and mortality, and reducing infant mortality; and no progress toward equity in most outcomes. The US as a whole has actually gotten worse across these indicators, and lags behind most economically comparable countries in maternal and infant health. New Jersey mirrors these national trends. The pathways leading to adverse outcomes in maternal and infant health include multiple dimensions of causality that accumulate over a lifetime and across generations. They have social roots with multiple intersections that form unique and complex conditions of lived experience that the old systems of health care and public health were not designed to accommodate.

Nurture NJ recognizes this complex reality and has been actively building momentum toward implementing new ways to address these challenges with the state’s stakeholders. The Nurture NJ Strategic Plan brings to bear the science to define a new structural approach, and can be an organizing force for government, private stakeholder, and community partnership action. This Strategic Plan is predicated on the knowledge that achieving the goals of Nurture NJ will require innovative and transformative action to achieve structural change. The goal is to make New Jersey the safest place in the nation to give birth and raise a baby by improving conditions for maternal and infant health during critical periods, and by achieving equity in all maternal and infant health outcomes.

To make this massive task more digestible, the Strategic Plan identifies three proximal objectives: (1) ensure all women are healthy and have access to care before pregnancy, (2) build a safe, high-quality, equitable system of care and services for all women during prenatal, labor and delivery and postpartum care, and (3) ensure supportive community environments and contexts during every other period of a woman’s life so that the conditions and opportunities for health are always available. Achieving these proximal objectives, and the ultimate goals of Nurture NJ, will require simultaneous transformation through nine domains of action, across three life course areas affecting maternal and infant health.

The disparities in maternal and infant outcomes are not the result of differences in genes or behavior, but the result of the different historic, social, economic, and health environments experienced by Black and Brown women.
9 Action Areas for the Nurture NJ Strategic Plan include:

1. **Build racial equity infrastructure and capacity.**

Racism finds its way into all systems affecting the health of women and children—including health, social services, criminal justice systems, housing, food systems, employment, etc. For Nurture NJ to be successful in achieving equity in maternal and infant outcomes and in making New Jersey the safest place to give birth, some hard work is needed to dismantle the systems that hold racism in place both inside and outside government. What makes Nurture NJ distinct from other strategic plans is its commitment to eliminating the role that racism plays by systematically restructuring the systems that hold racism in place. Therefore, new structures need to be built to both provide people with the capacity and skills to undo racism, and to ensure that the requisite equity-promoting actions become a part of every person’s and organization’s DNA.

2. **Support community infrastructures for power-building and consistent engagement in decision-making.**

During the Nurture NJ strategic planning process, the voices of women in New Jersey communicated loud and clear “not about us without us”, meaning: “listen to us; do not make decisions that profoundly affect our lives without us at the decision-making table.” The Strategic Plan outlines specific actions to structure this engagement into practice. Community engagement in decision-making is only the first step. Effective collaboration between residents and agencies requires support to communities to build their own knowledge base, conduct their own critical analyses and enhance their leadership skills. The Strategic Plan includes recommendations to ensure a sustained, effective, and structured process of community power-building and engagement.

3. **Engage multiple sectors to achieve collective impact on health.**

In order to achieve the vision of Nurture NJ, private sector participation is as critical as public sector participation for the needed values-based transformation for the state. All sectors must be engaged—education, housing, health, business, government, policy, justice, service providers, and each of these sectors needs to work with racial equity awareness, practices, and processes. The Strategic Plan makes a series of recommendations to ensure that all sectors play a role in achieving improved outcomes, and that they work collaboratively to achieve outcomes no single stakeholder or sector could achieve alone. This Plan also recommends implementation of a place-based model that the highest need communities can embrace to demonstrate the positive impacts of building a supportive community context for health.

4. **Shift ideology and mindsets to increase support for transformative action.**

Mindset shifts are important first steps because they allow redefinition of the range of possibilities available to apply as solutions in health and public health design, policy, research, and implementation. Several mindsets pervading the practice of maternal and infant health that are in need of transformation and addressed in this Plan include:

<table>
<thead>
<tr>
<th>FROM</th>
<th>TO:</th>
</tr>
</thead>
<tbody>
<tr>
<td>There are implicit and explicit beliefs in a de facto hierarchy of human value, with Black and Brown people valued less than others.</td>
<td>Racial equity is fundamental to dismantling the structures based on a hierarchy of human value contributing to actions that maintain or create inequities.</td>
</tr>
<tr>
<td>It is the behaviors of Black and Brown people that cause adverse outcomes. Changing women’s behaviors through education and/or provision of resource directories will achieve the desired health outcomes.</td>
<td>Historic oppression has an impact on current socioeconomic resources of individuals and communities and creates inequities that reverberate throughout every aspect of life. Individual behaviors exist at the end of a long chain of causality.</td>
</tr>
<tr>
<td>Maternal and Infant mortality can be improved through prenatal interventions alone.</td>
<td>Women’s health and wellness across the life course, including before, during and after pregnancy are critical components of good pregnancy outcomes.</td>
</tr>
<tr>
<td>Top-down decision making in health is expedient and appropriate to achieving desired outcomes.</td>
<td>Community power building and power sharing on issues that affect communities is critical to designing and implementing effective, accessible, acceptable, stress and trauma free interventions.</td>
</tr>
</tbody>
</table>
5. Strengthen and expand public policy to support conditions for health in New Jersey.

To understand the unique policy dynamics affecting women in New Jersey, the Nurture NJ strategic planning team conducted nearly 30 interviews with policymakers operating at the state level, asking which current policies most influenced maternal health, and which policies could influence maternal health in the future. The policy recommendations reflect expansion of the extraordinary work currently undertaken by public servants, as well as a desire to broaden and strengthen policies to create a supportive environment for health.

6. Generate and more widely disseminate data and information for improved decision-making.

In order to ensure that New Jersey is making the best decisions, the state must have a clear understanding of the data describing conditions on the ground and across sectors. The Nurture NJ Strategic Plan envisions improvement in the collection of data on women’s experiences, use of linked state data and evidence, and improved accessibility to data for accountability purposes. The Plan also envisions improved dissemination of data to stakeholders across the state who need the information to develop better solutions.

7. Change institutional structures to accommodate innovation and transformative action.

Recognizing that most organizational structures were not designed to accommodate innovative approaches and designs (multisector engagement for collective impact, community engagement, racial equity, human-centered approaches), the Strategic Plan makes a series of recommendations that can change structures to better handle transformative approaches and interventions.

8. Address the social determinants of health.

Maternal and infant health and well-being are often determined by factors outside the health system, as well as by factors that exist before a pregnancy begins. Addressing social determinants of health means ensuring that families live in conditions that are always supportive of health, ensuring protection against adverse exposures, and providing remediation against barriers to access to needed care, services and healthy behavioral practices. The set of recommendations in this action area ensures access to resources and conditions to attain and maintain health in environments where people live, work, play, study and seek help.

9. Improve the quality of care and service delivery to individuals.

Improving the delivery of respectful, equitable and evidence-based care is critical to achieving the Nurture NJ goals. This requires transformation in the way care and services are delivered by health and other service providers. All of the preceding action areas and the recommendations contained within them are foundational to being able to deliver equitable, effective and evidence-based care to individuals. The set of recommendations contained in this action area focus on the process of care and service provision and will be effective insofar as they are implemented on top of the foundational structures of racial equity, community engagement and multisector collaboration.
Conclusion

Achieving the goals of Nurture NJ will require innovative and transformative action. The old adage is true: every system is perfectly designed to achieve the results it gets. The systems in New Jersey need to be transformed in order for the outcomes for mothers and infants to change. Therefore, the realization must take firm hold in New Jersey that it is unreasonable to expect any different outcome by continuing to employ the same strategies and approaches from the past. The state cannot afford to waste time tinkering at the margins of the current system to impact inequities in health and eliminate the high rates of morbidity and mortality. Women in New Jersey and their families cannot afford to wait. Women and families in this state deserve better. In response, all stakeholders who have the power to initiate change cannot shrink from the challenge of transformative change. The very impetus and notion of Nurture NJ as conceived by First Lady Tammy Murphy is aligned with the desires of every resident in this state, every woman of color, and their families—to have a safe, healthy, respectful and joy-filled prenatal, childbirth and child-rearing experience—and this vision needs to be realized for all women, starting now.
V. Recommendations at a Glance

1. BUILD RACIAL EQUITY INFRASTRUCTURE AND CAPACITY.

1.1 All state departments and agencies should be required to implement a plan for increasing and maintaining capacity to promote racial equity in all systems and structures.

1.2 Declare racism a public health crisis.

1.3 Establish an Office for State Diversity, Equity, and Inclusion to reflect the increased priority, enable a greater level of collaboration, and address the state’s equity needs.

1.4 Create a state-led accrediting body empowered to award a “racial equity designation” for the public and private sectors.

1.5 The state should convene the private sector to incentivize and engage them in action on racial equity.

1.6 Build upon the Nurture NJ Interdepartmental Working Group to break down internal silos and share possibilities for collaboration.

1.7 Explore the process and impacts of existing Truth, Racial Healing and Transformation (TRHT) processes in other states to determine potential impact in New Jersey.
## V. RECOMMENDATIONS AT A GLANCE

### 2. SUPPORT COMMUNITY INFRASTRUCTURES FOR POWER-BUILDING AND CONSISTENT ENGAGEMENT IN DECISION-MAKING.

| 2.1 | State departments and agencies, in partnership with the private sector, non-profits, community leaders, and funders, should develop infrastructure for community-level power- and knowledge-building in communities with high Black maternal and infant mortality. |
| 2.2 | All state departments and agencies should be required to issue written statements of their commitment to community engagement. |
| 2.3 | Develop permanent structures to integrate community partnership into state, county, and local decision-making processes. |
| 2.4 | Develop incentives for all public and private entities that increase multisector and cross-state collaboration and community engagement. |

### 3. ENGAGE MULTIPLE SECTORS TO ACHIEVE COLLECTIVE IMPACT ON HEALTH.

| 3.1 | Develop public-private partnerships to implement place-based, community partnered change models in areas with the highest Black maternal and infant morbidity and mortality and then expand to every community across New Jersey. |
| 3.2 | The funders collaborative in support of Nurture NJ should support a Nurture NJ Coordinator to oversee implementation of the Nurture NJ Strategic Plan. |
| 3.3 | Establish a Center in the state capital that focuses on innovation and research in maternal and infant health through partnerships with the state’s academic, funder, business, and faith communities. |

### 4. SHIFT IDEOLOGY AND MINDSETS TO INCREASE SUPPORT FOR TRANSFORMATIVE ACTION.

| 4.1 | State, county and local leaders should leverage the declaration of racism as a public health crisis to generate media coverage and facilitate community dialogues. |
| 4.2 | Through a statewide communications campaign, shift ideology around the role of life course experiences, environmental and social exposures on women and infant health. |
| 4.3 | Develop a communications plan to promote benefits of midwifery and community doula models of care. |
| 4.4 | Develop a communications plan to encourage mindset shifts regarding the connection of behavioral and physical health services. |
| 4.5 | Actively shift public and private sector mindsets on benefits of shared decision-making with community. |
| 4.6 | Ensure understanding of the importance of human-centered and trauma-informed care practices and expand use among all program planners and providers. |
| 4.7 | Private sector businesses and/or their associations should fund, conduct and disseminate a business case for racial equity analysis specific to New Jersey. |
| 4.8 | Reframe the statewide targets in Healthy NJ 2030 to eliminate disparities in Black versus white rates. |
### V. RECOMMENDATIONS AT A GLANCE

#### 5. STRENGTHEN AND EXPAND PUBLIC POLICY TO SUPPORT CONDITIONS FOR HEALTH IN NEW JERSEY.

**Recommendations to Achieve Healthy Women:**

5.1 The State should continue to invest in opportunities for safe, decent, toxin-free affordable housing.

5.2 The Secretary of Higher Education should expand successful programs that improve access to high quality education.

5.3 The Department of Treasury should increase uptake of the Earned Income Tax Credit.

5.4 The Department of Labor should continue their efforts with employees and employers to expand utilization of the paid family leave benefits.

5.5 The Department of Health should increase the utilization of the Women, Infants and Children (WIC) Program through policy changes and program modernization.

5.6 The Department of Human Services should continue to expand flexibility in the Supplemental Nutrition Assistance Program (SNAP) to ensure the maximum number of eligible families are enrolled and utilizing the benefit.

**Recommendations to Achieve Equitable Service and Care:**

5.7 New Jersey should affirmatively provide for comprehensive family planning services and reproductive autonomy through policy and in funding.

5.8 The Department of Human Services should strengthen efforts to make the health system accountable to women of color through reliable coverage and evidence-based care.

5.9 The Division of Consumer Affairs should examine standards of care related to maternal and infant health.

5.10 The Department of Health should implement a system of community-designed, real-time maternal feedback on quality of care.

5.11 The Department of Health, the Office of the Secretary of Higher Education, and the Department of Labor should promote workforce development and retention in communities of color.

5.12 The Office of the Attorney General, through the Division of Community Affairs, should develop pre and post licensure education for New Jersey’s health professions.

5.13 The Department of Human Services and Department of Health should support a representative, effective community workforce serving pregnant individuals and babies.

5.14 The Department of Human Services should continue to ensure comprehensive access to health care for women through the Medicaid program by seeking funding and federal approval to expand Medicaid to 365 days postpartum.

5.15 Assess models for value-based care to ensure they do not penalize health providers that disproportionately serve communities with high social needs.

5.16 Through the Nurture NJ Interdepartmental Working Group, state departments and agencies should conduct a community-led analysis of co-location of community-based government assets.

5.17 Craft and disseminate an “advised procedure” for how county prosecutors work with pregnant women, including the possibility of delaying sentencing for the period of pregnancy and three months postpartum.
# V. Recommendations at a Glance

## Recommendations to Achieve Supportive Environments and Institutions:

| 5.18 | The Department of Health should work with state leaders to provide breastfeeding support in communities for both mothers, fathers and other partners. |
| 5.19 | The Department of Children and Families should continue to expand and universally offer evidence-based home visiting programs with focus on those models proven to reduce maternal and infant mortality. |
| 5.20 | The Department of Education should continue to prioritize access to high quality childcare through Early Head Start. |
| 5.21 | State leaders should increase the state contribution to the childcare block grant to ensure that, at a minimum, all families within the income limits are able to receive care. |
| 5.22 | The New Jersey Economic Development Authority should provide targeted support to childcare providers as a critical industry in the state. |


## Recommendations to Achieve Healthy Women:

| 6.1 | Publish a biannual journal or magazine for maternal and infant health in New Jersey through the proposed Center for Maternal and Infant Health (recommendation 3.3) and an academic partner. |

## Recommendations to Achieve Equitable Service and Care:

| 6.2 | Improve the process for quality and usage of state maternal mortality data through significant reinvestment in the Maternal Mortality Review Committee (MMRC). |
| 6.3 | The Department of Human Services and Department of Health should work together to improve accountability to women of color through data transparency. |

## Recommendations to Achieve Supportive Environments and Institutions:

| 6.4 | The Department of Health, in collaboration with academic partners, should develop a data-based approach to racial inequity surveillance able to identify health and social disparities and focus approaches. |
| 6.5 | The academic community in New Jersey should commit to conducting research to monitor and evaluate changes in community engagement, perceptions (mindsets, narrative change), changes in community-supportive policy, and resultant health impacts in populations of color in New Jersey. |

### 7. Change Institutional Structures to Accommodate Innovation.

## Recommendations to Achieve Healthy Women:

| 7.1 | Staff of key state departments and agencies should become familiar with Nurture NJ Ecosystem in order to use it to guide and prioritize all program development, implementation, monitoring, and evaluation. |
| 7.2 | The Department of Human Services and Department of Health should ensure access to affordable, equitable integrated behavioral health care at all times over the life-course. |
| 7.3 | Provide access to the full range of family planning services, including all safe and effective contraception methods and abortion care, through stronger provider relationships. |
## Recommendations to Achieve Equitable Service and Care:

7.4 | Strengthen and expand practice of the midwifery model of care in New Jersey by building a more robust workforce pipeline.

7.5 | All 49 birthing hospitals and the birthing facilities in New Jersey should meet or attain rates lower than the national target for NTSV surgical/cesarean births.

7.6 | The Department of Health and the Department of Human Services should expand the use and improve the utility of the Perinatal Risk Assessment.

7.7 | New Jersey hospitals should institute systemic changes to accommodate doulas and safe birth practices.

7.8 | To promote access to comprehensive, continuous, high-quality maternal care services, the state should design tools to promote shared decision-making with patients.

7.9 | The New Jersey Perinatal Quality Collaborative (NJPQC), the organization responsible for improving the quality of perinatal care throughout the state, should lead implementation of prenatal and postpartum Alliance for Innovation in Maternal Health (AIM) bundles across the state.

7.10 | All persons who give birth in New Jersey should be cared for at a birthing hospital or facility that provides the appropriate level of maternal care by the end of 2022.

7.11 | The Department of Health and Department of Human Services and other relevant departments or agencies should collaborate on a plan to develop community-based providers, including birthing centers, in underserved areas.

7.12 | The Department of Health should work with New Jersey health care providers to increase accountability on racial equity initiatives.

7.13 | State leaders should assess the benefit of regulatory relief to underserved communities and providers.

7.14 | State leaders should increase funding for prenatal and reproductive health care for undocumented women.

## Recommendations to Achieve Supportive Environments and Contexts:

7.15 | The Department of Health and Department of Human Services should continue to strengthen the community health worker workforce.

7.16 | State departments and agencies and health care providers should incorporate community-based perinatal health workers in an interdisciplinary care approach to support pregnant women and caregivers into the postnatal period.

7.17 | Continue to expand and strengthen Fatherhood Engagement Initiatives.

7.18 | Continue to improve and transform Central Intake.

## 8. ADDRESS THE SOCIAL DETERMINANTS OF HEALTH.

## Recommendations to Achieve Healthy Women:

8.1 | Regional health hubs should work collaboratively with state departments and agencies, private funders, community and grassroots groups, and academic leaders on a landscape analysis in the state’s Black maternal and infant health hotspots.
V. RECOMMENDATIONS AT A GLANCE

8.2 New Jersey’s stakeholders in the nutrition sector should expand partnerships to develop multisector efforts to address the specific issue of access to healthy foods.

8.3 Develop multisector efforts to address the specific issue of the impact of environmental factors on maternal and infant health.

Recommendations to Achieve Equitable Service and Care:

8.4 Develop multisector efforts to address the specific issue of transportation access for women.

Recommendations to Achieve Supportive Environments and Contexts:

8.5 New Jersey’s housing developers, funders, advocates, and stakeholders should develop multisector efforts to increase the availability of quality, affordable housing for pregnant individuals and women with young children.

8.6 Develop multisector efforts to address the specific issue of women impacted by the criminal justice system.

9. IMPROVE THE QUALITY OF CARE AND SERVICE DELIVERY TO INDIVIDUALS.

Recommendations to Achieve Healthy Women:

9.1 Ensure quality and respectful preconception, interconception care and women’s wellness care is available, accessible and affordable for all women, and that it conforms to CDC Guidelines.

Recommendations to Achieve Equitable Service and Care:

9.2 Secure a Commitment to Action from the CEOs of all health care systems and leadership of health professional societies in New Jersey, which should include action steps to reduce maternal and infant mortality and morbidity.

9.3 Increase access to Centering Pregnancy.

9.4 The Department of Human Services should ensure access to comprehensive evidence-based childbirth education for all Medicaid beneficiaries as standard practice of prenatal care.

9.5 Increase the number of Baby-Friendly designated hospitals in New Jersey to at least one hospital in all infant mortality hotspot areas.

9.6 Normalize active engagement of fathers and other partners during prenatal care, labor and delivery, and postpartum care.

9.7 The Department of Banking and Insurance should continue outreach to pregnant women.

Recommendations to Achieve Supportive Environments and Contexts:

9.8 Ensure all parents receive community-based peer support for postpartum health, breastfeeding, and social support.

9.9 Health care providers, social service providers, and health insurers should promote alternative models of early childhood care to expand care for the infant.
V. RECOMMENDATIONS AT A GLANCE
VI. Maternal and Infant Health Primer: The Urgent Need for Action

Context of Maternal Health in New Jersey

Maternal Mortality

New Jersey’s maternal health outcomes and disparities are among the worst in the country. Pregnancy-related deaths include women who die during pregnancy or within one year of the end of pregnancy, from a pregnancy complication, a chain of events initiated by pregnancy, or the aggravation of an unrelated condition by the physiologic effects of pregnancy. Tracking of pregnancy-related deaths is important, because opportunities for improving outcomes will vary based on causes, timing of deaths, and the specific details about the death. Approximately one-third of all deaths associated with pregnancy are specifically classified as pregnancy-related. The Department of Health’s last posted “Trends in Statewide Maternal Mortality” report identified 78 pregnancy-related deaths from 2009-2013, of which 36 (46.2 per 100,000 live births) were non-Hispanic Black women, 21 (26.9 per 100,000 live births) were white women, 12 (15.4 per 100,000 live births) were Hispanic women, and 7 (7.7 per 100,000 live births) were Asian women. Unfortunately, this trend worsened; from 2014 to 2016, Black women in New Jersey had approximately seven times more pregnancy-related deaths (46.9 per 100,000 live births) than white women (6.5 per 100,000 live births) (New Jersey Maternal Mortality Review Committee, New Jersey Department of Health). New Jersey’s total pregnancy-related death ratio measured per 100,000 live births is also increasing: from 12.8 (2011–2013) to 15.3 (2014–2016). This trend is distressing because three in five pregnancy-related deaths are preventable (CDC, 2019) and some leading causes (e.g. hemorrhage, hypertension, and embolism-related deaths) are highly preventable.
**Severe Maternal Morbidity**

For every woman who dies, many more women nearly die or suffer severe complications that alter their reproductive options. These can have lifelong negative effects on their general health and well-being (Figure 2). Severe Maternal Morbidity (SMM) is defined by the Centers for Disease Control as unexpected outcomes of labor and delivery that result in significant short- or long-term consequences to a woman’s health (CDC, 2017). Chronic pain and post-traumatic stress disorder are two examples of possible sequelae. New Jersey’s total SMM rate was 192.2 per 10,000 delivery hospitalizations (NJ DOH, 2018).

New Jersey’s rates of SMM among Black, non-Hispanic women were nearly three times greater than those of non-Hispanic white women (2018). SMM rate is calculated as number of events per 10,000 delivery hospitalizations. In 2018, Black mothers had the highest rate of SMM with transfusion (377 per 10,000 delivery hospitalizations vs 135 per 10,000 for white women). Overall New Jersey’s rates of SMM are among the highest in the US and Black non-Hispanic women suffer the highest rates of SMM events (NJ DOH, 2020).

In 2018, the leading causes of severe maternal morbidity among Black women (per 10,000 delivery hospitalizations), were disseminated intravascular coagulation (30.8), acute renal failure (29.2), shock (21.3), eclampsia (15.0), sepsis (15.0), and air and thrombotic embolism (11.1) (NJ DOH, 2020).

**CONTINUUM OF MATERNAL MORBIDITY SHOWING VARIATION IN SEVERITY**

![Figure 2](image-url)
VI. MATERNAL AND INFANT HEALTH PRIMER: THE URGENT NEED FOR ACTION

Research into factors associated with overall SMM indicates that the rapid uptick is not due to changes in women’s physical characteristics or poorer health. Instead, the rise is more likely due to the overuse of non-evidence-based interventions, such as surgical births. Several leading maternal mortality and morbidity causes are mostly preventable if a person receives the right care at the right place at the right time. However, New Jersey’s perinatal designations are assigned based entirely on the level of neonatal service availability. To illustrate, if a pregnant woman has pre-existing medical conditions such as hypertension and diabetes, she will require support and expert care from physicians and nurses who specialize in high-risk pregnancies vs. from those who specialize in neonatal care. Not all birthing facilities in New Jersey need to be able to take care of high-risk pregnancies, but focused effort is needed to connect women to the facilities that can offer an appropriate level of care to address their health risks. National designations have been established that determine the appropriate level of staffing and other criteria, but these national designations have not yet been implemented in New Jersey. Similarly, multi-level and multisector changes are needed throughout New Jersey to increase support for and that value vaginal births. Hospital systems in the US have documented successes in reducing overuse of surgical births among low-risk women, defined as nulliparous, term, singleton, vertex (NTSV) by implementing a system-wide quality improvement initiative that standardizes clinical practices.

In the past two years, New Jersey has taken critically important steps to address the acute issues in the health care system such as: 1) improving the data available through the nationally recognized Report Card of Hospital Maternity Care, 2) expanding investment in community-based doulas through training and Medicaid reimbursement, and 3) non-payment for early elective deliveries through Medicaid and State Health Benefits Plans. Nurture NJ can build on this excellent foundation by ensuring women have consistent access to evidence-based care framed in equity, utilizing equity-based quality improvement measures for accountability, and ensuring improved preventive health and wellness for women across the life course.

Figure 3

NEW JERSEY SEVERE MATERNAL MORBIDITY RATES BY MEDIAN HOUSEHOLD INCOME, NATIONAL QUARTILE FOR PATIENT ZIP CODE (2011-2015)

Data Sources: Healthcare Cost and Utilization Project (HCUP), AHRQ
VI. MATERNAL AND INFANT HEALTH PRIMER: THE URGENT NEED FOR ACTION

Life Course Exposures and Pregnancy Outcomes

Many life experiences and exposures that occur before and after pregnancy can have significant relevance to pregnancy health. Adverse stressful exposures over the life course, lack of access to preventive health care, and adverse neighborhood factors are strongly correlated with poor outcomes and need to become a focus of intervention. Life course theory is based largely on the Barker hypothesis, which emerged from analyses showing a strong correlation between geographically distinct high rates of infant mortality and high rates of adult chronic diseases. The Barker hypothesis argued that the effects of past experiences can impact adult health. Research found that Black women’s health is subject to accumulated wear and tear (also known as weathering) as a result of chronic exposure to socio-economic disadvantage over the life course. This wear and tear worsens with age and adversely affects pregnancy outcomes at higher age ranges.

The Barker hypothesis suggested the existence of two critical factors in utero that contribute to poor health outcomes in later life. The first is plasticity—a period when developing organs are able to adapt to stressors in the fetal environment. These adaptations can help the fetus survive the immediate danger, but the adaptation becomes a physiologic limitation with chronic exposures, resulting in chronic conditions later in life. The second is epigenetics—a response to external environmental stressors that causes a differential expression of genes that may also be protective in the short term, but maladaptive over time. Life course theory, therefore, examines how the places and experiences where people are born, grow, live, work, and age contribute to their later health outcomes. The life course model is particularly compelling because the process of identifying the causal pathways and risks of adverse Black birth outcomes could potentially impact the elimination of other adult health disparities, including maternal morbidities and mortality.

Adverse childhood experiences (ACEs) are examples of how stressors experienced during critical periods of development can affect maternal and infant health and disparities. ACEs are exposures that transfer risk across the life course from childhood to adulthood. ACEs, as stressful or traumatic events, occur before the age of 18, and include physical abuse, sexual abuse, emotional abuse, physical neglect, emotional neglect, parental incarceration, domestic violence, household mental illness, household substance misuse, and parental separation or divorce. ACEs are often coupled with adverse community environments, which rob a child of the protective environments that may confer some resilience to the adverse experiences.

ACEs may affect reproductive health through any number of biological changes that result from stressful exposures during childhood. These changes can include compromised neuroendocrine and immune functions, or birth outcomes can be influenced indirectly through psychosocial pathways including elevated levels of stress and anxiety, tobacco, or substance use (e.g. opioid use) or through physical violence. Detecting and addressing these exposures before the collateral effects occur requires lifetime connection to the health care system. In July 2019, the New Jersey Funders ACEs Collaborative released “Adverse Childhood Events: Opportunities to Prevent, Protect Against, and Heal from the Effects of ACEs in New Jersey.” The same collaborative is supporting a statewide implementation plan for this report, expected in early 2021. The report’s recommendations dovetail with the recommendations of this Plan and should be implemented with expediency.

Preventive health care for women and children is
an important part of protecting, promoting, and maintaining health and well-being over the life course, while reducing the burden of disease, disability, and death. Preconception care and preventive services are necessary to address and mitigate preexisting health or behavioral conditions that might affect the pregnancy and/or assist women in planning or preventing a pregnancy. While 56 percent of Black women and 78 percent of white women had a health care visit in the twelve months before their pregnancy, little is known about the nature of these visits and whether health and behavioral issues relating to pregnancy were addressed.

Pregnancy Risk Assessment Data Monitoring (PRAMS) data (2018) suggest that only 38.6 percent of Black women and 34.6 percent of white women had access to and reported using contraception at the time of conception, and the rates of unintended pregnancy for Black and Hispanic women are high (48 percent and 37 percent respectively) compared to white women (13.4 percent). Studies conducted before full implementation of the Affordable Care Act, which facilitated access to preventive services, suggest that use of preventive services nationally is low. Other studies show that income, competing demands and other factors determine usage of preventive services for women. To ensure greater access to preventive services efforts are needed to address access issues, missed opportunities for prevention, social determinants, and the barriers to attaining available covered services including behavioral health and treatment for substance use disorders. Further research is needed to better target these efforts and assess the use of preventive services in New Jersey.

Context of Infant Health in New Jersey
The health of an infant is inextricable from the health of the mother, and New Jersey’s infant health outcomes reflect similar consequences of inequality and racism. An infant death is an incalculable loss for a mother and her family, and on a population level, it has long been seen as a sentinel indicator of how well a country cares for women and children. And, when infants of one population group die at a much higher rate than other groups, this disparity is also a sentinel indicator of the quality of a country’s care for this population group.

The US has the highest infant mortality rate (IMR) compared to economically comparable countries. And, while New Jersey overall has the fifth lowest total IMR among 50 states, the overall rate masks a severe racial and ethnic disparity.

**Key facts about current infant mortality in New Jersey:**

- In 2017, The Black infant mortality rate (9.4/1000 live births) is over three times that of the white infant mortality rate (2.7/1000 live births).
- New Jersey averages about 101,000 births and 456 infant deaths per year.
- Medicaid serves as a significant insurer of pregnancy and birth care for women. Over the period 2013-2018, half of all births to Black women were insured by Medicaid, as were 45 percent of Hispanic births and 17 percent of white births.
- Racial inequities in infant mortality have long plagued the US and New Jersey. Although Black infants make up 13.4 percent of all births, they account for 28 percent of all deaths.
- The leading causes of infant death differ by race/ethnicity. For Black infants, the top three causes in order are prematurity and/or Low Birthweight (LBW), congenital anomalies, and SIDS; for Hispanic infants: congenital anomalies, LBW, and maternal complications. For white infants, the three leading causes are congenital anomalies, SIDS, and LBW.
- According to internal analysis of New Jersey Perinatal Period of Risk data, the leading causes of infant death are prematurity and other perinatal conditions. Twenty percent of Black infant deaths and 29 percent of Hispanic infant deaths fall into this category while only 6 percent of white deaths are attributed to this cause.
- The largest numbers of live births by county in New Jersey (2019) occur in Hudson (9,958), Essex (9,890), Ocean (9,010), Bergen (8,965) and Middlesex (8,610). The highest rates of infant mortality (3-year rates, 2016-2018) occur in Cumberland (7.2), Camden (6.8), Atlantic (6.5), Mercer (5.7) and Essex (5.6) counties (NJ SHAD).
### VI. MATERNAL AND INFANT HEALTH PRIMER: THE URGENT NEED FOR ACTION

#### Table 3: Numbers of Infant Deaths by County and Race, New Jersey, 2016-2018

<table>
<thead>
<tr>
<th>County Name</th>
<th># Infant Deaths</th>
<th># Live Births</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NUMBER OF BLACK INFANT DEATHS BY COUNTY (HIGH TO LOW) 2016-2018</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Essex</td>
<td>106</td>
<td>12,419</td>
</tr>
<tr>
<td>Camden</td>
<td>53</td>
<td>3,706</td>
</tr>
<tr>
<td>Union</td>
<td>37</td>
<td>3,726</td>
</tr>
<tr>
<td>Mercer</td>
<td>34</td>
<td>2,597</td>
</tr>
<tr>
<td>Middlesex</td>
<td>23</td>
<td>2,429</td>
</tr>
<tr>
<td>Hudson</td>
<td>19</td>
<td>2,867</td>
</tr>
<tr>
<td>Burlington</td>
<td>18</td>
<td>2,163</td>
</tr>
<tr>
<td>Atlantic</td>
<td>17</td>
<td>1,540</td>
</tr>
<tr>
<td>Passaic</td>
<td>14</td>
<td>1,894</td>
</tr>
<tr>
<td>Ocean</td>
<td>11</td>
<td>581</td>
</tr>
<tr>
<td>Cumberland</td>
<td>11</td>
<td>1,074</td>
</tr>
<tr>
<td>Gloucester</td>
<td>10</td>
<td>949</td>
</tr>
<tr>
<td>Somerset</td>
<td>8</td>
<td>931</td>
</tr>
<tr>
<td>Bergen</td>
<td>8</td>
<td>1,421</td>
</tr>
<tr>
<td>Monmouth</td>
<td>5</td>
<td>1,353</td>
</tr>
<tr>
<td>Salem</td>
<td>4</td>
<td>379</td>
</tr>
<tr>
<td>Morris</td>
<td>2</td>
<td>373</td>
</tr>
<tr>
<td>Warren</td>
<td>1</td>
<td>164</td>
</tr>
<tr>
<td>Hunterdon</td>
<td>1</td>
<td>51</td>
</tr>
<tr>
<td>Cape May</td>
<td>1</td>
<td>133</td>
</tr>
<tr>
<td>Sussex</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>383</td>
<td>40,822</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>County Name</th>
<th># Infant Deaths</th>
<th># Live Births</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NUMBER OF HISPANIC INFANT DEATHS BY COUNTY (HIGH TO LOW) 2016-2018</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hudson</td>
<td>42</td>
<td>11,164</td>
</tr>
<tr>
<td>Union</td>
<td>36</td>
<td>8,752</td>
</tr>
<tr>
<td>Essex</td>
<td>36</td>
<td>9,271</td>
</tr>
<tr>
<td>Passaic</td>
<td>34</td>
<td>10,294</td>
</tr>
<tr>
<td>Middlesex</td>
<td>34</td>
<td>8,209</td>
</tr>
<tr>
<td>Camden</td>
<td>28</td>
<td>4,526</td>
</tr>
<tr>
<td>Bergen</td>
<td>21</td>
<td>6,999</td>
</tr>
<tr>
<td>Cumberland</td>
<td>18</td>
<td>2,442</td>
</tr>
<tr>
<td>Atlantic</td>
<td>17</td>
<td>2,428</td>
</tr>
<tr>
<td>Mercer</td>
<td>16</td>
<td>3,680</td>
</tr>
<tr>
<td>Somerset</td>
<td>13</td>
<td>2,218</td>
</tr>
<tr>
<td>Morris</td>
<td>13</td>
<td>2427</td>
</tr>
<tr>
<td>Monmouth</td>
<td>13</td>
<td>3,325</td>
</tr>
<tr>
<td>Burlington</td>
<td>7</td>
<td>1,533</td>
</tr>
<tr>
<td>Gloucester</td>
<td>4</td>
<td>765</td>
</tr>
<tr>
<td>Warren</td>
<td>3</td>
<td>378</td>
</tr>
<tr>
<td>Ocean</td>
<td>3</td>
<td>2721</td>
</tr>
<tr>
<td>Cape May</td>
<td>3</td>
<td>400</td>
</tr>
<tr>
<td>Sussex</td>
<td>2</td>
<td>381</td>
</tr>
<tr>
<td>Salem</td>
<td>2</td>
<td>292</td>
</tr>
<tr>
<td>Hunterdon</td>
<td>2</td>
<td>363</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>347</td>
<td>82,568</td>
</tr>
</tbody>
</table>

#### HIGHEST BLACK INFANT MORTALITY RATE BY COUNTY, 2016-2018*

<table>
<thead>
<tr>
<th>County</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Camden</td>
<td>14.3</td>
</tr>
<tr>
<td>Mercer</td>
<td>13.1</td>
</tr>
<tr>
<td>Union</td>
<td>9.9</td>
</tr>
<tr>
<td>Middlesex</td>
<td>9.5</td>
</tr>
<tr>
<td>Essex</td>
<td>8.5</td>
</tr>
</tbody>
</table>

#### HIGHEST HISPANIC INFANT MORTALITY RATE BY COUNTY, 2016-2018*

<table>
<thead>
<tr>
<th>County</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Camden</td>
<td>6.2</td>
</tr>
<tr>
<td>Union</td>
<td>4.1</td>
</tr>
<tr>
<td>Middlesex</td>
<td>4.1</td>
</tr>
<tr>
<td>Essex</td>
<td>3.7</td>
</tr>
<tr>
<td>Hudson</td>
<td>3.8</td>
</tr>
<tr>
<td>Passaic</td>
<td>3.3</td>
</tr>
<tr>
<td>Bergen</td>
<td>3</td>
</tr>
</tbody>
</table>

#### WHITE, ASIAN AND NATIVE AMERICAN INFANT MORTALITY

**Number of Native American Live Births and Infant Deaths, 2014-2018**

- 1 Infant Death 335 Live Births
- Mortality Rate - Asian, Three-Year Rates, 2016-2018: 2.6
- Mortality Rate - White, Three-Year Rates, 2016-2018: 2.4

*Number of infant deaths per 1,000 births

Source: NJ SHAD
VI. MATERNAL AND INFANT HEALTH PRIMER: THE URGENT NEED FOR ACTION

When developing an approach to reduce infant mortality, it is important to understand the major drivers and potential solutions. As determined by the Department of Health, prematurity is a major contributor to the disparity in infant mortality for Black women and the force driving racial disparities. However, these same perinatal period of risk analyses (PPOR) demonstrate that access to prenatal care has little impact on prematurity (internal analysis, Department of Health). Nationally, data has shown that a mother’s health status before pregnancy has a greater impact on this outcome, and health behaviors and genetic factors alone have not been shown to explain the excess mortality risk. Furthermore, poor quality prenatal care can contribute to adverse outcomes. Through the Nurture NJ community dialogues, women reported inaction or dismissal in the face of expressed need for help; excess clinical intervention when not indicated; disrespectful treatment during care; and disconnected services and systems that are challenging to navigate. These care experiences can increase stress. On a systems level, quality of care may be influenced by diversity of insurance mix at a prenatal care site. Women in the community dialogues also reported receipt of lower quality care when they seek care in locations with a majority of women insured by Medicaid. Racism and trauma (terms defined in depth in the Nurture NJ Playbook and Toolkit) are also reported by women as factors affecting their care experience.

However, some high quality prenatal care, such as Centering Pregnancy, which uses a group model, combines health assessment, interactive learning, and community building, has been shown to reduce premature births by 33 percent. Similarly, recent data published from the federal Strong Start for Mothers and Newborns Initiative—which included New Jersey’s Central Family Health Consortium as a grantee—found that birth centers which used the midwifery model succeeded in significantly improving rates of preterm birth, low birthweight, and C-section deliveries, when participants were analyzed against a comparison group with similar risks. The midwifery model of care is a patient-centered approach to pregnancy and birth that prioritizes education and empowerment of the woman. The Strong Start evaluators concluded, “the midwifery model of care, which can be practiced by any provider in any setting, offers lessons for how to structure prenatal care to improve outcomes for women who face poverty, relationship instability, depression, and a host of other life-challenges.”

Role of Racism in Maternal and Infant Health

In addition to addressing the cultural and policy environments to create a supportive landscape for maternal and infant health, the US faces a distinct challenge that may not affect other OECD countries: a long history of racial oppression resulting in the embedding of its underlying contributor—racism—into the national culture and institutions. This in turn causes racial disparities in health outcomes. The staggering health disparities in maternal and infant health are not due to any genetic or behavioral characteristics of Black women. In fact, racism—not “race”—has emerged as the strongest contributor to racial disparities in health. The mechanisms for racism’s impact on health have been well studied, and include:
1. **Institutional pathways.** Wherein policies, procedures and practices reduce or inhibit access to conditions of life that support health; for example, those policies that limit access to jobs, health care, quality housing, quality education, right to vote, etc.\(^{18}\)

2. **Cultural pathways.** Wherein implicit bias or beliefs that one group is lower on a perceived social hierarchy results in disparate action. For example, research shows that half of white medical trainees believe such myths as Black people have thicker skin or less sensitive nerve endings than white people, leading them to undertreat pain in Black patients.\(^{19}\)

3. **Physiologic embodiment.** Wherein the experience of racism and discrimination correlates with physiologic markers of stress and related diseases.\(^{20,21}\)

4. **Historical trauma.** Wherein “the cumulative emotional and psychological wounding over the lifespan and across generations engenders from massive group trauma.”\(^{22}\)

5. **Direct deprivation of life.** Wherein Black people are more likely to be killed. Black men’s mortality risk for death by police (1.9 and 2.4 deaths per 100,000, per year), is over twice the rate for white men. Latino risk is between 0.8 and 1.2, and white risk is between 0.6 and 0.7.\(^{23}\)

6. **Through health care inequities.** Wherein Black people receive unequal health care treatment and outcomes.\(^{24}\)

Racial disparities permeate all sectors of US society (employment, education, finance, the justice system, etc.), producing compounded, collateral and intersecting effects. For 246 years (roughly 10 generations, 1619-1865) 10-12 million African people were kidnapped and brutally enslaved in the trans-Atlantic slave trade. Subsequent eras have not afforded Black people the full complement of rights afforded to other populations: “Black codes”, de jure and de facto racial segregation, lynching and other unanswered brutalities were inflicted on Black people. It should also never be forgotten that there have been 500 years of colonization of Indigenous peoples, including massive land theft and efforts to erase Indigenous populations and cultures. For example, the land that is now considered New Jersey largely belonged to the Lenni-Lenape tribe, who were part of the Algonquin nation.\(^{25}\)

These multi-century acts of human disregard and oppression have perpetuated deeply ingrained patterns and dynamics of racial inequities that continue to be encoded in American culture and systems, including systems affecting health. These inequitable and often inhumane patterns and practices have shaped economic, political, and cultural structures, and have influenced knowledge, values, policies, attitudes, stereotypes, falsehoods, myths, and white fears about race and racial inequities.

The impact of racism on the health of women and infants nationally has been well documented in scientific literature and popular media.\(^{26,27}\) Analysis by the New Jersey Department of Health found dangerous levels of racial bias in the health care system that resulted in negative health outcomes. After adjusting for race and ethnicity, educational attainment, prenatal care insurance payor type and marital status, pregnant individuals who reported experiencing racial bias during the year prior to pregnancy were: 1) 40 percent more likely to have a pre-term birth, 2) 40 percent less likely to attend their postpartum checkups, 3) 70 percent less likely to bring their infant to their well-baby visits, and 4) 2.5 times more likely to experience postpartum depression symptoms.

These patterns and practices must be undone to achieve equity in any domain, particularly in health. To do this, leaders from all sectors, workers in all sectors and residents in general must intentionally and actively work to dismantle racism within their spheres of influence. A coordinated and structured statewide approach would be the most effective way to change the culture around racial equity, particularly when there is a mandate from the highest levels of government.

**Social Determinants of Health**

Social determinants are the conditions and treatment
VI. MATERNAL AND INFANT HEALTH PRIMER: THE URGENT NEED FOR ACTION

one receives in the places where individuals live, work, play, study, shop, worship, and seek help. Each individual is encircled by these conditions, and health behaviors are highly dependent on the opportunities and deficits these factors impose. Social factors are thought to influence health through two pathways.

First, via social causation, social status influences health via intermediate factors that are disproportionately distributed in the population. Populations at lower ends of the socioeconomic spectrum have higher risk of developing health conditions and are more likely to be affected by adverse life conditions, have lower access to resources, experience higher stress, and in some cases experience higher rates of adverse health behaviors.

Second, via the life course, populations at the lower socioeconomic spectrum experience higher chronic exposure to adverse conditions of life which have had a cumulative impact on health; and concurrently, these populations have fewer protective buffers to these adverse conditions. In both pathways, material factors, behavioral factors and/or psychosocial stressors can act as the intermediate vectors impacting health. Psychosocial stress is known to have physiologic implications relating to both maternal and infant health.

Some of the factors which are considered “upstream,” or macro factors that comprise social-structural influences on health and health systems, government policies, and the social, physical, economic and environmental factors that determine health include: effects of current and historic discriminatory policies and practices (e.g. disenfranchisement), conditions of the physical environment (e.g. lead (Pb) in the home), economic inequities (e.g. income and wealth disparities), quality of interpersonal treatment in services (e.g. disrespectful treatment), and receiving non-evidence based care. Table 2 illustrates the disparity in a selection of social determinants of health in New Jersey. On most indicators, populations of color experience more adverse conditions compared to the white population.

Leaders in all sectors, workers in all sectors, and residents in general must intentionally and actively work to dismantle racism within their spheres of influence.
For many communities in New Jersey, historical and current policies have resulted in environments which either limit the conditions for health among the residents of these communities, or make it much more stressful, expensive, and time-consuming to access the spaces where these health producing conditions exist. Communities are unequal with respect to availability of supermarkets, access to labor and delivery facilities, availability of primary care providers and quality of care. For example, due to the lack of provider capacity and community-wide structural supports, Atlantic City was without a family planning provider for many years, leaving women there without access to consistent family planning services.

The Context of Maternity Care: Listening to Women’s Voices

During the period from October 2019 through August 2020, the Nurture NJ strategic planning team held numerous dialogue groups in southern, coastal and northern New Jersey to better understand the experiences women have broadly with health relating to wellness care, pregnancy and childbirth. (More detail is provided in the Nurture NJ Strategic Plan Companion Document: A Deeper Dive into Data and Key Concepts.) The groups consisted of women who had given birth in New Jersey. Some groups included women who work as community health workers or doulas to women in New Jersey. Some groups included advocates, and in some cases, health care providers. The groups consisted of women of all races and ethnicities, but the majority were Black and Brown women living in high maternal and infant mortality areas of New Jersey. The dialogues revealed the problems they experienced with the health care system.

In these dialogue sessions, women spoke about the beauty of motherhood, their joy at being able to create and raise children and love them unconditionally. Their joy of having children contrasted sharply with the negative experiences many had to endure to birth them. Women reported negative experiences with:

- Obtaining appointments, particularly when seeking care in the first trimester when they confirm pregnancy but are unable to find an appointment in the early stages of pregnancy. This is reflected in the data showing a disparity in access to PNC for Black vs other women in the state.
- Disjointed and siloed, program-based care, with weak connective tissue to create smooth navigation between services
- Having their concerns ignored: for example, many women who reported unusual pains or feelings that something was amiss to their providers were initially dismissed by providers and they subsequently ended up with emergency hospitalizations.

<table>
<thead>
<tr>
<th>Table 2: Social Determinants of Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population Distribution by Race/Ethnicity</td>
</tr>
<tr>
<td>Population Distribution by Race/Ethnicity</td>
</tr>
<tr>
<td>Percent Below 100% FPL (2018)</td>
</tr>
<tr>
<td>Unemployment Rate (2018)</td>
</tr>
<tr>
<td>Per Capita Income (2018)</td>
</tr>
<tr>
<td>Food Insecurity (2017)</td>
</tr>
</tbody>
</table>

Source: NJ SHAD
VI. MATERNAL AND INFANT HEALTH PRIMER: THE URGENT NEED FOR ACTION

- Lower quality of care in low income neighborhoods attributed by women to racial discrimination or concentration of Medicaid insurance type.
- Neighborhoods that are under-resourced and lack good quality care, other needed services, transportation, food markets, or safe and affordable housing.
- Lack of access to helpful information on available resources and services.

Women further report that the good conditions they desire do exist in the state, just not in their neighborhoods. They often elect, if they have the means, to travel longer distances to obtain better quality of care in “the suburbs.”

The voices and experiences of women are critical to understanding the depth of the challenges in New Jersey. The women insist that they have reported problems and have told their stories many times before. People listen, but nothing changes. It is critical to remain connected to these women’s experiences, to maintain transparency on what problems exist and where, and most of all—to address these factors affecting a woman’s attempts to have a healthy pregnancy. Piecemeal programmatic solutions to these challenges in New Jersey are insufficient to address these challenges. A broad strategy that serves to transform the systems and structures in health care, and the implementation of policy and social supports, are needed to address these multiple and intersecting challenges.
VII. Addressing The Challenge: A Transformative Strategy

Setting a Common Vision: The Ecosystem Map

To define a coherent vision for Nurture NJ, the strategic planning team designed an Ecosystem Map. Maternal and infant outcomes are determined by health status before, during, and after pregnancy. As such, the Ecosystem Map is subdivided by these time periods. Each column represents one of the time periods that focus on specific sub-goals—defined as critical but more proximal targets to the achievement of the Nurture NJ outcomes. Achievement of sustained reductions in maternal mortality and achievement of equitable outcomes may take a long time to unfold, and the ultimate outcome depends on the achievement of these proximal outcomes: healthy women, equitable service and care, and supportive environments and contexts to sustain health postpartum and beyond. These are achieved and measurable in a shorter time frame and are necessary achievements along the path to improved maternal and birth outcomes and equity. The Ecosystem thus redirects focus from the long-term outcomes toward the achievement of these more proximal ones.

Healthy Women. To accomplish the primary goal of improved maternal and infant outcomes and the reduction of inequities, the first time period focuses on improving women’s overall health.

Equitable Service and Care. The second relevant time period in the Ecosystem occurs during pregnancy and encompasses prenatal care and related services, as well as labor and delivery. Evidence-based and equitable care are key qualities of the care component and must be structured into the delivery process for all services.

Supportive Environments and Contexts. The third time period in the Ecosystem Map is the period subsequent to a pregnancy. A significant shift in ideology away from an emphasis on women’s health solely as it relates to reproductive potential to a fully realized life course approach to achieve a population of healthy women is necessary to achieve sustained improvements in maternal reproductive and birth outcomes. There is emerging evidence that experiences in childhood and across the life course can affect reproductive potential, thus there is a clear need to ensure health across the life course. As such, the third proximal outcome centers on the achievement of an ongoing supportive environment and context that extend beyond the pregnancy and postpartum periods, to cover the entire life course for both women and their infants. Women and their families should not have to live inside a safety net for their whole lives. Instead, their communities should ensure that the places where they live, work, play, shop, worship, learn, and recreate are always promoting, and never inhibiting equity and health. This period outlines the contexts needed to ensure women have what they need to live healthy lives.

Within each life course period, the Ecosystem maps nine action areas (common across all) with specific recommendations defined for each action area.

The Ecosystem Map is a vision of what conditions will need to be built in each community to ensure that the health outcomes sought by Nurture NJ can be achieved. The Nurture NJ Ecosystem can also serve as a playbook to choreograph the actions of multiple stakeholders who are working within and across their fields of control to build this common vision. While many areas are cross cutting, stakeholders should be able to locate their realm of influence from the Ecosystem Map and forge relevant partnerships to begin to build stronger, healthier, and more equitable communities.
### Nurture NJ Maternal and Infant Health Ecosystem Map

<table>
<thead>
<tr>
<th>Timing</th>
<th>Before pregnancy</th>
<th>Prenatal care, labor &amp; delivery, postpartum</th>
<th>Postpartum, early childhood, throughout life course</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>KEY OUTCOME:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HEALTHY WOMEN</td>
<td></td>
<td>EQUITABLE SERVICE &amp; CARE</td>
<td>SUPPORTIVE ENVIRONMENTS &amp; INSTITUTIONS</td>
</tr>
<tr>
<td>RACIAL EQUITY</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COMMUNITY POWER BUILDING</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AND ENGAGEMENT</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MULTISECTOR COLLABORATION</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mindset Shift</td>
<td>Whole-life approach to women’s health, not only during pregnancy</td>
<td>Accountability for the health and safety for all women, especially those impacted by social and historic factors</td>
<td>Holistic solutions that address population-level problems</td>
</tr>
<tr>
<td>Public Policy</td>
<td>Application of Health Equity in All Policies and Practices standards, intersectional design and implementation frame</td>
<td>Health Equity in All Policies and Practices across funding and policy decisions</td>
<td>Health Equity in All Policies and Practices at the population-level to guide policy, intervention and funding</td>
</tr>
<tr>
<td>Research</td>
<td>Innovative and community-grounded to assess the impacts of the equity-based Ecosystem model on women’s health</td>
<td>Quality improvement, monitoring, &amp; evaluation and implementation science driven by community-grounded needs.</td>
<td>Evidence base of strategies to remediate and repair social and historical risks developed through community-grounded research</td>
</tr>
<tr>
<td>Institutional &amp; Structural Change</td>
<td>“Equity-integrated” designation process for agencies, organizations and businesses</td>
<td>Capacity development to create designated equity-integrated organizations</td>
<td>All agencies and public and private organizations designated “equity-integrated” institutions</td>
</tr>
<tr>
<td>Social Determinants of Health</td>
<td>Access to resources to achieve and maintain health</td>
<td>All environments where people live, work, play, study and seek help facilitate health</td>
<td>Environments where people live, work, play, study and seek help facilitate health</td>
</tr>
<tr>
<td>Individual Intervention &amp; Care</td>
<td>Expansion of coverage and payment strategies to make women’s preventive health care available to all women</td>
<td>Health system accountability for addressing social and preventive factors, including through coordinated follow-up with community supports</td>
<td>Full community participation in learning, critical analysis and civic engagement</td>
</tr>
</tbody>
</table>

**Clinical, Social, Community, Policy and Environmental Conditions and Actions Needed to achieve outcomes:**

- **Before pregnancy:**
  - Prenatal care, labor & delivery, postpartum
  - Postpartum, early childhood, throughout life course

**Equity and Improved Maternal and Infant Outcomes:**

- **Timing:**
  - Before pregnancy
  - Prenatal care, labor & delivery, postpartum
  - Postpartum, early childhood, throughout life course

- **KEY OUTCOME:**
  - Healthy Women
  - EQUITABLE SERVICE & CARE
  - SUPPORTIVE ENVIRONMENTS & INSTITUTIONS

- **RACIAL EQUITY:**
  - COMMUNITY POWER BUILDING AND ENGAGEMENT
  - MULTISECTOR COLLABORATION

- **Mindset Shift:**
  - Whole-life approach to women’s health, not only during pregnancy
  - Accountability for the health and safety for all women, especially those impacted by social and historic factors
  - Holistic solutions that address population-level problems

- **Public Policy:**
  - Application of Health Equity in All Policies and Practices standards, intersectional design and implementation frame
  - Health Equity in All Policies and Practices across funding and policy decisions
  - Health Equity in All Policies and Practices at the population-level to guide policy, intervention and funding

- **Research:**
  - Innovative and community-grounded to assess the impacts of the equity-based Ecosystem model on women’s health
  - Quality improvement, monitoring, & evaluation and implementation science driven by community-grounded needs.
  - Evidence base of strategies to remediate and repair social and historical risks developed through community-grounded research

- **Institutional & Structural Change:**
  - “Equity-integrated” designation process for agencies, organizations and businesses
  - Capacity development to create designated equity-integrated organizations
  - All agencies and public and private organizations designated “equity-integrated” institutions

- **Social Determinants of Health:**
  - Access to resources to achieve and maintain health
  - All environments where people live, work, play, study and seek help facilitate health
  - Environments where people live, work, play, study and seek help facilitate health

- **Individual Intervention & Care:**
  - Expansion of coverage and payment strategies to make women’s preventive health care available to all women
  - Health system accountability for addressing social and preventive factors, including through coordinated follow-up with community supports
  - Full community participation in learning, critical analysis and civic engagement
Becoming the Safest Place to Give Birth: What Will New Jersey Need?

Studying countries that currently are the safest places to give birth makes it clear that more than health care is needed. Using the Ecosystem map as a guide, all stakeholders can embrace a mindset that supports implementation of a multitude of innovative approaches. A move to incorporate a stronger focus on policies affecting social conditions opens up new possibilities for impact on a wider range of factors affecting health, and requires a greater reliance on high-level, multisector collaboration. This is not impossible and has already begun in New Jersey. (Refer to the milestones of Nurture NJ initiatives found in Appendix A.)

Interviews with stakeholders in New Jersey revealed three themes:

1. Addressing maternal and infant health currently occurs via non-coordinated silos. Entities in health care, academia, and the workforce and leaders in influential sectors are often unaware of the impacts of other sectors’ processes and policies on maternal and infant health.

2. The language of multisectorality is a public health term and there is no common narrative that connects other sectors to health, facilitating collaborative action and collective impact.

All the key sector stakeholders interviewed in the development of the Strategic Plan are very invested in improving health outcomes of the communities that they serve. For example, all state departments and agencies interviewed—ranging from the Department of Transportation to the Department of Environmental Protection—recognize the importance of considering maternal and infant health in their efforts.

3. Once connections between sectors are made, dramatic improvements can occur.

By engaging multiple sectors, New Jersey can leverage knowledge, expertise, reach, and resources, benefiting from their combined and varied strengths (collective impact) as they work toward the shared goal of producing better maternal and infant health outcomes.

Creating Health Supporting Communities: Place-based Community Pilots

Multisectoral collaboration is especially critical to ensure that any new resources or policies initiated by Nurture NJ are equitably distributed and managed, accessed by all, with assurances that communities that need more will receive what they need. Stakeholders in the state report that, currently, not all counties and townships in New Jersey have equal access to the same programs, resources, services, benefits and conditions to support health. Both the underlying conditions of health and the safety nets vary by location. However, in order to achieve health for all women, all of the necessary conditions for health need to be available to all women in every community. The types of communities characterized by a lack of health-supporting resources and conditions are often disenfranchised communities and disproportionately affect low income, Black, or Latino communities. The outcomes of multi-sector collaboration should be coordinated for collective impact in improving the lives, condition and contexts for health for all members of a targeted community. Several research studies have
shown that conditions of “place”, “neighborhoods”, and “community” profoundly affect health.\textsuperscript{29,30}

A neighborhood that supports health and provides options for healthy behavior would include for all residents at minimum:\textsuperscript{31,32,33,34,35}

- A safe place to live for all residents, with protection from the elements
- An environment free of toxins and pollutants, like lead in water or mold in households
- A safe, accessible and affordable place to exercise
- Access to a variety of affordable and healthy foods and the ability to prepare them
- Safe and affordable transportation options to access services and care
- Good quality schools
- Equal and fair protection under the law for all residents
- Respectful and quality treatment from health and other service providers
- Access to employment providing a living wage
- Access to safe and affordable supportive services (e.g. childcare) to facilitate work or education

A “place-based intervention” is defined as a process of focusing implementation of state policy, resources, and action toward a defined geographic area in order to improve the conditions and outcomes in the area. The goal is to address many intersecting challenges through a more holistic approach, negating a need for tradeoffs among priority needs. However, place-based strategies have been variously applied—from placing a specific intervention, e.g. a diabetes education program—located within a high need community, to the development of a multifaceted community empowerment zone that is focused on overall community development. In fact, place-based approaches can include a multitude of configurations along a spectrum between these two examples.

The complexity of intersecting problems presented by maternal and infant health in New Jersey requires a holistic, comprehensive, multifaceted and collaborative strategy to structurally build access to all the necessary resources and conditions for health and well-being in every community.

Merck for Mother’s Safer Childbirth Cities Initiative is a place-based pilot currently underway in Camden and Newark, and key learnings will be emerging that can be incorporated into the development of Nurture NJ place-based pilots. Emphasizing this work can demonstrate the value and impact that multisector and community-engaged planning can have on creating a landscape and context for health in specific communities. This type of investment rallies partners to work toward a specific goal, provides tangible benefit to communities and demonstrates the potential impacts on health care quality, birth outcomes and inequities.

Who Should Be Involved in Making New Jersey the Safest Place to Give Birth?

Developing a strategy for improving maternal and infant health outcomes and for eliminating disparities is clearly complex given the number of outcomes, the number of risk factors and the social and structural conditions which undergird these. However, it is even more complicated when one considers that outcomes...
are impacted across at least three distinct life course time periods (preconception, pregnancy/labor and delivery, and postpartum) and that within each of these periods, different systems, payers, programs, stakeholders, or resources may exist. Due to lack of collaboration and information sharing, these become disconnected systems that women have to learn to navigate.

**Healthy Women** entails preventive, wellness, and behavioral health care for women of childbearing age. The rationale for this focus is that healthy women are more likely to have healthy pregnancies, thus planning pregnancies and addressing health concerns that may affect pregnancy should be in the domain of women's health before a pregnancy occurs. Stakeholders relevant to this time period may include Federally Qualified Health Centers (FQHCs), Planned Parenthood, behavioral health providers, emergency rooms, private providers, public and private insurers, employers, government, health departments, women and their partners, and family members. Payers for care and cost of premiums during this period vary, usually depending on employment status and access to Affordable Care Act (ACA) plans. Systems of wellness care are less well defined and often exist as “preconception” care services or wellness care provided with no copays through the ACA.

**Equitable Service and Care** entails all the services and care relating to preparation for pregnancy, childbirth and childrearing. Pregnant women in New Jersey are covered by a variety of payers (private insurers, Medicaid). In this period, employers and community resources (food stores, businesses, safe and affordable housing, etc.) are important forces that influence women's access to coverage and/or services. In addition, women interact with a variety of prenatal care medical providers (physicians, midwives, nurse practitioners, nurses, etc.), social and other support providers (community health workers, doulas, WIC, Healthy Start, mental and behavioral health providers, social workers, breastfeeding peer counselors). It is important to note the state’s commitment to expanding access to doula services, providing women with a birth companion who provides personal, nonmedical support to women and families throughout a woman’s pregnancy, childbirth, and post-partum experience. Multiple studies show that doula care can lead to lower rates of maternal and infant health complications, fewer pre-term births and low-birth-weight infants, lower rates of cesarean sections, and higher rates of breastfeeding. Amplifying mothers’ voices and listening to their needs, community-based doulas have statistically improved birth outcomes for mothers of color. In addition, Central Intake serves as a county-based single point of entry system for referrals to these types of community resources, including medical care, Home Visiting Programs, Healthy Women Healthy Families, Doula Programs, and social support agencies. Central Intake simplifies and streamlines the referral process for obstetrical and prenatal care providers, other community agencies, and families.

**Supportive Environments and Contexts** period entails the life course period for women who are not pregnant and any children they may have birthed. This time period contains all of the stakeholders named under the preconception period as well as many of the programs and stakeholders in the prenatal period. This time period contains the set of influences that will most impact a woman’s or her infant’s health and impact it for the longest period of time. Thus, employers, business, and community conditions create a context that either supports health or not.

A pregnancy outcome, particularly those outcomes Nurture NJ seeks to impact, is influenced by a tremendous number of stakeholders across the life course, that includes but goes well beyond health care providers and the prenatal period. All of these many systems, payers, providers, funders, businesses, and community members have a role in building the conditions that support the health of women and infants in New Jersey, and it is critical for the conditions of health to be available across the life course.

In looking toward this goal and implementing the Nurture NJ Strategic Plan, it is especially important that the communities most affected by high maternal and infant mortality become actively engaged, both as a way to reclaim their civic power to direct the process to an outcome that addresses real needs without causing more stress, and as a way to ensure equity and accountability from those who control the process. During the Nurture NJ planning phases, dialogues with community members revealed a need for a more structured process for the communities to learn and conduct critical analyses of the maternal and infant health challenges facing their community. Knowledge
about the existence of the problems of disparities and of the preventability of maternal and infant death is not widespread and misconceptions abound. Structuring critical dialogues, sharing data and providing basic information to assist in these critical dialogues will go a long way toward preparing community members to engage with other stakeholders and exert more power in directing the processes that will affect their lives.

Finally, the leadership of this effort is of critical importance as well. Achieving the goals of Nurture NJ requires orchestrating multiple initiatives over a long period of time, with sufficient oversight to ensure that the components come together coherently, enabling the neediest communities to fully build the ecosystem that supports the health of its residents. Nurture NJ should be led by an individual (referred to herein as the Nurture NJ Coordinator, or The Coordinator) working in the highest levels of government who can oversee the implementation of the Strategic Plan, coordinate activities, energize and mobilize leaders across sectors, and consistently maintain a culture of racial equity. That person should coordinate with a key point person at each government agency, as well as leaders in the many sectors identified in this Plan.

**Areas of Opportunity: The Nine Transformative Action Areas**

The massive complexity of the challenge of achieving racial equity in birth outcomes and in making New Jersey the safest place to give birth requires many stakeholders, many transformative approaches and structural and systemic changes. Additionally, implementing the low-hanging fruit—actions that provide easy programmatic or policy wins—needs to be reconceptualized and undertaken only within a frame that coherently addresses all aspects of the complexity. The question is—how do you make such a complex challenge with so many moving parts actionable?

This Nurture NJ Strategic Plan approaches the challenge by defining nine transformative action areas. Why transformative? Because its opposite, a transactional approach, will only build on top of a system that has proven itself slow and ineffective in achieving the desired outcomes. A transformational approach is necessary to address the type of complexity New Jersey faces.

The nine action areas provide the frame for involving and connecting the many stakeholders into strategic actions to create the conditions, structures, systems and behaviors that are necessary to achieve equity and to make New Jersey the safest place to give birth.

1. **Build racial equity infrastructure and capacity.**
2. **Support community infrastructures for power-building and consistent engagement in decision-making.**
3. **Engage multiple sectors to achieve collective impact on health.**
4. **Shift ideology and mindsets to increase support for transformative action.**
5. **Strengthen and expand public policy to support conditions for health in New Jersey.**
6. **Generate and more widely disseminate information for improved decision-making.**
7. **Change institutional structures to accommodate innovation and transformative action.**
8. **Address the social determinants of health.**
9. **Improve the quality of care and service delivery to individuals.**

While some of the action areas are unique to specific stakeholders or life course periods, the first four are crosscutting and are designed to form the basis for state-wide collaborative planning and action that will facilitate transformation in all other areas.
### VII. ADDRESSING THE CHALLENGE: A TRANSFORMATIVE STRATEGY

<table>
<thead>
<tr>
<th>Definition</th>
<th>TRANSACTIONAL APPROACH</th>
<th>TRANSFORMATIONAL APPROACH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Issue-based efforts that help individuals negotiate existing structures. These solutions transact with institutions to get a short-term gain for communities but leave the existing structures in place.</td>
<td>Initiatives that cross multiple institutions that shift efforts towards proactive solutions. These solutions alter the ways institutions operate thereby shifting cultural values and political will to create equity.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Approach</th>
<th>Transactional Approach</th>
<th>Transformational Approach</th>
</tr>
</thead>
<tbody>
<tr>
<td>Routine solutions using skills and experience readily available.</td>
<td>Require changes in values, beliefs, roles, relationships, and approaches to work.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>People responsible</th>
<th>Transactional Approach</th>
<th>Transformational Approach</th>
</tr>
</thead>
<tbody>
<tr>
<td>Often solved by an authority or expert.</td>
<td>Solved by the people with the problem.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Changes required</th>
<th>Transactional Approach</th>
<th>Transformational Approach</th>
</tr>
</thead>
<tbody>
<tr>
<td>Require change in just one or a few places; often contained within organizational boundaries.</td>
<td>Require change in numerous places; usually cross organizational boundaries.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Receptivity</th>
<th>Transactional Approach</th>
<th>Transformational Approach</th>
</tr>
</thead>
<tbody>
<tr>
<td>People are generally receptive to technical solutions.</td>
<td>People try to avoid the work of “solving” the adaptive challenge.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Timeframe</th>
<th>Transactional Approach</th>
<th>Transformational Approach</th>
</tr>
</thead>
<tbody>
<tr>
<td>Can be implemented quickly – even by edict.</td>
<td>“Solutions” can take a long time to implement and require experiments and new discoveries; they cannot be implemented by edict.</td>
<td></td>
</tr>
</tbody>
</table>

VIII. The Nurture NJ Strategic Plan Recommendations

The status of maternal and infant health in New Jersey is nothing short of a crisis. In the course of the strategic planning process, women shared their experiences of living and giving birth in New Jersey. The people who shared their stories demanded change, and a desire to participate in that change. This Strategic Plan reflects the urgency that women expressed. While aspirational, this Plan is also based on existing science and international standards of respectful care. There may be some trepidation at addressing challenging issues like upstream factors and structural racism. However, tackling these large and long-standing problems must take precedence. Any new action that is not conceptualized and implemented through a racial equity and/or intersectional frame is destined to further codify inequities into systems. This will only serve to exacerbate the problem the actions are intended to address. Therefore, it is critical to establish a vision, mission, and core values for The Nurture NJ Strategic Plan.
Vision: New Jersey will be the safest and most equitable place in the nation to give birth and raise a baby.

Mission: All women of color, particularly Black women, should achieve maternal and infant health and survival rates on par with other ethnic groups, and New Jersey will achieve a significant and sustained improvement in the overall maternal and infant morbidity and mortality rates.

Values: Achieving equity for all women requires dismantling structures that support inequitable processes and building or shoring up processes that support respectful care. This plan focuses on:

- the dismantling of structural racism,
- community power-building and engagement to support all aspects of planning and implementation,
- multisector collaboration to address upstream root causes that lie outside the realm of influence of public health and medicine, and
- a commitment to systematically build the Ecosystem that makes all recommended components accessible to all women, particularly in low-resource or high-need communities.

The following recommendations are designed to be inclusive of all stakeholders in the state, and to reflect the vision and values.

1. Build racial equity infrastructure and capacity

New Jersey experiences profound disparities in outcomes for the state’s mothers and babies. Structural racism underlies this disparity and can only be changed by restructuring to always promote—and never inhibit—the attainment of racial equity. These recommendations are designed to build new processes and accountability structures to facilitate achievement of racial equity across all sectors in New Jersey through actions, procedures, and policies. These recommendations aim to ensure that racism is addressed in all the institutions that have connection to the life experiences that affect the health of Black, Indigenous, Latina, Asian, Pacific Islander, lower income whites, LGBTQI+, rural, immigrant, and other special needs women and their babies.
**Recommendations:**

1.1 All state departments and agencies should be required to implement, monitor and evaluate a plan for increasing equity capacity and for maintaining capacity to promote racial equity in all policies, budgets, institutional practices, policies, systems, and structures.

1.1.1 All state institutions, personnel, contractors and their organizations, and all recipients of state funds should be encouraged to prioritize and allocate appropriate levels of funding to specifically address racial, gender, and class equity as allowable under state law.

1.1.2 All state departments and agencies, personnel, contractors and their organizations, and recipients of state funds should:

   - undergo an equity capacity assessment to determine their knowledge and skill for promoting and supporting equity in all policies;
   - participate in equity training, starting at the stage identified by their assessment and culminating when they reach the highest level of equity capacity. For those agencies with implicit bias training underway, ensure that a full range of training at each equity capacity development level is available to frontline workers;
   - engage in assessing and actively restructuring all institutional and organizational policies, procedures, and rules where racism and unfairness may be operational.

1.1.3 State institutions should be responsible for implementing this requirement in partnership with their city, county and local counterparts.

1.2 Declare racism a public health crisis.

1.2.1 State leaders should develop wording for a state declaration that racism is a public health crisis, given its impact on maternal and infant health disparities as well as other health disparities in the state. The declaration can be based on other states that have taken action (Michigan, Ohio and Wisconsin).

1.3 Establish an Office for State Diversity, Equity, and Inclusion to reflect the increased priority, enable a greater level of collaboration, and address the state's equity needs.

1.3.1 The Diversity, Equity and Inclusion Office should convene and provide support to department-level diversity officers, Offices of Minority and Multi-Cultural Health, and EEO personnel.

1.3.2 This Diversity, Equity and Inclusion Office should develop and oversee a statewide equity capacity building infrastructure for all state institutions, personnel, and all recipients of state funds using a stages of change framework, which will ensure that expanded training will address all stages of equity capacity development.

1.3.3 The Governor's Administration should ensure the development of a high-level accountability structure to support equity work in the state.

1.3.4 The Diversity, Equity and Inclusion Office should work with all state departments and agencies to require placement of anti-racism statements and goals in all public policy or guidance documents.

1.3.5 The Diversity, Equity and Inclusion Office and team should also develop recommended protocols, tools and training resources for the private sector to support their equity capacity development as requested (similar to CDC Guidance for COVID 19 Reopening to private sector businesses).
1.3.6 Ensure appropriate staffing of the Equity, Diversity and Inclusion Office to address the state’s equity capacity building and structural change needs. This should include an Equity Auditor, to carry out the duties of the Office and to monitor compliance with Recommendation 1.1. The Auditor should have the authority to evaluate compliance at all state departments and agencies and in all policy development and implementation decision-making.

1.3.7 The Auditor should have authority to enforce accountability for racial, gender, and class equity into budgets, institutional practices, policies, systems, and structures. When existing policy vehicles fail to address inherent racism and unfairness actively and authentically, suggestions should be made by the Auditor to remedy the situation.

1.3.8 State departments and agencies should periodically report to the State Equity Auditor on new rules, regulations, programs and policies under their jurisdiction and how many have been assessed for equity, and how many existing rules, regulations, programs and policies have been restructured to achieve equity. In addition, these entities should report the extent to which the assessment was community-partnered.

1.4 Create a state-led accrediting body empowered to award a “racial equity designation” for the public and private sectors.

1.4.1 The accrediting body should consist of state health officials, community members, and other key stakeholders.

1.4.2 The accrediting body should develop the racial equity designation, similar to the Baby-Friendly designation for hospitals, as a voluntary program for private entities, non-profit organizations, government agencies, and other organizations in the state.

1.5 The state should convene the private sector to incentivize and engage them in action on racial equity. See recommendations 2.4 and 3.2 for associated activities.

1.6 Build upon the Nurture NJ Interdepartmental Working Group to initiate a permanent internal structure that meets quarterly to discuss planned programs and policies that impact maternal and infant health and racial disparities in birth outcomes, budget implications, break down internal silos, share possibilities for collaboration and develop a process for assessing health impacts of pending policies.

1.6.1 The Equity Office should work with the New Jersey Interdepartmental Working Group and the Nurture NJ Coordinator (TBD) to formalize a process for sharing best practices for applying a health impacts and racial equity analysis to pending policies and programs.

1.7 Explore the process and impacts of existing Truth, Racial Healing and Transformation (TRHT) processes in other states to determine potential impact in New Jersey.

1.7.1 The State Equity Office should leverage existing best practices from other states to train “healing practitioners” to conduct conversations between state agency staff, community members, businesses, and service providers across the state.
VIII. THE NURTURE NJ STRATEGIC PLAN RECOMMENDATIONS

**Recommendation 1: Which stakeholders should be involved and how?**

The Governor’s Administration should work to develop the Equity Office and oversee recommendation 1.1 and launch the infrastructure building process. This should be done in close coordination with the Office of the First Lady and a Nurture NJ Coordinator overseeing the implementation of this Strategic Plan.

**Recommendation 1: How might this be funded?**

Recommendations listed will have an indeterminate need for funding. The Equity Office will require additional state funds. The work of the Nurture NJ Coordinator, and engagement with community groups, could be funded by private philanthropy.

**Recommendation 1: How should this be measured?**

Developing process indicators should be based on these intended outcomes:

- Increased statewide focus on and collaboration in achieving racial equity
- Establishment of a statewide structure for capacity building to ensure all stakeholders are able to improve skill at recognizing and addressing structural inequities
- Engagement from all state departments and agencies to integrate equity into all policies, practices, procedures, planning and implementation
- Equity and anti-racism considerations in all decision-making in public and private sectors
- Increased mobilization of the private sector in support of healthy mothers and infants and elimination of disparities in birth outcomes
- Elimination of health inequities in maternal and infant health

**2. Support community infrastructures for power-building and consistent engagement in decision-making**

Based on the assessment of the current landscape in New Jersey through dialogues with community members, stakeholders, and policymakers, it is clear that the communities most affected by maternal and infant health issues are not consistently engaged in decision-making. Community groups report that, because community engagement is not consistently prioritized across state funding streams, many organizations have not developed experience with engaging the communities they serve in decision-making. Sustainable community engagement and power-building must begin with establishment of internal community dialogues, cross-community summits and culminate in a transparent process for relationship and trust-building with existing public and private institutions.

**Recommendations:**

2.1 **State departments and agencies, in partnership with the private sector, non-profits, community leaders, and funders, should develop infrastructure for community-level power- and knowledge-building in communities with high Black maternal and infant mortality.** These activities can be done in coordination with the place-based pilots in Recommendation 3.1.

- 2.1.1 Build structured community forums to enhance readiness and effectiveness to critically analyze community needs and engage in decision-making processes with state-funded programs.
- 2.1.2 In parallel, all private sector, nonprofit, and community leaders, and philanthropy staff engaging with community members, should seek learning on racial equity, conduct equity capacity assessments and seek training accordingly.
- 2.1.3 Support educational resources and systems for continuing education credits or certifications that are affordable to women
from communities of color, to sustain this infrastructure for learning communities.

2.1.4 Support community groups in designing creative strategies to improve maternal and infant health, identifying where state-level advocacy and additional funding is needed.

2.2 All state departments and agencies should be required to issue written statements of their commitment to community engagement.

2.2.1 Commitment statements should provide departments' and agencies' intention to improve existing structures and processes to ensure community engagement and power-building.

2.2.2 The Nurture NJ Interdepartmental Working Group should convene a multisector subcommittee to develop collective “Standards of Excellence for New Jersey,” which outline a human-centered and intersectional approach to policy decisions and program development that values community power-building and racial equity.

2.3 Develop permanent structures to integrate community partnership into state, county, and local decision-making processes.

2.3.1 State leaders should mandate institutional restructuring in state government to integrate community partnership in decision-making regarding planning, design, implementation, review and evaluation of all programs, practices and policies. For some agencies, this restructuring may have the most impact through municipal, county or local entities.

2.3.2 State department and agency leaders should require that grants to community organizations include a budget line dedicated to community engagement and representation.

2.3.3 Community-based organizations should develop accountability metrics to recognize equitable funding and spending, in the format of a New Jersey Community Engagement Report Card.

2.3.4 Develop partnership agreement templates that reflect racial equity.

2.4 Develop incentives for all public and private entities that increase multisector and cross-state collaboration and community engagement. Some examples include public recognition by state officials or a publicly recognized, statewide designation.

2.4.1 Include faith-based organizations and congregations, philanthropies, businesses, and community-based organizations. See recommendations 1.6 and 3.2 for associated activities.

Recommendation 2: Which stakeholders should be involved and how?
The Governor’s Administration should lead state-government-wide initiatives to ensure that the tone and pace are set for change. Private funders and state departments and agencies should engage directly and consistently with community groups to implement the change.

Recommendation 2: How might this be funded?
Additional public funds may be required to ensure that state departments and agencies have the capacity for transformative, lasting change. Private funds will be necessary to support community groups in the development of power-building, creation of durable advocacy platforms and narrative development. As such investment is groundbreaking, some national funders may have interest in joining.
3. Engage multiple sectors to achieve collective impact on health

Remediation of the complex problems influencing health will require a unified effort across a wide range of both public and private systems, overcoming existing silos. Many community leaders commented that approaches to affect maternal and infant health—and even broader underlying issues like racial equity—have historically been undertaken without sufficient collaboration across sectors. Community leaders within the same city are often unaware of other initiatives, or of private sector engagement. At the same time, stakeholders consistently identified service deserts that overlapped with the areas most impacted by poor outcomes in maternal and infant health. In these same towns and cities, community resilience is extraordinarily high—and can be harnessed through the power of collaboration and organization.

Recommendations:

3.1 Develop public-private partnerships to implement place-based, community-partnered change models in areas with the highest Black maternal and infant morbidity and mortality and then expand to every community across New Jersey.

3.1.1 Based on the work resulting from Recommendation 8.1, leading state departments and agencies and private funders should work with their county and local government partners to provide planning grants to develop multisector collaborations for learning and planning.

3.1.2 Provide implementation grants, initially to at least four competitive sites.

3.1.3 Fund, seek support for, develop and provide technical assistance to these four communities to demonstrate implementation of the built ecosystem in New Jersey.

3.1.4 Provide technical assistance as needed to other areas of high need to develop a pipeline to future funding opportunities.

3.1.5 Encourage and incentivize multisector collaboration in all planning, funding and implementation of the place-based model.

3.1.6 Design a widely accessible blueprint with free tools to implement the model across New Jersey.

3.2 The funders collaborative in support of Nurture NJ should support a Nurture NJ Coordinator to oversee implementation of the Nurture NJ Strategic Plan.

3.2.1 In order to ensure that sectors and state departments and agencies collaborate to implement the Strategic Plan, the funders collaborative in support of Nurture NJ should support a Nurture NJ Coordinator within
the Governor’s Administration and promote multisector and agency collaboration and accountability.

3.3 Establish a Center in the state capital that focuses on innovation and research in maternal and infant health through partnerships with the state’s academic, funder, business and faith communities.

3.3.1 The Department of Health, Department of Human Services, Office of the Secretary of Higher Education, and Economic Development Authority, under the leadership of the Governor’s Office and First Lady’s Office, should continue the development of a plan to establish and launch a center dedicated to maternal and infant health innovation and research, anchored in New Jersey and integrating the solutions to maternal and infant health challenges with innovative economic development, cutting edge research and support for entrepreneurship and commercialization.

3.3.2 The Center should be a resource for equity, health care, and research, as well as an incubator of new enterprises driving better maternal and infant health outcomes and a central hub for New Jersey’s stakeholders dedicated to improving health for New Jersey’s mothers and babies.

3.3.3 The Center should work with New Jersey’s academic community to establish partnerships to advance maternal and infant health, including:

- Institutions of higher learning, such as medical schools, nursing schools, and doula and midwife training program partnerships with middle schools and high schools in lower resourced communities to develop academic and training pathways. This would occur concurrently with science investments in the same communities.

- Evaluation of the effectiveness of state-level programs for parents and babies, including an analysis of the relationship between access to and utilization of state-funded social services and maternal and infant health outcomes.

- An economic burden study of maternal and infant mortality and morbidity tied to state workforce projections.

- Mapping of “maternal hot spots,” based on data from the Department of Health, to measure access to social services, affordable housing, transportation, and healthy food. From a baseline mapping exercise, stakeholders can explore key issues in more depth, such as housing quality and safety, in partnership with the Department of Environmental Protection’s Lead Exposure Mapping Project, expected to be available in 2021 (please see further detail in Recommendation 8.1).

3.3.4 The New Jersey Economic Development Authority, in partnership with other state departments and agencies, should convene a Nurture NJ Business Roundtable and engage businesses throughout the state in the Center, allowing New Jersey’s business community to establish partnerships with government agencies and other organizations to benefit Nurture NJ, including:

- Investing in the Center and organizations that promote or provide wrap-around services for pregnant individuals and babies, such as the Merck for Mothers Safer Childbirth Cities Initiative.

- Driving innovation in maternal and infant maternal health by sponsoring challenges like Johnson & Johnson’s “QuickFire Challenge”.

- Conducting research around workforce readiness and support for parents and pregnant individuals in the workforce.

- Contributing to the development of racial equity training infrastructure for private
and public sectors.

- Expanding programs like Internet Essentials that provide low-cost computers and internet access, facilitating telehealth and health education.

- Supporting capacity building for creating and implementing quality improvement initiatives and utilizing quality improvement data methods and tools.

- Expanding programs, such as Early Head Start, to serve pregnant moms in high need areas, provide one registered nurse at each program to serve pregnant mothers and invest in data system(s) to capture impact.

3.3.5 The Center should work closely with the funders collaborative in support of Nurture NJ to establish:

- Flexible funding for academia and community and grassroots organizations that have long-standing connections with communities impacted by maternal and infant mortality and morbidity.

- Funding for maternal and infant health disparities clinical/public health fellows who will work in communities with high rates of maternal and infant mortality and morbidity and serve either at the patient or population level.

- Funding to research the gaps in social services and housing needs and provide that data to housing and academia-focused organizations.

- In partnership with the business community, funding for the development of racial equity training infrastructure that can be used in both the public and private sectors.

3.3.6 The Center should engage New Jersey’s faith community through:

- Supporting dedicated staff for outreach to congregations, ministries, missions, women’s auxiliary groups, and spiritual leaders in targeted communities.

- Working with faith sector leadership to add maternal and infant health as part of their guiding religious priorities.

- Supporting faith-based campaigns that champion maternal and infant health and wellness that resonate with spiritual teachings and values (e.g. Faith in Action for N.J.’s Mothers and Infants, Congregations for Children, etc.).

**Recommendation 3: Which stakeholders should be involved and how?**

The Center focused on maternal and infant health innovation and research should start as a public-private partnership but be formally incorporated as a non-governmental entity to ensure its longevity. The Director should be a non-governmental employee, but work very closely with state leaders, the academic community, the private philanthropy community and business leaders.

**Recommendation 3: How might this be funded?**

An initial seed grant with public and private funds would be useful for credibility purposes; however, the initial launch can also be solely private funds.

**Recommendation 3: How should this be measured?**

Developing process indicators should be based on these intended outcomes:

- At least four communities with high maternal and infant morbidity and mortality will be actively supported through funding and multisector collaboration to achieve a fully built Maternal and Infant Health ecosystem.
that supports women and infants needs for health

- Higher level of public-private sector engagement, collaboration and resource sharing in implementing the Nurture NJ Strategic Plan
- Establishment of a Center to coordinate the implementation of the Strategic Plan

4. Shift ideology and mindsets to increase support for transformative action

The transformative change that this Strategic Plan envisions is only possible by shifting ideology and mindset. First, the people of New Jersey must embrace racial equity and the set of circumstances necessary to develop meaningful, lasting change. While New Jersey is one of the most highly diverse states in the nation, it is also one of the most segregated, in part due to decades of housing and zoning discrimination. Public revelations of racial and income disparities related to COVID-19 infection and death rates and the recent protests surrounding police brutality in Black communities provide an opportunity to tap into existing public and media dialogues to enhance progress toward actively undoing racism in all sectors. Second, along with explicit and implicit bias, many New Jersey residents may harbor beliefs about the power of the individual to control their environment, and how this power might or might not shift depending on their circumstances.

Nurture NJ must help to educate communities on a human-centered approach, which focuses on the needs, constraints, contexts and perspectives of the users of care, designed to provide services that prioritize the needs of people first. It should include trauma-informed care to promote environments of healing and recovery rather than practices that may inadvertently re-traumatize. Finally, a business case for racial equity can help to change mindsets in the private sector, projecting meaningful increases in consumer spending and federal state, and local tax revenues, and decreases in social services spending and health-related costs.

Recommendations:

4.1 State, county and local leaders should leverage the declaration of racism as a public health crisis to generate significant media coverage and facilitate community dialogues.

4.2 Through a statewide communications campaign, promote a fundamental shift in ideology around the role of life course experiences, and environmental and social exposures on the health of women and infants.

4.2.1 The communications campaign should use state of the art marketing methods across multiple platforms to influence and move societal attitudes from not only valuing women’s health during preconception, pregnancy and postpartum care, but to fully realize whole-life approaches to maternal and infant health.

4.2.2 The campaign should work to shift mindsets about the importance of providing improved care in order to level the playing field for those at greatest risk of poor health due to social and historic factors.

4.2.3 A component of the campaign should be
VIII. THE NURTURE NJ STRATEGIC PLAN RECOMMENDATIONS

to help individuals understand the impact of social and historic factors on health disparities and promote a mindset shift to support and promote behavioral health as an integral part of health attainment.

4.2.4 Increase civic support and understanding of the importance of equity to a democracy.

4.3 Develop a communications plan to promote benefits of midwifery and community doula models of care (e.g. spontaneous labor, vaginal births, freedom of movement during labor, woman-centered prenatal, labor and delivery, and postpartum care).

4.3.1 This campaign should be developed in collaboration with communities of color, building knowledge around the midwifery and community doula care models.

4.4 Develop a communications plan to encourage mindset shifts in individuals, providers and payers regarding the fundamental connection of behavioral and physical health services through further clinical integration.

4.4.1 Redefine patient-centered medical homes as always including a behavioral health element as consistent standard of care.

4.4.2 In keeping with the recommendations of the NJHQCQI Medicaid 2.0 Blueprint, the Department of Human Services and Department of Health should continue working toward a more integrated payor and delivery system to shift the mindsets of all players in the health care system.

4.5 Actively shift public and private sector mindsets on benefits of shared decision-making with community.

4.5.1 The New Jersey Economic Development Authority and the New Jersey Department of Labor should seek strong actors in the state on racial justice and community engagement work, and then lift up these practices to others in the statewide business community to help further engagement of people facing maternal and infant health challenges.

4.6 Ensure understanding of the importance of human-centered and trauma-informed care practices and expand use among all program planners and providers (health and non-health).

4.6.1 The New Jersey Office of the Secretary of Higher Education, the New Jersey Department of Education, the New Jersey Department of Health, and other relevant agencies should work with Nurture NJ to develop tools for professional training programs and faith-based institutions, including in-service opportunities to expand health, medical and other service trainee’s exposure to the diversity of human conditions in the State, and incorporate an equity focused and respectful, human centered approach to care and services.

4.6.2 The Division of Consumer Affairs should integrate these tools into continuing education requirements for licensed professionals and requirements for licensure.

4.7 Private sector businesses and/or their associations should fund, conduct and disseminate a business case for racial equity analysis specific to New Jersey.

4.7.1 The business case should assess the economic cost of disparities to the social fabric and to human life; specifically, to women and their babies.

4.7.2 During the development of the plan, leaders should conduct town halls and meetings to ensure community and multisector participation in the process.

4.7.3 Present the business case at private sector conferences to continue nurturing learning communities for racial equity and supporting an emergence of a compelling narrative(s).

4.8 Reframe the statewide targets in Healthy NJ 2030.
4.8.1 The New Jersey Department of Health should align state targets for infant mortality rates to be equal for Black and white mothers and infants to ensure that the state is working towards accelerating equity.

**Recommendation 4: Which stakeholders should be involved and how?**

Academic partners, Chambers of Commerce, business community, EDA, DOE, DOH, DOL, employers, NGOs and advocacy organizations.

Any comprehensive campaign to shift mindset and ideology must begin with a thorough assessment of the audiences and their current views and opinions. Nurture NJ is currently working with two communications firms that will kick off this work.

**Recommendation 4: How might this be funded?**

The launch of this work could be funded with private dollars.

**Recommendation 4: How should this be measured?**

Developing process indicators should be based on these intended outcomes:

- Expansion of mental models in all stakeholders working with Nurture NJ, all residents of New Jersey, service providers, etc. for how they can prevent inequities and reduce maternal and infant morbidity and mortality

---

5. Strengthen and expand public policy to support conditions for health in New Jersey

In order to address the full range of social determinants of health, this Plan embraces a “Health Equity in All Policies” (HEIAP) approach, which not only considers health impacts of policy decisions, but uses an equity lens to enhance policymaking across sectors to improve the health of all communities and people. To be successful, Nurture NJ must ensure that New Jersey will attain the highest possible standard of health and safety for all women, giving special attention to those with greatest risk of poor health due to social and historic factors. Inherent in the recommendations of the Nurture NJ team are actions to put women at the center of care, and increase the accountability, capacity and responsiveness of the health care system to women themselves. Finally, Nurture NJ envisions a shift in policy, intervention, and funding ideology from individual level to population level, prioritizing holistic solutions, and a paradigm shift where institutions within New Jersey prioritize equity.

**Recommendations:**

5.1 **The State should continue to invest in opportunities for safe, decent, toxin-free affordable housing.**

5.1.1 The Department of Health, Department of Human Services, Department of Community Affairs, the Housing Mortgage and Finance Agency, non-profits, and a private developer should collaborate to identify parents with dependent children as a “special needs” category for Housing Mortgage Finance Agency projects (e.g. federal Low-Income Housing Tax Credit projects and other multifamily rental buildings financed by tax-exempt or taxable bonding), and seek additional resources to support this new category.

5.1.2 The state should consider an additional allocation of volume cap for the Housing Mortgage Finance Agency to fund projects to address social determinants of health impacting pregnant women and infants.

5.1.3 The relevant departments and agencies should continue to expand the Hospital Partnership Subsidy Program, including efforts to embed primary care/health facilities in the first floors of these subsidized housing developments to increase access to care, and their Healthy
VIII. THE NURTURE NJ STRATEGIC PLAN RECOMMENDATIONS

Homes Initiative, which partners with the Board of Utilities and the Department of Community Affairs to reduce health hazards in the community to improve the health outcomes of the larger neighborhood through a comprehensive intervention.

5.1.4 The Secretary for Higher Education, the Department of Community Affairs and the Housing Mortgage Finance Agency should collaborate with community colleges to replicate the Hospital Partnership with higher education, which could provide affordable housing for nontraditional students, including students with children.

5.1.5 The Department of Community Affairs should increase the State Rental Assistance Program (SRAP) and/or the temporary housing assistance by at least $1M for pregnant individuals and women with young children.

5.1.6 State, county and local officials should review available resources for lead abatement, as well as barriers at the state, county and local level for the efficient use of lead abatement funds for their intended purpose, working toward faster, more efficient abatement services, which are more effective than the remediation solutions being pursued currently.

5.2 The Secretary of Higher Education should expand successful programs that improve access to high quality education.

5.2.1 Expand existing partnerships with community colleges, four-year institutions, and technical and vocational schools to tailor programming to accommodate women of childbearing age seeking to complete their degrees, gain a trade, or pursue a vocation.

5.2.2 Increase funding for programs where appropriate and expand successful outreach and awareness initiatives for women to increase participation in programs. Programs for increased funding may include New Jersey’s tuition-free Community College Opportunity Grant (CCOG) program, the federal GEAR UP (Gaining Early Awareness and Readiness for Undergraduate Programs) grant administered by the state, and New Jersey’s Educational Opportunity Fund (EOF). Additionally, develop a marketing toolkit with a focus on women of childbearing age and women of color.

5.2.3 Publish a material hardships guide for institutions of higher education, with a particular focus on resources for student parents.

5.2.4 Continue to explore partnerships with the Department of Human Services to establish targeted childcare subsidies for community college enrollees.

5.3 The Department of Treasury should increase uptake of the Earned Income Tax Credit.

5.3.1 Working with community partners, the Treasury outreach and marketing team should continue comprehensive outreach and trust-building program for taxpayers and employers to ensure that all individuals eligible for the Earned Income Tax Credit are accessing the benefit.

5.4 The Department of Labor should continue their efforts with employees and employers to expand utilization of the paid family leave benefits.

5.5 The Department of Health should increase the utilization of the Women, Infants and Children (WIC) Program through policy changes and program modernization.

5.5.1 The Department should accelerate plans to provide a benefits card, streamline application approvals, and additional improvements developed in consultation with recipients and community stakeholders.

5.5.2 The Department of Health should closely examine adjustments made during COVID-19 (e.g. applications and approvals
VIII. THE NURTURE NJ STRATEGIC PLAN RECOMMENDATIONS

via phone, substitution of additional food items) for permanent integration as federal and state law allow.

5.5.3 Integrate WIC outreach into the Central Intake process, including those contacts initiated by phone and text message.

5.6 The Department of Human Services should continue to expand flexibility in the Supplemental Nutrition Assistance Program (SNAP) to ensure the maximum number of eligible families are enrolled and utilizing the benefit.

5.6.1 Expand online grocery store ordering through major retailers.

5.6.2 Permit applications, as well as tracking the status of an application, online.

5.7 New Jersey should affirmatively provide for comprehensive family planning services and reproductive autonomy through policy and in funding.

5.7.1 State leaders should ensure funding of the state family planning program to continue and expand safety net family planning availability in all individuals in all communities, including undocumented women.

5.7.2 The Department of Human Services should consider payment changes to ensure that women should have access to the full range family planning options.

5.8 The Department of Human Services should strengthen efforts to make the health system accountable to women of color through reliable coverage and evidence-based care.

5.8.1 The Department of Human Services should ensure appropriate application of presumptive eligibility for Medicaid across all prenatal health providers to ensure that women are connected to providers as soon as possible for prenatal care.

5.8.2 The Department of Human Services should partner with the Medicaid MCOs to develop new standards to ensure evidence-based care for women, including measures for participating providers related to NTSV.

5.8.3 The Department of Human Services should institute a perinatal episode of care (EOC) to ensure coordination of services in months before and after delivery that include safeguards, such as contractual requirements for MCOs, to ensure families are linked to the tools and resources needed to carry out recommended care plans. Key measures for the EOC should focus on improving quality and reducing disparities.

5.8.4 The Department of Banking and Insurance should work with health plans participating in the state-based exchange to ensure evidence-based care for women, including measures for participating providers related to NTSV.

5.9 The Division of Consumer Affairs should examine standards of care related to maternal and infant health.

5.9.1 Operating through the professional boards, the Division of Consumer Affairs should consider revisions to standards of care for the health professions relevant to maternal and infant safety and health.

5.10 The Department of Health should implement a system of community-designed, real-time maternal feedback on quality of care.

5.10.1 Pilot the use of The Mothers on Respect index (MOR) scale post-delivery, with data captured in electronic medical records to facilitate analysis; after the pilot results, the Department should iterate on the model to develop a statewide system for measuring maternal experience in care (in keeping with the statutory requirements of P.L. 2019, c. 75).

5.11 The Department of Health, the Office of the Secretary of Higher Education and the Department of Labor should promote workforce development and retention in communities of color.
5.11.1 The Department of Health should update existing regulations that allow only nurse midwives to attend hospital births, expanding to include certified midwives.

5.11.2 Develop a state model similar to the National Health Service Corps to pay for college and medical training for individuals of color who commit to serving in high-need communities.

5.12 The Office of the Attorney General, through the Division of Community Affairs, should develop pre- and post-licensure education for New Jersey’s health professions.

5.12.1 Through accreditation mechanisms, legislative mandate or voluntary action, ensure curricular improvement at New Jersey’s health professional schools to include comprehensive, mandatory implicit bias and anti-racism training at health care professional schools statewide.

5.12.2 Through regulation, institute continuing education requirements for licensed health care professionals on implicit bias and anti-racism, including mentored time learning about communities of color, using national best practices, as part of the credentialing and re-credentialing processes.

5.13 The Department of Human Services and Department of Health should support a representative, effective community workforce serving pregnant individuals and babies.

5.13.1 The Department of Human Services should continue to improve Medicaid reimbursement for all obstetric providers to reach 100 percent of the physician rate, and require MCOs to reimburse for, and include all members of a perinatal care team (including doulas) in their networks.

5.13.2 The Department of Human Services should carefully review the results of the Center for Medicare and Medicaid Services Strong Start Evaluation for potential activities to expand access for Medicaid beneficiaries to the midwifery model of care.

5.13.3 The Department of Human Services should clarify that certified midwives are eligible to enroll as providers in the state Medicaid program.

5.13.4 The Department of Health and Department of Human Services should continue to support the capacity and workforce development of doulas to serve pregnant individuals during the prenatal and postpartum period.

5.13.5 The Department of Human Services and Department of Health should support an organization to provide training, technical support for reimbursement, leadership development, and advocacy for community-based doulas to promote access to and sustainability of doula services.

5.13.6 In order to promote the sustainability of the community health worker and doula workforce, the State of New Jersey should facilitate enrollment and billing with the Medicaid program (see recommendation 7.16).

5.14 The Department of Human Services should continue to ensure comprehensive access to health care for women through the Medicaid program by seeking funding and federal approval to expand Medicaid to 365 Days postpartum.

5.15 Assess models for value-based care to ensure they do not penalize practices that disproportionately serve communities with high social needs.

5.15.1 The Department of Human Services and the Department of Banking and Insurance should ensure that equity is supported in payment models.

5.16 Through the Nurture NJ Interdepartmental Working Group, leading state agencies should conduct a thorough, community-led policy analysis to consider co-location of community-based government assets.

5.16.1 Nurture NJ Interdepartmental Working Group members should work with
VIII. THE NURTURE NJ STRATEGIC PLAN RECOMMENDATIONS

community members to assess whether co-locating services such as Family Support Centers, One Stop Centers for Unemployment, WIC agencies, would streamline and improve access for families. Understanding the potential stigma associated with such services, the Working Group should also shift application processes online to the greatest extent possible.

5.16.2 Nurture NJ Interdepartmental Working Group members should also work with the Economic Development Authority, Department of Treasury and other relevant agencies to identify financed properties with commercial space or potential sites for co-location to facilitate access to services.

5.17 Craft and disseminate an “advised procedure” for how county prosecutors work with pregnant women, including the possibility of delaying sentencing for the period of pregnancy and three months postpartum.

5.17.1 State leaders, including the Governor, Attorney General, Department of Corrections and Department of Health, Department of Corrections should collaborate on the development of the new procedures and practices.

5.17.2 Public and private sector stakeholders should develop secure maternity care homes to house women to avoid traumatic childbirth experiences and to allow the mother and baby dyad to remain intact.

5.18 The Department of Health should work with state leaders to provide breastfeeding support in communities for both mothers, fathers and other partners.

5.18.1 Provide support for Baby Cafés, an international model gaining traction that provides resources to existing community locations (churches, WIC offices) to facilitate sessions with mothers run by qualified IBCLC lactation consultants, CLCs, CLSs, CLEs, and other approved breastfeeding counselors.

5.18.2 Fund breastfeeding peer counselor training to increase the availability of community-based support for women who breastfeed.

5.19 The Department of Children and Families should continue to expand and universally offer evidence-based home visiting programs with focus on those models proven to reduce maternal and infant mortality.

5.19.1 State leaders should ensure stable financing for New Jersey’s Home Visitation Initiative by leveraging both state and federal funds.

5.20 The Department of Education should continue to prioritize access to high quality childcare through Early Head Start.

5.20.1 The Department of Education should prioritize and perform outreach to ensure full utilization of early Head Start transition slots in areas of greatest need.

5.20.2 State departments and agencies should encourage the Office of Head Start in the US Department of Health and Human Services to increase infant and toddler childcare slots in New Jersey to expand childcare capacity.

5.21 State leaders should increase the state contribution to the childcare block grant to ensure that, at a minimum, all families within the income limits are able to receive care.

5.21.1 State leaders should leverage additional state funding to invest in capital improvements to allow for expansion of infant care capacity in the state.

5.22 The New Jersey Economic Development Authority should provide targeted support to childcare providers as a critical industry in the state.

5.22.1 The Economic Development Authority should create a targeted program to increase childcare capacity and support Early Head Start programs, with a focus on “childcare deserts” in the state.

5.22.2 The Economic Development Authority
should support shared business services models to support smaller childcare providers and Early Head Start Programs.

**Recommendation 5: Which stakeholders should be involved and how?**

Each recommendation identifies a lead department or agency, but the recommendation should be implemented in close collaboration with all other relevant departments or agencies, and community and grassroots organizations and informed by analysis and data supported by academic partners.

**Recommendation 5: How might this be funded?**

Some policy changes can be achieved through existing or re-purposed state funds. Other, larger initiatives may be supported by federal funding streams made available through the Centers for Disease Control and Prevention, the Health Resources and Services Administration and other sources.

**Recommendation 5: How should progress be measured?**

Developing process indicators should be based on these intended outcomes:

- Implementation of all evidence-based policies and practices that support the achievement of healthy women, quality and respectful care, and supportive community contexts for health
- Measurable improvement in the health of all women, particularly those residing in the communities with the highest maternal and infant morbidity and mortality

6. Generate and disseminate information for improved decision-making

Data is critical for good public health decision-making. Making data available and accessible to all stakeholders, including communities, is also essential for accountability. In implementing the Strategic Plan, the state has a strong start already—the New Jersey Department of Health has made significant progress in the analysis of state data, a broad stakeholder-informed needs assessment, and a review of national- and state-level evidence on the preventability of the majority of pregnancy-associated and pregnancy-related deaths, injuries, and elimination of perinatal disparities. This data guided the development of quality improvement goals, targets, and indicators. Work plans for each indicator were created and implementation has already commenced. The private sector could assist by investing more in state-specific analysis, and state academic leaders could make additional contributions to the scientific literature with close examinations of the New Jersey experience in maternal and infant health.

**Recommendations:**

6.1 Publish a biannual journal or magazine for maternal and infant health in New Jersey through the proposed Center for Maternal and Infant Health (recommendation 3.3) and an academic partner.

6.1.1 This major research periodical should be community-friendly, scientifically rigorous, and provide a forum for publicizing maternal and infant data and democratizing information by making it more accessible to all stakeholders.

6.1.2 This effort should be coordinated with, or at minimum build off, the efforts of the New Jersey Integrated Population Health Data Project based at Rutgers University.

6.1.3 Journal leaders should work with all state agencies to make their data accessible to researchers and sister agencies; this can be facilitated by the Department of Health, which has existing agreements for data use and data sharing.

6.1.4 Journal leadership should incentivize New Jersey researchers and graduate students to conduct research and analyses on priority topics.
8.2 Improve the process for quality and usage of state maternal mortality data through significant reinvestment in the Maternal Mortality Review Committee (MMRC).

6.2.1 The MMRC should take full advantage of its new authority to subpoena records, receive assistance from any state or local government entity, establish mandatory and voluntary reporting processes, and transfer of the MMRIA system to the server at the Centers for Disease Control and Prevention.

6.2.2 The Department of Health should leverage federal funding from the Centers for Disease Control and Prevention and from the Health Resources and Services Administration to call more frequent meetings of the MMRC, expand staff, and conduct more thorough investigations.

6.2.3 The MMRC should engage consumers to consider community factors and address the social determinants of health.

6.2.4 The MMRC should include the Division of Consumer Affairs; the boards that license, regulate, and enforce standards among the professions should be engaged in this work, along with the staff and attorneys who are expert in related regulations.

6.2.5 The Department of Health should train MMRC members on health equity, implicit bias, anti-racism and other emerging priorities.

6.2.6 The Office of Minority and Multicultural Health should coordinate document translation into the five commonly spoken languages in the state and apply health literacy and cultural competency principals to publicly released data materials, such as dashboards and reports.

6.2.7 The Department of Health should develop infrastructure for real-time data processing and linkage of electronic birth certificate, death certificate, and hospital discharge data to produce an analytic dataset, and share findings on key maternal health care indicators via a restricted-access portal to subscribed birthing hospitals.

6.2.8 The Department of Health should invest in stylistic revisions of its data interface, improve data visualizations, and expand language accessibility over time to provide a more intuitive and understandable experience for the diversity of end-users, including consumers, providers, decisionmakers, and researchers.

6.2.9 The Department of Health should enhance the Report Card of Hospital Maternity Care for the purposes of quality improvement by contextualizing SMM findings against other state data sources, like the Pregnancy Risk Assessment Monitoring System (PRAMS) survey, and aligning definitions and measures with existing reporting tools such as Leapfrog, focusing state resources on previously unavailable data.

6.3 The Department of Human Services and Department of Health should work together to improve accountability to women of color through data transparency.

6.3.1 The Department of Health should prioritize the planned overhaul of the state data infrastructure to provide access to more timely and granular maternal and infant mortality and morbidity data, with priority given to improved user navigability, and ease of analysis of maternal health by multi-health factors.

6.3.2 The Department of Health and Department of Human Services should improve centralized data on maternal and infant health and service access irrespective of payer. Completely link the Medicaid claims data with the Department of Health
vital records data in order to gain a more complete picture of the inputs affecting poor outcomes in health care settings.

6.3.3 The Department of Health should partner with the new Center for Maternal and Infant Health (recommendation 3.3) on a centralized program for health statistics that can tabulate, analyze, and disseminate health and multisector data to support problem assessment and improved outcomes, including the release of data in a manner that support quality improvement initiatives.

6.4 The Department of Health, in collaboration with academic partners, should develop a data-based approach to racial inequity surveillance able to identify health and social disparities and focus approaches.

6.4.1 Work with data experts to link data disaggregated by race/ethnicity across departments and agencies (e.g. historical redlining; family separations; maternal and infant health issues) to inform a multi-faceted approach.

6.4.2 Conduct research to monitor and evaluate changes in ability to generate equitable outcomes that are sustainable and inclusive, evidenced in policy change and health impacts for populations of color in New Jersey.

6.4.3 Monitor and evaluate the progress of the place-based models; ensure the evaluation teams are racially and ethnically diverse and community partnered.

6.5 The academic community in New Jersey should commit to conducting research to monitor and evaluate changes in community engagement, perceptions (mindsets, narrative change), changes in community-supportive policy, and resultant health impacts in populations of color in New Jersey.

6.5.1 Use existing vehicles for research, such as a PhD program, as well as P.L. 2019, c.497, which requires the New Jersey Office on Minority and Multicultural Health to study racial disparities on sexual and reproductive health of Black women.

Recommendation 6: Which stakeholders should be involved and how?

The Center for Maternal and Infant Health (recommendation 3.3) can take a major leadership role through the generation of new data and rigorous analysis. Some of the core work, however, will need to be achieved through close collaboration among departments and agencies and breaking down the barriers to data sharing and integration.

Recommendation 5: How might this be funded?

Increasing the utility of existing data largely falls under the work of the Department of Health’s major grant from the US Health Resources and Services Administration. Given the ability of data improvements to garner useful and innovative findings, such initiatives should attract the funding interest of private philanthropy and business inside the state and across the country.

Recommendation 6: How should progress be measured?

Developing process indicators should be based on these intended outcomes:

- Improved and integrated data systems that include health and social indicators
- Ready access to data and information to communities
- Increased use of data for accountability
- Better and consistent data to document women’s voices and experiences in care
- Regular research to monitor and evaluate the impacts of the Nurture NJ Strategic Plan actions
7. Change institutional structures to accommodate innovation

The infrastructure for maternal and infant health is not as resilient, durable or amenable to innovation as it should be. The COVID-19 pandemic demonstrated the need for these systems to be more adaptable to address emergent issues. For example, while New Jersey has made great strides in improving access to treatment for opioid use disorder, women still face barriers of transportation, cost, and consistency in prescribing based on clinician, which worsened in the pandemic. Ensuring that a woman has access to comprehensive medical and psychosocial treatment before considering a pregnancy is critical. Additionally, existing structures may not be set up to accommodate changes required to achieve racial equity in health or to support community engagement. Finally, staffing may be insufficient to effectively conduct recommended activities. Restructuring the agencies serving mothers and children in New Jersey will achieve the durable resilience that decreases vulnerability; these structural changes will ensure sustainability. These recommendations represent a re-orientation of the service sector to prioritize the needs of pregnant individuals and their infants.

Recommendations:

7.1 Staff of key state departments and agencies should become familiar with Nurture NJ Ecosystem in order to use it to guide and prioritize all program development, implementation, monitoring, and evaluation.

7.1.1 State departments and agencies participating in the Nurture NJ Interdepartmental Working Group should review all proposed and reauthorized programs, grants, funding announcements and policies impacting maternal and infant health against the Ecosystem Map to ensure appropriate prioritization and use of resources to guide building the Ecosystem required to achieve sustained health and racial equity. Give priority to those that contribute to building the ecosystem vision.

7.1.2 As part of the Business Roundtable for Nurture NJ, businesses should agree to incorporate the use of the Nurture NJ Ecosystem into their community engagement strategies, corporate community giving, and other programs.

7.2 The Department of Human Services and Department of Health should ensure access to affordable, equitable integrated behavioral health care at all times over the life course.

7.2.1 Scale successful models to integrate physical and behavioral health by enabling a supportive reimbursement and regulatory infrastructure to promote care integration. For example, the New Jersey Behavioral Health Integration Project, initially funded by the Nicholson Foundation, should be expanded through removal of any regulatory and reimbursement barriers hindering statewide adoption.

7.2.2 Scale successful models to provide behavioral health care to pregnant individuals and their infants, including:

- The Cooper Center for Healing Perinatal Substance Use Disorder Program, a group prenatal program for pregnant women with substance use disorders.
- The Rutgers RWJMS Project ECHO for Neonatal Abstinence Syndrome and Substance Exposed Infants, a telementoring project that works with interdisciplinary teams at hospitals that include neonatologists, obstetricians, labor and delivery nurses, and others seeking to better address NAS/SEI in their practices. (Telementoring is the remote provision of guidance from one professional to another.)
- Perinatal Mood and Anxiety Disorders Center, which provides maternal mental health support and services to the perinatal community using evidence-based psychotherapy.
- In-Home Recovery Program (IHRP), a multipronged, two-generation, trauma-
informed initiative to support parental substance use disorder (SUD) recovery, healthy attachment, family stability, and positive child development.

7.2.3 Revisit the current resources program design dedicated to the screening and treatment of Fetal Alcohol Spectrum Disorder (FASD) and expand this program to more broadly meet the needs of all infants exposed to any addictive substances.

7.2.4 Expand tobacco prevention and cessation efforts.

7.3 **Provide access to the full range of family planning services, including all safe and effective contraception methods and abortion care, through stronger provider relationships.**

7.3.1 Through Department of Health grantees and Department of Human Services Medicaid MCOs, work to integrate family planning providers more seamlessly to the rest of the maternal health care system.

7.3.2 State officials should seek additional funding community-based entities to address “contraceptive deserts” in the state, where women lack reasonable access to all forms of birth control.

7.3.3 The Department of Health and the Department of Human Services should encourage their networks, grantees and contractors to disseminate the New Jersey Reproductive Health Access Project’s [Provider Access Commitment Toolkit](#) to ensure that providers are offering the full range of contraceptive choices.

7.3.4 The Department of Health should continue to implement the My Life, My Plan law, to facilitate long-term reproductive life planning for individuals of childbearing age and their families through dissemination of interactive online educational materials that promote physical and mental health and tools to assist women with developing a reproductive life plan.

7.3.5 The Governor, in partnership with the State Legislature, should codify Roe v. Wade to ensure a woman’s right to choose in New Jersey.

7.4 **Strengthen and expand practice of the midwifery model of care in New Jersey by building a more robust workforce pipeline.**

7.4.1 The Department of Health should work with state leaders to provide incentives to hospitals to serve as clinical sites for more student midwives and reimburse midwifery preceptors in hospital for training time.

7.4.2 Engage New Jersey’s medical schools to implement interprofessional educational programs co-led by a midwife and OB-GYN physician team, like those in the [Maternity Care Education and Practice Redesign](#), to encourage interprofessional collaboration.

7.4.3 One or more of the New Jersey state colleges should develop a midwifery program, not housed in a School of Nursing, modeled after the Jefferson College of Health Professions Midwifery Program, for individuals prepared at the bachelor’s level who are not nurses and want to become midwives.

7.4.4 Diversify midwifery faculty through improved recruitment and removal of the requirement for a Master’s in Nursing to become faculty in midwife training programs.

7.4.5 Require midwifery graduates who have received state funding for their education to practice in high need areas in New Jersey for two years after the completion of their training.

7.5 **All 49 birthing hospitals and the birthing facilities in New Jersey should meet or attain rates lower than the national target for NTSV surgical/cesarean births.**

7.5.1 Given that only 16 percent of New Jersey hospitals met the national target in 2016, hospitals should institute new comprehensive informed consent processes for all maternity patients. Before any primary or repeat surgical/cesarean birth,
VIII. THE NURTURE NJ STRATEGIC PLAN RECOMMENDATIONS

patients should understand the short- and long-term risks of surgical births and the benefits of spontaneous labor for both parents and newborns, and before induction of labor, the patient should be aware of their cervical Bishop score and the medical and non-medical indications for induction.

7.5.2 The Department of Health and the Department of Human Services should examine more aggressive action to ensure improvement, including limitations on participation in provider networks for hospitals who do not meet targets.

7.6 The Department of Health and the Department of Human Services should expand the use and improve the utility of the Perinatal Risk Assessment.

7.6.1 The Department of Human Services, in coordination with the MCOs, should continue to improve the Perinatal Risk Assessment (PRA) through a collaborative process with community members and providers, including exploration of increased utilization through the hospital admission process.

7.6.2 The Department of Health should utilize the Healthy Women Healthy Families Community Health Worker Workforce to redesign the Community Health Screening Tool for community-based providers to complement the PRA (as recommended by the State Health Improvement Plan 2020).

7.6.3 The Department of Health and Department of Human Services should continue to partner to integrate the Perinatal Risk Assessment into the New Jersey Health Information Network to enhance interoperability along the care continuum.

7.7 New Jersey hospitals should institute systemic changes to accommodate doulas and safe birth practices.

7.7.1 The Department of Health should partner with the New Jersey Hospital Association, Maternal and Child Health Consortia, and hospital leadership to ensure that policies and procedures are instituted to integrate doula support and evidence-based birth practices in accordance with Lamaze 6 care practices as standard practice of care at all New Jersey hospitals.

7.8 To promote access to comprehensive, continuous, high-quality maternal care services, the state should design tools to promote shared decision-making with patients.

7.8.1 To enhance the ability of pregnant individuals to share in the decision-making for their care, the Department of Health in partnership with other relevant departments or agencies should launch a public education campaign and utilize other communication strategies to increase public awareness of prenatal and post-birth warning signs.

7.8.2 The Department of Health should continue to implement a pilot program of shared decision-making tools for labor and delivery hospitals as mandated by P.L. 2019, CHAPTER 133, and work with the Department of Human Services to integrate these practices into Managed Care Organization requirements over the long term.

7.9 The New Jersey Perinatal Quality Collaborative (NJPQC), the organization responsible for improving the quality of perinatal care throughout the state, should lead implementation of prenatal and postpartum Alliance for Innovation in Maternal Health (AIM) bundles across the state.

7.9.1 Applying CDC funding and NJDOH designation, the NJPQC should continue to offer evidence-informed didactic learning sessions, uptake of select AIM on Maternal Health Patient Safety Bundles, and opportunities for peer-to-peer learning regarding improvement strategies and best practices.

7.9.2 All 49 birthing hospitals should be required to implement the AIM Obstetric Hemorrhage Bundle and the AIM
Hypertension Bundles, including best practice readiness, recognition, response and reporting tactics.

7.9.3 The NJPQC should require the implementation of Postpartum AIM bundles to provide seamless integration between hospital and community care.

7.10 All persons who give birth in New Jersey should be cared for at a birthing hospital or facility that provides the appropriate level of maternal care by the end of 2022.

7.10.1 The New Jersey Department of Health, in partnership with the New Jersey Perinatal Quality Collaborative, should conduct the CDC LOCATe survey of birthing hospitals to establish a baseline. Based on that pending data and by mid-2022, New Jersey should establish maternal level of care designation for each birthing hospital and birthing facility based on national criteria.

7.11 The Department of Health and Department of Human Services, and other relevant departments or agencies should collaborate on a plan to develop community-based providers, including birthing centers, in underserved areas.

7.11.1 Evaluate why many birthing centers in New Jersey elect not to participate with insurance plans or the Medicaid program, including reimbursement rates and/or lack of facility fees, and seek policy changes to address these barriers.

7.11.2 The Departments should work with community members, midwives, the business community, and other allies to develop a plan for out-of-hospital births in new birthing centers that includes achievement of an appropriate case mix by insurance type in the existing birthing centers in New Jersey, including Medicaid.

7.11.3 The Departments should explore opportunities for OBGYN practices, birthing centers that participate in Medicaid, and similar practices in specific communities to participate in state incentive programs to help facilitate the start-up of maternal and infant health centers serving low-income women.

7.12 The Department of Health should work with New Jersey health care providers to increase accountability on racial equity initiatives.

7.12.1 The Department of Health should require that, by 2022, all maternal mortality and morbidity related quality improvement initiatives in health care provider settings, including site-specific planning, surveillance, and ongoing reporting activities for maternal mortality and morbidity, must consider the demographic diversity of New Jersey’s mothers, including race, ethnicity and socioeconomic status.

7.13 State leaders should assess the benefit of regulatory relief to underserved communities and providers.

7.13.1 The Department of Health, Department of Human Services, and other relevant agencies should review regulatory waivers and policy changes issued in response to COVID-19 and determine which of these should and could remain in place after the expiration of the public health emergency to continue supporting patients, access to care, and affordability. This review should include the potential of expanded telehealth to increase access to maternal and infant health care.

7.13.2 The Department of Human Services and Department of Banking and Insurance should review emergency changes which have been made to the administration of public and commercial health care coverage that could have longer-term implications to improve quality and access of care, and determine whether any of the emergency changes should be made permanent.

7.14 State leaders should increase funding for prenatal and reproductive health care for undocumented women.

7.14.1 Understanding that funds from the New
New Jersey Supplemental Prenatal Care program frequently fall short, state leaders should provide for twelve months of funding for prenatal care, including access to the full range of reproductive health services such as contraceptive care for undocumented women into New Jersey’s existing charity care program, and directly link it to care provided at each setting.

**7.15 The Department of Health and Department of Human Services should continue to strengthen the community health worker workforce.**

7.15.1 Through the Healthy Women, Healthy Families program and the newly founded Community Health Worker Institute, the Department of Health should continue to partner with community health workers to expand access to the full range of economic, social, and behavioral health supports they provide.

7.15.2 The Department of Human Services should provide sustainable funding for community health worker services through an 1115 waiver.

**7.16 State departments and agencies and health care providers should incorporate community-based perinatal health workers in an interdisciplinary care approach to support pregnant women and caregivers into the postnatal period.**

7.16.1 In partnership with the Department of Health and the Department of Children and Families, the Department of Human Services should require MCOs to incorporate perinatal health workers into care networks to enable support for families during multiple phases, including pregnancy, labor, delivery, and the postpartum period; this should include collaboration among the home visiting services, doulas and other community health workers.

7.16.2 The New Jersey chapters of ACOG and ACNM should continue to advance best practices in inter-professional education to promote collaboration and team-based care.

**7.17 Continue to expand and strengthen Fatherhood Engagement Initiatives.**

7.17.1 The Department of Children and Families and the Department of Health should conduct community-led assessment of existing fatherhood engagement programs to glean best practices.

7.17.2 The Department of Children and Families and the Department of Health should require grantees of fatherhood programs to include fathers in the leadership of the initiatives.

7.17.3 The Department of Children and Families and the Department of Health should coordinate and collaborate with Head Start programs’ Fatherhood Engagement programs.

**7.18 Continue to improve and transform Central Intake.**

7.18.1 The Department for Children and Families and the Department of Health should work together to streamline and upgrade Central Intake to improve access to services, including expanded hours to accommodate family schedules, and changing the program’s name to increase approachability.

7.18.2 Building from the “Calling all Sectors” project, agencies should continue to make Central Intake multisectoral in each community. Central Intake grantees should expand training for staff on the available programs and facilitating stronger partnerships with local community programs providing services to families, ensuring that each grantee facilitates access to other vital services, operating as a “Nurture NJ Navigator.”

7.18.3 The Department of Health and Department of Human Services should create formal linkages between Central Intake programs and Medicaid MCOs, who are required to, and paid for, creating linkages to services for their members in communities.
VIII. THE NURTURE NJ STRATEGIC PLAN RECOMMENDATIONS

8. Address the social determinants of health

As has been widely demonstrated through research and through the voices and lived experiences of women, determinants outside of health care are often more impactful on a woman’s health. While New Jersey has a higher average income and lower unemployment than the national averages, the state is challenged by extreme inequality across communities. A woman’s ability to access resources such as healthy food, transportation and safe housing impacts her ability maintain her health. In the Nurture NJ Ecosystem, every environment where women live, work, play, study, and seek help facilitates health. Lower income residents struggle to meet basic needs including housing, transportation, access to healthy foods, and higher education; and they experience higher interaction with the criminal justice system. Housing stability is a primary determinant of health and, unfortunately, New Jersey suffers from a lack of affordable homes for purchase or rent, which can leave women in dangerous housing situations, causing or exacerbating a host of health problems. For the many women in the state grappling with substance use disorder or mental health challenges, the lack of supportive housing compounds these issues. It must be noted, however, that addressing social determinants is necessary but insufficient by itself as a strategy to address racial disparities in maternal and infant morbidity and mortality. The added stressor of racism affects populations of color at all income levels, therefore social determinants must be addressed through an equity lens.

Recommendations:

8.1 Regional health hubs should work collaboratively with state departments and agencies, private funders, community and grassroots groups, and academic leaders on a landscape analysis in the state’s Black maternal and infant health hotspots. This work will inform the development of the place-based pilots described in Recommendation 3.1.

8.1.1 The Department of Health in partnership with all other relevant departments and agencies should conduct a mapping exercise to overlay geographic areas with high infant mortality, maternal mortality, and severe maternal morbidity to identify disproportionately impacted areas of the state.

8.1.2 The landscape analysis should include mapping of services to combat the primary social determinants of health, including but not limited to: transportation; healthy foods; affordable housing; access to full range of contraceptive choices; housing quality to identify service gaps and target potential interventions.
8.1.3 This work should leverage, and be interoperable with, the Departments of Health and Environmental Protection’s Healthy Community Planning Reports, which combine municipal-level public health and environmental data to help inform decision making that promotes a healthy and safe environment.

8.2 New Jersey’s stakeholders in the nutrition sector should expand partnerships to develop multisector efforts to address the specific issue of access to healthy foods.

8.2.1 Collaborate with public sector and private funders, and community and grassroots organizations to develop a food policy council in New Jersey to give local voice to food system issues. Statewide work should be modeled after the success of the Passaic County Food Policy Council (PCFPC), a group of stakeholders working to ensure that all Passaic County residents have access to safe, sufficient, nutritious, and affordable foods and to support a sustainable and economically viable local food system.

8.2.2 Work with community and grassroots organizations, private and public sectors, academia, and health to increase awareness and utilization of WIC, including debunking myths (e.g. WIC does not support or encourage breastfeeding), and educating social service providers on the process for applying and accessing different benefits (e.g. Farmers Markets).

8.2.3 Academia, community, and grassroots organizations should work with the New Jersey congressional delegation to develop policies and funding that increase SNAP benefits to reach food insecure families that do not currently meet SNAP income level requirements.
8.2.4 The business and private sector, the New Jersey Economic Development Authority, and the state leaders should work together to create new incentives for grocery store development in underserved communities.

8.3 Develop multisector efforts to address the specific issue of the impact of environmental factors on maternal and infant health.

8.3.1 The Department of Environmental Protection, the Economic Development Authority, and other federal, state, local and community group partners should continue to build on the success of the Community Collaborative Initiative. This Initiative can facilitate innovative and multiple-use solutions for cleaning up contaminated sites, increasing recreational open space, and other environmental health improvements.

8.3.2 The New Jersey Board of Public Utilities should institute equity evaluation for the implementation of the Energy Master Plan, which includes goals that can benefit the health of pregnant individuals and infants, including reducing its carbon pollution and expanding clean energy infrastructure.

8.4 Develop multisector efforts to address the specific issue of transportation access for women.

8.4.1 State leaders, including the Department of Transportation, New Jersey Transit and the Economic Development Authority, should work to achieve multisectoral pooling of financial resources to provide funding for transportation; work with local government to improve infrastructure in transportation-poor townships and cities.

8.4.2 The New Jersey Economic Development Authority should help to increase partnership with businesses and private funders to build upon established Lyft, Uber, and other corporate initiatives to provide transportation to doctors’ appointments, grocery shopping and other services for pregnant individuals and infants.

8.4.3 Service providers should work with government agencies on fair, transparent solutions to the anti-kickback rules that prevent providers from advertising free and reduced transportation or offering such services to new patients.

8.4.4 The Department of Transportation should work to secure federal funding to increase transportation efforts (buses, bike shares, etc.) to transportation and infrastructure-poor towns.

8.4.5 The Department of Transportation should accelerate adoption and implementation of Complete Streets policies in localities with a focus on health equity.

8.5 New Jersey’s housing developers, funders, advocates and stakeholders should develop multisector efforts to increase the availability of quality, affordable housing for pregnant individuals and women with young children.

8.5.1 Using the landscape assessment developed under Recommendation 8.1, overlay data on housing quality and safety in partnership with the Department of Environmental Protection’s Lead Exposure Mapping Project, expected to be available in 2021, to identify targets for intervention.

8.5.2 The Department of Community Affairs should continue to work with community organizations to evaluate and expand Housing First programs across the state, which is a nationwide best practice.

8.5.3 The Department of Community Affairs should partner with local governments and community service and grassroots organizations to ensure that units are developed and equitably allocated to pregnant individuals and families with young children.

8.5.4 The Department of Community Affairs, state and local government leaders, community-based housing advocates and private sector leaders should establish a centralized mechanism for quantifying and
VIII. THE NURTURE NJ STRATEGIC PLAN RECOMMENDATIONS

8.5.5 The Housing and Mortgage Finance Agency should continue to expand its Housing Resource Center website to include information on all affordable housing units, including those in inclusionary development, and serve as a true one-stop for finding affordable housing.

8.5.6 The Housing and Mortgage Finance Agency should continue its work with the Office of the Attorney General to end discriminatory practices that often lead to the illegal denial of housing to parents with young children or housing assistance.

8.6 Develop multisector efforts to address the specific issue of women impacted by the criminal justice system.

8.6.1 The Department of Corrections and County Jails should assess costs for expanding its current family reunifications and parenting programs to include the provision of pregnancy and childbirth education for all incarcerated parents and seek public-private partnerships as necessary.

8.6.2 The Department of Corrections should examine expansion of partnerships with community and grassroots organizations, academia, and health care providers to ensure counseling and treatment for all incarcerated parents with substance use disorders, mental health conditions, and chronic conditions.

8.6.3 The Department of Corrections should develop and provide training for correctional officers and medical personnel to ensure that incarcerated pregnant women receive care that promotes their health and safety.

8.6.4 Community groups should provide reentry assistance, including access to social services, that will ensure the holistic health of parents and their children.

Recommendation 8: Which stakeholders should be involved and how?

These recommendations identify stakeholders from a leading sector; the Nurture NJ Coordinator, in partnership with the Center for Maternal and Infant Health (recommendation 3.3), should solicit applicants and/or nominations for named partners to Nurture NJ to lead these initiatives on behalf of their organization and colleagues in the sector.

Recommendation 8: How might this be funded?

These recommendations require contributions in capital from the given sector identified to lead – either through human capital, funding, or collaborative energy.

Recommendation 8: How should progress be measured?

Developing process indicators should be based on these intended outcomes:

- Consistent access for all women and families to the resources and services they need to attain and maintain health

9. Improve the quality of care and service delivery to individuals

While a high-functioning health care system is only one part of a supportive ecosystem for maternal and infant health care, it is a critically essential part. Like many states around the country, the health care system is consolidating in New Jersey, centralizing power and control amongst fewer integrated health networks. Several community organizers in New Jersey expressed the need for the leaders of these health care providers to make an actionable public statement around their commitment to solving the problem of racial disparity in maternal and infant health. In addition, certain elements of women’s care in the state are particularly ripe for improvement—including care for women before
they get pregnant; increasing utilization of evidence-based care for pregnancy and labor/delivery; and more robust community-based supports for the postpartum period. In order to improve care for infants, the New Jersey Department of Health is working toward a goal of one Baby-Friendly hospital in all areas with high infant mortality, as well as proactive integration of a partner or father in post-delivery care. Best practices in postpartum care also center around partner involvement in the earliest days of a child’s life, which is related to positive outcomes including improved weight gain in pre-term infants, parental confidence in providing care, and improved breastfeeding rates.

**Recommendations:**

**9.1 Ensure quality and respectful preconception care, interconception care and women’s wellness care is available, accessible and affordable for all women, and that it conforms to CDC Guidelines.**

9.1.1 New Jersey health care providers should, as a part of primary care visits, provide risk assessment, educational and health promotion counseling to all women of childbearing age to reduce reproductive risks and improve pregnancy outcomes.

9.1.2 Commercial insurers and MCOs should partner with providers to increase the number of women who receive interventions as follow-up to preconception or wellness risk screening, focusing on high priority evidence-based interventions.

9.1.3 Academic researchers in the state should examine factors that influence women’s use of preventive services and disseminate findings to support increased participation in ACA preventive care.

9.1.4 The Department of Human Services should examine payment mechanisms for women’s preventive health and wellness for ability to address health risks that might impact birth outcomes, including bonus payments for Medicaid MCOs that hit targets of preventive service utilization among women of child-bearing age.

**9.2 Secure a Commitment to Action from the CEOs of all health care systems and leadership of health professional societies in New Jersey, which should include specific, measurable action steps to reduce maternal and infant mortality and morbidity through the provision of equitable, evidence-based pre- and post-natal care in New Jersey. The commitment should state that they will:**

9.2.1 Avert preventable death and disability generated in hospital and outpatient settings, including statewide targets and recommended quality improvement activities, referred to in Recommendation 7.

9.2.2 Review quarterly reports of the MMRC and incorporate actionable findings.

9.2.3 Count and track pregnancy-related deaths and severe maternal morbidity at least twice per year based on a standardized hospital-level review process in accordance with national recommendations.

9.2.4 Use data to develop site-specific plans for actions needed to reduce maternal mortality and morbidity at their facility. These action plans will be used to facilitate shared learning and help guide ongoing adjustments.

9.2.5 Name a Nurture NJ point person at each facility.

9.2.6 Leverage state policy and resources to incentivize existing health systems to hire from the community, create services in the community, and recruit and support young talent through community-based training programs.

**9.3 Increase access to Centering Pregnancy.**

9.3.1 The Department of Human Services should work with state officials to increase the reimbursement for Centering Pregnancy to incentivize more providers to take up the model.

9.3.2 Private sector supporters should consider providing additional funding to allow more
urban centers to develop the space and support necessary to implement the model, as well as develop models that are based on an equity frame.

9.4 **The Department of Human Services should ensure access to comprehensive evidence-based childbirth education for all Medicaid beneficiaries as standard practice of prenatal care.**

9.4.1 The Department of Human Services should partner with MCOs to ensure this standard of care is implemented.

9.5 **Increase the number of Baby-Friendly designated hospitals in New Jersey to at least one hospital in all infant mortality hotspot areas.**

9.5.1 State departments and agencies (the Department of Health or the Economic Development Authority) could provide small grants, or the Department of Human Services could provide one-time financial incentives through Medicaid, to cover the technical support needed to achieve designation.

9.6 **Normalize active engagement of fathers and other partners during prenatal care, labor and delivery and postpartum care.**

9.6.1 The New Jersey Hospital Association and relevant stakeholders should update best practices for pre-term birth to include proactive the engagement of fathers and other primary caregivers, including skin-to-skin contact.

9.7 **The Department of Banking and Insurance should continue outreach to pregnant women.**

9.7.1 The Department of Banking and Insurance should ensure proactive outreach to relevant communities to notify them that as of February 1, 2021, pregnancy will be a qualifying event to enroll in coverage through the state-based marketplace outside of annual enrollment periods.

9.8 **Ensure all parents receive community-based peer support for postpartum health, breastfeeding and social support.**

9.8.1 The New Jersey Perinatal Quality Consortium should disseminate these supports through the AIM Community Care Initiative as a model.

9.9 **Health care providers, social service providers and health insurers should promote alternative models of early childhood care to expand care for the infant.**

9.9.1 Providers should include after hours and weekend appointments for well-child visits to allow multiple caretakers (mothers, fathers, grandparents) to attend and gain key information.

---

**Recommendation 9: Which stakeholders should be involved and how?**

Hospital leadership and staff; leadership and staff of Federally Qualified Health Centers; OB/GYNs, maternal/fetal medicine specialists, nurses, midwives, doulas, primary care physicians, family planning providers.

**Recommendation 9: How might this be funded?**

Special initiatives could be funded through private sector dollars, but much of this work can be achieved through targeted re-purposing of existing reimbursement models through both private and public payers.

**Recommendation 9: How should progress be measured?**

Developing process indicators should be based on these intended outcomes:

- All women will receive respectful, human-centered, equitable and evidence-based care and services as needed during all phases of their life course
“The commitment to protect the mothers and babies of New Jersey has not wavered. In the last few months, our nation has seen what New Jersey is capable of when we prioritize the health of the most vulnerable. We may be in the middle of one of the greatest challenges of our time but we have never been more certain that together we will continue to build a village of support for our mothers and make New Jersey the safest and most equitable place in the nation to deliver a baby.”

- First Lady of New Jersey Tammy Murphy and Assistant Commissioner for the Department of Health Lisa Asare
IX. Implementation and Evaluation of the Nurture NJ Strategic Plan

The Nurture NJ Strategic Plan was co-developed with a diverse group of stakeholders, from state government and business leaders to community members. Their enthusiasm for transformative change was palpable in every interaction. As New Jersey moves into an implementation phase, an important mechanism for sustaining the enthusiasm is by clearly defining, and regularly assessing, The Nurture NJ Strategic Plan goals and aspirations.

The Strategy Cascade

In their seminal work, Playing to Win: How Strategy Really Works, discussed in the Harvard Business Review, December 18, 2014, Lafley and Martin define strategy as a coordinated set of five decision points that need to be traversed to achieve the desired outcome. These decision points are summarized here and expanded on in the context of Nurture NJ. The decisions to be made for a winning strategy include:

1. Defining the aspiration: developing a robust vision that is distinguishable from the status quo and that increases the likelihood of achieving goals.
2. Defining the target playing field: carving a defined area of influence where the strategy can be implemented successfully.
3. Defining strategies that are different from the status quo to win at achieving the aspirations.
4. Defining the core capabilities necessary to succeed; and
5. Defining the management systems needed to achieve the aspirations. (Figure 6)

The Nurture NJ Strategic Plan begins this process by making choices in the first four legs of the cascade based on the science and expert, community and stakeholder knowledge. Here, these choices are summarized, and the baton is passed to each stakeholder to define the last leg of the cascade to make the plan a sustainable reality.

1. The Nurture NJ Aspiration. To achieve the outcomes sought by Nurture NJ, the context of life for New Jersey residents must be different than it is today. This Strategic Plan aspires to build a complete ecosystem that supports the health and well-being of mothers and infants and that nurtures them during critical times of their lives. This is in contrast to implementing discrete programs. The entire built ecosystem needs to exist in all of New Jersey, most urgently in areas with high maternal and infant morbidity and mortality. Additionally, mother/infant dyads will need at a minimum 1,090 days exposure to the built ecosystem to lay a foundation for a healthy pregnancy, safe birth, and early growth and development. This 1,090-day period includes:

   Figure 6
IX. IMPLEMENTATION AND EVALUATION OF THE NURTURE NJ STRATEGIC PLAN

- 3 months (90 days) preconception (https://www.womenshealth.gov/pregnancy/you-get-pregnant/preconception-health) to ensure optimum women’s health and well-being; and
- 1000 days for the infant and mother from conception to the infant’s second birthday. “The 1,000 days between the beginning of a woman’s pregnancy and her child’s 2nd birthday sets the foundation for all the days that follow…. The foundation for (the infant’s) lifelong health is built in this interval” (https://thousandoceans.org/why-1000-days/) This 1000 days also includes the 4th trimester (or 90 days post birth) to ensure maternal recovery and postpartum well-being. (https://newmomhealth.com/learn/ourwhy)

While the ecosystem presents an academic vision of what the context of health in communities should be to support safe childbirth, it is important to be able to visualize the outcomes from the standpoint of the mother, her infant, family and community. When the ecosystem is completely built, the following conditions should exist for every mother:

- All mothers will have stress-free access to effective, quality and respectful preventive, wellness, and reproductive health care at all times across their life course
- All women will receive the care, support and services they need commensurate to their need
- All children will be nurtured from conception in environments that always support and never inhibit their well-being
- All communities will support a culture of health
- All women will receive timely, effective, quality, safe, respectful, human-centered prenatal care
- All women will receive effective, quality, safe respectful, human-centered ancillary prenatal care services
- No woman will receive intervention not indicated by her health condition
- All providers and agencies will practice with a high level of equity capacity
- All women will receive effective, quality, safe labor and delivery care
- All women will receive effective, quality, safe breastfeeding support
- All communities will have a voice in and power to design systems and services, policies and rules that affect them
- All policies will be developed and implemented from an intersectional and equity frame
- Values-based pay will be commensurate with the level of population needs
- All babies will be born in Baby-Friendly hospitals
- All women will have the option to choose midwifery care
- Midwifery care will be available and fairly compensated
- Doula support will be available to all women who want it
- All communities will have breastfeeding support resources and will be breastfeeding-friendly
- All workplaces and employers will support women’s right to health and well-being
- All employers will support and promote workers’ engagement in civic activity
- All workplaces and schools will be breastfeeding-friendly
- The state of New Jersey will rank high on population levels of equity proficiency
- Media messages will support and promote a culture of equity and health
- Communities will have access to multiple opportunities to engage with maternal and infant health advocacy
- Communities will have ongoing access to accurate maternal and infant health knowledge
- Providers will be held accountable for quality of care, racism and disrespect
- All sectors will continue to collaborate and
IX. IMPLEMENTATION AND EVALUATION OF THE NURTURE NJ STRATEGIC PLAN

(2) Defining the playing field: carving a defined area of influence where the strategy can be implemented successfully. Nurture NJ is designed to create a context and culture of health that benefits the entire state. However, there are geographic and racial and ethnic communities that suffer higher maternal and infant morbidity and mortality than others, and there are rarely enough resources to work everywhere at once. As such, the plan recommends both a phased approach and one that uses the principles of “universal design”, adapted to program and intervention design. The phased plan focuses on building internal stakeholder skill and infrastructures statewide first, then focuses on scaling up programs and building ecosystems in high need areas. The rationale for this is twofold: (1) succeeding in the highest need areas will most dramatically lower the overall state rates, and (2) learning to build structures and contexts to accommodate the needs of the most vulnerable can also be instructive for other populations who may eventually find themselves in need (universal design).

(3) Defining strategies that are different from the status quo to win at achieving the aspirations. “How to win” requires defining what needs to be done to succeed where other paths have failed. It is clear that there must be a strong differentiation between the status quo and a new approach. In this case, the Nurture NJ Strategic Plan defines a structural change approach that targets high need communities. In its simplest form and from the standpoint of stakeholders, it means following one vision (building the Ecosystem), developing two capacities (racial equity capacity, community engagement and power-building capacity), and implementing three approaches (multisector engagement, community pilots and evidence-based, respectful, human-centered practice.) The addition of these approaches structured into the day to day activities of stakeholders makes the difference that allows for succeeding where other efforts have failed to achieve maternal and infant health, safety and equity.

(4) Defining the core capabilities that are necessary to succeed. In many ways, the choice of “where to focus” the Nurture NJ Strategic Plan is already defined by agency and stakeholder mandates, missions and funding. But this may be the source of fragmentation and unequal resources across the state, as cited by many stakeholders. Thus, defining where to focus and how to succeed at building a full ecosystem depend highly on the ability to achieve collective impact from multiple sectors working together toward the same vision. Thus, multisector engagement is a core capacity necessary for success...
of the plan. Additionally, any component of the strategy that is not implemented through a racial equity frame is bound to perpetuate existing disparities. Thus, racial equity and community power-building and engagement capacities must be developed statewide as a core competency to be successful in differentiating this plan from the status quo.

(5) **Defining the management systems needed.** This leg of the strategy cascade is at the intersection where this written Strategic Plan ends and the work that must be conducted within each stakeholder group begins—each must define and set up their internal management systems to accommodate these new approaches. The management systems might include providing space, opportunities and resources for training, developing accountability structures, identifying and reassigning roles, defining a lead coordinating role, etc. This is where each stakeholder organization must actively translate the Strategic Plan into an action plan within their realm of influence. Facilitated statewide convenings and workgroups to facilitate this planning process are expected to be promoted by the Office of the First Lady of New Jersey. Funders, the Academy and professional organizations like MCQC can also play a significant role in convening multisector and community work groups.

**Monitoring and Evaluating Outcomes**

At the beginning of plan development, the strategic planning team was assigned the goal of reducing maternal mortality by 50 percent over five years. Through the year-long process of stakeholder engagement, it became clear that the goal as initially written did not encompass the entirety of work needed to both reduce maternal mortality and morbidity and eliminate the deep inequities that exist. The development team determined that working towards any singular measure of success would not eliminate racial disparities in birth outcomes. As a result, both the reevaluated mission and this plan demonstrate a new way of thinking about transforming maternal care. While the original goal of reducing maternal mortality by 50 percent over five years remains, it has been rewritten—to sustainably reduce maternal mortality by 50 percent over five years, which reflects a new mindset beyond the development of interventions and programs that might temporarily achieve this outcome, to creating sustained structural changes to support this outcome permanently.

The revised and additional indicators are listed below:

a. Sustainably reduce maternal mortality by 50 percent over five years

b. Sustainably reduce the leading causes of maternal mortality by 50 percent over five years: cardiomyopathy, hemorrhage and infection/sepsis

c. Sustainably reduce severe maternal morbidity by 25 percent over five years

d. Sustainably eliminate racial disparities in birth outcomes

It must be noted that the data for maternal mortality is measured over a three-year aggregated period, so the evaluation data for the maternal mortality reduction indicator will be available January 2029. The Nurture NJ Coordinator will work with the Nurture NJ Interdepartmental Working Group and all stakeholders to develop any additional statewide goals. However, the true measures of success should be place-based and community driven. Stakeholders should refer to the list of potential interim measures and goals in Section III of the Companion Document to develop metrics that reflect each community’s unique needs. (Evaluation guidance and measures are detailed in The Nurture NJ Companion Document, Section III.)

**Long-term Outcomes.** It will likely take between ten to fifteen years to build a significant portion of the contextual environment that supports the achievement of Nurture NJ’s stated outcomes of equity in maternal and infant morbidity and mortality, and to ensure that New Jersey creates the safest place for all women to give birth. This estimate is based on assessments of time to implementation of noted evidence-based practices in health organizations. Implementation science cites a time horizon of up to twenty-five years for an organization to fully implement a significantly new practice. Blase and others cite the twenty-five years it took for handwashing to become standard practice after the science was generated. In the case of The Nurture NJ Strategic Plan, the advantage of having a statewide plan with support and participation of all
stakeholders may generate enough collective impact to accelerate the progress (Blase, Fixsen, Sims and Ward, 2014).

An Implementation action plan for the first year of the Strategic Plan is outlined in The Nurture NJ Year-One Implementation Playbook and Toolkit. The first year’s activities will ensure that progress is jumpstarted and visible by building and making operational an infrastructure that coordinates, guides and supports the transformative change needed across the state. The operational objectives for implementation of the Nurture NJ Strategic Plan are:

**Conclusion**

The Nurture NJ Strategic Plan is designed to evolve with the state’s stakeholders as they move along the pathway of engagement with equity and the action required to achieve it. A close read of the Nurture NJ Strategic Plan Companion Document: A Deeper Dive into Data and Key Concepts provides important context; review of the full Nurture NJ Strategic Plan gives the full range of action necessary for transformative change; and The Nurture NJ Year-One Implementation Playbook and Toolkit gives every stakeholder a place to start.

In implementing this plan, it may be easy to pick quick wins, pithy soundbites and easily measurable goals, but this plan was designed for long-term, sustained structural change. Tackling racial equity is not easy—but it is the state’s imperative. Women in New Jersey and their families require the state’s full commitment, stamina, and heart. Every single woman deserves to bring her children into the world with safety, security, and joy. Until that is within reach, all residents of the state of New Jersey have work to do—and now, some tools to do this work. The state now has a strategic plan, political will, broad-based public support, and the arc of history all working in its favor.

There is no denying that the crisis of inequities in maternal and infant health is complex, challenging, and demands a transformative response. The COVID-19 pandemic has added new challenges and obstacles, further complicating this crisis. Other challenges will arise along the way, creating competing demands which threaten to throw progress off course. The response needed to address these crises requires much from all of New Jersey, and success is dependent on mounting a collective statewide response. The momentum toward transformation has already commenced.

As stated by First Lady Tammy Murphy and Assistant Commissioner for the Department of Health Lisa Asare, “the commitment to protect the mothers and babies of New Jersey has not wavered. In the last few months, our nation has seen what New Jersey is capable of when we prioritize the health of the most vulnerable. We may be in the middle of one of the greatest challenges of our time but we have never been more certain that together we will continue to build a village of support for our mothers and make New Jersey the safest and most equitable place in the nation to deliver a baby.” (Star Ledger, Aug 9, 2020)
References


15. All data retrieved from New Jersey’s State Health Assessment database unless otherwise noted.


IX. IMPLEMENTATION AND EVALUATION OF THE NURTURE NJ STRATEGIC PLAN

recommendations, and false beliefs about biological differences between blacks and whites. *Proceedings of the National Academy of Sciences of the United States of America*, 113(16), 4296–4301. [https://doi.org/10.1073/pnas.1516047113](https://doi.org/10.1073/pnas.1516047113)


32. [https://londonfunders.org.uk/sites/default/files/images/PlaceBasedFunding_briefingpaper_June2015.pdf](https://londonfunders.org.uk/sites/default/files/images/PlaceBasedFunding_briefingpaper_June2015.pdf)


X. Appendices

A. Nurture NJ Key Milestones
B. Index of Recommendations Relevant to Each Stakeholder Group
C. Nurture NJ Companion Document Table of Contents
D. Nurture NJ Year-One Playbook Table of Contents
Appendix A: Nurture NJ Key Milestones

2018

Increased funding for family planning.
- **P.L. 2018, c. 2** enacted, which made an FY 2018 supplemental appropriation of $7,453,000 to the New Jersey Department of Health (NJDOH) for family planning services.
- Press release: [Governor Murphy Announces Thousands of New Jersey Women Benefitting from Restoration of $7.5 Million for Women’s Health Care and Family Planning Services](1/31/19).

Commemorated the first Maternal Health Awareness Day.
- Maternal Health Awareness Day is designated by P.L. 2017, JR-6 to raise public and professional awareness about important maternal health, safety, and mortality issues; highlight obstetrical pathways that promote maternal safety; educate the citizens of New Jersey about promising maternal health initiatives, including public initiatives like the “Stop, Look, and Listen” campaign, and professional initiatives, like the AIM Program, which focus on improving patient safety and decreasing maternal mortality; and encourage the development of new programs and initiatives that are designed to proactively address issues of maternal health and mortality.
  - Press release: [January 23rd is Maternal Health Awareness Day in New Jersey](1/23/18).
  - Governor’s Proclamation: [January 23, 2018 as Maternal Health Awareness Day](1/23/18).

Held community engagement forums.
- Regional focus groups for Community Health Workers (CHWs) and Central Intake (CI) Workers held to inform a root cause analysis about Black infant mortality (BIM) and maternal mortality (MM) for the State Health Improvement Plan (SHIP).
  - The feedback informed the basis for the SHIP’s “Improving Birth Outcomes Action Plan,” New Jersey’s Healthy Women, Healthy Families program, and NJDOH’s maternal strategy development.

Key data briefs published.
- [infant safe sleep practices](#)
- [pregnancy intention](#)
- [breastfeeding](#)
- [The Hispanic Paradox in New Jersey: Examining the Effect on Black, Non-Hispanic Mothers](#)
- [Maternal Cigarette Smoking](#)

“Healthy Women, Healthy Families” initiative launched.
- Press release: [New Jersey Agencies Awarded $4.7 Million to Improve Black Infant, Maternal Mortality](7/11/18).

Established New Jersey Child and Dependent Care Tax Credit.
- Governor Murphy signed P.L. 2018, c 45 into law July 2018 which established this credit, for which more than
70,000 taxpayers are eligible for expenses they incur for the care of a child under age 13, or a spouse or dependent who is physically or mentally incapable of self-care.

**Earned Income Tax Credit increased.**

- The Governor signed P.L. 2018, c 45 into law July 2018, which increased the Earned Income Tax Credit for the second year of a three-year phase-in, providing an additional $30.2 million to match 39 percent of the federal benefit. In 2018, the EITC increased from 35 percent to 37 percent. After 2020, the EITC will remain at 40 percent of the federal EITC.

**Earned Sick Leave went into effect.**

- The Governor signed **P.L.2018, c.10** into law in May 2018. The law allows workers to take time off to care for themselves or their loved ones who are sick or have medical appointments, while receiving full pay from their employer.

**Ensured financial aid equity.**

- Governor Murphy signed legislation allowing undocumented students (New Jersey Dreamers) to apply for state financial aid assistance, fulfilling his promise to ensure financial aid equity.
  - Press release: [Governor Murphy Signs Financial Aid Equity Legislation](#) (5/9/18)

**Increased college affordability.**

- Through New Jersey’s tuition- and fee-free Community College Opportunity Grant (CCOG) program, the Educational Opportunity Fund (EOF) and the federal GEAR UP (Gaining Early Awareness and Readiness for Undergraduate Programs) grant administered by the state, we are making high-quality credentials affordable to low-income women of childbearing age and women of color.
  - Press Release: [Governor Murphy Announces New Jersey’s First Step Toward Free Community College](#) (9/27/18)

**Studies on health equity launched.**

- **P.L. 2019, c. 497** enacted, which requires New Jersey Office on Minority and Multicultural Health to study racial disparities on sexual and reproductive health of Black women
- **P.L. 2018, c.22**, enacted which requires Child Fatality and Near Fatality Review Board to study racial and ethnic disparities that contribute to infant mortality.

**Signed sweeping equal pay legislation.**

- The Governor signed **P.L. 2018, c. 9** into law. The Diane B. Allen Equal Pay Act strengthens protections against employment discrimination and promotes equal pay for all groups protected by the Law Against Discrimination.
  - Press release: [Governor Murphy Signs Historic, Sweeping Equal Pay Legislation](#) (4/24/18)

**2019**

**Nurture NJ Campaign officially launched.**

**Took steps toward economic equity.**
Held the First-ever Founders & Funders Roundtable to discuss steps New Jersey could take to build a more equitable, diverse innovation economy.

**Set goals to reduce environmental hazards.**

- Release of the state’s Energy Master Plan, which includes ambitious goals that will reduce environmental hazards that impact women and children.

**New Jersey Transit’s Maternal Infant Health (MIH) application launched.**

- Program was designed to support Nurture NJ’s mission to improve maternal and infant health in communities where race and economics are contributing factors to infant mortality rates. The MIH application is an enhancement of New Jersey Transit’s federally mandated paratransit eligibility determination model, Access Link, and is processed much faster than the regular application—one day compared to one month.

**NJDODH established important data markers.**

- Finalization of 2011–2016 severe maternal morbidity, including disparities and sociodemographic factors data statewide. Data trendlines and national data set demonstrates trajectory and benchmarks New Jersey against national trends.
- Finalization of 2016 complication, laceration, and severe maternal morbidity, including disparities and sociodemographic factors, data statewide and by hospital.

**Paid Family and Medical Leave (PFML) expanded.**

- The Governor signed P.L. 2019, c. 37 into law February 2019
- Expectant mothers can utilize the state’s PFML program to take time necessary before birth of the child, for recovery time after the birth, and for bonding with a newborn or new addition to the family. Starting July 2020, the PFML program will offer an increase in benefits – 85 percent of their wages (up to $881). Additionally, the length of time for a mother or father to bond with a new addition and to care for a family member who needs assistance increased from 6 weeks to 12 weeks.
  - Press release: [Governor Murphy Signs Sweeping Legislation Expanding Paid Family Leave](#)

**Key data briefs published.**

- [Maternal Mental Health](#)
- [Unintended Pregnancies Among Mothers in New Jersey](#)
- [The Effect of Childbirth Classes on Nulliparous, Term, Singleton, Vertex (NTSV) Deliveries and Breastfeeding Among New Jersey Mothers](#)
- [Women’s Health and Alcohol Use](#)

**Expanded Centering Pregnancy.**

Press release: State and Private Partnerships Fund Centering to Improve Infant and Maternal Mortality In New Jersey (4/18/19)

P.L. 2018, c. 237 provided for Medicaid coverage for group prenatal care services. The Governor signed this bill into law August 2019. Several of the HWHF grantees offer Centering Pregnancy, a group prenatal care program.

Advanced the work of the New Jersey Maternal Care Quality Collaborative (NJMCQC)

Press release: Governor Murphy Signs Legislation to Establish Maternal Mortality Review Committee (5/1/19).

NJDOH finalized 2013–2015 maternal mortality data—including overall ratios, racial disparities, leading causes of death, and timing of death—at review by the New Jersey Maternal Mortality Review Committee (NJMMRC).

New Jersey Maternal Mortality Review Committee findings and emerging maternal health efforts in New Jersey are represented at the biannual CDC MMRIA User Meeting and at other state and national conferences.

Established the New Jersey Maternal Data Center (NJMDC).

The NJMDC public-facing website launches as NJDOH’s repository for the most recent maternal data, information about state services and resources, and highlighted focus areas.


NJMDC publication of three infographics to educate providers and consumers about maternal health and, especially, about the dangers of elective surgical births: Maternal Mortality and Morbidity: Terms for New Jersey to Know, New Jersey NTSV Surgical/Cesarean Birth Rates by Hospital (2016), and Why Avoid Unnecessary Surgical Births.

The Story Bank launched as part of the NJMDC and initially featured six women with stories of maternal or infant mortality or morbidity.


Work launched to develop respectful care at birth.

- AR219/SR121 filed with New Jersey Secretary of State, which encourages NJDOH to develop a set of standards for respectful care at birth and to conduct public outreach initiatives.

- P.L. 2019, c.133 enacted, which establishes a pilot program under NJDOH’s auspices to evaluate shared decision-making tools for use by hospitals providing maternity services, and by birthing centers.

Perinatal Risk Assessment work advanced.

- P.L.2019, c.88 enacted, which codifies current practice regarding completion of Perinatal Risk Assessment form by certain Medicaid health care providers and tasks NJDOH to participate in reporting and identification of quality improvement options.

- Press release: Governor Murphy Signs Legislative Package to Combat New Jersey’s Maternal and Infant Health Crisis (5/8/19)
Initiatives launched to improve Medicaid efforts around maternal health.

- **P.L.2019, c.85** enacted, which provides Medicaid coverage for doula care
- **P.L.2019, c.86** enacted, which establishes a perinatal episode of care pilot program in Medicaid
- **P.L.2019, c.87** enacted, which prohibits health benefits coverage for certain non-medically indicated early elective deliveries under Medicaid program, State Health Benefits Plan, and School Employee Health Benefits Plan.
- **P.L. 2019, c. 306** enacted, which requires health benefits coverage for fertility preservation services under certain health insurance plans
- **P.L. 2019, c. 317** enacted, which requires Medicaid coverage for pasteurized donated human breast milk under certain circumstances.
- **P.L. 2019, c. 343** enacted, which requires health benefits and Medicaid coverage for breastfeeding support.

First annual Report Card of Hospital Maternity Care published.

- This report of 2016 infection, laceration, hemorrhage, and severe maternal morbidity statistics statewide and by hospital is available as a dashboard on NJDOH’s NJMDC website.
  - Press release: [First Lady Tammy Murphy and Department of Health Announce the Release of the New Jersey Report Card of Hospital Maternity Care](6/27/19).
  - Methodology Report: [New Jersey Hospital Maternity Care Report Card, 2016](8/20/19).

Key federal funding secured by NJDOH.

- NJDOH named one of 25 awardees of the CDC’s Enhancing Reviews and Surveillance to Eliminate Maternal Mortality (ERASE MM) grant to improve timeliness and accuracy of case review and determination conducted by the New Jersey Maternal Mortality Review Committee.
  - Press release: [New Jersey Department of Health Receives $450,000 Federal Grant to Support Maternal Mortality Efforts](8/22/19).
- NJDOH named one of nine recipients of $10.5M in funding over five years from the Health Resources and Services Administration to facilitate collaborative, data-driven action focused on preventing and reducing maternal mortality and severe maternal morbidity.
  - Funding supports the work of the New Jersey Maternity Care Quality Collaborative (NJMCQC), a statutorily mandated multidisciplinary team of stakeholders who will oversee the transformation of maternal health care in the state, and tasks this entity to establish a strategic plan to guide and evaluate its work.
  - The grant supports maternal mortality and morbidity data collection and analysis with a focus on moving data to action.
  - The HRSA-SMHIP requires NJDOH to undertake evidence-based strategies to drive innovation in maternity care delivery, including implicit bias training, promoting access to long-acting reversible contraceptives during the postpartum period, fostering collaborative learning for providers such as OB/GYNs, community health workers and doulas, and ensuring connectivity to risk assessment screening tools.
  - Press release: [First Lady Tammy Murphy and New Jersey Department of Health Announce $10.5M](8/22/19).
**Federal Grant to Improve Maternal Health** (9/24/19).

- HRSA: Maternal Health Awardees FY19.

**Began increases to the minimum wage to $15 per hour.**

- The [Governor signed legislation to increase New Jersey’s minimum wage to $15 per hour by 2024. Press release: Governor Murphy Signs Landmark Legislation Raising Minimum Wage to $15 Per Hour](https://www.gov.nj.us/releases/2019/07/03/news19-141.shtml).

**Child care access expanded through increased subsidies and decreased co-pays.**

- Between 2018 and 2020, infant care rates increased by nearly 40 percent. For parents who select an infant care provider with a three-star quality rating from Human Services’ Grow NJ Kids quality improvement program, that rate increases an additional 20 percent.

- In January 2020 DHS waived parent co-payments for childcare subsidies by 50 percent.

**Under the Murphy Administration, toddler care rates have increased from $717 to $830 per month and pre-school rates from $585 to $690 per month, with higher rates for higher quality rated programs.**

**Increased funding for family planning.**

- [P.L.2019, c.277](https://www.leg.state.nj.us/laws/billinfo/polsign/pl2019c277.shtml) enacted, which made FY 2020 supplemental appropriation of $9.5 million to DOH for family planning services. The legislation replaced critical federal funding for family planning services that are impacted by the Trump Administration’s implementation of the Title X gag rule, which limits access to health care and family planning resources.


**Implicit bias initiative work continued.**

- NJDOH is developing an initiative focused on implicit bias training for delivery hospitals, FQHCs, and all others who come into contact with mothers and families.

- DHS expands training for child care providers on implicit bias and diversity with the goal of helping to design curricula that are responsive to the diversity of New Jersey families and children.

- Launch of the New Jersey TRANSIT NJT2030 Diversity and Inclusion initiative, which will amplify our existing training on implicit bias for our employees.

**Second annual Report Card of Hospital Maternity Care published.**

- The second annual report card covers data from 2018 and represents 100 percent participation from New Jersey hospitals


**First meeting of the new MMRC held.**

- The new, broader Maternal Mortality Review Committee is comprised of 24 members representing diverse disciplines across the health field.
Invested in the community health worker workforce.

- Establishment of the Colette Lamothe-Galette Community Health Worker Institute through an apprenticeship grant from the Department of Labor.

Office of New Americans expanded access.

- Office of New Americans works to integrate immigrants and refugees and ensure access to key social services, employment and inclusion in New Jersey’s economy.

Work to expand access to doula services continued.

- Doula work group formed to establish infrastructure to support Medicaid reimbursement of doula services.

Hospital Partnership Subsidy Program expanded.

- Housing Mortgage Finance Agency and the Department of Community Affairs expand the State matches funds from hospitals to provide apartments affordable for low- & moderate-income families, as well as housing for special needs residents.

Paid leave expanded.

- Expanded paid leave benefits to 12 weeks and increased weekly compensation from 67 percent to 85 percent

Made major investment in environmental justice.

- Gov. Murphy signed the nation’s first environmental justice law designed to reduce the disproportionate environmental and public health impacts of pollution on overburdened communities.

Equity work incorporated at leading state departments and agencies.

- Creation of the Office of Clean Energy Equity at the New Jersey Board of Public Utilities to examine policies and programs and how they impact the residents of New Jersey.

Interagency Task Force to Combat Youth Bias report released.

- Youth Bias Task Force issued a report recommending sweeping reforms to the state’s education system, tougher anti-bias laws, and a robust public engagement campaign to counter the alarming rate of bias incidents among New Jersey’s children and young adults. It details how systemic racism and institutional bias lay the foundation for bias and hate among young people and identifies social factors that lead youth to act on those learned beliefs.

New Jersey’s state-based health insurance marketplace launched.

- The Governor launched New Jersey’s official health insurance marketplace, Get Covered New Jersey. The marketplace is a one-stop shop for residents who do not have coverage from an employer or other program.
  - Press release: Governor Murphy Announces Launch of New State-Based Health Insurance Marketplace, Get Covered New Jersey

State Plan for Higher Education working groups published best practices.

- The Office of the Secretary of Higher Education (OSHE) – through a collaborative process with college
presidents, faculty and students – published best practices through State Plan for Higher Education working groups to make college more affordable and foster safe and inclusive learning environments. The College Affordability working group published a material hardships guide to support the basic needs of students and help foster innovative ways for institutions to combat food insecurity on their campuses. The Safe and Inclusive Learning Environments working group developed best practices to enhance campus safety and supports through campus climate surveys that assess perceptions of safety and inclusion, including racism and implicit bias.

- Webpage: [https://nj.gov/highereducation/workinggroups.shtml](https://nj.gov/highereducation/workinggroups.shtml)

**Plan First family planning initiative launched.**

- The Governor signed *[P.L. 2018, c. 1](https://nj.gov/laws/historical/p1155/p1155a1018-2011a1.html)* into law in February 2018. The initiative was launched in 2020 through The Department of Human Services as Plan First, which covers family planning services for low-income individuals whose incomes are higher than traditional Medicaid eligibility and would not otherwise qualify for Medicaid services. Services include contraception (including long-acting reversible contraception), pregnancy testing, family planning counseling, STD/HIV screenings, pap smears, and HPV immunizations.

**Statewide initiative on ACEs launched.**

- The Burke Foundation launched a statewide awareness campaign to address impact of ACEs.

- The New Jersey ACES Collaborative, consisting of The Nicholson Foundation, the Burke Foundation, the Turrell Fund and NJ Department of Children & Families, named Dave Ellis as Executive on Loan to the State of New Jersey, functioning as the first Executive Director for the Office of Resilience within DCF.

- This public-private alliance seeks to dramatically increase public awareness of ACEs and activate members from sectors such as health, business, education, child welfare, government, nonprofit and philanthropy to coordinate in addressing ACEs.
## Appendix B

Index of Recommendations Relevant to Each Stakeholder Group

<table>
<thead>
<tr>
<th>STAKEHOLDER GROUP</th>
<th>MOST RELEVANT RECOMMENDATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academia</td>
<td>1.8  3.1  3.2  4.2  4.3  4.6  6.1  6.5  8.14  8.11  7.43  7.45  8.1  2.1  4.7  6</td>
</tr>
<tr>
<td>Business and Employers</td>
<td>1.8  3.1  3.2  4.1  4.3  4.6  8.4  7.10  2.1  2.4  3.34  4.7  8.5</td>
</tr>
<tr>
<td>Community</td>
<td>1.8  3.1  4.1  4.3  4.6  5  6.1  7  8  9  2.1  6.1  8.5</td>
</tr>
<tr>
<td>Funders</td>
<td>1.8  2.1  3.1  3.2  4.1  4.2  4.3  4.6  6.5  9.3  4.7  3.3  6.1  8.5</td>
</tr>
<tr>
<td>Health Sector</td>
<td>1.8  3.1  4.1  4.3  6.1  9  9.1  9.6  9.8  9.9  4.7  8.1  6.1  8.2  9</td>
</tr>
<tr>
<td>Service Providers</td>
<td>1.8  3.1  4.1  4.3  6.1  9  7.51  7.6  7.8  7.142  8.33  8.43  9.9  9</td>
</tr>
<tr>
<td>State Leadership</td>
<td>1.1  1.2  1.3  1.4  1.6  1.7  1.8  2.2  2.5  3.1  3.2  4  5.1  5.17</td>
</tr>
<tr>
<td>All State departments and agencies</td>
<td>1.11 1.12 1.3 1.4 1.5 2.2 2.3 2.5 3.1 1.8 3.1 3.2 4.3 5.8 4.1 5.17</td>
</tr>
<tr>
<td>Individual Agencies:</td>
<td></td>
</tr>
<tr>
<td>Department of Health</td>
<td>4.8  5.11  5.19  5.12  5.6  5.7  5.81  5.84  5.85  6.2  6.3.1  6.3.2  6.3.3  7.21  6.4  9</td>
</tr>
<tr>
<td></td>
<td>7.3  5.9  5.1  5.11  7.4  7.43  7.46  7.5  7.6  7.8  7.1  7.7  7.9  7.11</td>
</tr>
<tr>
<td></td>
<td>7.12  7.12.2  7.14.1  7.16  2.2  7.15  7.18</td>
</tr>
<tr>
<td>Department of Human Services</td>
<td>5.11  5.14  5.15  5.7  5.8  7.15  9  5.9  5.11  5.16  5.18  6.3.2  7.21</td>
</tr>
<tr>
<td></td>
<td>7.3  7.4.2  7.5.2  7.5.6  7.12.2  9.14  9.3.1  9.4  2.2</td>
</tr>
<tr>
<td>Department of Banking and Insurance</td>
<td>7.12.2 9.7  2.2</td>
</tr>
<tr>
<td>Department of Children and Families</td>
<td>5.14  7.15  7.16  2.2  5.2  6.3  7.17  7.18</td>
</tr>
<tr>
<td>Department of Community Affairs</td>
<td>5.13  8.4  2.1  2.2  3.1  5.2  5.10  5.13</td>
</tr>
<tr>
<td>Department of Corrections</td>
<td>5.18  8.5  2.2  8.6</td>
</tr>
<tr>
<td>Department of Education</td>
<td>5.3  2.2  5.21</td>
</tr>
<tr>
<td>Department of Environmental Protection</td>
<td>8.2  2.2  8.3</td>
</tr>
<tr>
<td>STAKEHOLDER GROUP</td>
<td>MOST RELEVANT RECOMMENDATIONS, CONTINUED</td>
</tr>
<tr>
<td>------------------------------------------------------</td>
<td>------------------------------------------</td>
</tr>
<tr>
<td>Department of Labor</td>
<td>5.5  2.2</td>
</tr>
<tr>
<td>Department of Transportation</td>
<td>8.3.4  8.3.5  8.3.1  2.2  8.4</td>
</tr>
<tr>
<td>Department of Treasury</td>
<td>5.4  2.2</td>
</tr>
<tr>
<td>New Jersey Housing and Mortgage Finance Agency</td>
<td>5.1  8.5</td>
</tr>
<tr>
<td>Economic Development Authority</td>
<td>5.17  7.1.2  8.3.1  8.3.2  3.3.4  4.5  4.7  5.23</td>
</tr>
<tr>
<td>Secretary of Higher Education</td>
<td>5.3</td>
</tr>
<tr>
<td>Office of Minority and Multi-Cultural Health</td>
<td>1.3.5  1.4  1.7  2.1  3.1  4.7</td>
</tr>
<tr>
<td>Chief Diversity Officer</td>
<td>1.3.1  1.3.3  1.4  1.7  3.1  3.3.4  4.7</td>
</tr>
<tr>
<td>EEO</td>
<td>1.3.5  1.4</td>
</tr>
<tr>
<td>Communications</td>
<td>4.2  4.3  4.4</td>
</tr>
<tr>
<td>Office of Attorney General</td>
<td>5.13  5.18  8.6</td>
</tr>
<tr>
<td>Hospitals</td>
<td>7.5  7.7  7.10</td>
</tr>
</tbody>
</table>
Appendix C
Companion Document Table of Contents

Publication of the Office of the First Lady, Trenton, New Jersey, November, 2020

Section I. The Problems of Inequities, Maternal Morbidity and Mortality, and Infant Morbidity and Mortality in New Jersey

I.1. New Jersey Women Speak: New Jersey Isn’t the Greatest Place to Give Birth Now
Diane L. Rowley, Pamela Brug, Terri Johnson, Bahby Banks, Pauline E. Brooks, Jatesha “Jaye” Madden-Wilson

I.2. Maternal Morbidity and Mortality in New Jersey
Jennifer Fearon, Mehnaz Mustafa, Erin Mayo, Genevieve Lalanne-Raymond, Abate Mammo, Alison Shippy, Amanda Medina-Forrester, Colette Lamothe-Galette, Lakota Kruse, Lisa Asare, Magda Schaler-Haynes, Marcela Maziarz, Marilyn Corney-Daley, Mildred Mendez, Yannai Kranzler, and Debra Bingham

I.3. Infant Mortality in New Jersey
Vijaya K. Hogan, Diane L. Rowley, Jennifer F. Culhane

I.4. New Jersey Data Snapshot: Women’s access to health care, social services, and supportive policy.
Elizabeth Lee, Vijaya K. Hogan

1.5. Issue in Focus: Adverse Childhood Events, Substance Use and Infant and Maternal Morbidity and Mortality
Vijaya K. Hogan and Elizabeth Lee

I.6. Racism in the United States
Pauline E. Brooks, Patricia H. Karimi-Taleghani, Vijaya K. Hogan

I.7. The Science: Pathways of Racism’s Impact on Health
Vijaya K. Hogan, Pauline E. Brooks, Diane L. Rowley

Section II. Building an Ecosystem that Supports Maternal and Infant Health and Equity in New Jersey

II.1. The Nurture NJ Ecoystem

II.2. The Built Ecosystem: Creating A Place-Based Maternal and Infant Health Demonstration for Nurture NJ
Vijaya K. Hogan, Elizabeth Lee, Diane L. Rowley

II.3. Building Infrastructure to Support, Promote and Maintain Racial Equity and Community Power-
Sharing in all Policies and Processes of Nurture NJ
Vijaya K. Hogan

II.4. Best Practices in Racial Equity and Racial Healing Initiatives
Luz E. Benitez Delgado, Elizabeth Lee

II.5. Community Engagement, Power-Building and Power-Sharing
Esther Nieves

II.6. Facilitating Cross-Sector Collaboration in Ensuring Healthy Mothers and Infants for Nurture NJ
Shanta Whitaker, Elizabeth Lee

Section III. Equity Evaluation Framework for the Nurture NJ Strategic Plan

III.1. An Equity Informed Framework for Designing an Evaluation for Nurture NJ
Pauline E. Brooks, Patricia H. Karimi-Taleghani

Appendices
Glossary
Strategic Plan Author Bios
Suggested Interim Evaluation Measures
Appendix D
Nurture NJ Year-One Implementation Playbook and Toolkit Table of Contents

Part 1: Playbook
I. Introduction
II. Year One Recommendations by Stakeholder Group

Part 2: Toolkit
I. Nurture NJ Resources
II. Racial Equity Assessment Learning and Tools
III. Community Engagement Tools
IV. Policy, Procedural, and Structural Change Tools