20 Year Review–Delaware Strategies for State Policies and Spending

March 2020

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In coordination with

Office of State Planning Coordination

State of Delaware

FINAL PRE-PUBLICATION PROOF

Preface

As the director of the Institute for Public Administration (IPA) at the University of Delaware, I am pleased to provide this report, *20 Year Review – Delaware Strategies for State Policies and Spending*. The Office of State Planning Coordination (OSPC) funded this study to provide for an objective review of the performance of Delaware's Strategies for State Policies and Spending (State Strategies) since their initial adoption in 1999. Findings from this research are intended to inform the development of the *2020 Strategies for State Policies and Spending*.

To assess the performance of the State Strategies, IPA identified and analyzed a series of performance metrics aligned with each of the eleven "Shaping Delaware's Future" goals laid out in the original, 1999 State Strategies. This report captures the analysis of Delaware's performance on these metrics, with additional commentary highlighting particular successes and shortcomings of the State's investment strategies, along with suggestions for further refinement of Delaware's efforts to make progress on the "Shaping Delaware's Future" goals.

IPA is committed to supporting the state of Delaware through collaborative, practical research that aides in the development and implementation of policies beneficial for all Delawareans. It is my hope that this report serves a valuable role in both reflecting on positive public policy outcomes and informing the continued development and refinement of policies that advance the livability and competitiveness of Delaware and its communities.

Jerome R. Lewis, Ph.D.

Director, Institute for Public Administration

Acknowledgements

The authors of this report thank the State of Delaware's Office of State Planning and Coordination for envisioning and supporting this important work. A number of state agencies and stakeholders provided valuable input and data. Special thanks go to the Delaware State Housing Authority, the Delaware Department of Education, the Delaware Department of Agriculture, the Delaware Department of Health and Human Services, and the Partnership for Healthy Communities at the University of Delaware. This report reflects the ongoing implementation efforts of these agencies and others across the public and private sectors. Their willingness to share relevant data and information made this report possible.

The project team would also like to thank their IPA colleagues Lisa Moreland Allred and Sarah Pragg for editing and formatting this report.

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Project Overview

In fall 2019, the Delaware Office of State Planning Coordination (OSPC) contracted the University of Delaware Institute for Public Administration (IPA) to develop a 20-year review and assessment of the Delaware *Strategies for State Policies and Spending* (*State Strategies*). Envisioned as a more holistic, historic view of the past 20 years than the traditional annual report format allows for, this document outlines the State's performance relative to the eleven "Shaping Delaware's Future" goals laid out in the original, 1999 *State Strategies*.[1]

Goal 1 *– Direct investment and future development to existing communities, urban concentrations, and growth areas.*

Goal 2 *– Protect important farmlands and critical natural resource areas.*

Goal 3 *– Improve housing quality, variety and affordability for all income groups.*

Goal 4 *– Ensure objective measurement of long term community effects of land use policies and infrastructure investments.*

Goal 5 *– Streamline regulatory processes and provide flexible incentives and disincentives to encourage development in desired areas.*

Goal 6 *– Encourage redevelopment and improve the livability of existing communities and urban areas, and guide new employment into underused commercial and industrial sites.*

Goal 7 *– Provide high quality employment opportunities for citizens with various skill levels to retain and attract a diverse economic base.*

Goal 8 *– Protect the state's water supplies, open spaces, farmlands and communities by encouraging revitalization of existing water and wastewater systems and the construction of new systems.*

Goal 9 *– Promote mobility for people and goods through a balanced system of transportation options.*

Goal 10 *– Improve access to educational opportunities, health care and human services for all Delawareans.*

Goal 11 *– Coordinate public policy planning and decisions among state, counties and municipalities.*

Though the exact methods of analysis varied by goal, in general the IPA research team 1) compiled data sources relevant to each goal; 2) identified and selected appropriate performance metrics; and 3) used these data sources and metrics to objectively benchmark

[1] Shaping Delaware's Future: Managing Growth in 21st Century Delaware, Strategies for State Policies and Spending. The Governor's Cabinet Committee on State Planning Issues, prepared by the Delaware Office of State Planning Coordination. December 23, 1999. Pages 11-12.

Delaware's progress on the eleven "Shaping Delaware's Future" goals. Further, IPA summarized notable state, county, and municipal initiatives that most directly related to these goals.

In light of Delaware's objective performance on the selected metrics and the status of policy initiatives addressing particular goals, the research team noted evident trends, gaps in performance, and areas of notable success. Finally, IPA posited potential policy or procedural remedies that agencies, organizations, and governments might consider to accelerate progress on the "Shaping Delaware's Future" goals. Collectively, the data, performance metrics, analysis, and recommendations assembled for this report are intended to inform both the development of the latest *State Strategies* update and ongoing efforts to monitor and refine the implementation of the *State Strategies*.

Goal 1. Direct investment and future development to existing communities, urban concentrations, and growth areas

Summary

The location of approved development over roughly the last decade provides significant evidence of the State's success in its efforts to direct investment into existing communities and identified growth areas. As detailed in this section, nearly all non-residential development that was approved through the development plan or building permit stage during the 2008-2018 time period occurred in areas the *State Strategies* favored. The record was also solid for the approval of residential development plans or building permits, with favored areas accounting for eight out of ten plans approved and 93 percent of building permits issued for new construction.

After experiencing a long steady decline, the State's population living in incorporated areas has also stabilized during the 20 years of *State Strategies* implementation. U.S. Census "Urban Area" population data indicates that Delaware's residential settlement patterns are trending toward densely populated, contiguous forms and away from sparsely populated, leapfrog forms.

Measuring Progress

The State routinely tracks two compelling performance metrics (highlighted in bold as items #1 and 2, below): development plan approvals and building permits. In this section, we also examine population in municipalities and urban areas to gain additional insight on the correlation between development by investment level and the impact on existing municipalities and urban areas.

1) **Development Approval Information** illustrates where developers have gained plan approval from local governments to build projects. By examining how many of these approvals are granted in and around established communities (i.e., areas generally within *State Strategies* Levels 1, 2, and 3), it is possible to infer how well efforts to integrate local planning with statewide priorities are performing on a planning level.
2) **Building Permit Data** show precisely where and when new construction is imminent. These data may lag in terms of months or years behind the planning data, but overall they probably serve as a better baseline for market demand and development trends. Again, analyzing where structures are approved for construction, relative to their

designated level of investment, now shows how well coordinated planning activities are reflective of, shaping, or at odds with, economic forces on the ground.

3) Population in municipalities - Presumably, directed investment in existing communities should facilitate their growth and carrying capacity.

4) Population in urban areas – Many of the state's population centers are not incorporated municipalities but are census designated "urban areas." Regardless of their jurisdictional status, they are favored for development by virtue of their Investment Level designation in the *State Strategies*.

Development Trends[2]

The discussion in this sub-section describes trends seen in development application and permit approval data from 2008 to 2018. There are some references to "early," "mid," and "recent/late" data for the sake of summary and comparison over time. Early refers to 2008 to 2011. Mid describes 2012-2015 data. Recent/late encompasses 2016 to 2018.

Non-Residential

Delaware has been remarkably successful in steering non-residential development towards favored Investment Levels. Statewide, over the time period studied, over 95 percent of plan approvals were in Level 1 or 2, and 99 percent were within Levels 1, 2, or 3. Level 1 and 2 approvals were over 96 percent in New Castle, 94 percent in Kent, and over 87 percent in Sussex. All were at near 97 percent or better when including Level 3.

Permit approvals tell a similarly glowing story. Statewide, 88.5 percent of all approvals were in Level 1 and 2 areas. Including Level 3, the figure jumps to almost 93 percent. Although Sussex County's Level 4 non-residential approvals did account for roughly five percent of total non-residential approvals—three to five times the amount from New Castle or Kent—Sussex has steadily improved. In the most recent data for Sussex County, 87 percent of permits were issued in levels 1, 2, or 3.

Residential

Over the 11-year period, 61.9 percent of all approved plans were proposed for Level 1 or 2 areas. Levels 1, 2, and 3 accounted for 80.7 percent. Just over 19 percent were in Level 4. Kent County has achieved impressive and consistent levels, with nearly every approved plan within Level 1 or 2 since 2015. New Castle County has generally limited Level 4 approvals under five percent. The most recent data may be of concern if it proves to be a trend. Though Level 1, 2,

[2] Office of State Planning Coordination, "Delaware Development Trends," https://firstmap-delaware.opendata.arcgis.com/datasets/delaware-development-trends, October 23, 2019.

and 3 approvals held relatively steady, core Level 1 and 2 area approvals dipped below 50% statewide.

Residential permit approvals tell much the same story over the study period, with 61.2 percent of approvals in Investment Levels 1 and 2 and 80.5 percent within Levels 1, 2, and 3. Sussex County Level 4 approvals consistently accounted for roughly 14 percent of total approvals, followed by Kent County at around four percent and New Castle at under two percent. Clearly some of these new starts are legacy approvals from old plans, as Kent has not approved a plan in Level 4 in several years. Again, the data show the beginnings of a possible trend away from core areas in favor of identified growth areas. Statewide, Level 1 and 2 area starts have fallen below 60 percent for the first time in the available data record.

Population in Municipalities

As Delaware's historic commercial and residential centers, the State's 57 municipalities have been a considerable focus of planning attention. In the years preceding the adoption of the *State Strategies*, Delaware's municipalities accounted for a decreasing share of the state's population—adding just over 20,000 residents during the 1990s while falling from 29 percent of the state's population in 1990 to 27 percent in 2000. Since the 2000 census, Delaware's municipalities have been home to approximately one-third of the state's population growth, with over 50,000 residents added to municipal population totals. As of the 2013–2017 American Community Survey, 28 percent of the state's population resides in incorporated municipalities.[3]

Population in Urban Areas

The U.S. Census Bureau defines urban areas as relatively uninterrupted territories of densely populated residential and non-residential land uses, with urbanized areas consisting of 50,000 or more people and urban clusters consisting of at least 2,500 and less than 50,000 people.[4] Population trends in these areas are useful indicators of the degree to which development in Delaware is adhering to urban patterns that are typically more easily provided with public and private infrastructure and services than their rural counterparts.

Delaware is a relatively urban state, ranking 18th among the 50 states with 83.3 percent of its population in urban areas as of the 2010 census. This share of population in urban areas increased from 80.1 percent in 2000.[5] While more recent urban area population data will have

[3] U.S. Census Bureau, American Communities Survey 5 year estimates & 1990, 2000, & 2010 decennial census.

[4] For details on Census definitions of urban areas, see https://www.census.gov/programs-surveys/geography/guidance/geo-areas/urban-rural/2010-urban-rural.html.

[5] U.S. Census Bureau, 2000 & 2010 decennial census.

to wait for the 2020 Census, available decennial trends present a positive picture of Delaware's development consistent with the *State Strategies*.

A deeper dive into urban area population data reveals some concerning trends, while also focusing attention on opportunities for potential policy development. Though growth in the larger urbanized areas accounted for the largest portion (85,950) of Delaware's urban-rural area population change from 2000-2010, the 34,241 increase in the smaller urban clusters represented a 35 percent increase as opposed to the 16 percent increase in urbanized areas. Logic indicates that these smaller urban areas are likely to feel more stressed than their larger counterparts in dealing with growth, as they may not have the benefit of large, legacy infrastructure assets to lean on in providing for services. This suggests the need for continued focus on developing and disseminating planning tools and programs to assist these communities in assessing their readiness for growth and financing needed infrastructure and service improvements.

Lastly, the density of Delaware's urban areas ranks only 36th among all states.[6] This ranking suggests that it may be challenging for Delaware to provide typical urban services, such as public transportation, in a cost effective and efficient manner. While wholesale increases in density may not be desirable, a useful policy focus could entail targeted efforts to redevelop appropriate urban areas in ways that increase density and make urban service provision more feasible.

Looking Forward

The State's efforts to not encourage growth in Investment Level 4 areas, and to prevent it in those area deemed Out of Play, have been demonstrably successful. All of the figures examined clearly show growth is being focused into areas encompassed by Investment Levels 1, 2, or 3. If one reads the goal, "Direct Investment and future development to existing communities, urban concentrations, and growth areas" literally and with no implied emphasis, the only possible conclusion is that Delaware's efforts are an unqualified success.

However, these successes are not immediately apparent when examining the percentage of Delaware residents living in municipalities. At best, one percent more Delawareans live in a municipality today, as opposed to 20 years ago. Likewise, small urban clusters grew at over twice the rate of larger, established urban centers. If one infers that growth should be prioritized within the named areas, in the order they are listed, then success would mean significant growth in municipal populations and the state's traditional urban centers, with some overflow being taken up by designated growth areas.

[6] U.S. Census Bureau, 2010 decennial census.

Whichever way the policy is interpreted and operationalized going forward, analysis of infrastructure and service costs relative to a development's location within the Investment Levels and its design character may prove useful and illustrative. The potential use of a fiscal analysis framework to analyze these costs is discussed as part of the section for Goal 4.

Goal 2. Protect important farmlands and critical natural resource areas

Summary

Like most neighboring states, Delaware has lost farmland over recent decades. However, the State's agricultural preservation efforts have been very active. Concurrently, the value of Delaware's agricultural exports have increased markedly since 1997, from just under $800 million to nearly $1.5 Billion. Of late, the enthusiastic support of Delaware Governor John Carney has buoyed the State's efforts. In a recent release, the state boasts more than 134,000 acres of farmland—roughly a quarter of Delaware's total inventory of farmland—permanently preserved for future generations.[7]

The State has also acted to preserve significant amounts of open space and environmentally sensitive areas, investing over $250 million since 1990 and preserving 60,000 acres. Historically, both agricultural and open space preservation efforts have been vulnerable to funding pressures.

Agricultural Preservation

American Farmland Trust data allow for comparisons of Delaware's farmland preservation efforts with other states and the nation, over two, recent five-year periods. Beyond this recent analysis, the Department of Agriculture's longer record of farmland preservation data allows for a longitudinal view of the State's efforts.

Table 1 contrasts Delaware's efforts with a sampling of neighboring states. Only New Jersey added farmland over the five-year period reviewed. Delaware, like most others, lost a marginal percentage of its overall land in active farming.

[7] Delaware.gov, "Delaware Announces Largest Round of Farms Preserved in State History," June, 2019. Retrieved from https://news.delaware.gov/2019/06/24/delaware-announces-largest-round-of-farms-preserved-in-state-history/

Agricultural Preservation – Land in Farms and Existing Easements

Table 1. Acres of Land in Farming

State	2012	2017 (Delaware 2019)	Net Change, 2012-2017 (Delaware 2012-2019)	Percent change, 2012-2017 (Delaware 2012-2019)
Delaware	**508,652**	**490,000**	**-18,652**	**-3.6%**
Maryland	2,030,745	1,990,122	-40,623	-2.0%
New Jersey	715,057	734,084	19,027	2.7%
New York	7,183,576	6,866,171	-317,405	-4.4%
Pennsylvania	7,704,444	7,278,668	-425,776	-5.5%
Virginia	8,302,444	7,797,979	-504,465	-6.1%
U.S.	26,444,918	25,192,348	-1,252,570	-4.7%

Source: American Farmland Trust, Farmland Information Center, April 2019 (2012 and 2017 data); Delaware Department of Agriculture, August 2019 (2019 Delaware data).

Table 2 clearly shows the relative effectiveness of Delaware's farmland preservation efforts. Over the timeframe measured, Delaware's acreage in agricultural conservation easements increased by 22 percent, edging out Virginia's proportional increase. The other states sampled largely lost ground or held relatively steady on this measure.

Table 2. Acres in Agricultural Conservation Easements

State	2012	2017 (Delaware 2019)	Net Change, 2012-2017 (Delaware 2012-2019)	Percent change, 2012-2017 (Delaware 2012-2019)
Delaware	**109,650**	**133,933**	**24,238**	**22.2%**
Maryland	147,413	139,910	-7,503	-5.4%
New Jersey	40,355	37,173	-3,182	-8.6%
New York	116,708	118,804	2,096	1.8%
Pennsylvania	313,373	245,910	-67,463	-27.4%
Virginia	313,608	397,378	83,770	21.1%
U.S.	1,041,107	987,439	-53,668	-5.4%

Source: American Farmland Trust, Farmland Information Center, April 2019 (2012 and 2017 data); Delaware Department of Agriculture, August 2019 (2019 Delaware data).

In 2019, Delaware's total acreage in farms, preserved and unpreserved, was reported as 490,000, nearly 40 percent of the State's land mass. Delaware's data, in both tables, was updated with State-collected data due to some inconsistencies in the American Farmland Trust data.

Delaware pursues agricultural preservation in two key ways: the establishment of agricultural preservation districts and the purchase of agricultural easements or development rights. Preservation districts preclude development for ten years. Easements are permanently protected. Properties generally start as preservation districts and may, or may not, elect for permanent preservation during, or after, the ten year period.

Table 3 documents the establishment of preservation districts by county since 2000.

Table 3. Delaware Agricultural Preservation Districts, 2000 – 2019

	Kent		New Castle		Sussex		Delaware	
	Districts	Acres	Districts	Acres	Districts	Acres	Districts	Acres
2000	228	64,773	54	14,367	187	43,433	469	122,573
2005	-	-	-	-	-	-	601	140,907
2010	415	77,951	91	18,007	325	54,327	831	150,285
2015	530	89,271	104	18,262	466	63,996	1,100	171,529
2019	589	87,549	123	16,909	583	69,591	1,436	174,049

Source: Delaware Department of Agriculture, 2019

Overall, the state has tripled the number of individual districts and made moderate gains in acreage in preservation districts. New Castle County has seen slow growth in total acreage. Kent and Sussex Counties show solid gains. In all cases, owing to smaller district creation, district growth is not proportional to total acreage.

Permanent preservation figures tell an even more encouraging story (see Table 4). Delaware has more than quadrupled the number of farms permanently preserved since 2000, with a 150 percent increase in total acreage. Farmland in Kent and Sussex Counties accounts for the majority of this surge.

Table 4. Delaware Agricultural Lands Permanently Protected by Easement, 2000-2019

	Kent		New Castle		Sussex		Delaware	
	Farms	Acres	Farms	Acres	Farms	Acres	Farms	Acres
2000	131	30,215	29	6,407	77	17,161	237	53,783
2005	-	-	-	-	-	-	407	76,135
2010	308	53,764	80	12,083	216	31,621	604	97,468
2015	404	61,292	90	13,293	314	41,638	808	116,223
2019	495	69,536	101	14,394	408	50,003	1,004	133,933

Source: Delaware Department of Agriculture, 2019

Agricultural Preservation—Acquisitions

Table 5 lists the State's agricultural land acquisitions dating back to 1999. Gross acreages have generally trended down since the first years of the program. Recent indications suggest the current upswing will continue. When adjusted for inflation, it is readily apparent that the state is making efficient investments. Prices paid for easements in the mid 2000s did steadily rise as peaking development pressures influenced the market. However, in inflation-adjusted dollars, the state is paying less per acre of preserved farmland now than it did in 1999.[8]

Table 5. Delaware Agricultural Lands Preservation Fund, 1999-2018

Year	Round	Acreage	Total $	Average Discount	$/acre	2018 $/acre
1999	4	12,411	$13,728,518	42%	$1,106.16	$1,667.25
2000	5	17,869	$16,341,871	57%	$914.54	$1,333.61
2001	6	6,796	$5,887,371	52%	$866.30	$1,228.31
2002	7	4,319	$6,300,765	53%	$1,458.85	$2,036.28
2003	8	5,638	$8,423,905	49%	$1,494.13	$2,039.06
2004	9	6,125	$13,732,921	41%	$2,242.11	$2,980.46
2005	10	2,974	$13,970,245	50%	$4,697.46	$6,039.76
2006	11	2,363	$15,650,523	56%	$6,623.16	$8,249.61
2007	12	2,858	$14,204,883	55%	$4,970.22	$6,019.31
2008	13	2,838	$12,613,538	66%	$4,444.52	$5,183.62
2009	14	4,487	$11,509,715	73%	$2,565.12	$3,002.37
2010	15	6,655	$19,694,643	63%	$2,959.38	$3,407.93
2011	16	5,383	$9,772,411	68%	$1,815.42	$2,026.61
2012	17	5,779	$10,861,333	66%	$1,879.45	$2,055.55
2013	18	4,460	$8,509,924	61%	$1,908.05	$2,056.71
2014	19	1,071	$1,410,093	70%	$1,316.61	$1,396.53
2016	20	2,220	$2,727,233	73%	$1,228.48	$1,285.29
2017	21	3,039	$4,179,741	74%	$1,375.37	$1,408.96
2018	22	3,525	$4,882,021	74%	$1,384.97	$1,384.97

Source: Delaware Department of Agriculture, 2019.

Economic Productivity

In addition to protecting Delaware's rural community character, the State's agricultural land preservation efforts have demonstrated success in preserving a viable, globally competitive agricultural industry. The United States Census of Agriculture reports the market value of agricultural products sold by Delaware's farmers at five-year intervals. The market value of

[8] Delaware Department of Agriculture

agricultural products sold by Delaware farmers increased from approximately $767 million in 1997 to nearly $1.47 billion by 2017—a 91 percent increase in market value.[9] While Delaware does not have a monopoly on increased productivity in agriculture, its rate of increase in market value outpaces that experienced in the neighboring states of Maryland (80%), New Jersey (55%), Pennsylvania (82%), and Virginia (65%).[10]

Open Space and Natural Areas

Delaware's Open Space Program—A Twenty-Six Year Perspective makes a compelling case for the state's commitment to preserving open space and natural areas.[11] Since 1990, the State has invested over a quarter billion dollars in preservation. This investment has largely come from dedicated State funding, as well as contributions from the realty transfer tax. From 1990 to 2016, using a variety of acquisition strategies, the State has permanently preserved roughly 60,000 acres across 432 projects. A DNREC Land Use—Land Cover Analysis of acquisitions reports that, to date, 24,000 acres of wetlands, 20,500 acres of forests, and 11,000 acres of agricultural areas have been preserved permanently.

In some cases acquisitions were fee-simple. However, by also using voluntary easements, bargain sales, donations and endowments, each one-dollar of revenue invested is estimated to have preserved $1.66 worth of market value open space or natural area.

DNREC's *Delaware's Open Space Program – A Twenty-Six Year Perspective* does note that there has been some variability in State funding over the report's review period. The designated funding was not allotted on a handful of occasions following the 2008 economic downturn.

Open Space and Natural Areas—Impacts

The effects of environmental preservation can be difficult to touch and feel. Less intense runoff, bacterial loads, and incremental flooding improvements can be very subtle and unfold over generations. However, the State's efforts have also had real effects on amenities and resources its citizens can enjoy on a day-to-day basis. Decades long efforts to preserve open space and natural areas have yielded a 40 percent increase in wildlife areas and ponds, a 61 percent

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[9] U.S. Department of Agriculture, "2017 Census of Agriculture." Retrieved October 15, 2019 from https://www.nass.usda.gov/Publications/AgCensus/2017/Full_Report/Volume_1,_Chapter_1_State_Level/Delaware/st10_1_0001_0001.pdf.

[10] Ibid.

[11] Delaware Department of Natural Resources and Environmental Control, "Delaware's Open Space Program – A Twenty-Six Year Perspective, July 1990 – June 2016." 2016. Retrieved from http://www.dnrec.delaware.gov/OpenSpaces/Documents/Delawares-Open-Space-Program-A-26-year-report-1990-June2016.pdf

increase in the acreage of state parks, and a 63 percent increase in acreage of cultural resource sites, among other impressive gains.[12]

On a regional scale, the economic impacts of functional natural areas are tremendous. According to a 2011 report detailing the economic impact of the Delaware River Basin alone, which includes three quarters of the state's population, the basin contributes to $25 Billion annually in economic activity. Forests, water supply, and agriculture alone were estimated to account for roughly $12 Billion.[13]

Looking Forward

Funding for agricultural and open space preservation has been inconsistent over the past twenty years. In fact, there was no state funding provided for these programs in some tight budget years. Both programs are very successful and critical to preserving Delaware's agricultural economy and natural resources in the face of continued growth pressures.

The reason agricultural and open space preservation funding is so important is that rural areas are still threatened with development pressure, especially in Sussex County. Construction of new housing units in the rural, Investment Level 4 areas represent an outsized proportion of all permits approved in Level 4 areas. Even when considering that some new rural, large lot construction is expected and desirable, it appears that the amount of growth could negatively impact the viability of Delaware's agricultural economy and the natural environment.

Addressing these issues will involve a two-pronged approach in the coming years. First, the State can and should work to ensure reliable and predictable funding for the Agricultural Preservation and Open Space programs. This is, of course, contingent upon State revenues and other budget pressures, but it should remain a priority as it has been under Governor Carney's leadership. Second, and as importantly, the State should continue to work with county and local governments on comprehensive plans and land use regulations that preserve and protect the agricultural economy and natural environment, while directing large scale new developments into areas with infrastructure to support it.

[12] Ibid.

[13] Kauffman, Gerald J. "Socioeconomic Value of the Delaware River Basin in Delaware, New Jersey, New York, and Pennsylvania;" University of Delaware, 2011. Retrieved from https://www.nj.gov/drbc/library/documents/SocioeconomicValueDRB-UDEL-FinalRpt.pdf

Goal 3. Improve housing quality, variety and affordability for all income groups

Summary

The goal of improving housing quality, affordability, and variety was highlighted in the original *State Strategies*, and it continues to be a focus today. This topic has been a nationwide challenge over the past 20 years, as it has been in Delaware. Since 2000, home prices in Delaware have risen even more than the national average, while median household incomes have not increased at the same rate. The State of Delaware has used a variety of means to ensure that affordable housing remains available, including tax credits and incentive programs. While there is still a need to diversify housing stock in Delaware, OSPC, the Delaware State Housing Authority (DSHA), and other state agencies continue to work toward addressing the issues of housing quality, variety, and affordability.

Measuring Progress

Affordability and Home Ownership

As shown in Tables 6 and 7, housing affordability has worsened over the past 20 years at the national level, and for Delaware and neighboring states. The US Department of Housing and Urban Development (HUD) considers families to be “cost burdened” if they pay more than 30 percent of their income for housing. Cost burdened families may have difficulty affording necessities such as food, clothing, transportation and medical care. Based on the US Census measure of households where monthly home owner or renter costs are over 35% of household income, Delaware compares relatively well to its neighboring states and the rest of the country. Compared to neighboring states, only Pennsylvania is slightly more affordable by this measure, while New Jersey is least affordable among this group. However, Delaware’s affordability has declined at a faster rate than both neighboring states and the country over the past 20 years. During this period of time the share of Delaware home owners paying more than 35 percent of their household income toward housing costs increased by 8 percentage points, while the share of Delaware renters paying over 35 percent of their household income toward housing increased by nearly 14 percentage points.

Housing affordability has become a crisis nationwide, particularly for renters. Over 40 percent of all renters in Delaware, neighboring states, and the rest of the country pay at least 35 percent of their household income toward housing costs, which makes them cost burdened. Fewer than 30 percent of renters were considered cost burdened in 2000.

Table 6. Percent of Homeowners with Monthly Ownerships Costs Over 35% of Household Income

	Delaware	Maryland	Pennsylvania	New Jersey	USA
2000	13.8	16.1	15.1	20.5	15.8
2010	26.4	28.4	24.2	35.5	28.6
2017	21.8	21.7	20.0	29.3	22.3

Source: U.S. Census Bureau, Decennial Census 2000 & 2010 and 2017 American Community Survey 1-year estimates.

Table 7. Percent of Renters with Gross Rent Over 35% of Household Income

	Delaware	Maryland	Pennsylvania	New Jersey	USA
2000	26.7	27.0	28.6	29.9	29.5
2010	41.6	40.2	39.8	42.4	41.7
2017	40.3	41.2	40.3	43.6	41.5

Source: U.S. Census Bureau, Decennial Census 2000 & 2010 and 2017 American Community Survey 1-year estimates.

Home ownership rates increased during the housing boom of the late 1990s and early 2000s to a national high of approximately 69% in 2003 and 2004, though this rate has since dropped closer to longer term historic averages of 63%-65% nationwide. In Delaware, the percentage of owner-occupied housing units has remained above both the average of neighboring states and the country overall at approximately 71%. The home ownership statistic is important for housing policy makers because households that rent—in Delaware and elsewhere—are much more likely to be cost burdened than they were 20 years ago.

Table 8. Owner-Occupied Housing Units as a Percentage of Occupied Housing Units

	Delaware	Maryland	Pennsylvania	New Jersey	USA
2000	72.3	67.7	71.3	65.6	66.2
2010	73.6	69.0	71.0	66.9	66.6
2017	71.3	66.8	69.0	64.1	63.8

Source: U.S. Census Bureau, Decennial Census 2000 & 2010 and 2017 American Community Survey 1-year estimates.

Median Household Income and Home Value

Median household income and median home values can also be used to infer needs for affordable housing. As shown in Table 9, Delaware's median income, although higher than the national median, has not increased proportionally with the national median from 2000 to 2017. Additionally, median home values have increased at a higher rate than the national average over this time. The neighboring states of Maryland, Pennsylvania and New Jersey have also all seen their median household incomes increase at a higher rate than Delaware's over the past two decades.

Table 9. Percent Increase in Median Household Income and Median Home Value, 2000-2017

	Median Household Income 2000	Median Household Income 2017	Percent Increase in Median HH Income	Median Home Value 2000	Median Home Value 2017	Percent Increase in Median Home Value
Delaware	$47,831	$63,036	31.8	$130,400	$238,600	83.0
Maryland	$52,868	$78,916	49.3	$146,000	$296,500	103.1
Pennsylvania	$40,106	$56,591	41.1	$97,000	$170,500	75.8
New Jersey	$55,146	$76,475	38.7	$170,800	$321,100	88.0
USA	$41,994	$57,652	37.3	$119,600	$193,500	61.8

Source: U.S. Census Bureau, Decennial Census 2000 & 2010 and 2017 American Community Survey 1-year estimates.

Diversity of Housing Stock

In terms of diversity in housing types, Delaware still lags behind the rest of the country when it comes to the percentage of multifamily housing statewide. This is primarily due to the lack of multifamily housing in Kent and Sussex County, where the share of multifamily housing is approximately half that in New Castle County. As shown in Tables 10 and 11, the share of multifamily housing units in Delaware still lags far behind that in neighboring states and the rest of the country, and the share of single-family detached housing in Delaware has increased over the past two decades.

Table 10. Share of housing types as a percentage of all housing units, 2000

	Percentage of 1-unit, detached homes	Percentage of 1-unit, attached homes	Percentage of multifamily units
Delaware	55.9	14.1	18.7
Maryland	51.2	21.0	25.8
Pennsylvania	55.9	17.9	21.2
New Jersey	54.2	8.6	36.1
USA	60.3	5.6	26.4

Source: U.S. Census Bureau, Decennial Census 2000.

Table 11. Share of housing types as a percentage of all housing units, 2017

	Percentage of 1-unit, detached homes	Percentage of 1-unit, attached homes	Percentage of multifamily units
Delaware	58.9	15.0	17.6
Maryland	51.5	21.4	25.6
Pennsylvania	57.1	18.6	20.3
New Jersey	53.6	9.5	35.9
USA	61.7	5.8	26.1

Source: U.S. Census Bureau, 2017 American Community Survey 1-year estimates.

Ongoing Initiatives

Programmatic Engagement and Innovation

DSHA has a seat at the table for all PLUS reviews for large new construction projects, as well as comprehensive plan updates. Additionally, the Downtown Development Districts program helps to incentivize and promote new development and growth in more densely developed municipalities across the State. In summer 2019, Governor Carney increased the number of municipalities who have access to the incentives and benefits of this program to 12[14]. DSHA also continues to make direct investments into affordable housing throughout Delaware. Between 1999 and 2019, DSHA used national Housing and Urban Development funds and Low Income Housing Tax Credits to enable the construction of over 3,000 new affordable homes and the reconstruction or renovation of almost 4,500 affordable units.[15]

Opportunity Zones

An Opportunity Zone is an economically-distressed community where private investments, under certain conditions, may be eligible for capital gains tax incentives. [16] The State selected 25 census tracts as Opportunity Zones in April 2018, and they were subsequently designated by the U.S. Department of the Treasury.[17] Opportunity Zones can be used to develop new housing in designated areas, and some of the projects already approved for Opportunity Zone areas in Delaware include much needed mixed use and multifamily housing projects. Nine geographic

[14]State of Delaware, "Governor Carney Announces Downtown Development District Designations," https://news.delaware.gov/2019/08/19/governor-carney-announces-downtown-development-district-designations/, August 19, 2019.
[15] Delaware State Housing Authority, 2019.
[16] U.S. Internal Revenue Service, "Opportunity Zones Frequently Asked Questions," https://www.irs.gov/newsroom/opportunity-zones-frequently-asked-questions, October, 22, 2019.
[17] State of Delaware, "Governor Carney Announces Interactive Website for Opportunity Zones Initiative," https://news.delaware.gov/2018/11/15/opportunity-zones-website/, November 15, 2018.

areas across Delaware include Opportunity Zones: Laurel, Seaford, and Georgetown in Sussex County; Milford, Dover, and Smyrna/Clayton in Kent County; and Newark, Wilmington, and Claymont in New Castle County.

Supplementary Housing Programs

The Strong Neighborhoods Housing Fund (SNHF) is a State program that seeks to improve housing affordability by providing gap funding to address vacant and blighted lots as part of comprehensive community development strategies. SNHF was established with initial funding from the 2015 JPMorgan Chase bank settlement and is now a revolving fund. The impact of SNHF funding has been a statewide investment of $8.25 million to leverage total investments of $25.9 million.[18]

Monitoring Housing Needs and Identifying Solutions

DSHA has released three statewide reports on housing needs since 2003.[19] Renter housing supply, substandard housing, manufactured housing, and affordable housing are among the areas identified in these reports that require private and public investment and action in order to improve housing conditions. The State has also adopted International Energy Conservation Codes, Mechanical Codes, and Plumbing Codes, which can improve the quality of new housing. The *Delaware Housing Needs Assessment 2015–2020* includes three key recommendations:

- Support for affordable housing opportunities and fair housing initiatives will need more investment in areas of high value.
- Support for neighborhood identity, rehabilitating existing housing stock, and supporting homeownership in areas showing initial signs of decline.
- Foster new housing opportunities in distressed neighborhoods by pursuing strategic development projects through public private partnerships, preserving quality housing stock, focusing developing in and around neighborhood anchors, and encouraging socio-economic diversity.[20]

Moving Forward

Through the development of key programs and incentives, Delaware has made great progress toward improving housing affordability within the state over the past 20 years. However, housing affordability is a national crisis and Delaware is not alone in the need to do better on

[18] Delaware State Housing Authority, 2019.
[19] See http://www.destatehousing.com/FormsAndInformation/needs.php
[20] Delaware State Housing Authority, *Delaware Housing Needs Assessment 2015-2020*, http://www.destatehousing.com/FormsAndInformation/Publications/2014_housing_needs_executive.pdf, September 2014.

this important issue. Moving forward will likely require a great deal of additional federal funding to truly resolve many of the issues within the housing market and the State will be unlikely to have the capacity to address all or even most needs without cross-sector and intergovernmental coordination. However, there are definitive steps the State can consider taking to ensure that housing is more accessible and affordable for all Delaware residents.

In the *Delaware Housing Needs Assessment 2015-2020*, DSHA outlined many trends and policies to consider when addressing the housing affordability crisis in Delaware. Some of the key findings included:

- Delaware is a fast growing state compared to national averages, with much of this growth attributable to new retirees moving from other states as a result of lower taxes and the development of retiree and beach communities in coastal Sussex County.
- Most of the forecasted housing construction will occur outside of cities in exurban communities and rural areas with available land to build subdivisions.
- Some of Delaware's largest industries—particularly health care, tourism and retail—have many low and moderate wage workers, creating a significant demand for workforce housing.
- Future housing demand is shaped by changing demographics, with a growing need for smaller units and more rental housing.[21]

These trends suggest four key areas of concern and potential policy development. First, the state is aging. Between the 2000 Census and the 2017 Census ACS, the median age of Delaware residents grew from 36.0 to 39.8 and the share of Delaware residents over the age of 65 grew from 13 percent to 17 percent. In Sussex County alone, the percentage of residents over the age of 65 grew from 18.5 percent in 2000 to 25.2 percent in 2017. This trend is expected to continue over the next decade, and many of the state's new residents are retirees from metro areas outside of Delaware that are likely to demand a full array of urban services in the future. This demand not only means that more services will be necessary to accommodate these residents after they move to Delaware, but also that new housing will be necessary to accommodate them as they grow older in their new communities. Promoting universal design in newly developed housing is one way to ensure Delaware's housing stock provides for the needs of existing and future residents representing all ages and demographics.

Second, due to the forecast that most new housing construction will be developed outside of urban areas, it is imperative that the State and local governments ensure that new developments in suburban communities include a mix of housing that will provide a balance of multifamily and attached dwellings. Exclusive single-family detached zoning should be

[21] Ibid.

discouraged in some cases in order to promote a healthier mix of housing types statewide. A method for pursuing this recommendation is to continue to comment on housing related policies and practices through the PLUS process, including communicating to towns and counties about the value of ensuring that zoning ordinances allow for a mix and density of housing in prime locations.

Third, due to the fact that some of Delaware's largest industries rely on low wage workers, it will be very important for the State to encourage workforce and moderate income housing in key locations that can support employees in these industries. Workforce housing and new housing targeted toward those with low or moderate incomes in key locations close to employment centers will be essential for addressing this issue. This can be done by incentivizing developers with density bonuses to build new developments that include a threshold percentage of affordable units. Another method to address this concern is continuing to seek funding from State and Federal budgets to support subsidized housing development and the renovation of aging public housing developments statewide.

Fourth, housing demand being driven by demographics means that more rental housing and more developments providing smaller housing units will be necessary in the future. One way to promote multifamily and rental housing in growth areas of the state would be to incentivize additional multifamily development in Investment Level 1 and 2 areas, preferably through a master planning process that ensures community-scale rather than parcel-by-parcel approach to development. The State could also consider recommending the minimization of exclusively single-family detached zoning in Investment Level 1 and 2 areas in order to allow for additional infill development and increased density.

Goal 4. Ensure objective measurement of long term community effects of land use policies and infrastructure investments

Summary

The State goes to considerable length to document trends and to collect and distribute objective data regarding community effects of land use policies and infrastructure investments. Each year, OSPC authors an annual report detailing development trends, demographics, state financial investments supporting these trends, local and state planning activities, and contemporary areas of policy focus and need.[22] Considered alone, these annual efforts seem to largely fulfill the stated goal for objective measurement of long term community effects of land use policies and infrastructure investments. As discussed in the section assessing goal 1, “Direct Investment and future development to existing communities, urban concentrations, and growth areas,” OSPC regularly collects, shares, and analyzes statewide development data that can be used to objectively assess effects of the *State Strategies* and local land use policies, as well as revealing trends and shifts in service and infrastructure demand and related quality of life considerations. The methods used to analyze these data have been refined through the OSPC annual reports, with considerable attention paid to ensuring objectivity and the presentation of sound, repeatable, and verifiable analyses.

Looking beyond the annual reports, the State has taken steps to ensure that objective and consistent measurement is the norm across all agencies. As a result of 2019 legislation developed as part of the State’s Government Efficiency and Accountability Review, all Delaware agencies are now required to use the Delaware Population Consortium’s (DPC) population projections. Basing all service provision projections, performance measures, and associated metrics on a common set of figures will enhance the State’s continued ability to forecast and report on community impacts in an objective fashion.

One limitation in gauging community effects is that the existing assessment methodology, with its focus on measuring development by Investment Level, could be described as a fairly broad-brush approach. As such, this section includes recommendations on approaches that could be used to better assess the marginal and regional community impacts of development and other service, infrastructure, and investment trends.

[22] See “OSPC Annual Reports to the Governor” available at http://stateplanning.delaware.gov/publications/index.shtml.

Measuring Progress

Growth by Investment Level

To analyze the impact of the *State Strategies* and related policies, OSPC solicits county and municipal records on both approved plans and issued building permits. These records are then geo-referenced (i.e., plotted on a digital map) and their geographic distribution is compared with the Investment Levels. This straightforward process makes it readily apparent which plans and permits are occurring in the desired areas and which are not (see Figure 1).

Figure 1. Illustration of Development Trends Analysis from "2019 Report on State Planning Issues"

Table A.14 Summary of building permit activity by county and investment level, 2013–2018

County	Levels 1 & 2	Level 3	Level 4	% in growth zones	% outside growth zones
Residential Units, 2013–2018					
New Castle County	8,353	2,012	712	94%	6%
Kent County	4,696	469	1,224	81%	19%
Sussex County	7,882	4,753	4,685	73%	27%
Non-Residential Square Footage, 2013–2018					
New Castle County	12,029,152	223,141	178,422	99%	1%
Kent County	2,059,803	57,573	273,873	89%	11%
Sussex County	3,330,579	579,764	638,839	86%	14%

Objective, Published, Annual Reporting

The State formally fulfills goal 4 through the preparation of the Cabinet Committee on State Planning Issues' annual report. Though the precise format varies slightly from year-to-year, each annual report carefully details development trends and State investments by region, and even specific community. Appendix B of the recent reports gives the reader a top-down view of directed State investment in support of adopted policies and community growth, while detailing long-term community trends and impacts on a variety of services.

The annual reports summarize education funding, with assessments of new school construction indicating the location of these facilities relative to the *State Strategies* investment levels. Trail and pathway investments are itemized, with descriptions detailing the connections these provide to established communities. Transit, traffic, housing, public safety, agricultural preservation, and a host of other policy topics and issue areas are discussed, with data provided to offer context on community impacts.

Ongoing Progress

Comprehensive Plan Certification

The *State Strategies* may be a state-level document, but its impacts are not limited to operations and planning within State agencies. All 57 Delaware municipalities and three counties regularly develop, amend, and update their comprehensive land-use plans. These updates equate directly to subsequent zoning updates in the respective localities, along with changes in where and what type of growth is to be allowed. The Governor's certification of comprehensive plans is an important step in this process, as municipalities may not annex without a certified plan. Certification is only granted after a State review, facilitated through the PLUS process, confirms plan compatibility with the *State Strategies*. Through this process, the *State Strategies* provides a common framework for assessing both state and local plans and investment strategies.

Government Efficiency and Accountability Review (GEAR)

Initiated by an Executive Order by Governor Carney in 2017, GEAR is a statewide effort aimed in part at promoting efficient spending and investment. On the planning front, three key tasks were identified: establishing a centralized land inventory database, improving data integration and mapping, and requiring all state agencies to use Delaware Population Consortium Projections. The latter was accomplished by legislative act in 2019. By itself, it is a significant step towards the stated goal of "objective measure," as it precludes any "cooking of the books" that could otherwise be possible by selecting a population projection for analysis that would yield a more favorable result for a particular policy or program. The two former initiatives concern themselves more with accuracy, effectiveness, and a reduction in redundancy than on objectivity, per se. However, these initiatives point to the State's continued efforts to provide agencies with tools and datasets that allow for the development of a common understanding of issues and assets—hopefully yielding improved decision-making relative to State investments in the process.

Looking Forward

OSPC is able to produce a very detailed and granular accounting of residential and non-residential development approvals and building permits across the Investment Levels. Through deliberate effort, the State provides an annual custom accounting of expenditures directed by State planning policies. Continued engagement with partner municipalities and on-the-ground implementation of targeted initiatives, such as downtown development districts and transportation improvement districts, should continue to provide the State with concrete, measurable feedback.

Perhaps the next step would be to be able to more precisely map the intensity of investment of State dollars geographically. The state has long been interested in a “fiscal note” or “fiscal analysis” methodology that could ascribe potential costs to various planning proposals and/or track expenditures in order to compare monetary outlays against stated, preferred levels of investment. This methodology has even been proposed on a parcel level, though tracking individual pieces of land as they are subdivided has proved troublesome.

Model Analysis of Infrastructure and Demand on a Census County Division or Urban Area scale

Delaware has experienced substantial growth and development in the time since the *State Strategies* became policy. On average, this growth has created significant demands for services that the State, local governments, and private sector actors have responded to. Examined from a marginal perspective, the location of this growth demands continued vigilance to monitor for the potential underutilization of existing infrastructure and services in stable or declining areas, along with potential shortfalls as more rapid growth threatens to outstrip current capacities. Examining historic population trends at the Census County Division (CCD) scale can help to illustrate some of these shifts in population and attendant service and infrastructure demands. For example, between the 2000 Census and the 2013–2017 American Community Survey, the population of the Wilmington CCD declined by nearly 1,400 residents, with the share of Delaware’s population living in this area decreasing from 9.3 percent to 7.6 percent. Over the same timeframe, population in the Middletown-Odessa CCD increased by 27,593 and the share of Delaware residents living in this area increased from 3.8 percent to 6.1 percent.

While fiscal analyses at the development or plan level are possible, such an approach would be cumbersome to replicate sufficiently and gain a comprehensive view of the impacts of development. Analysis at the CCD scale, or that of Census designated urban areas, could prove useful for communicating about and preparing detailed studies of shifts in the location of residential and commercial centers and the resulting community impacts and infrastructure and service demands. In particular, the CCD scale is associated with recognizable sub-county regions in Delaware. This characteristic could allow for the production of compelling quantitative and qualitative case studies of the past, present, and expected future impacts of growth, development, and state investments on Delaware’s communities. Over time, the State’s development and refinement of such a regional planning analysis capability could afford significant value in terms of the capacity to generate detailed sub-county planning forecasts while fostering meaningful public engagement on the likely incidence and impacts of growth and development.

Goal 5. Streamline regulatory processes and provide flexible incentives and disincentives to encourage development in desired areas

Summary

The State, with active and enthusiastic cooperation from the counties and many municipalities, has been very active in providing incentives for development in desired areas as well as streamlining the process. Transportation Improvement Districts (TIDs) now provide the development community with certainty regarding future investment and bypass the requirement for a traffic impact study. Downtown Development Districts (DDD) and Opportunity Zones provide tangible, fiscal incentives for development in carefully selected, often master-planned areas. Master plans themselves are valuable in this regard, as, typically, development interests are spared the process of requesting rezonings or a lengthy public approval process when working from an approved master plan. The PLUS process can also serve to streamline development plans and comprehensive plans as the applicant is advised of potential hurdles to approval towards the front end of the process. PLUS also represents a key disincentive to haphazard development, as, for instance, municipalities may not annex without demonstrating compliance with the *State Strategies* and achieving plan certification after review through the process.

Policies to Incentivize and Streamline Desirable growth.

Historically, Delaware has preferred to foster a positive climate around planning policy, favoring the carrot to the stick. In most cases, the “disincentive” is the absence of incentives. There is, however, an important exception.

Certified Comprehensive Plans and PLUS

House Bill 255, passed in 2001, represented a groundbreaking alignment of local and state planning priorities. It achieved this, in no small part, due to a significant disincentive. Local municipalities would not be permitted to annex new lands unless and until their comprehensive plan had been certified by the Governor.

What sounds like a top-down, heavy handed approach actually is not. The State review and certification process itself was specifically designed to facilitate increased cooperation between municipal entities and the many state agencies they would typically have to work with in researching and crafting a plan. It also requires documented coordination with the host county and neighboring municipalities. This review is now integrated into the Preliminary Land Use

Service (PLUS) process so that all state agencies have an opportunity to review the plans and provide coordinated comments.

Furthermore, the State Investment Levels were rarely the sole determinant in a certification decision. In fact, a certified comprehensive plan would often have the effect of changing the Investment Level map upon a subsequent *State Strategies* update. The State's methodology purposefully gives significant weight to areas municipalities have identified for potential annexation.

Since the program's inception in 2004, 107 comprehensive plans, 150 comprehensive plan amendments, and 47 Pre-Update reviews have gone through the PLUS process prior to approval and eventual certification.[23] The process ensures that the plan is compatible with the *State Strategies*.

Master Plans

Master planning is an established concept that did not require legislative or executive action to be encouraged. Nonetheless, the recommendation that a community or municipality consider a master plan for a particular area has been extraordinarily common in PLUS plan reviews. Many times simply a suggestion, in a handful of cases, it has been required to gain certification.

Though master planning is, undeniably, an additional step in the growth and development process, the addition of that step often enables the end party to bypass or gain expedited approval for downstream procedures. An easy example is zoning. A master planned annexation will, effectively, be pre-zoned upon its incorporation. This mitigates the need for the end party to request re-zonings. Individuals and development interests can clearly see what is desired and can plan accordingly with increased certainty for municipal approval.

Notable examples of master planned areas include the Southern New Castle County Master Plan of 2009 (currently being updated), Milford, Smyrna, Middletown, Fort DuPont, and Claymont.

Transportation Improvement Districts (TIDs)

New Castle County updated its unified development code in 2019 to specifically allow for TIDs. Other TIDs are being developed in Dover, Milford, Newark, Kent County, and Henlopen. Middletown, southern New Castle County, and Hyett's Corner already have TIDs in place.

Downtown Development Districts (DDDs)

Codified in Chapter 19 of Title 22 of the Delaware State Code, DDDs were enacted in 2014 to create a strong incentive for residential, commercial, and industrial investment, development,

[23] Delaware Office of State Planning Coordination, 2019.

and redevelopment in qualified areas. Qualified investment may receive up to a 20 percent rebate of eligible costs upon completion.

Interested communities undertake a competitive selection process in which in-kind contributions and the presence of a complementary comprehensive or master plan is a significant advantage. To date, a dozen communities have been awarded DDD designation. In 2019, Delaware City, Middletown, New Castle, and Clayton joined Dover, Georgetown, Harrington, Laurel, Milford, Seaford, Smyrna, and Wilmington as approved districts. Already, nearly $32 million has been rewarded in rebates on almost $600 million in incentivized investment.

Looking Forward

The framework for efficient, statewide, collaborative planning has been set down, as outlined by the programs and initiatives detailed above. Each represents a conscious and deliberate decision to prioritize the State's overall goals and vision, namely, the *State Strategies*, over perceived short-term wins for any given initiative. The effectiveness and efficiency of current and future programs may well be dictated by how well they do, or do not, purposefully maintain cohesion with the State's overall stated direction. PLUS and master planning are additional steps in the process, and a TID is a larger undertaking than any one traffic study. Despite this, these additional procedures tend to lead to greater predictability, fewer delays, a more orderly path from start to finish, and greater efficiency overall.

However, when a project or initiative is not aligned with the *State Strategies*, these checks and procedures may indeed represent a delay or hurdle. Buy-in across various state agencies and levels of municipal government to the *State Strategies* may represent the single most significant opportunity for continued efficiency and effective evaluation of incentives. Likewise, robust engagement with the various stakeholders of the *State Strategies* during their periodic refinement may enable the commitment and buy-in required.

Goal 6. Encourage redevelopment and improve the livability of existing communities and urban areas, and guide new employment into underused commercial and industrial sites

Summary

There is a fair amount of crossover between goals five and six. Here, the discussion centers upon the rehabilitation of blighted areas and the redevelopment and reuse of legacy commercial and industrial parcels. DNREC's brownfield redevelopment initiative and the State's recent Downtown Development Districts program directly address this important goal.

DNREC's brownfield program relieves investors of liability arising from past pollution, greatly increasing the private sector's willingness to purchase and improve such properties. Over 300 properties have been certified since 2004, including notable projects like Claymont Renaissance, the UD STAR Campus, and the Wilmington Riverfront.

Likewise, in only a few short years, the DDD program has leveraged nearly $32 million in State funded rebates into almost $600 million in private investment. Only a small percentage of investment has gone to new construction. The overwhelming majority involved mixed-use, commercial, and the rehabilitation of existing structure, all in carefully selected, pre-planned areas. The Strong Neighborhood Housing Fund serves a similar function on a much smaller scale.

Finally, Opportunity Zones have been created and targeted to some of the State's greatest areas of need. Though too new to yet assess, they are designed to incentivize and attract large-scale investment.

Measuring Progress of Ongoing Initiatives

Downtown Development Districts

Delaware already has a strong track record of success with the young Downtown Development Districts (DDDs). Boasting eight districts and over 100 small and large projects in only a handful of years of operation, the DDD concept has proven very attractive to investors and candidate communities. The program has leveraged nearly $32 million in rebates into almost $600 million of private investment. In 2019 alone, it leveraged $10.9 million in incentives into $231.4 million in private investment.[24]

[24] For a more complete summary of DDD activities, see https://stateplanning.delaware.gov/ddd/status-success.shtml.

More impressive than the raw numbers is the fact that this investment is happening in sub-areas of selected municipalities, precisely where they said they needed it. Also noteworthy is the steady growth of smaller projects, year over year, from none to seven, to 18, to 31 in 2018. 100+ projects cannot be detailed here, but many have involved the rehabilitation of vacant, underutilized, or outdated commercial and institutional structures back to productive use.

Strong Neighborhood Housing Fund

Initially created with revenue from a one-time settlement stemming from the 2008 recession, the Strong Neighborhood Housing Fund now receives a $3M annual allotment from the Bond Bill. Dover, Wilmington, New Castle County, Milford, and Georgetown have active projects. The program is focused on the rehabilitation of vacant, abandoned, or foreclosed properties as a pathway to homeownership. The 2019 round of funding leverages $3.2 million to attract at least $9.4 million in non-state funds slated for the construction or rehabilitation of 60 properties in the City of Wilmington, New Castle County, Dover, Milford, and Georgetown.

Opportunity Zones

Enabled by the 2017 Tax Cuts and Jobs Act, Opportunity Zones provide the incentive of tax benefits to firms, entities, and individuals who invest eligible capital into these need-based, prioritized communities. In spring 2018, Governor Carney announced the Opportunity Zone designation of 25 census tracts in Delaware, strategically selected to encompass the state's existing Downtown Development Districts with an eye towards potentially leveraging the benefits of both programs. Among them were areas around and including the Newark STAR Campus, Claymont, significant portions of Wilmington, Smyrna, Seaford, Laurel, Georgetown, Milford, and Dover.[25] In coming years, development in these areas should be considered as part of the annual assessment work conducted by OSPC and its partners.

Brownfield Certification and Redevelopment

Enacted in 2004, the DNREC-administered Brownfield Development Program runs on a simple concept—development interests that did not contribute to the pollution of existing brownfields are relieved of their liability regarding potential future environmental issues if they follow certification guidelines. Financial assistance can be made available to cooperative parties.

The Claymont Master Plan serves as a shining example of what is possible with full community engagement when an otherwise insurmountable obstacle is addressed in this way. Since 2015, a private development interest has partnered with DNREC to remediate the former steel plant under the agency's voluntary cleanup program. The master plan envisions sweeping changes,

[25] Delaware.gov, Delaware News, "$3.2M Awarded to Strong Neighborhood Projects." Published May 13, 2019. Retrieved from https://news.delaware.gov/2019/05/13/3-2-million-awarded-to-strong-neighborhoods-projects/

enabling the transition from a legacy industrial area to a mixed-use, transit-oriented, complete community.

As of late 2019, DNREC has certified 304 sites that are in various stages of remediation, redevelopment, or completion.[26] The full inventory is available online from DNREC. A dozen success stories were easily provided by DNREC staff:

1. Playtex Plant, Dover – now Capital Station shopping center
2. Capitol Scrap, Dover – now 2 parcels with a NAPA Auto Parts store and a community/cultural center
3. Harper Thiel electroplating facility, Wilmington – now Wilmington Brew Works
4. Speakman Company, plumbing parts manufacturer, Wilmington – now Speakman Place affordable homes
5. Gulf gas station, Kirkwood Highway, Wilmington – now WSFS Bank
6. Chrysler Assembly Plant, Newark – now University of Delaware STAR campus
7. Multiple facilities along Wilmington Riverfront – now hotels, shopping, restaurants, Children's museum
8. Railroad and associated right of way, Milton – now Milton Rails to Trails public access walking/biking trail
9. 1800's lumber yard and cooper shop/hosiery mill factory 14th and Walnut St, WIlmington- now Habitat for Humanity affordable housing
10. Industrial School 1896, 1972, Clayton – now First State Military Academy
11. Lewes Coal Gas, Lewes – now cafe, bakery and home and garden store
12. Multiple facilities South Wilmington – now 76ers Fieldhouse

Looking Forward

Clearly the state has benefitted substantially from two decades of persistently pursuing a consistent vision. Building upon the foundation of earlier policy pillars such as comprehensive planning and plan certification, there have been tremendous successes seen in the more recent efforts at master planning and the targeting of program incentives according to a unified body of planning.

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[26] Delaware Department of Natural Resources and Environmental Control, 2019.

The State may wish to replicate and build upon these efforts with additional programs and incentives. Already, the state has demonstrated considerable foresight in attempting to ensure various programs align and complement each other, such as with the purposeful selection of Opportunity Zones to dovetail with selected downtown development districts. Looking forward another 20 years, it may be prudent to periodically re-evaluate, align, or merge existing and future initiatives to avoid a potentially confusing alphabet soup of initiatives and programs to the extent possible. A planning and economic development toolbox may also be of use for succinctly describing the varied initiatives, programs, and grants available, as well as detailing contact information and application procedures.

Goal 7. Provide high quality employment opportunities for citizens with various skill levels to retain and attract a diverse economic base

Summary

Since the adoption of the *State Strategies* twenty years ago, economic trends and conditions in Delaware have reflected largely national and global phenomena experienced through the lens of the state's particular economic legacy. This time period brought a great recession, a slow recovery, and a contemporary period of sustained economic expansion and low unemployment rates. The long restructuring from an economy based on goods production to one based on knowledge and service provision continued, with the 1999 - 2018 period bringing a loss of nearly 16,000 manufacturing jobs more than counterbalanced by growth in sectors including finance and insurance, professional, scientific, and technical services, and health care and social assistance. Delaware maintains a highly diverse economic base relative to other states, creating opportunities for future growth built on existing strengths.

Overall, the performance of Delaware's economy has been competitive with other states, with low current unemployment rates and growth in sectors with considerable future opportunities. However, economic opportunity varies considerably across Delaware's communities. In particular, unemployment rates have been persistently higher in Kent County, among Delaware residents identifying as Black or African American, and among residents without college degrees.

While the exact dimensions of Delaware's future economic performance are unclear, what seems clear is that Delaware and the larger economy will be faced with continued change in the form of economic restructuring, the relative importance of particular skills, and the continued ability for Delawareans of all geographic and demographic backgrounds to access economic opportunity. Responding to the past, present, and likely future dynamism of Delaware's economy, Governor Carney worked with Delaware's public and private sector leaders to reorganize the State's approach to economic development through the newly created public-private Delaware Prosperity Partnership and the Delaware Department of State's Division of Small Business. The continued vitality of Delaware's economy and its residents will likely depend on thoughtful programming and collaboration among these and other entities to help businesses and communities plan for and meaningfully participate in current and emerging economic trends. In particular, State, local, and private investments that aim to improve and diversify the quality of place experienced across Delaware will likely serve as a necessary ingredient for attracting and retaining the talent needed to help Delaware's existing and future businesses grow.

Economic Dynamics

According to figures from the Bureau of Economic Analysis, Delaware added nearly 105,000 jobs over the 1999-2018 time period.[27] Growth was uneven across industry sectors, with manufacturing employment decreasing substantially in absolute terms and sectors including health care and social assistance, finance and insurance, accommodation and food services, and professional, scientific and technical services experiencing substantial growth that counterbalanced these losses.

Delaware's employment growth did not quite keep up with population growth, as jobs per capita decreased very slightly from 0.63 in 1999 to 0.62 in 2018.[28] An older population likely contributes to this change, with a greater share of Delaware's residents choosing not to seek wage and salary employment. Delaware's labor force participation rate has decreased from 67.6 percent in 1999 to 62.5 percent in 2018.[29]

Viewed through the spatial lens of the *State Strategies*, Delaware's employment growth has been focused primarily in those areas targeted for more intense urban development. While the granularity of employment data does not allow for precise comparison of employment with State Strategies levels, an analysis of block-level employment data from the U.S. Census Bureau's Longitudinal Employer-Household Dynamics program reveals that approximately 75 percent of Delaware's employment growth over the 2002-2017 period was focused in Level 1 and 2 areas. Level 1 and 2 areas contain approximately 85 percent of employment in Delaware.[30]

Understood as a state's spreading of risks against industry-specific downturns or hedging across industries to increase the chance of capturing future opportunities, economic diversity can speak to the resilience of a regional economy. An analysis of 2018 employment data by the Council for Community and Economic Research revealed that Delaware's counties are significantly more economically diverse than average.[31] Kent County was more diverse than 73 percent of all U.S. counties, with Sussex ranking more diverse than 81 percent of counties and New Castle more diverse than nearly 95 percent of all counties.

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[27] Bureau of Economic Analysis, U.S. Department of Commerce, "Total Full-Time and Part-Time Employment by NAICS Industry (SAEMP25N), 1998-2018." Last updated September 24, 2019. Accessed November 15, 2019 from https://apps.bea.gov/iTable/index_regional.cfm.

[28] Ibid.

[29] Bureau of Labor Statistics, U.S. Department of Labor, "States and selected areas: Employment status of the civilian noninstitutional population, 1976 to 2018 annual averages." Accessed November 15, 2019 from https://www.bls.gov/lau/staadata.txt.

[30] University of Delaware, Institute for Public Administration GIS analysis of 2015 State Strategies Levels relative to the block-level employment data of the U.S. Census Bureau's Longitudinal Employer-Household Dynamics (LEHD) program. LEHD data on employment for Delaware as a work area extracted November 15, 2019 from "OnTheMap," https://onthemap.ces.census.gov/.

[31] Council for Community and Economic Research (C2ER), "Regional Economic Data Toolkit: Diversity Index." Accessed November 15, 2019 from http://subscribers.c2er.org/licensee_login.asp?src=diversity.

Economic Performance

Measures of Delaware's Gross Domestic Product (GDP)—the value of the goods and services produced in Delaware—indicate that Delaware has long been one of the nation's most economically productive states. As of 2018, the Bureau of Economic Analysis ranked Delaware 9th among all states with a real GDP per capita of $64,895.[32] This ranking has decreased since 1999, when Delaware was 1st, but the state has consistently ranked highly on this measure since the *State Strategies* were adopted. Consistent with Delaware's generally competitive standing, the Bureau of Labor Statistics reports that Delaware's 2018 annual average unemployment rate of 3.8 percent was 0.1 points better than the national rate and ranked 25th among all states.[33]

Household Economic Opportunity

Economic outcomes vary considerably across Delaware's households and communities. According to 2018 Current Population Survey data, Black or African American workers residing in Delaware experienced a 6.2 percent unemployment rate, compared to a 3.8 percent rate for all workers and a 3.0 percent rate for White workers.[34] 2018 Local Area Unemployment Statistics data indicated that Sussex and New Castle counties enjoyed 3.7 percent unemployment rates while Kent suffered from a relatively higher 4.1 percent rate.[35] 2017 American Community Survey data also reports significantly different unemployment rates for Delaware residents age 25-64 based on their educational attainment—with residents with a Bachelor's degree or higher having a 2.7 percent unemployment rate, residents achieving no more than a high school diploma with a 6.2 percent rate, and residents that didn't finish high school having an 8.8 percent unemployment rate.[36]

Areas of Existing and Potential Policy Focus

Delaware Pathways

Recognizing that a significant number of current and future jobs for Delawareans will require certificates short of a four-year degree, Governor Carney has committed the State to working

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[32] Bureau of Economic Analysis, U.S. Department of Commerce, "Per capita real GDP by state (SAGDP10N), 1999-2018." Last updated November 7, 2019. Accessed November 15, 2019 from https://apps.bea.gov/iTable/index_regional.cfm.
[33] Bureau of Labor Statistics, U.S. Department of Labor, "Regional and State Unemployment, 2018 Annual Average Summary." February 28, 2019. Accessed November 15, 2019 from https://www.bls.gov/news.release/srgune.nr0.htm.
[34] Bureau of Labor Statistics, U.S. Department of Labor, "Employment status of the civilian noninstitutional population by sex, race, Hispanic or Latino ethnicity, marital status, and detailed age, 2018 annual averages." Last modified October 2, 2019. Accessed November 15, 2019 from https://www.bls.gov/lau/ex14tables.htm.
[35] Bureau of Labor Statistics, U.S. Department of Labor, "Labor Force Data by County, 2018 Annual Averages." April 19, 2019. Accessed November 26, 2019 from https://www.bls.gov/lau/laucnty18.xlsx.
[36] U.S. Census Bureau, 2017 American Community Survey 1-Year Estimates, "Table S2301 - Employment Status." Accessed November 14, 2019 from factfinder.census.gov.

with public and private partners to ensure career pathways are in place to prepare students for jobs and careers in high demand fields. The past twenty years of economic restructuring serves as a testament to the need for this effort. In just one example of employment shifts over this time period, traditional manufacturing declined statewide and warehousing jobs increased from just over 1,000 in 1999 to nearly 6,100 in 2018.[37] As industries continue to expand and decline, and job requirements shift, Delaware will need to remain vigilant in its efforts to ensure residents have access to knowledge of emerging sectors and sufficient opportunities to pursue careers in these fields.

Targeted Efforts to Plan for Legacy Economy Adaptation

Delaware's municipalities and historic population centers were, almost without exception, founded and developed with a different economic paradigm in mind than exists today or will exist in the future. One needn't look further than Delaware's railroad communities or the redeveloping Claymont Steel site to see how the position of local economies in the greater regional economy can shift over time. As part of the *State Strategies*, Delaware's municipalities have all engaged in comprehensive planning. While economic development is a necessary component of this planning, it can be crowded out in favor of addressing the more immediate requirements of land use and zoning. To ensure that Delaware's historic centers of commerce can chart a course forward for economic development, serious consideration should be given toward incentivizing the development and implementation of local and sub-county economic development strategies. This effort would help communities to identify the characteristics of desired economic growth while putting in place policies and strategies to work toward these outcomes. A collaborative approach among the Division of Small Business, the Delaware Prosperity Partnership, and other public, private, and higher education entities is recommended to ensure that localities have access to a relatively complete array of resources and perspectives to pursue opportunity areas.

Comprehensive Approach to Attracting, Developing, and Retaining Talent

While infrastructure remains critically important to economic development, there is growing competitiveness among states and regions for attracting, developing, and retaining the talent necessary to fill and create jobs in diverse industry sectors. The Delaware Prosperity Partnership's appointment of a Director of Talent Services reflects this growing competition.

From the standpoint of how Delaware should best invest to win this competition, a diverse portfolio of people- and place-based investments will be required. On the people front,

[37] Bureau of Economic Analysis, U.S. Department of Commerce, "Total Full-Time and Part-Time Employment by NAICS Industry (SAEMP25N), 1998-2018." Last updated September 24, 2019. Accessed November 15, 2019 from https://apps.bea.gov/iTable/index_regional.cfm.

investments in K-12, higher education, and programming, such as career pathways, will be required.

From a place-based perspective, the State can play a particular role in at least two areas. First, targeted investments in economically distressed areas can help to ensure that talent has an opportunity to thrive statewide. With the advent of federally-enabled Opportunity Zones and state-enabled Downtown Development Districts, the timing is ripe to layer additional programming and incentives on efforts to spur revitalization. Second, a focus on developing craft-based or unique local small businesses in Delaware communities can serve to retain existing talent by providing entrepreneurial opportunities, while also attracting talent through the stimulation of diverse and vital community settings statewide. The recent creation of the Delaware Division of Small Business provides a venue for creating these entrepreneurial opportunities, and the growth of Delaware's craft beverage industry in recent decades serves as an example of the place-based economic development value that can come from what might start as small-scale entrepreneurship.[38]

[38] Bureau of Labor Statistics, U.S. Department of Labor, "Industry on tap: breweries." December 2017. Accessed November 15, 2019 from https://www.bls.gov/spotlight/2017/industry-on-tap-breweries/home.htm.

Goal 8. Protect the state's water supplies, open spaces, farmlands and communities by encouraging revitalization of existing water and wastewater systems and the construction of new systems

Summary

Although the State faces a looming $4 Billion outlay to repair, upgrade, and expand its varied and aging drinking and wastewater systems over the next 20 or so years, continued diligent planning and anticipated system investments could largely offset these costs. Unfortunately, according to the Water Infrastructure Advisory Council (WIAC), the effect may not be uniform. Economically depressed areas lacking in new private sector investment may fall behind.

Delaware is strong in water planning, boasting a 60-year history of such. Aside from the WIAC, deliberate planning advises the dispensation of the Drinking Water State Revolving Fund (DWSRF) and the Delaware Water Pollution Control Revolving Fund (DWPCRF). Unfortunately, funding commitments have not always, or recently, kept pace. Both funds have, at times, had to "live off the interest" of existing loans in repayment, with a resulting need for administrators to exercise restraint in granting new loans. A stable commitment from the federal government, or the designation of additional state funds, would be a great benefit.

An analysis of the available data on the new construction of septic systems reveals a mixed bag of results. New septic system construction has trended down for all three counties since before 2000. However, figures for Investment Level 4 and Out of Play areas are little changed from nearly ten years ago. Whether this can be described as "uncontrolled growth," or is simply attributable to the desired low density rural character of such areas is a matter of opinion.

Also noteworthy is the number of new septic system permits being issued in Level 1, 2, and to a lesser extent, Level 3 areas. Certainly, in Levels 1 and 2, the argument could be made that septic systems should not be necessary, as they are identified as established areas of high priority for investment. As a percentage, these approvals appear negligible. Though the analysis is of a sample, and generally speaks in percentages, it still shows that nearly 2,500 systems have been approved statewide since 2000; 1,340 since 2005.

Overview of State Initiatives

Since the inception of the Clean Water State Revolving Fund program in 1990 (known in Delaware as the Drinking Water State Revolving Fund (DWSRF), the Water Infrastructure Advisory Council (WIAC) has reviewed and recommended funding for 102 municipal/public wastewater and stormwater *related loans and 1,354 non-point source loans totaling over $430 million.* **-** *DNREC Bond Bill Hearing, May, 2018*[39]

Water Infrastructure Advisory Council

Delaware is fortunate to have the benefit of a longstanding culture of water awareness and thoughtful policy. The Interstate Water Resources Survey of 1959 was amongst the first initiatives in the state's long record of planning. Today, the Water Infrastructure Advisory Council (WIAC), assisted by DNREC, recommends the State's water infrastructure policy and program to the General Assembly. WIAC's thirteen members include significant representation from the public sector, the engineering community, private interests, and unaffiliated citizens.

Under the Council's stewardship, periodic drinking water needs assessments, long-term funding plans, and watershed management plans are produced. The fundamental finding of the most recent needs assessment is plainly made. Delaware, like most other east coast states, faces the daunting prospect of the incremental upgrade of an aging water and wastewater infrastructure. The, mostly buried, infrastructure that largely dates to at least the 1960s carries a total replacement value in excess of $4 Billion. Even though the projected 20-year suggested investment of $1 Billion appears eye-watering, the council advises that anticipated system investments should account for much of this figure, though investment is likely to lag in economically depressed areas.[40]

Drinking Water State Revolving Fund

Since 1999, federal and state contributions to the Drinking Water State Revolving Fund (DWSRF) have equaled almost exactly one quarter of a billion dollars. Delaware's contributions account for over $36 million. Since the program's establishment in 1990 the fund has provided loans for work on over 100 municipal water and wastewater systems, and over 1,300 non-point source remediation loans.[41]

However, funding has not kept pace with growth or inflation, as shown in table 12. In fact, it has decreased overall, even comparing 2019 dollars to 1999 currency. Despite a blip in 2001 when no contributions were made, and a one-year surge in spending in 2009, owing to the stimulus, funding has remained relatively flat. It initially fell from over $17 million in 2000 and has generally hovered between eight and eleven million dollars annually since. Funding levels increased modestly in 2019 to $13 million.

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[39] DNREC Bond Bill Hearing Presentation, May 2018. Retrieved from http://www.dnrec.delaware.gov/Admin/Documents/wiac-briefing-to-the-bond-bill-committee-20180517.pdf

[40] "Water Infrastructure Advisory Council, Drinking Water Needs Assessment." State of Delaware, Feb., 2015. Retrieved from http://www.dnrec.delaware.gov/fab/Documents/WIAC%20Drinking%20Water%20Needs%20Assessment%20Survey-Final%20Report.pdf

[41] DNREC Bond Bill Hearing Presentation, May 2018. Retrieved from http://www.dnrec.delaware.gov/Admin/Documents/wiac-briefing-to-the-bond-bill-committee-20180517.pdf

Table 12. Drinking Water State Revolving Fund Details, 1999-2019

	1999	2000	2001	2002	2003	2004	2005
Fed Funds	$12,558,800	$14,585,100	$0	$7,757,000	$7,789,100	$8,052,500	$7,984,100
DE Funds	$2,511,760	$2,917,020	$0	$1,551,400	$1,557,820	$1,610,500	$1,600,820
DE Match	20%	20%	na	20%	20%	20%	20%
Total	$15,070,560	$17,502,120	$0	$9,308,400	$9,346,920	$9,663,000	$9,584,920
	2006	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
Fed Funds	$8,303,100	$8,285,500	$8,229,300	$34,230,626	$9,881,603	$13,573,000	$9,268,000
DE Funds	$1,660,620	$1,657,100	$1,645,860	$3,275,000	$1,649,085	$367,714	$1,853,600
DE Match	20%	20%	20%	10%	17%	3%	20%
Total	$9,963,720	$9,942,600	$9,875,160	$37,505,626	$11,530,688	$13,940,714	$11,121,600
	2013	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**
Fed Funds	$8,975,000	$8,421,000	$8,845,000	$8,787,000	$8,312,000	$8,241,000	$11,107,000
DE Funds	$1,795,000	$1,684,200	$1,769,000	$1,757,400	$1,662,400	$1,648,200	$2,221,400
DE Match	20%	20%	20%	20%	20%	20%	20%
Total	$10,770,000	$10,105,200	$10,614,000	$10,544,400	$9,974,400	$9,889,200	$13,328,400

Source: Delaware Drinking Water NIMS Data Report, https://www.epa.gov/sites/production/files/2019-12/documents/delaware_dwsrf_2019.pdf, October 23, 2019.

The most recent DWSRF plan dates to 2017 amidst unclear federal funding reliability. The plan's first goal notes the need to make "judicious use" of remaining funds. Even so, it delineated 14 funded projects, eight of which were to receive some subsidy, for a total of $7.3 million, with another $2.5 million for set-aside activities. The DWSRF also utilizes a project priority ranking criteria that favors existing systems and investments in what it terms, "disadvantaged areas." Projects deemed unaffordable to disadvantaged communities and projects remediating known water quality standards deficiencies received the highest bonus points for independent factors.

Delaware Water Pollution Control Revolving Fund

Also known as the Clean Water State Revolving fund, the Delaware Water Pollution Control Revolving Fund is administered by DNREC and was created by the Delaware Legislature in 1990. It is set up in accordance with the requirements of Title VI of the Federal Water Pollution Control Act and is funded by federal seed money, state matching funds, and interest accrued from ongoing lending.

The 2019 Intended Use document details roughly $15 million spread across eight projects. Four are statewide efforts administered by DNREC.[42] The remainder are administered by Sussex County and are allocated towards spray irrigation improvements or National Pollutant Discharge Elimination System (NPDES) administration and enforcement.

Funding levels appear to have waned significantly, owing to more stringent guidelines laid out in the Water Resources Reform and Development Act. In FY 2012 Delaware was able to allocate $32.5 million total, $27 million in federal funds and $5.4 million in matching funds. Seven years later, the 2019 allocations are $9.3 million total, $1.5 million of which is state match.

Analysis of Septic System Permit Approvals

Statewide septic system permits from 1985 to 2019 were reviewed and broken down by county and State Investment Level. Of the over 100,000 records, 90,000 could be accurately located geographically. Of that number, 28,000 were for approved and constructed septic systems. Table 13 lists this subset by county and time period of approval.

Table 13. Total Septic Systems Approved and Constructed, by County and Time Period

County	Pre 1999	2000 - 2004	2005 - 2009	2010 - 2014	2015 – 2019
Kent	10.4%	6.5%	6.1%	2.6%	2.2%
New Castle	6.2%	2.9%	1.6%	0.9%	0.7%
Sussex	18.3%	13.7%	12.5%	7.6%	7.7%

Source: University of Delaware Institute for Public Administration – Water Resources Center analysis of DNREC Septic Permit Data, 2019. Note: Percentage shares represent portion of all permits issued statewide over entire time period.

The overall trends paint a positive picture. Septic system approvals have trended down steadily and significantly. A sizable reduction was seen between 2005-2009 and 2010-2014, possibly owing to the steady implementation of the *State Strategies*. It is too soon to say if the diminishing gains seen in the last scoring period represent a plateau in progress, or if they are indicative of the “natural” rate of septic construction.

Table 14 shows all approvals from 1985 to present. As one would expect, the vast majority of approvals occurred in Investment Levels 3 and 4. Still, there was a fairly uniform 15-20% ratio of approvals in the Investment Levels most favored for growth (Levels 1 and 2).

[42] DNREC, “State of Delaware Water Pollution Control Revolving Fund 2019 Intended Use Plan,” May, 2019. Retrieved from http://www.dnrec.delaware.gov/fab/Documents/Intended%20Use%20Plan%20and%20Project%20Priority%20List/fy-2019-cwsrf-intended-use-plan-final-20190516.pdf

Table 14. Permits for Constructed Septic Systems by County and Investment Level, 1985 – 2019

2015 Level	Kent	New Castle	Sussex
Level 1	3.9%	3.7%	5.2%
Level 2	16.6%	11.5%	14.9%
Level 3	21.2%	31.4%	21.2%
Level 4	53.9%	51.1%	57.2%
Out of Play	4.4%	2.3%	1.5%

Source: University of Delaware Institute for Public Administration – Water Resources Center analysis of DNREC Septic Permit Data, 2019. Note: Percentage shares represent portion of all permits issued in a particular county for 1985 – 2019.

Overall, examining table 15, clear progress is apparent over the near 35-year period. Since the mid 2000s, septic system construction in Level 1 areas is under a half percent, with Level 2 trending downward significantly to near as impressive a figure. Even the less developed levels have seen significant reduction in the number of permits issued and, therefore, the share of total permits accounted for in these areas. Again, some of the reductions seen in Levels 3 and 4 seems to have stabilized over the past ten years.

Table 15. Permits for Constructed Septic Systems by Time Period and Investment Level

2015 Level	Pre 1999	2000 - 2004	2005 - 2009	2010 - 2014	2015 – 2019
Level 1	2.7%	0.9%	0.6%	0.3%	0.4%
Level 2	6.7%	3.7%	2.2%	1.1%	0.7%
Level 3	8.2%	6.2%	3.8%	2.0%	2.0%
Level 4	16.4%	11.8%	13.1%	7.4%	7.3%
Out of Play	0.9%	0.5%	0.5%	0.4%	0.2%

Source: University of Delaware Institute for Public Administration – Water Resources Center analysis of DNREC Septic Permit Data, 2019. Note: Percentage shares represent portion of all permits issued statewide over entire time period.

As shown in Table 16, parsing the data a bit reveals that Sussex County is an outlier. Table 14 showed that the rates of septic approvals in Sussex County Levels 3 and 4 areas is not drastically different from the other counties. However, Table 16 reveals that the magnitude of approvals in Sussex County is significantly higher than it is in Kent or New Castle Counties. Since 1985, Sussex permits in Level 4 account for over a third of all new system construction in the state, over twice the percentage for Kent and nearly five times that of New Castle County.

Table 16. Permits for Constructed Septic Systems by County, Level, and Time Period

County	2015 Level	Pre 2000	2000 – 2004	2005 - 2009	2010 - 2014	2015 - 2019
Kent	Level 1	0.6%	0.2%	0.1%	0.1%	0.1%
Kent	Level 2	1.6%	1.6%	0.7%	0.2%	0.1%
Kent	Level 3	2.3%	1.7%	1.1%	0.4%	0.5%
Kent	Level 4	5.4%	2.9%	3.9%	1.8%	1.4%
Kent	Out of Play	0.5%	0.2%	0.3%	0.2%	0.1%
New Castle	Level 1	0.2%	0.0%	0.1%	0.0%	0.0%
New Castle	Level 2	0.6%	0.2%	0.3%	0.2%	0.1%
New Castle	Level 3	2.2%	0.8%	0.4%	0.2%	0.2%
New Castle	Level 4	3.0%	1.7%	0.7%	0.4%	0.4%
New Castle	Out of Play	0.1%	0.0%	0.1%	0.0%	0.0%
Sussex	Level 1	1.8%	0.7%	0.4%	0.2%	0.2%
Sussex	Level 2	4.5%	1.9%	1.2%	0.7%	0.6%
Sussex	Level 3	3.8%	3.8%	2.3%	1.4%	1.3%
Sussex	Level 4	7.9%	7.2%	8.4%	5.2%	5.4%
Sussex	Out of Play	0.3%	0.2%	0.2%	0.1%	0.1%

Source: University of Delaware Institute for Public Administration – Water Resources Center Analysis of DNREC Septic Permit Data, 2019. Note: Percentage shares represent portion of all permits issued statewide over entire time period.

Looking Forward

The State is facing the necessity of investing billions of dollars in water and wastewater in the coming decades. Though the WIAC notes that this is not a crisis and may be managed, it does note the potential for uneven results, particularly for larger, established, core systems that some of Delaware’s more vulnerable populations depend on.

Clearly, 20 years of relatively stagnant funding has not helped the State get ahead of these issues. Given that 80% of these funds are federal, it may not be prudent to rely upon the availability of increased federal funds. The entire nation’s infrastructure is aged. Urgent or sudden system failures, as have been seen elsewhere in recent years, could necessitate the State committing more than the usual 20 percent match, or spending to address crises as they arise. Further, though the contemporary approval of septic systems represents only a small share of all septic systems approved in recent decades, there are a significant number of septic systems serving households statewide. These are private systems, but their continued maintenance is critical for ensuring both the public health, safety, and welfare of individual households and communities, and environmental quality statewide. In short, Delaware is faced with a considerable backlog of drinking water and wastewater infrastructure needs.

In January 2020, Governor Carney and Delaware legislators proposed the creation of a "Delaware Clean Water Trust to help rebuild Delaware's drinking water infrastructure, prevent flooding in vulnerable communities, and keep contamination out of our waterways."[43] The proposed "Clean Water Delaware Act [would establish] a framework for assessing needs and planning and implementing projects that support Delaware's efforts to improve the quality of the State's water supply and waterways."[44] Such a framework for coordinating efforts to plan for infrastructure investments is highly consistent with the *State Strategies* and seems to be a promising opportunity for addressing these needs in a thoughtful, coordinated, and fiscally responsible manner.

[43] "Governor Carney, Legislators Announce Major Investments in Clean Water," https://news.delaware.gov/2020/01/21/governor-carney-legislators-announce-major-investments-in-clean-water/, January 21, 2020.
[44] 150th General Assembly, "House Substitute 1 for House Bill 200," https://legis.delaware.gov/BillDetail?LegislationId=47964, Accessed January 29, 2020.

Goal 9. Promote mobility for people and goods through a balanced system of transportation options

Summary

Delaware's investments and policies demonstrate significant efforts made to maintain a balanced system of transportation options. Sizeable investments have been made in the State's trails and pathways. Overall transit funding has risen steadily, despite a marginal decrease in demand. Roughly half of this increase is attributable to the State's commitment to paratransit services that have grown from a small portion of the overall transit budget to near parity with the fixed-route service. Freight has also seen steady growth, notching a 23 percent increase in volume since 1997, owing, certainly at least in part, to the State's ongoing investments in ports, rail, bridges, and highways.

However, despite electric vehicles, ride-sharing, autonomous vehicles and transit, and drone-assisted package delivery all being right on the horizon, Delaware's transportation fundamentals have held. It remains a driver-dominated state. Despite a blip in vehicle miles traveled following the 2008 downturn, the trend of increased driving has continued. Commuters continue to report driving alone to work over 80 percent of the time, up slightly from 2000. Accordingly, the State has continued to invest public dollars at a rate that outpaces observed vehicle miles traveled, with capital funds for transportation increasing from $376 million in 2006 to well over a half billion in 2019.

Some of the least costly and most innovative efforts have centered on Intelligent Transportation Management. Signal timing, traffic sensors, bus tracking, and real-time feedback to the traveling public via social media and an app enable the existing roadway network to handle more traffic with less congestion. It also helps lay the groundwork for self-driving cars. The data show the future is not here yet, but the State has made strategic investments to ensure Delaware will be ready when it does arrive.

Measuring Progress

VMT and Capital Investment

Vehicle miles traveled, once assumed to be on an eternal rise, declined briefly in 2008 and did not recover to the previous levels until 2015 (see Table 17). This was in large part due to the recession beginning in 2008. Though there has been a great deal of discussion about young people driving less, the past half dozen years would seem to suggest that, at least in Delaware, there has been a reversion to the old paradigm. Vehicle miles traveled have continued to increase, growing from 2009 through 2018. Though there was a short lag before capital expenditures rebounded to reflect the increasing demand, they had done so by roughly 2017. Overall, the figures show that the State has continued to invest in infrastructure proportionally to the observed demand. In fact, Delaware, along with other states, has begun to increase capital transportation funding. The trend was even noted by the American Association of State Highway and Transportation Officials (AASHTO) in the summer of 2019.[45] Delaware's state contribution to transportation improvements increased by nearly $80-million from 2018 to 2019. The FY 2020 State investment figure is slated for a $100-million plus increase as well, to $425 Million. Though the past 20 years have not seen the decline of the single-occupancy automotive trip to the extent some had hoped for, the State has been responsive to the continued demand and has increased its investment accordingly.

[45] American Association of State Highway and Transportation Official (AASHTO), "State Budgets Beef Up Funding For Transportation," https://aashtojournal.org/2019/07/12/state-budgets-beef-up-funding-for-transportation/.

Table 17. State and Federal Funding Transportation Relative to Observed Demand

	2006	2007	2008	2009	2010	2011	2012
VMT (Billions)	9.407	9.453	8.9	9.0	9.1	8.9	9.0
VMT per Capita	11,024.2	10,924.4	10,150.6	10,179.6	10,207.9	9,809.2	9,834.0
State Capital Funding (millions)	$266.5	$183.7	$220.7	$223.5	$170.3	$127.5	$191.3
Federal Capital Funding (millions)	$109.9	$104.5	$155.7	$201.5	$239.1	$200.7	$213.2
Total (millions)	$376.5	$288.1	$376.4	$424.0	$409.5	$328.2	$404.5
	2013	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**
VMT (Billions)	9.1	9.3	9.5	10.1	10.4	10.7	10.7
VMT per Capita	9,852.3	9,972.2	10,091.2	10,640.4	10,866.4	11,063.2	11,029.9
State Capital Funding (millions)	$188.0	$171.0	$135.6	$196.7	$217.4	$233.9	$312.2
Federal Capital Funding (millions)	$214.5	$201.3	$236.9	$217.7	$215.9	$233.9	$215.7
Total (millions)	$402.6	$372.2	$372.5	$414.3	$433.3	$467.8	$527.9

Source: Cabinet Committee on State Planning Issues Annual Reports to the Governor (VMT and funding) and U.S. Census Bureau, American Community Survey (population for per capita calculations).

Freight Rail and Trucking

Delaware's multi-modal transportation network supports a growing volume of freight and goods shipments to, from, and within Delaware. Freight destined for Delaware locations increased from approximately 51.5 million tons in 1997 to 63.5 million tons by 2017, a 23 percent increase. While approximately 75 percent of these goods move by truck into and within Delaware, modes such as rail, water, and air account for a sizable share of freight volume moved and the value of goods moved. The tonnage of shipments originating in Delaware increased by approximately 25 percent over the 1997 to 2017 time period, with just over 51 million tons being shipped from Delaware locations. Nearly 75 percent of the shipping volume that originated in Delaware was also destined for Delaware, meaning that a substantial portion of goods movement in Delaware is accounted for by intrastate shipments.

Maximizing Existing Assets via ITMS

Exact expenditures on Integrated Transportation Management Systems (ITMS) or Intelligent Transportation Systems (ITS) are difficult to track, as much of the program runs out of the operating rather than capital budget. Regardless, the advances and achievements have been remarkable. Initially envisioned in late 1990s reauthorizations of the Intermodal Surface Transportation Efficiency Act as making use of the World Wide Web to connect with and inform system users, the concept and its execution have evolved rapidly.

Presently, DelDOT supports a fully integrated, real-time command center in Smyrna. Fed by dozens of traffic cameras and hundreds of electronic sensors, DelDOT staff are able to detect, respond to, and inform the traveling public of traffic accidents, severe weather, unexpected congestion, and a host of other contingencies in near real-time. A.M. radio and variable message signs remain valuable tools. However, operations personnel can more effectively reach out via automated Twitter and Facebook alerts and via DelDOT's own travel app. It also has established data-sharing protocols with Google and Waze, meaning incidents first reported by either DelDOT or its connected network of users will often alert users of private-sector navigation applications.

Public-facing amenities aside, the ITMS system has myriad, yet to be fully realized, uses. Regarding operations and incident management, it greatly enhances the agency's situational awareness and ability to respond quickly to a variety of circumstances. Moreover, it allows the ability to direct the system to re-route or delay traffic with variable messaging signs and signal timing. The signal timing aspect, as well as the gradual replacement of analog traffic lights with integrated models, has a significantly positive effect on the throughput capacity of many of the state's roadways.

Multi-Modal Investments

After some time of relative dormancy, the Markell administration brought a renewed emphasis and prioritization to funding multimodal improvements for walking and biking. In 2011, a comprehensive statewide trails and pathways plan was initiated. Table 18 details the State's investments.

Table 18. Funding Levels for Statewide Trails and Pathways Implementation, 2012-2019

Agency	2012	2013	2014	2015	2016	2017	2018	2019
DelDOT	$0	$10 million	$0	$800,000	$3,400,000	$5,400,000	$800,000	$7,700,000
DNREC	$7,000,000	$3,000,000	$3,000,000	$2,700,000	$3,000,000	$2,500,000	$0	$200,000
Total	$7,000,000	$13 million	$3,000,000	$3,500,000	$6,400,000	$7,900,000	$800,000	$7,900,000

Source: Cabinet Committee on State Planning Issues, *2019 Report on State Planning Issues*, October 2019.

The enhanced funding Gov. Markell promoted has remained. It has supported, and continues to fund, a number of well-known projects—the Georgetown to Lewes Rail Trail, the Junction Breakwater, the Capital City, the Industrial Track, the C&D Canal, and a host of others.

Journey to Work

While considerable investments have been made in promoting a balanced transportation system, as a share of total trips, reliance on single occupant vehicles to drive to work has actually increased. According to US Census figures, the share of Delaware's working residents commuting to work by driving alone in a vehicle increased from 79.2 percent in 2000 to 82 percent by 2017. Over the same time period, the share of commuters using public transportation decreased from 2.8 percent to 2.2 percent.[46]

Transit Investment

During FY96, Delaware's paratransit services required 30% of DART First State's total expenditure of approximately $23 million in subsidies for bus transportation operating costs. By FY02, DART First State's bus transportation operating subsidies had risen to approximately $44 million, and paratransit services accounted for more than 43% of that total.[47] In 2013, a DTC report indicated 45.4% of the agency's budget was appropriated for paratransit.[48] For fiscal year 2018, DTC had total operating expenses of $130,713,941, with fixed-route service accounting for $60,294,669 and paratransit accounting for $61,290,312 (46.9%).[49]

As recently as 2017, DTC has taken some steps to offset rising costs by better defining its paratransit service area, as well as introducing differential pricing for riders in and out of the

[46] U.S. Census Bureau, Decennial Census 2000 and American Communities Survey 1 Year Estimates, 2017.

[47] Tuttle, Douglas & Falcon, Emily, "DART First State – Delaware Paratransit Services Study, A Review of Service Characteristics, Policy Implications and Options;" Delaware Center for Transportation, 2003.

[48] "It's Time to Rethink How We Do Transit." DTC-DART, 2013. Retrieved from https://dartfirststate.com/rightfit/pdf/dart_brochure.pdf

[49] "Financial Statements, June 30, 2018." DTC & Independent Auditor, 2018. Retrieved from https://auditor.delaware.gov/wp-content/uploads/sites/40/2018/12/Delaware-Transit-Corporation-Financial-Statements-June-30-2018.pdf

defined areas. However, DTC's own brochures characterize the continued growth of paratransit expenditures as "unsustainable," and as potentially compromising service growth in its traditional fixed-route systems.

Major Projects

Twenty years can fly by, but traffic cones and construction zones seemingly endure forever. It's important to remember these projects do get completed and have a substantial impact on the character of the state and the daily lives of residents, commuters, and visitors. Below are only a few highlights of some of DelDOT's major projects undertaken during these past twenty years:

- Claymont Improvement Plan - $7.5M
- Christina Riverfront - $100M
- I-95 Improvements - $250M
- US 301 - $450M
- West Dover Connector - $40M
- Dover Civil Air Terminal - $7M
- Indian River Inlet & Bridge - $230M
- Rehoboth Beach Area - $80M
- Port of Wilmington - $12M
- Governor's Ave - $17M
- Mid County Transit Facility and DMV
- Dover Transit Hub
- Elkton Road – South Main Street
- Market Street Safety
- SR 26
- Newark Regional Transportation Center

Looking Forward

The future of transportation is uniquely difficult to anticipate, particularly over a 20 year timeframe. Driverless cars, ride sharing as a top-tier mode, drone deliveries, and even a transition to electric and increasingly autonomous vehicles all would seem to be real possibilities. Even the nature of where, how, and when we work is seemingly undecided. The effects of adopting such profoundly transformative modes could have far-reaching impacts on everything from the design of our communities, the rate of car ownership, the need for parking, preferred patterns of development, the traditional commute, and on and on.

Thankfully, Delaware has taken steps to prepare, featuring a robust ITMS infrastructure, having made data bandwidth investments alongside transportation improvements, and piloting autonomous transit. Even as the dominant mode of transportation has changed over the past few hundred years, our towns and cities have largely endured, each time gradually remaking themselves. This is another area where the state has a strong track record; regional, sub-regional, and municipal scale master planning, as well as a consistent, regional methodology for assessing needed improvements relative to proposed growth (TID).

As with water and sewer infrastructure, an aged infrastructure and rapid innovation and change may require sustained levels of elevated funding for transportation, a steadfast prioritization of core infrastructure (i.e., that serving Level 1, 2, and possibly 3 areas), or both. A continued emphasis on multi-modal, walking, cycling, and transit, particularly in, around, and between established population centers may also be advisable. Complete and connected communities have endured as a successful model from the horse through the railroad, and through the age of cars. They're likely a good bet for whatever comes next as well.

Goal 10. Improve access to educational opportunities, health care and human services for all Delawareans

Summary

Delaware has taken demonstrable action to improve access to and ensure the adequacy of educational and human services. While enrollment in public schools has increased moderately (21 percent from 2001 to present), funding has nearly doubled and presently sits at $1.1 billion per year. Charter school enrollment has more than doubled as well, providing more campuses in varied communities. Charter enrollment increased from under five percent of students to thirteen percent at present.

Aside from overall funding, the State, in partnership with the counties, a number of municipalities, and private interests, has steadily worked to ensure that new schools are sited appropriately. Early on, these efforts were often individualized efforts initiated by motivated town and city planners working diligently to achieve the best possible outcome for their community. More recently, a procedure has been established with the Department of Education, the Office of Management and Budget and the Office of State Planning to ensure that new land acquisitions and school construction align with the *State Strategies*. Data on the location of new school construction over the last 20 years suggests that these policies have been largely successful to focus school construction in the Investment Levels most prepared to support it and complementary residential growth.

Delaware, like many other states, struggles with health insurance coverage for less privileged communities, and infant mortality rates are a significant concern. These important issues have not gone unnoticed. A comprehensive analysis was performed in 2011, and a number of initiatives are presently underway to address them; namely the Partnership for Healthy Delaware Communities, coordinated at UD, the "My Healthy Community" Portal, and ongoing work laid out in the State Health Improvement Plan.

Measuring Progress

Adequacy of School Funding

The State's enrollment increases could be characterized as somewhat modest since 2001, with a 21 percent total increase (see Table 19). Charter growth has continued to outpace traditional public school growth, but not at spectacular rates. Over the 18-year period, charter enrollment went from accounting for less than five percent of total to just over 13 percent.

Concurrently, education spending has far outpaced enrollment, going from roughly $617 million in 2002 to $1.1 Billion by 2008. Eleven years later, the total stands at $1.48 billion—a 240 percent increase.[50]

Table 19. Delaware Public School Enrollment, 2001-2018

Year	Public	Charter	Total	% increase, total	% increase, charter	charter/ total
2001	110,454	4,239	114,693			
2002	110,476	5,069	115,545	0.7%	19.6%	4.6%
2003	110,792	6,263	117,055	1.3%	23.6%	5.7%
2004	111,864	6,549	118,413	1.2%	4.6%	5.9%
2005	113,923	6,568	120,491	1.8%	0.3%	5.8%
2006	114,276	7,580	121,856	1.1%	15.4%	6.6%
2007	115,103	8,512	123,615	1.4%	12.3%	7.4%
2008	116,277	8,626	124,903	1.0%	1.3%	7.4%
2009	117,098	9,173	126,271	1.1%	6.3%	7.8%
2010	118,419	9,525	127,944	1.3%	3.8%	8.0%
2011	119,780	10,322	130,102	1.7%	8.4%	8.6%
2012	120,591	10,438	131,029	0.7%	1.1%	8.7%
2013	121,763	11,078	132,841	1.4%	6.1%	9.1%
2014	121,921	12,521	134,442	1.2%	13.0%	10.3%
2015	121,405	14,112	135,517	0.8%	12.7%	11.6%
2016	121,676	15,030	136,706	0.9%	6.5%	12.4%
2017	121,991	15,882	137,873	0.9%	5.7%	13.0%
2018	122,575	16,091	138,666	0.6%	1.3%	13.1%

Source: Delaware Department of Education, 2019.

Efficacy of School Siting

In 2004, the Delaware Legislature adopted Senate Bill 304, which required coordination and approval for new school siting from the Department of Education, the Office of Management and Budget, and the Office of State Planning Coordination. A number of costs had been associated with less coordinated school siting, including roads, sewer, and student transportation costs. In 2002, statewide transportation costs were $54.5 million, rising to nearly $83 million by 2008.

Since 1999, 41 schools have been built in the state. Well over 60 percent (26 of 41) were constructed in Level 1 areas. Ninety percent (37 of 41) were sited in either Levels 1 or 2. Three were sited in Level 3. Only one, a high school, was built in a Level 4 area.

[50] Delaware Department of Education, 2019.

Performance was impressive across all three counties. Kent County saw ten schools constructed, eight in Level 1 and two in Level 2. New Castle County built 18 schools, ten in Level 1, six in Level 2, and two in Level 3. Thirteen schools were built in Sussex County. Eight were in Level 1, three in level 2, one in Level 3, and one high school in Level 4.[51]

Despite the type of school, and associated campus demands, there were no definitive trends apparent. All early childhood centers were sited in Levels 1 or 2; three of four in Level 1. Twenty of twenty two elementary schools were sited in Levels 1 or 2 areas; 14 in Level 1 and two in Level 3. All middle schools were in Level 1 or 2 areas; five of seven in Level 1. Finally, six of eight high schools were in Level 1 or 2 areas; four in Level 1, two in Level 2, and one each in Level 3 and 4.

In regards to school siting, the State is demonstrably "putting its money where it's mouth is" and funneling state investment very effectively into targeted areas.

Health Access and Outcomes

Widespread health insurance is one way to enable access to health care, and Delaware ranked ninth in 2017 among US states with nearly 95 percent of the state's civilian, noninstitutionalized population estimated to be insured. Coverage rates and the state's ranking diverge across demographic groups, however. For example, though 94.4 percent of Delaware children under 6 years old were estimated to be insured in 2017, this rate ranks the state 40th. Similarly, the 82 percent insured rate for Delaware's Hispanic or Latino residents ranks 28th among US states. More positively, the estimated 95.3 insured rate for Delaware residents identifying as black or African American ranked the state fourth nationally.[52]

Understood as a broad measure of the overall health of a community, Delaware's relatively high infant mortality rates suggest a need for continued vigilance in identifying and addressing unmet public health needs on topics including nutrition, education, and access to medical care. As of 2017, Delaware's infant mortality rate of 6.6 deaths per 1,000 births ranked 14th highest nationally, with 26 states having rates below 6.0 and 13 states with rates below 5.0.[53]

Ongoing Notable Initiatives

Planning for Parks and Recreation

DNREC plays a leading role in collaborative planning for outdoor recreation planning with its ongoing Statewide Comprehensive Outdoor Recreation Plan (SCORP). The analysis built into the

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[51] Delaware Department of Education School Construction Data, provided Feb., 2020.
[52] U.S. Census Bureau, American Community Survey 1-year Estimates, 2017.
[53] Centers for Disease Control and Prevention (CDC)/National Center for Health Statistics, U.S. Department of Health & Human Services, "Infant Mortality Rates by State." Accessed November 15, 2019 from https://www.cdc.gov/nchs/pressroom/sosmap/infant_mortality_rates/infant_mortality.htm.

plan can calculate the population within easy reach of a given facility, or facility type, and is often used by municipalities or developers when debating public amenities they may provide in the future.

Using these data, and with considerable public outreach, a number of Delaware cities (Newark, Milford, Dover, and Lewes) have created local recreation master plans, establishing a critical link between state-level data and analysis and local land use and policy decisions. Likewise, the State has developed at least a dozen master plans for a number of its state parks and recreation areas. Some notable examples include the White Clay Creek, Brandywine Zoo, Auburn Valley, Killens Pond, and Cape Henlopen. Moreover, significant effort has been given to trails and pathways connecting population centers and recreation areas. Trail and pathway funding is discussed in greater detail under the transportation goal.

Cross-sector Partnerships for Health

Begun in 2011, the State Health Improvement Plan (SHIP) strove to assess the health status of Delawareans and develop a plan to address identified core issues. Out of six goals ranked most pressing, two were chosen for the "action cycle": 1) Reduce obesity by promoting healthy diet and exercise and 2) Improve access to behavioral/mental health services. Task forces meet regularly to advance efforts, and over $80,000 was raised through a public-private partnership, in collaboration with the Governor's Council on Health Promotion and Disease Prevention, to fund the 'Motivate the First State' initiative. On the mental health front, a new outreach website launched in 2015. Its focus is on informed decision making in health care and behavioral health services with the target audience of system users in mind.[54]

As part of the State's continuing efforts to inform and implement health improvement efforts, the Delaware Department of Health and Social Services (DHSS) hosts the "My Healthy Community" web portal. The aim is to enable community use of data "to inform place-based approaches, support and facilitate data-informed discussions that describe and define population health priorities, and leverage data to transform communities by educating them about their community's health and the environment in which they live."[55]

Many health-focused efforts in Delaware are administered by a coalition of public, private, and community sector partners. What follows is a summary of two such initiatives—the Partnership for Healthy Communities and Healthy Communities Delaware.

[54] Delaware's State Health Improvement Plan, Accessed January 27, 2020: http://delawareship.org/.

[55] Delaware Department of Health and Social Services, "My Healthy Community: Delaware Environmental Public Health Tracking Network," Accessed January 27, 2020: https://myhealthycommunity.dhss.delaware.gov/.

Partnership for Healthy Communities

According to its director, and former State Cabinet Secretary, Rita Landgraf, "The UD Partnership for Healthy Communities focus is on the cross sector work that we are doing with state government largely towards advancing and aligning health initiatives, especially in working with communities that experience the poorest of outcomes."

Similar to the *State Strategies* and the PLUS process, much of the partnership's work is based on breaking down silos between varied agencies, advocates, and service providers to address stubborn and persistent outcomes that may often afflict those in the grasp of generational poverty, social injustice, and inequitable resource allocation. As one example of the success in working across sectors, the 2019 Delaware State Health Improvement Plan (SHIP) Annual Report was prepared through collaboration among the Partnership for Healthy Communities, the Delaware Academy of Medicine/Delaware Public Health Association, and the Delaware Division of Public Health.[56]

The partnership's work plan is exhaustive, yet it focuses on issues that have hidden in plain sight. People afraid of violence don't exercise outside as often. Those surrounded by convenience shops and liquor stores may tend to drink and smoke at higher rates. Access to early childhood programs and activities improves cognitive function and an individual's long term prospects. To inform ongoing efforts, the Partnership has piloted the application of a "Community Health Index" scoring methodology across the state. Accounting for life expectancy, child poverty, high school graduation rates, and infant mortality, the effort highlights areas at highest risk throughout Delaware.[57]

Healthy Communities Delaware

According to its website: "Healthy Communities Delaware is a consortium of public, nonprofit and private organizations committed to taking a collective approach to align efforts and invest in projects, programs and policies aimed at improving the health of people in low-wealth communities in the state. HCD is committed to effective and sustainable ways of investing in our local communities to reduce the health disparities that exist from one zip code or neighborhood to another."[58]

Healthy Communities Delaware is administered through a partnership among the Delaware Community Foundation, the University of Delaware Partnership for Healthy Communities, and the State of Delaware's Department of Health and Social Services.

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[56] 2019 Delaware State Health Improvement Plan Annual Report, October 22, 2019, Accessed January 27, 2020: https://issuu.com/dam-dpha/docs/ship-annual-report-2019-final.

[57] University of Delaware Partnership for Healthy Communities, Accessed January 27, 2020: https://sites.udel.edu/healthycommunities/.

[58] Healthy Communities Delaware, Accessed January 27, 2020: https://www.healthycommunitiesdelaware.org/.

The model for Healthy Communities Delaware was designed to bring community stakeholders, sector leaders, and community investors together to work toward common goals with streamlined funding opportunities. On January 14, 2019, the HCD kicked off with the Aligning for Better Health Symposium at the Chase Center on the Riverfront in Wilmington, Delaware. The event highlighted successful collaborations taking place throughout Delaware to address the social determinants of health. Since then, HCD established a Community Investment Council and a Leadership Council, and hired an Executive Director.

Looking Forward

On a macro scale, the data suggest Delaware is performing well in regard to this goal. The State can demonstrate a commitment to educational funding well in excess of the growth of the population of students. Delaware systematically plans for recreational and physical exercise opportunities and has an extremely engaged public health sector. For over a decade, professionals in public health and planning have realized the intrinsic relationship between public health and the built environment, and they have worked together actively.

One area Delaware has made demonstrable strides in regards to access to education is in the cooperative, strategic placement of new schools. Since 1999, roughly 90 percent of new schools constructed were located in the most favored Investment Levels, areas 1 and 2. In 20 years, only one high school was built outside Levels 1, 2, or 3.

Many of the health issues the State wrestles with, such as societal determinants of health and the provision of health insurance, are beyond the complete control of any single state, agency, or even sector. With cross-sector partnerships in place, Delaware is well situated to continue to identify policy and implementation opportunities for health improvement. Working from this base of committed stakeholders, continued vigilance will be necessary to ensure these partnerships translate into needed public awareness and formal programs and policies, as appropriate.

Goal 11. Coordinate public policy planning and decisions among state, counties and municipalities

Summary of Progress

The eleven "Shaping Delaware's Future" goals serve as enduring guideposts of the State's interests in and objectives for land use planning coordination. While the previous goals address distinct public policy topics like transportation, housing, economic development, or the spatial pattern of development and investments, this final goal speaks to the desire for Delaware's state, county, and municipal governments to coordinate their public policy planning and decision-making processes. Assessing progress on this goal independently, it is clear that Delaware has taken tremendous strides in its efforts to coordinate public policy decisions among the state, counties, and municipalities. Viewed in concert with the assessments prepared for the first ten goals, it is equally clear that the State has been able to leverage this coordination to effect meaningful impacts on fronts including the spatial pattern of growth and state investments, critical lands preservation, and economic development and community revitalization initiatives.

In just two decades, Delaware has progressed from having "no single written document indicating where the state is going and how its individual functional agency programs fit together"[59] to having a regularly updated *State Strategies* provide both a unified policy framework for guiding State investments in infrastructure and services and a venue for informing and coordinating with local planning efforts. Since the adoption of the 1999 *State Strategies* and state planning legislation of the early 2000s, Delaware's framework for land use planning coordination has been increasingly characterized by intergovernmental communication and collaboration, coordinated project and plan reviews, and State investments in infrastructure and services that accord with the deliberate, public priorities laid out in the *State Strategies*. As a result of these policies and the efforts of planners and decision-makers statewide, the planning landscape in Delaware has transformed.

Local comprehensive plans had been uncommon and frequently outdated policy guides, but now all of Delaware's 57 municipalities and 3 counties have state certified comprehensive plans, many of which have been updated multiple times over the past two decades. With these local plans and the *State Strategies* in place, Delaware's planning coordination efforts benefit from a simple, shared awareness of planning priorities that did not exist previously. The launch of the Preliminary Land Use Service (PLUS) process in 2004 has been one mode for activating this awareness, with state agencies now regularly providing reviews of local comprehensive

[59] Siemon, Larsen & Marsh, *Choices for Delaware Final Report*, Boca Raton, FL. May 27, 1997. Page 3

plans and development projects that are informed by these state and local priorities. Further, local plans are now key ingredients of the regular updates to the *State Strategies*—a fact that would have been an impossibility before State legislation incentivized thoughtful local planning activity.

Delaware's planning coordination framework has grown more sophisticated and resilient over time, as State leaders continue to adopt and formalize policies addressing the "Shaping Delaware's Future" goals and state agencies and local governments find themselves working in increasingly coordinated fashion to implement these policies. While legislation and formal policy continue to be the tangible starting points for much of Delaware's coordinated planning efforts, state and local experience with collaboration has seemed to breed the comfort necessary for pursuing voluntary, multi-jurisdictional, public-private sector planning efforts such as master plans or Transportation Improvement Districts (TIDs). Tools such as FirstMap, the State's enterprise Geographic Information System, ensure that public and private sector planners operate from a common repository of data—helping to avoid duplication of effort and reduce the possibility for conflicts due to disparate starting points for planning and analysis.

Delaware's planning coordination framework is no panacea—thorny policy issues remain on fronts such as affordable housing, equitable economic development, infrastructure finance, and environmental protection; policies aimed at effecting efficient, coordinated growth and can be perceived as at odds with quick turnaround times for private development efforts; and jurisdictions often their own interests on parallel, and occasionally oppositional, tracks to *State Strategies*. There are opportunities for improvement. However, the progress and policy outcomes reviewed in this and previous sections reveal that Delaware has a strong, battle-tested framework for planning coordination in place. This framework has yielded significant progress for Delaware in addressing the broad "Shaping Delaware's Future" goals.

Opportunities to Leverage Delaware's Planning Coordination Framework for Continued Progress

Delaware can, and should, continue to leverage its hard-won planning coordination framework to continue to meet the needs of Delaware's citizens, including protecting the environment, investing government resources efficiently, and improving economic opportunity and quality of life. Opportunities for further work and policy refinement appear within each of the sections of this report. What follows is a summary of opportunities to extend and detail Delaware's planning coordination framework to address persistent public policy challenges. Though they address a range of topics, several basic themes tie them together—the need for proactive rather than reactive planning, the need to address equity considerations, and the need to ensure efficient implementation of plans and policies at all levels of government.

Address Diverse, Community Economic Development Needs

With the creation of the Division of Small Business and the Delaware Prosperity Partnership, Delaware has taken tremendous strides in recent years to react to a dynamic regional and global economy. These entities and the programs they manage will likely be stressed to keep up with market-driven demands to support business development, site selection, and innovation and entrepreneurship ecosystem services, among others. These market-responsive efforts are critical, and they have and likely will continue to result in significant job retention and expansion gains for Delaware and its communities. However, a market focus can result in inequities that leave particular geographies and demographics behind. For example, this report previously cited persistently higher unemployment rates for Kent County and African-Americans living in Delaware—trends which diverge from Delaware's relatively strong overall economic performance.

Delaware's initiation of the Downtown Development Districts program, management of brownfield redevelopment programs, and ongoing advocacy for Opportunity Zones speaks to the need to continue to focus on those communities and settings that private investors may not view as presenting attractive, straightforward investment options. Areas for future consideration on this front include:

- Developing a community economic development planning program through the Office of State Planning Coordination that enables identification of economic development goals and potential initiatives on a community-by-community basis. This approach could serve to reinforce the viability of various approaches to local economic development—with some communities desiring to develop as largely residential communities separate from employment centers; some seeking to expand or reinvigorated local employment opportunities; and some seeking to enhance their unique sense of place to attract visitors and ensure cultural and historic preservation. This community identification of goals and paths forward could serve at least two key purposes: 1) providing a framework for tangible public-private cooperation on economic development topics across a wide variety of Delaware's communities and 2) allowing for more efficient, goal-informed interactions among Delaware's communities and economic development organizations such as the Division of Small Business and Delaware Prosperity Partnership.
- Supporting the redevelopment of Delaware's suburban communities with research on market trends and opportunities and, as appropriate, programmatic planning initiatives. Delaware's suburbs played an early role in filling a large market niche for greenfield residential, commercial, and industrial development. Today, Delaware's communities—and many nationwide—have observed that many of these suburban

landscapes may not serve the same vital role that they were initially intended for.[60] Efforts to catalogue Delaware's so-called underutilized commercial or greyfield sites could spur useful thought on the steps that could be taken to revitalize these areas. Ongoing efforts to redevelop commercial areas along Concord Pike could provide a practical example for building initial research and investigation around.

- Launch an equitable economic development program that focuses on positively engaging distressed communities "to help equity, transparency, sustainability and community engagement become driving forces in local economic development efforts."[61] While the specifics should be built to serve the needs of Delaware's communities, an approach built on findings from the National League of Cities' and Urban Land Institute's Equitable Economic Development Fellowship could prove useful.[62]

Develop a Framework for Climate Change Mitigation and Adaptation Planning

Climate change is an emerging global concern that will have significant regional and local impacts. DNREC's Division of Climate, Coastal, & Energy is facilitating the development of the state's first climate action plan. This plan will likely require that many elements of the State's approach to planning coordination, infrastructure provision, and environmental protection be revisited, and the scale of the challenge suggests many future policy changes could be dramatic in nature. As the action plan is developed, implementation steps should become clearer. In coordination with these efforts, the Office of State Planning Coordination should work with partners including DNREC and organizations party to Delaware's Resilient and Sustainable Communities League (RASCL)[63] to develop frameworks for communities to plan for and implement needed climate change mitigation and adaption initiatives at local and regional scales. Pilot work to develop a climate-conscious comprehensive plan for Milford may serve as an example for how some of these efforts could be structured.[64]

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[60] See Chester County, Pennsylvania's "Commercial Landscape Series" planning guides for an example of regional efforts on this front: https://www.chescoplanning.org/municorner/ComLand/overview.cfm

[61] National League of Cities, "National League of Cities Launches First-Ever Equitable Economic Development Fellowship," https://www.nlc.org/article/national-league-of-cities-launches-first-ever-equitable-economic-development-fellowship, June 28, 2016.

[62] Ibid.

[63] See "Delaware Resilient and Sustainable Communities League," https://www.derascl.org/

[64] Barnes, Philip J., *Climate-Conscious Comprehensive Planning in Delaware: Developing and Piloting a Planning Process in Milford, Delaware*, University of Delaware Institute for Public Administration, http://udspace.udel.edu/bitstream/handle/19716/22631/cccpd-2017.pdf, 2017.

Continue to Streamline Planning and Data Coordination Procedures

Taking a coordinated, thoughtful, and multi-party approach to planning for and reviewing development in Delaware is a worthy endeavor that should be continued. At the same time, the Delaware Business Roundtable commissioned a "Ready in 6" report that speaks to demands for faster or expedited development approvals that can be at least perceived to be at odds with a more deliberate approach.[65] Ensuring the continued viability of Delaware's planning coordination framework will no doubt require tweaks of processes and procedures along the way—sometimes substantially. Two ongoing efforts demonstrate the types of initiatives that will likely continue to be needed to react to both internal and external pressures related to the nature, timing, and value of coordination:

- The Office of State Planning Coordination is leading efforts to streamline the PLUS review application process, as well as allowing for easier, more straightforward reporting on projects reviewed through this process—and the eventual disposition of these projects at the level of the jurisdiction governing land use decisions. These efforts should be ongoing and responsive to both internal, State needs and the considerations and timelines of private sector participants in the development process.
- The State's Government Efficiency and Accountability Review (GEAR) Board has prioritized work to "improve data integration and mapping so that better information is available for decision makers at some cost savings."[66] Applied research on this topic is scheduled for completion by summer 2020. At that time, clear steps on the future governance of GIS applications in Delaware should be apparent, with a focus on ensuring common access to critical data for efficient, public decision-making. This public efficiency should also offer Delaware's private sector a competitive advantage drawn from working with responsive, data-driven planning agencies and regulators. Continued vigilance will be necessary to ensure Delaware makes efficient geospatial investments that serve both State agency needs and the growing demands of data-hungry private-sector actors.

Incentivize Plan Implementation Activities

Early municipal planning efforts in Delaware benefitted from the State provision of Livable Delaware grants to reimburse for comprehensive planning project expenses. These funds ensured that all Delaware communities had access to the professional services needed to carefully consider and plan for growth and development. All Delaware communities now have certified comprehensive plans in place, which provide a basic framework for local land use and

[65] See "Ready in 6 report recommends ways to drive faster permit approvals" for a summary of this effort: https://delawarebusinesstimes.com/news/ready-in-6-recommendations/

[66] Government Efficiency and Accountability Review Board, "2019-09-08 Financial Services Team Progress," https://gear.delaware.gov/wp-content/uploads/sites/103/2019/09/2019-09-18-Financial-Services-Four-Blocker.pdf, p. 4.

zoning activity and the coordination of these efforts across jurisdictions. As Delaware embarks on a third decade of *State Strategies*-informed planning coordination, there is a need to move beyond the basic framework of comprehensive planning and focus on targeted planning and implementation efforts, such as the economic development and climate change topics discussed within this section. Absent funding support for these locally-driven efforts, many communities are likely to maintain a basic planning presence while not having the resources needed to push forward on more advanced topics—potentially creating a "have and have-nots" scenario that will exacerbate the challenges faced by struggling, legacy communities. An implementation grant program could serve to institutionalize the thoughtful and impactful local initiatives and partnerships that will be needed to ensure quality of life and abundant opportunities for all Delawareans.