Growing Better Places: An exercise to understand development and infrastructure decisions in New Castle County and prepare better plans for our communities

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New Castle County government has started a shift toward more proactive and collaborative land use and comprehensive planning. In 2017, the Department of Land Use re-established a comprehensive planning unit that was eliminated around 20 years ago and conducted mid-term evaluation of the County’s Comprehensive Plan. The Department also began a comprehensive plan enhancement to include community master plan implementation components for recently completed Community Area Master Plans and initiated two new Community Area Master Plans. These actions position the County to support its diverse communities in defining their future and achieving their goals through collaborative planning and coordinated, intentional implementation.

But the County cannot fully plan and foster vibrant communities without active involvement from the full range of people who live, work, play here. Hence, the Department of Land Use is making a concerted effort to increase the quantity and quality of engagement of the public in the planning processes.

New Castle County’s “Growing Better Places” is a development scenario board game that helps residents, students, employees, and other stakeholders discuss and understand the dynamics of growth, development, infrastructure, and community amenities and tradeoffs involved in related real-world decision making.

As part of our efforts to try a variety of approaches for public engagement, the Land Use Department developed the game to be used with a wide range of stakeholders as a way to begin gathering public input related to growth, and ultimately prepare the way for great engagement in the upcoming countywide comprehensive plan update processes. The next comp plan update is due in 2022.

The following report summarizes the game and its first use at an event held in late January 2019, called “Reality Check.” We want to use it with a variety of groups in the coming year across the County. This would be one component of our outreach and engagement efforts.
Executive Summary

Consultants from MIG, Inc. were tasked with creating a tool to assist New Castle County staff in engaging their community in local planning efforts. With a projected 50,000 residents moving to New Castle County by 2050, it was important for staff to begin a process of gathering public input related to growth and evolution. The team created a board game called “Growing Better Places” that helps residents, employees and stakeholders discuss growth, development, and community amenities in a more understandable and dynamic manner. The game was first played at a “Reality Check Workshop” with six groups. Main takeaways from the event are as follows:

- Generally, groups allocated development near existing urban centers, with the primary location of development being in/near Wilmington, DE. Very little development was “built” south of the C&D Canal. The varying cost of development based on existing infrastructure within different areas of the county was both discussed in the presentation and factored into the game.
- A small amount of demographic data was gathered prior to game play. This particular set of participants was made up primarily of people within the larger development industry. This included 91% of the group consisting of planners, engineers, attorneys, public officials, community leaders and developers. Additionally, 71% of the group had lived and/or worked in New Castle County for at least 11 years. The game results of this group may be impacted by their preconceived notions of the region and/or their knowledge of the local planning process. The experience and outcome of this game may vary with groups of increased diversity in age, race, socioeconomic group, employment type and time spent living/working in New Castle County.
- Participants had two primary reactions to the gamification of the County planning process.
  1. Some participants found that playing the game provided them additional insight on the goals and challenges of growth.
  2. Some participants found it difficult to balance “real-world” emotions and the use of accepted planning practices with the desire to win the game.
- The development type most commonly used in the game was Urban Development at 20 DU/Acre. Participants recognized the efficiency of accommodating growth by clustering higher density housing types closer to established urban centers, transit lines, and road infrastructure.
New Castle County
Reality Check Workshop Summary

Overview of Event

On January 10th, 2019 a “Reality Check Workshop” was held at the Route 9 Library & Innovation Center in New Castle, Delaware. About 50 people were in attendance, in addition to the County and consultant staff.

Introductory Presentation

The workshop began with a presentation – given by Jay Renkens and Andy Rutz with MIG, Inc. and Rich Hall with New Castle County – about New Castle County’s future growth and evolution, on-going planning work within New Castle County, and trends across the country.

After the presentation, a keypad polling questionnaire was given to attendees using the MentiMeter online polling platform. In this questionnaire, facilitators gathered demographic data as well as the group’s feelings towards national trends and the opportunities and challenges of growth in New Castle County.

The polling questionnaire was followed by a large group discussion, where attendees had a chance to talk about growth and change in the County and ask questions.

Next, the organizers gave an overview of the “Growing Better Places” game, which the participants would be playing. This included reviewing the rules and objectives of the game, using the tally sheets, and pointing out some things to consider during gameplay. The organizers also discussed their goals of having the group play the game which included both education and gathering real feedback about the participants’ growth preferences in New Castle County.
It took about two hours to play the “Growing Better Places” game. Each group had a pair of facilitators to help reach consensus and ensure aspects of the game and planning process were not overlooked. The groups varied in size from five to eight people. Each person in the group also received a role card, which assigned them the position of Economic Development Director, Public Health Official, Environmental Advocate, Developer and more. Each role had an associated goal with it that would result in a “Community Benefit” – a number of which were required to win the game – if completed.

Following the gameplay, each group reported out on their results. All groups successfully allocated the required housing units, provided community benefits and stayed within budget. The report-out sheets from each group detailed the housing allocation distribution by development type. Photos were taken of these sheets and the completed gameboards. Videos were also taken of each group’s verbal report-out to the larger group. This was done so that staff could review the results later and gather real-life planning-related input, as reported in this document.
New Castle County
Reality Check Workshop Summary

MentiMeter Polling Results
Questionnaire (Asked Before Gameplay)

How long have you lived and/or worked in New Castle County?

- 1 Year or Less: 11%
- 2-5 Years: 13%
- 5-10 Years: 4%
- 11-20 Years: 13%
- 21+ Years: 50%

What profession do you most closely identify with?

- Planner: 36%
- Developer: 16%
- Other: 7%
- Community Leader: 4%
- Attorney: 9%
- Engineer: 30%
- Public Official: 9%

How applicable do you think each of the national trends are to New Castle County?

- Aging-In-Place: Extremely Applicable
- Equity and Inclusivity: Not Applicable
- Authenticity and Experience: Not Applicable
- Retail Transformation: Extremely Applicable
- Polycentric Regions: Not Applicable
- Healthy Living By Design: Extremely Applicable
- Mobility Unchained: Extremely Applicable

What other Cities/Counties/Regions would you like New Castle to learn from/emulate?

- Middletown
- Portland, Oregon
- Austin, Texas
- Denver, Colorado
- Montgomery County, MD
- Portland, ME
- Fairfax County, VA
- Indianapolis, IN
- Zurich, Switzerland
- Copenhagen, Denmark
- Key West, FL
- Minneapolis, MN
- Columbus, OH
- Nashville, TN
- Nashville, TN
- Key West, FL
- Minneapolis, MN
- Philadelphia, PA
- Valley Forge, PA
- Cambridge, MA
- Copenhagen, Denmark
- Irving, TX
- Exton, PA
New Castle County
Reality Check Workshop Summary

In one word, what do you see as the greatest potential benefits and opportunities of growth in New Castle County?

quality of life

In one word, what is your greatest concern about New Castle County's future growth and evolution?

sprawl

jobs
“Growing Better Places” Game Results

The most popular place for housing allocations was in the Wilmington/Northeast Newport area.

Example of Development in the Wilmington/Northeast Newport Area

About 56 tiles (out of 122 total) were placed here between all the groups. Out of the development tiles placed in this area, 54% were Urban Development and 29% were Compact Neighborhood. This indicates a desire for continued and/or increased density near the largest urban center in the County. Multiple groups spoke of the benefits of clustered developments during their report-backs as well, and most groups that put development here did so in a clustered layout.

Development Types by Location

For the purpose of this analysis, the housing allocation results have been grouped into five main geographic groups:

- Area 1: Wilmington/Northeast Newport (56 tiles)
- Area 2: I-95 between Newport and Newark (17 tiles)
- Area 3: Middletown Area (16 tiles)
- Area 4: Newark Area (8 tiles)
- All Other Locations (25 tiles)
The second most popular area to locate development was along I-95 between Newport and Newark.

Example of Development Along I-95 Between Newport and Newark

Of these tiles, 35% were Urban Development and 53% were Compact Neighborhood. This also indicates a desire for density but shows a decrease from that of the Wilmington area. It’s possible that groups saw the highway as a primary way to access and connect density between Newport and Wilmington. Four out of six groups also placed new roads and/or transit along this corridor. This communicates an understanding of the need for increased transportation infrastructure associated with increased density.

Five out of six groups put nodes of development near Middletown.

Example of Development Near Middletown

This consisted of 50% Compact Neighborhood and 44% Subdivision. Here we see a decrease in density, but still a desire to cluster development with the main existing node in the southern part of the County. Although this area is geographically separated, only two out of five groups connected from Middletown to the northern part of the county with new roads and transit.
Although two thirds of the groups allocated housing units near Newark, it was the least popular area with only eight total tiles. The four development types were almost evenly chosen in this location, with a slight tendency towards lower density development types.

Development tiles placed between I-95 and the C & D Canal didn’t appear to follow consistent trends between the groups, although every group did put at least one tile within Delaware City. Half of the groups put a tile northeast of Wilmington, in the direction of Philadelphia. These were all Urban Development tiles, indicating that the groups prefer high density here but in small amounts.

The only role card that dramatically affected where development was placed was the Environmental Advocate. This role had the goal of limiting development to two squares or less south of the C & D Canal. Groups that had the Public Transit Director often strategically located new development tiles adjacent to existing transit routes to avoid having to build new transit, while still achieving the community benefit for that role card.

Development Types by Frequency

Each group distributed the development types in different proportions. Below is a graph showing the average amount of each development type allocated by the six groups. Most groups achieved the majority of their total housing units by choosing to allocate the Urban Development type of housing.

Rural Estate was by far the least used development type. All of the groups who used it waited until the second half of the game to place any Rural Estate developments. Multiple groups stated that it was hard to find a place where Rural Estate was cost effective and decided it was the least helpful development type to accommodate a growing population.
New Castle County
Reality Check Workshop Summary

Two roles in the game had an influence on the type of development each group chose. The first is the County Planner. The role of the County Planner, if in play, was to ensure that at least three squares of each development type were built during the game. Without this rule, it’s possible there would have been far less Subdivision developed, and possibly no Rural Estate developed at all since these are the two least efficient development types to accommodate growth.

The second role that had an influence how many tiles of each development type were chosen is the Developer role. The Developer, if in play, is responsible with ensuring the development of at least ten squares of Compact and/or Urban housing options. This role pushes the players towards developing higher density housing options.

Housing Units Yield

Each group achieved the goal of allocating at least 30,000 housing units without depleting the County’s public funds budget. The average amount of housing units allocated was 31,570.

![Graph showing average total housing units by development type]

Although each group reached the desired goal, they did so in quite different ways. This is evident by each group’s total number of tiles used. This number ranged from 13 to 29 tiles, showing that yield depends on both the development type as well as the location in which it’s built.

Example of Roll Card and Community Benefit

Group Analyzing the New Castle County Map
Community Benefits and Amenities

*Parks:* Four out of six groups provided at least eight new parks. Most groups placed parks near new development.

*Employers/New Jobs:* Five of six groups created five new employers for the county.

*Schools:* Five groups built five new schools each. One group built only four schools. All but one square of new development was within five miles of a new school.

*Grocery Stores:* Every group built at least three new grocery stores. Five out of six groups built four new grocery stores.

*Transit:* Every group built new transit, although not all new Urban development was provided new transit.

*New Roads:* Many groups did not build any new roads.

*Trails:* Every group built at least some new trails.
New Castle County
Reality Check Workshop Summary

MentiMeter Polling Results
Follow-Up (Asked After Gameplay)

How challenging was each part of the exercise?

- Locating Development Types: Very Easy
- Retaining Public Funds: Very Easy
- Achieving Community Benefits: Very Easy
- Coming to Consensus with the Group: Very Easy

If you were to play the game again with the same group, would you expect the outcome to be different?

- Yes: 42%
- No: 58%

Did playing the game change the way you would have answered the polling questions we asked earlier?

- Yes: 11%
- No: 89%

If you disagreed with the Group’s direction during the game, what would you have done differently?

- Built more amenities along the way
- Disconnecting from what is really on the ground from the game considerations
- I like how we worked as a unit. It was fun and we had a good learning curve
- Considered existing land use more and equity considerations
- More focus on real life goals.
- Would have focused the development in a smarter way
- More focus on roads
New Castle County
Reality Check Workshop Summary

In one word, what do you see as the greatest potential benefits and opportunities of growth in New Castle County?

In one word, what is your greatest concern about New Castle County's future growth and evolution?
Summary of Feedback

The main takeaways from the “Growing Better Places” exercise with this group were:

- Job creation to match an increased population is very important, as groups allocated new jobs despite projections that do not show an uptick in jobs for the County.
- There is a preference towards cost-efficient development including developing near existing centers and leveraging existing infrastructure.
- At least half of new development was preferred to go near Wilmington.
- Community amenities are essential to maintaining a high quality of life amidst growth in the County.

When asked about their concerns regarding New Castle County’s future growth and evolution, jobs were the most common response both before and after playing the game. During the game, an average of 5 new employers were created per group (5,000-10,000 new jobs per employer). Unlike some other community benefits, jobs were not overlooked. This reiterates the priority of job creation.

Multiple groups identified clustered development, higher density, and development near existing infrastructure to be the most efficient and cost-effective way to accommodate new population growth. Groups also recognized that developing in the southern part of the county was more expensive, specifically due to the lack of existing infrastructure.

Growth and Change Cards are Drawn Each Turn

All groups placed over half their development squares near Wilmington and along the I-95 corridor. Despite the groups acknowledging sprawl to be a concern related to future growth, about half the groups still spread out development between Newark, Newport and Wilmington, rather than creating a polycentric development pattern. Although the patterns of development sometimes implied sprawl, groups rarely built any new development very far from an existing city or municipality. The takeaway from this may be that expanding or densifying existing cities is preferable to developing existing agricultural land or open space.
After determining retaining public funds to be the most difficult part of the game, the group considered cost to be another big concern regarding future growth in the County. Despite the challenge, all groups managed to stay within budget.

The group largely agreed that quality of life was the greatest potential benefit/opportunity of the growth in New Castle County. Although creating new transportation connections was difficult for players of the game, groups did generally ensure to provide plenty of parks, schools, grocery stores, and new employers. Frequently, these amenities were placed on top of, or very near to, new development. Providing these amenities to serve the increased population was clearly of value to this group.

Before playing the game, the group identified connectivity and traffic to be a major concern related to growth in New Castle County. In theory, this should serve as an incentive for game players to provide more transit. On the contrary, players seemed to be more focused on development than transportation while playing this game. At least one group mentioned the cost of transit was a deterrent for them to provide more. Another group mentioned they were keeping existing transit in mind, but since this isn’t shown on the map, groups that are less familiar with the region may have a harder time doing this. Getting more feedback on transportation related issues may require additional facilitation or a supplemental exercise.
MentiMeter Polling Results
Comparison of Before and After Playing “Growing Better Places”

In one word, what do you see as the greatest potential benefits and opportunities of growth in New Castle County?

BEFORE GAME

AFTER GAME

Playing the “Growing Better Places” reinforced the idea that quality of life would be the greatest potential opportunity from growth in New Castle County. Before the game, new jobs were also a top opportunity, but after playing the game, jobs took a backseat to economic development. This implies that participants recognized through playing the game that it may take some extra incentive to bring new employment to the region. Growth in the county may be a way to spur economic development that would not otherwise occur.

In one word, what is your greatest concern about New Castle County’s future growth and evolution?

BEFORE GAME

AFTER GAME

Before playing the game, participants included connectivity and traffic as major concerns regarding New Castle County’s future growth and evolution. After playing the game, this concern was less prevalent. Jobs remained as the number one concern before and after playing the “Growing Better Places” game. This reinforces that the participants think job creation and economic development are key to accommodating growth in New Castle County.