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UNIVERSITY OF DELAWARE

Cost-Benefit Analysis for the Proposed Annexation and Development of Draper Farm (The Granary)

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SYNOPSIS

The analysis put forward by the University of Delaware Institute for Public Administration projects expected revenues for the Town of Milton related to the proposed annexation and development of the Draper Farm property over the course of 20 years. This analysis utilizes budgetary information provided by the Town of Milton and development projections from the owner of Draper Farm, Convergence Investments, Inc. to form the basis of expected revenues to the Town of Milton over the next 20 years. Other factors in these projections include expected new employees and equipment for town police, public works, and water systems as well as projected persons per household, prices for units sold, and town tax rates.

Overall, the analysis shows that the town is likely to earn over $15,000,000 between 2024 and 2043 after factoring in all projected costs related to the development. This projection assumes a sale price for detached units at approximately $585,000 for each new 3,000-square-foot house and approximately $380,000 for each 2,500-square-foot attached unit. The projected sizes of these units were provided by the developer at the September 14, 2021 Special Review Committee meeting and projected prices were formulated through a market analysis of recent completed sales for comparable home types in the immediate area in and around Milton.

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BACKGROUND

At the request of the Town of Milton in the summer of 2021, the Institute for Public Administration (IPA) in the Joseph R. Biden, Jr. School of Public Policy and Administration at the University of Delaware produced a cost-benefit analysis for a proposed annexation into the town in accordance with Milton Town Charter Section 3. As part of this request, IPA agreed to the following:

1. IPA will work with the Town of Milton Special Review Committee to evaluate the costs and benefits of a proposed large annexation of property to the west of the current town limits.
2. IPA will evaluate the potential financial costs and benefits to the town that could result from annexing the property, which is expected and intended to be developed primarily for single-family residences over a 20-year period.
3. IPA will work closely with town staff to identify key budget items and criteria for evaluating the costs and benefits of the annexation. Expected items to be considered include staff time and infrastructure demand. IPA staff will also evaluate the revenue expected to accrue to the town because of the development of this proposed annexation.
4. To complete this analysis, IPA will employ fiscal impact and cost-benefit analysis techniques recognized as professionally appropriate for use in planning and public management contexts to evaluate the revenue and expenditure impacts of new development.

IPA personnel attended all meetings of the Special Review Committee either in person or virtually and closely coordinated with the Town of Milton for all information needed for this project. A draft cost-benefit model was presented at the October 7, 2021 Special Review Committee meeting, and a draft report was reviewed at the October 19, 2021 Special Review Committee meeting.

DEVELOPMENT OF THE COST-BENEFIT MODEL

The IPA team started with a previously developed cost-benefit model that was developed with the intent to project revenues for local governments who were planning future land use areas in their comprehensive plans. While this existing model was useful, IPA quickly recognized that what was needed for this cost-benefit analysis was a model that was less complex, easier to understand, and able to apply the known information provided by both the town and the developer. In order to create this revised model, IPA applied projected new costs for the town on a per-capita basis for projected new residents while adding on expected new employees and equipment that the town would likely have to take on over the next 20 years. Projected revenues have been based on three primary areas: real estate transfer tax gained from each new sale, property tax paid by new homeowners at the town's existing tax rate, and a per capita calculation of expected new town revenue from miscellaneous sources such as licenses, permits, and fees based on an average from the previous two years in the town's budget. Subtracting projected costs from projected revenues provides an estimate of annual revenue for the town.

DETAILS OF THE COST-BENEFIT MODEL

The cost-benefit model is primarily driven by expected costs to the town from the new proposed development by Convergence Investments, Inc. and revenue that will be driven by the new development. These costs and revenues were projected over the course of 20 years between the expected delivery of the first homes in 2024 and 2043. Each portion of the model is explained in detail below.

Projected New Homes Constructed by Year

IPA based its estimate of new homes constructed by year using the Phasing/Unit Schedule outlined in the "The Granary at Draper Farm – Master Plan, May 20, 2021" which is shown below. Phase 1 was assumed to be completed over a two-year period (2024 and 2025) with 50 percent of the total homes to be constructed completed each year. Each subsequent phase was treated similarly commencing every two years beginning in 2026.

Phasing/Unit Schedule

Phase	Detached	Attached	Total
1	145	50	195
2	75	30	105
3	98	73	171
4	64	40	104
5	80	70	150
6	145	45	190
7	78	9	87
8	88	53	141
9	67	0	67
10	40	100	140
Total	**880**	**470**	**1,350**

Projected New Residents

With the estimated number of homes built per year, an average number of persons per household was applied to each unit constructed to project the number of new residents per year. The average household size used was 1.98 persons per units, which is based on the United States Census American Community Survey estimate for Milton. By applying the 1.98 average per household to the 1,350 projected new houses, the model projects 2,673 new residents in the town by 2043 at full build out for the community.

Expenditures

In terms of expenditures, the model factors in two major categories. The first is a measure of General Fund (GF) expenditures which applies a per-capita rate for the average GF expense per person that the town is spending now and applies that to projected new residents per year from the new development. The average GF expense is based on total GF expenditures for fiscal years 2015–2020. Also included in the GF expenditures are projected new costs from town administration in areas such as police, street maintenance, and parks maintenance. The second category of expenditures are projected new Utilities Fund expenditures anticipated to come as a result of the new development over time. Similar to the GF expenditure calculation, a per capita Utilities Fund expenditure is calculated using the average expenditure for fiscal year 2015–2020 and applied to the projected new residents per year.

General Fund Expenditures

GF expenditures were calculated by evaluating the town's Annual Budget for fiscal years 2015–2020. Using the annual budget figures and population estimates, a GF Expenditure per capita rate was calculated for each year with a fiscal year 2020 rate of $594. Given that GF per capita costs increased on average 3.53 percent per year for the period 2015–2020, an estimated cost for 2024 of $682 was projected. This rate is then applied to each new resident for the period 2024–2043 to obtain the additional GF cost associated with the new development. *(An adjustment was made for the fiscal year [FY] 2020 Capital Outlay expenditure figure as it was a significant outlier when compared to expenditure levels for 2015–2019 and would have significantly skewed upwards the estimated FY 2024 rate of $682. In this case, the FY 2019 amount was inflated by 3.53 percent for a new estimated FY 2020 Capital Outlay figure).*

Added to these expenditures were the projected costs for new town employees and equipment. It was reported to the Special Review Committee that six new police officers would be needed over time as a result of the new development. The estimated cost of each of these new officers and the cost of an associated patrol vehicle were phased in as the development is built. Additional employees for street and park maintenance and associated equipment (truck with a plow, mowers, and streetsweeper) were also factored into the overall cost for the GF. The estimated total cost for the GF of the new development in 2024 is $131,046 and in 2043 is $2,451,455.

Utility Fund Expenditures

For the Utilities Fund (UF) expenditures, a similar calculation to the GF estimate was done based on the previous six years of the town's UF Budget. For the UF, the primary difference in this calculation was factoring in the amount of utility costs associated with residential properties compared to commercial properties. To account for this, IPA utilized a land use analysis that identified the percentage of taxable property by square footage in the town that was commercial and residential. After identifying that approximately 83 percent of the town's taxable land by square footage was residential, the UF expenses were then reduced by 17 percent to reflect the amount of property that was non-residential. The estimated cost per capita per year that was applied for the UF was $305 per person per year and then multiplied by the projected number of town residents as they move into the new development.

Additionally, the Public Works Department estimated the need for two additional employees with these costs phased in and added to the UF cost estimate to ultimately get a total cost to the UF of $58,548 in 2024 and $906,421 in 2043.

Total Expenditures

Total expenditures for the model were calculated by simply adding the costs for the GF and the UF for each year of the development. The total cost estimated for the development from these two sources is estimated to be $189,594 in 2024 and $3,357,876 in 2043.

Revenues

The revenue calculation accounted for three main categories: realty transfer tax revenues, property tax revenues, and fees and fines revenues. In order to calculate the realty transfer tax, the rate of 1.5 percent was applied for each sale in the new community. In order to calculate the amount of revenue earned from each sale, a sales price for each home had to be estimated. To do so, a market analysis was done for recent sales in the Milton area. Once the home sales were estimated for both detached homes and attached homes, that price was applied to the realty transfer tax in order to identify new revenues.

The second input for revenues was from property taxes. Similarly, property taxes were estimated by utilizing the town's most recent tax rate of $0.25 per $100 of assessed value and then applied per year to the newly sold home prices to estimate annual revenues.

Fees and fines for the town from fiscal years 2019 and 2020 were used to estimate an amount that the town is likely to receive from these sources on a per capita basis from each new resident. This was then applied over time as the number of residents grow in the new development.

Finally, utility fund revenues were added to overall revenues. Utility fund revenues were estimated based on a per capita calculation based on revenues collected in the 2020 utility fund.

Housing Market Analysis

As mentioned above, in order to calculate revenues from both the realty transfer tax and the property tax, a value for each new home had to be estimated. These home price estimates are a very significant portion of the model because they determine in large part the amount of revenue that is likely to be generated by the new development. To estimate the likely sale price for new homes, a search was done using Zillow.com to identify the ten most recent sales in the immediate area in and around Milton for homes that are comparable to what the developer has stated they intend to build. At the September 14 Special Review Committee meeting, the developer responded to a question about the size of its new homes by suggesting that the new detached homes are likely to be approximately 3,000 square feet in size, and attached homes are likely to be approximately 2,500 square feet in size. Using this as a baseline for home types, the following search criteria was used in the immediate vicinity in and around Milton looking primarily north of Route 9 and west of Route 1:

- Detached units above 2,500 square feet with at least three bedrooms and two bathrooms, built no earlier than 2011, and sold within the past year. The ten most recent sales meeting these criteria were used, and the average sale price came to $585,125.
- Attached units above 2,000 square feet with at least three bedrooms and two bathrooms, built no earlier than 2011, and sold within the past year. The ten most recent sales meeting these criteria were used, and the average sale price came to $379,640.

It is important to keep in mind and to re-emphasize that the projected sales prices for new homes in the proposed development are not only one of the most significant drivers of the model, but also one of the most unpredictable. Real estate values can change dramatically over time, and while our market analysis followed an appropriate and accurate process, prices and sizes for proposed units may vary a great deal over the course of the next 20 years.

Realty Transfer Tax Revenues

As mentioned previously, the transfer tax is a 1.5 percent tax that is applied to each home sale based on the sales price of the house. For this analysis, each detached unit would earn the town $8,777 and each attached unit sold would earn the town $5,695. IPA estimates that new home sales will accrue over $10,000,000 over the course of 20 years from the sale of 1,350 units and a total of $18,496,792 when resales are factored in.

Property Tax Revenues

Property tax revenues are calculated by applying the town's recent tax rate of $0.25 per $100 of assessed value. Based on these estimates, this would equate to $1,463 annually for each detached home and $949 annually for each attached home. These revenues were phased in over time as homes are projected to be completed, with revenues slowly increasing annually over time. The model estimates show that by 2043 the town will receive approximately $1,747,219 per year in new revenues from property taxes from the 1,350 new homes built in the development.

Fees and Fines Revenues

The next category included for revenues were Fees and Fines. In order to apply expected revenues for this area the budget figures for fiscal years 2019 and 2020 were considered for each item, then added together in order to get a per capita basis for applying new fees and fines revenues per new resident in town. One area that was changed on the recommendation of the town manager for this area was to reduce the amount expected for charges for services by 50 percent based on the fact that the past two years have generated higher fees for this area than can normally be expected. The total amount anticipated to be accrued by the town over the 20-year period for fees and fines is estimated to be $555,499 per year by 2043 and a cumulative total of approximately $6,251,628 over the next 20 years.

Utility Fund Revenues

Utility fund revenues was the last category considered in this analysis. The calculation for this area was relatively simple. The amount of revenue accrued by the town in 2020 was divided by existing residents in order to get a per capita rate for new residents, and then this rate was applied to new residents each year as the population grew in the newly developed area. The total amount of revenue anticipated by the model annually in 2024 is $69,144 and in 2043 is $962,318.

Total Revenues

Total revenues for the model were calculated by adding the revenues for real estate transfer taxes, real estate property taxes, fees and fines revenues, and utility fund revenues. The total revenues estimated for the development from these sources is estimated to be $1,013,440 in 2024 and $4,480,275 in 2043.

Estimated & Cumulative NET Surplus Revenues

For the estimated NET Surplus (Deficit) per year, the total expenditures for each year were subtracted from the total revenues for each year. When factoring in both projected revenues and expenditures applying to the proposed new development in this model, IPA anticipates a surplus of $823,846 in 2024 and a surplus of $1,122,399 in 2043. When considering the cumulative NET Surplus (Deficit) for the development over the course of the next 20 years, the model anticipates that the town will accrue a surplus of $15,826,394 between 2024 and 2043 after factoring in the anticipated costs of the new development.

Conclusion

After factoring in predictable costs to the town that would be directly incurred by the development proposed by Convergence Investments, Inc on the Draper Farm property, the cost-benefit model produced by IPA found that the town is likely to gain over $15,000,000 in revenue between 2024 and 2043. The model projects that in most budget years the town is likely to earn between $500,000 and $1,000,000 in NET revenue after factoring in expected costs. Given these results, the proposed development is likely to be a benefit to the Town of Milton from a financial perspective. However, IPA also recognizes that there are other factors that will be considered by the town's Special Review Committee and the Town Council when making a final decision on the positives and negatives of the proposed annexation.

ABOUT THE INSTITUTE FOR PUBLIC ADMINISTRATION

The University of Delaware's Institute for Public Administration (IPA) addresses the policy, planning, and management needs of its partners through the integration of applied research, professional development, and the education of tomorrow's leaders.

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