



MORE HOUSING
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HELPING COMMUNITIES DEVELOP
HOUSING SOLUTIONS.

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Briefing Paper 7

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Municipal Housing *Solutions*





More Housing Wisconsin

Wisconsin is experiencing a **significant housing shortage**. A recent study estimates Wisconsin will need to build **over 200,000 housing units by 2030** to accommodate all the people who want to live and work here.¹ More Housing Wisconsin, a collaboration between the League of Wisconsin Municipalities, Wisconsin REALTORS® Association, and the Wisconsin Builders Association, seeks to educate and inform Wisconsin city and village leaders and staff about zoning changes and other strategies communities can use to help **address this state's housing shortage**. Our goal is to bring tools, resources, and best practices to municipalities to help communities initiate housing solutions that meet their unique needs and **strengthen our economy**.



THIS MONTH'S TOPIC SEPTEMBER 2024

Why is the cost of a single-family home lot so expensive? Understanding the costs of developing a buildable lot.

Developing a new housing subdivision is complex and costly. Many of the costs are beyond the control of both developers and local governments. However, allowable density, locally imposed engineering standards, and municipal fees can combine to make an already risky business venture unfeasible. A better understanding of the actual costs of developing a subdivision can serve as an important guide for creating local policies that encourage, rather than discourage, new home construction.

According to a recent Harvard University report, there are several reasons builders and developers are unable to provide enough homes at affordable prices, including:

- high interest rates and rising inflation
- cost and availability of labor
- price of building materials
- cost and availability of developed lots
- difficulties obtaining zoning or permit approvalsⁱⁱ

This briefing paper focuses on the low availability and subsequent high cost of developed lots. As the Harvard University report explains, nationwide, “the availability of developed land remains a key impediment to increasing the supply of housing.”ⁱⁱⁱ The trend over the last ten years is that substantially less buildable lots are being created. “Though lot availability was down just 1 percent year over year in the first quarter of 2024, it was down 11 percent from the first quarter of 2020 and 42 percent relative to the same quarter in 2015.”^{iv} According to a recent article in the New York Times, this has been the case since “the Great Recession broke the U.S. housing market.”^v The number of vacant developed lots remains 40 percent below its pre-Great Recession level.^{vi}

In Wisconsin the situation is much the same as it is nationally. According to a recent report published by the Wisconsin Policy Forum, there has been a significant long-term decline in the number of new lots being developed. The number of newly recorded lots in Wisconsin remains 72.5% below the pace of new lot recordings seen during the housing construction boom during the years of 2002-2004.^{vii}

ARE THERE ACTIONS LOCAL POLICYMAKERS CAN TAKE TO ENCOURAGE THE DEVELOPMENT OF MORE BUILDABLE SINGLE FAMILY HOME LOTS?

To help answer this question let’s look at three proposed housing developments from three different Wisconsin cities and compare the impacts that municipal policies and fees have on the cost of the lots.

The following cost comparisons reflect actual proposed developments and were prepared by Steve DeCleene, President, Neumann Companies, a residential development company headquartered in Pewaukee, and Robert Procter, a real estate lawyer with Axley Brynelson. The data have been normalized for ease of comparison by, for example, setting the size of the land at 80 acres in all 3 markets.

When comparing the costs of the three developments, three major differences stand out and help explain why the cost of the lots differ so greatly – allowable density, costs of engineering companies hired by the municipality to inspect infrastructure, and infrastructure costs.

1. Density. The allowable density (i.e., number of lots per acre) is an important cost factor that differs between the three developments.

- In the Waukesha County community large mandatory minimum lot sizes per single family home results in 97 buildable lots out of 80 acres. The average cost would be \$168,737 per lot. To make a 20% margin, a developer would need to charge \$210,922 per lot.
- In the Dane County example zoning standards allow for more density, resulting in 151 lots on the same 80 acres. The added density results in an average cost of \$118,899 per lot. To make a 20% margin, a developer would need to charge \$148,624 for the lot.
- In Dodge County the community’s zoning standards allow for even more density, resulting in 171 lots (all single family) at a cost of \$54,707. To earn a 20% margin, the developer would need to sell the lots for \$68,383.

Note also that the total cost of grading and storm ponds is not significantly different between the three developments, but the per lot cost varies considerably because of the allowable density. More lots allow for less cost of grading per lot. The cost per lot for grading and storm ponds in the least dense development, Waukesha County, is \$23,259. The cost per lot in the denser development in Dane County is \$16,296 and the cost per lot in the densest development in Dodge County is \$9,717.

2. Inspection fees. Municipally imposed inspection fees are another key cost difference between the three developments. State law allows communities to recover the cost from developers that the community sustains in hiring private engineering firms to inspect

the water, sewer, street, and other infrastructure items the developer is required to construct as a condition of subdivision approval to ensure that the construction meets municipal standards.^{viii} However, not all communities incur such expenses and for those that do the costs can vary considerably. In the three developments before us, the Waukesha County development was charged \$8,000 per lot for inspection fees. The Dane County development was charged \$1,382 per lot, and in Beaver Dam the inspection fee amount was \$1,500 per lot.

3. Infrastructure costs. Another cost that differs considerably between the three developments is the cost of infrastructure the municipalities require the developer to construct, such as water, sewer, and stormwater facilities. The difference in cost often, as here, reflects the amount and capacity of the piping, backfill requirements (i.e., gravel versus soil under the piping), and other engineering standards a community imposes. For example, the storm water costs differ significantly between the three developments. The total cost of storm water in the Waukesha County development was \$950,956. In Dane County, the storm water cost exceeded \$2 million. While in the Dodge County development the amount was substantially less at \$485,714.

Storm water costs per development rise or fall depending on the engineering standards a community imposes. For example, the number and location of stormwater inlet structures and subsequent piping and pipe sizes that municipalities require can add substantially to the developer's costs. While some communities will allow storm water to flow in swales and curb lines for long distances, others prohibit water from flowing in front of or behind more than two lots without needing it to be captured into a storm water structure and piping. Also, some municipalities require storm pipe to be installed on both sides of the road. In addition, some municipalities require drain tile be installed along the bottom of every curb.

Other infrastructure costs can vary significantly as well. Notice, for example, that in the Waukesha County development the developer was required to construct a sewer lift station at a cost of \$556,221 despite the community also imposing a sewer system impact fee that will be collected when building permits are pulled. Similarly, the developer in the Dane County development was required to build a booster station for water distribution at a cost of \$653,000. The Dodge County community imposed no such requirements on the developer.



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Conclusion: Many cost factors influencing developer decision-making lie outside the control of local policymakers, but some are within the power of elected officials, planning professionals, and municipal engineers to control and therefore have implications for public policy. Minimum lot sizes and other zoning standards relating to the density of a particular development, inspection fees charged against the development, and various infrastructure requirements all add cost to a potential development and could be changed through policy.

A University of California Berkley study on the costs of building new housing explains it well:

“In many cases, the level at which [local] policies are set can make or break the financial feasibility of new housing development. While there may be reasonable motivations to put such policies in place, many policymakers are not aware of the tradeoffs. Without knowledge of how policy decisions affect development feasibility, policymakers run the risk of implementing requirements that are not well-calibrated to the broader real estate market. This can curtail the creation of badly-needed new housing supply, exacerbating the housing shortage.”^{ix}



WAUKESHA COUNTY EXAMPLE

| DEVELOPMENT LINE ITEM BUDGET | | TOTAL | PER LOT |
|--|--|------------|---------|
| Total Acreage: | | 80 | |
| Number of Lots: | | 97 | 1.21 |
| Land Cost: | | 4,000,000 | 41,367 |
| Dev. Loan Interest | | 1,147,826 | 11,871 |
| Closing Cost, Property Tax, Loan Fees, LOC | | 241,391 | 2,496 |
| Land Planning, Due Diligence, and Legal | | 154,087 | 1,594 |
| Land, Closing Cost, and Financing | | 5,543,304 | 57,327 |
| Engineering Paid to Developer Engineer | | 285,009 | 2,947 |
| Inspection Fees charged by Municipality | | 773,565 | 8,000 |
| Engineering and Inspections | | 1,058,574 | 10,947 |
| Grading and Erosion Control | | 2,249,043 | 23,259 |
| Sanitary Distribution | | 1,648,522 | 17,049 |
| Sanitary Laterals | | 386,783 | 4,000 |
| Water Distribution | | 985,739 | 10,194 |
| Water Laterals | | 280,417 | 2,900 |
| Storm Sewer | | 950,957 | 9,835 |
| Sidewalks | | - | - |
| Cost of Curbs and Roads | | 1,067,922 | 11,044 |
| On Site Infrastructure | | 7,569,383 | 78,280 |
| Booster Station | | 556,522 | 5,755 |
| Offsite Water Distribution | | 566,202 | 5,856 |
| Highway Improvements | | 83,478 | 863 |
| Off Site Infrastructure | | 1,206,202 | 12,474 |
| Landscaping and Amenities | | 208,696 | 2,158 |
| Electric, net of reimbursement | | 120,870 | 1,250 |
| Gas, net of reimbursement | | - | - |
| Sales Commissions at 3% | | 609,183 | 6,300 |
| Other Costs | | 938,748 | 9,708 |
| Total Costs | | 16,316,211 | 168,738 |
| Retail Value at 20% Margin | | | 210,922 |

DANE COUNTY EXAMPLE

| DEVELOPMENT LINE ITEM BUDGET | | TOTAL | PER LOT |
|--|--|------------|---------|
| Total Acreage: | | 80 | |
| Number of Lots: | | 151 | 1.89 |
| Land Cost: | | 4,000,000 | 26,471 |
| Dev. Loan Interest | | 1,311,111 | 8,676 |
| Closing Cost, Property Tax, Loan Fees, LOC | | 570,844 | 3,778 |
| Land Planning, Due Diligence, and Legal | | 227,778 | 1,507 |
| Land, Closing Cost, and Financing | | 6,109,733 | 40,432 |
| Engineering Paid to Developer Engineer | | 375,556 | 2,485 |
| Inspection Fees charged by Municipality | | 208,889 | 1,382 |
| Engineering and Inspections | | 584,445 | 3,868 |
| Grading and Erosion Control | | 2,557,778 | 16,926 |
| Sanitary Distribution | | 1,622,222 | 10,735 |
| Sanitary Laterals | | 577,778 | 3,824 |
| Water Distribution | | 1,657,778 | 10,971 |
| Water Laterals | | 133,333 | 882 |
| Storm Sewer | | 2,082,222 | 13,779 |
| Sidewalks | | 354,699 | 2,347 |
| Cost of Curbs and Roads | | 1,982,634 | 13,120 |
| On Site Infrastructure | | 8,631,111 | 57,118 |
| Booster Station | | 653,333 | 4,324 |
| Offsite Water Distribution | | - | - |
| Highway Improvements | | 584,444 | 3,868 |
| Off Site Infrastructure | | 1,237,778 | 8,191 |
| Landscaping and Amenities | | 509,000 | 3,368 |
| Electric, net of reimbursement | | 187,693 | 1,242 |
| Gas, net of reimbursement | | - | - |
| Sales Commissions at 3% | | 707,200 | 4,680 |
| Other Costs | | 1,403,893 | 9,290 |
| Total Costs | | 17,966,960 | 118,899 |
| Retail Value at 20% Margin | | | 148,624 |

DODGE COUNTY EXAMPLE

| DEVELOPMENT LINE ITEM BUDGET | | TOTAL | PER LOT |
|--|--|-----------|---------|
| Total Acreage: | | 80 | |
| Number of Lots: | | 171 | 2.14 |
| Land Cost: | | 1,600,000 | 9,333 |
| Dev. Loan Interest | | 571,429 | 3,333 |
| Closing Cost, Property Tax, Loan Fees, LOC | | 208,571 | 1,217 |
| Land Planning, Due Diligence, and Legal | | 208,571 | 1,217 |
| Land, Closing Cost, and Financing | | 2,588,571 | 15,100 |
| Engineering Paid to Developer Engineer | | 400,000 | 2,333 |
| Inspection Fees charged by Municipality | | 257,143 | 1,500 |
| Engineering and Inspections | | 657,143 | 3,833 |
| Grading and Erosion Control | | 1,665,714 | 9,717 |
| Sanitary Distribution | | 1,268,571 | 7,400 |
| Sanitary Laterals | | 457,143 | 2,667 |
| Water Distribution | | 1,197,143 | 6,983 |
| Water Laterals | | 214,286 | 1,250 |
| Storm Sewer | | 485,714 | 2,833 |
| Sidewalks | | - | - |
| Cost of Curbs and Roads | | 1,322,857 | 7,717 |
| On Site Infrastructure | | 5,288,571 | 30,850 |
| Booster Station | | - | - |
| Offsite Water Distribution | | - | - |
| Highway Improvements | | 171,429 | 1,000 |
| Off Site Infrastructure | | 171,429 | 1,000 |
| Landscaping and Amenities | | 114,286 | 667 |
| Electric, net of reimbursement | | 208,571 | 1,217 |
| Gas, net of reimbursement | | - | - |
| Sales Commissions at 3% | | 349,714 | 2,040 |
| Other Costs | | 672,571 | 3,923 |
| Total Costs | | 9,378,286 | 54,707 |
| Retail Value at 20% Margin | | | 68,383 |

ⁱForward Analytics, *A Housing Hurdle: Demographics Drive Need for More Homes*; January 2023.

ⁱⁱ*The State of the Nation's Housing 2024*, Joint Center for Housing Studies, Harvard University.

ⁱⁱⁱIbid.

^{iv}Ibid.

^vNew York Times, *“Why Too Few Homes get Built in the U.S.”*, August 22, 2024.

^{vi}Ibid.

^{vii}*Housing Permitting Slows, Adding to Affordability Concerns*, Wisconsin Policy Forum, July 2024.

^{viii}Under Wis. Stat. § 66.0628(3), the rate charged to the developer for engineering inspection services may not exceed “the rate customarily paid for similar services by the political subdivision.”

^{ix}A TERNER CENTER for Housing Innovation REPORT, UC-Berkley - DECEMBER 2023 *Making It Pencil: The Math Behind Housing Development (2023 Update)*