



2019

Cost Containment Report

October 17, 2019

OVERVIEW AND CONTEXT

Containing the cost of developing housing is a critical issue in Minnesota. In 2017, about 550,000 Minnesota households were cost burdened by spending more than 30 percent of their income on housing.¹ If we are to address the need for affordable housing, we must build and preserve as many affordable units as possible with the limited resources available, which requires us to be cost conscious. However, cost containment requires tradeoffs and a balanced approach.

- Using lower quality materials and less efficient systems will reduce upfront costs, but they can also increase ongoing maintenance, repair, and utility costs, which may not be cost-effective in the long run.
- Using lower quality materials and more basic designs for a building's exterior will also reduce costs, but they will also make it more challenging to fit affordable housing in the surrounding neighborhood, particularly higher-income communities, which can lead to community opposition and increase costs related to delays, re-design, and projects not moving forward.
- Siting developments in less expensive locations can save money, but it can also reduce the tenants' access to jobs, services, amenities, safe neighborhoods, public transportation, good schools, and other benefits.

We based our 2020-23 Strategic Plan on the principle that housing is the foundation for success, providing individuals, families and communities the opportunity to thrive. To achieve this outcome for as many lower-income households as possible, we need to finance high-quality, durable, location-efficient housing that provides access to jobs, transit, and other amenities and is built at the lowest possible cost. We are balancing the goal of cost containment with other policy objectives.

Overall, as the following assessment shows, we have been effective at containing costs over the last decade and a half – maintaining relatively consistent total development costs (TDC) while pursuing other policy objectives that tend to increase costs, including supportive housing for people experiencing homelessness and people with disabilities, energy-efficient and healthy homes, and locations that provide access to jobs, transit, and other amenities. Nevertheless, we are under constant pressure to do more with less and will continue to identify and pursue additional strategies to contain and reduce costs.

This report is broken into two sections – the first addresses multifamily costs, and the second addresses single family costs.

¹ Minnesota Housing analysis of data from the U.S. Census Bureau's American Community Survey (2018, 1-year sample).

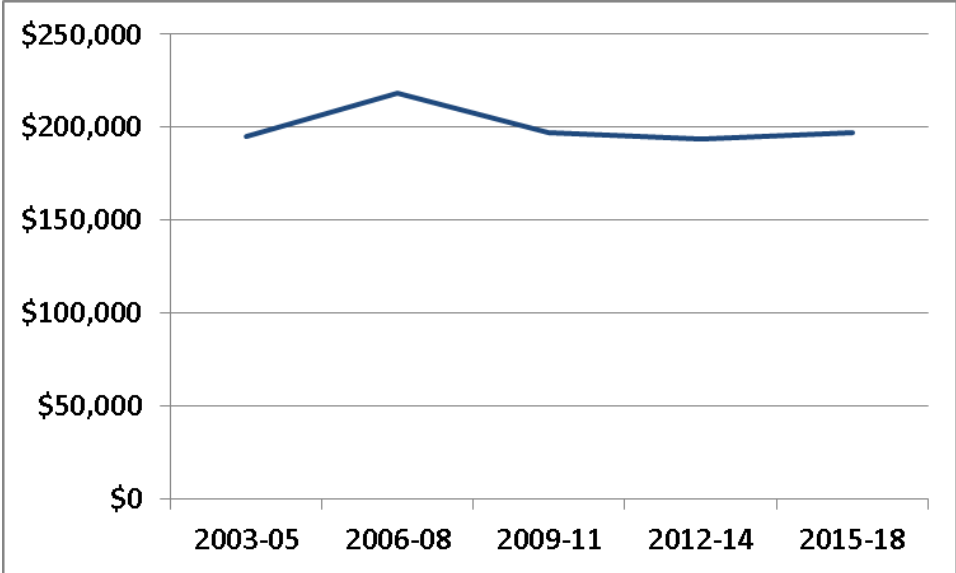
MULTIFAMILY COSTS

In a typical year, we distribute over \$150 million for multifamily development.² We must ensure that these funds are efficiently and effectively used to address the significant shortage of affordable housing. The first part of this section provides an overview of our results, and the second part outlines our strategies for achieving those results and improving performance.

Overview of Multifamily Costs

Overall, the average TDC per unit has been around \$200,000 for the last decade, after controlling for inflation in residential construction costs (which accounts for changes in material and wage costs over time). The data in Figure 1 applies to all types of developments, including new construction, rehabilitation, metro area, Greater Minnesota, tax credit, and non-tax credit. The trend line is influenced not only by the underlying cost trends but also by the mix of projects in a given year.³ For example, a larger share of resources going to new construction developments with tax credits in the metro area will increase average costs, while a larger share going to rehabilitation developments without tax credits in Greater Minnesota will decrease average costs.

Figure 1: Average TDC per Unit 2003 to 2018 – All Types of Developments (Adjusted for Construction Inflation, 2019 Dollars)

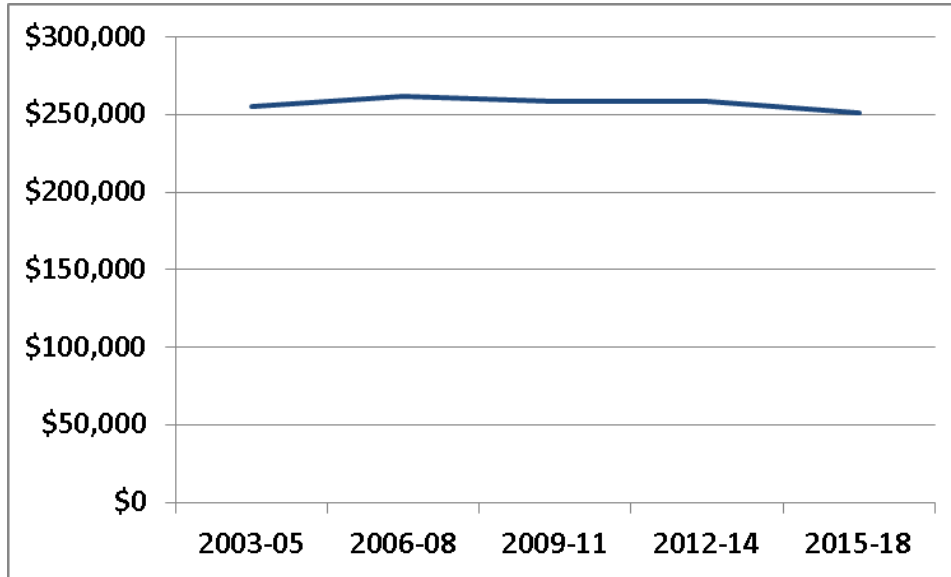


² This includes syndication proceeds from 9% housing tax credits.

³ To increase the comparability of the data, we excluded developments with a TDC per unit that were less than \$40,000, which took out rehabilitation projects with a more limited scope of work and added consistency to the level of rehabilitation being assessed. We also excluded developments with an overall acquisition cost of less than \$10,000, which excludes projects with no acquisition or heavily subsidized acquisition.

To control for the mix of projects in the trend line, Figure 2 shows average TDC per unit just for new construction projects with tax credits in the metro area. Again, average costs are relatively constant, but at a slightly higher \$250,000 level. The relatively consistent or contained cost is the key finding.

Figure 2: TDC per Unit 2003 to 2018 – New Construction with Tax Credits in the Metro Area (Adjusted for Construction Inflation, 2019 Dollars)



Most importantly, we have contained costs while taking on policy initiatives that tend to increase costs.

- In 2003, we added a selection and funding priority for supportive housing for people experiencing homelessness, which is generally a more costly type of development.
- In 2007, we added our Green Communities Overlay, which requires our developments to have energy-efficient and healthy-home features.
- In the last several of years, we strengthened our location efficiency priority by making it more geographically precise and increasing the points it receives in the selection process. Housing that is in a walkable neighborhood and near transit, good schools, jobs, and other amenities can be more expensive.

While we added or enhanced these policy objectives, we also added cost containment provisions.

- In 2006, we first developed and used our predictive cost model, which compares a development’s proposed costs with the costs that we would expect for that development based on the Agency’s experience with similar projects and industry-wide standards. This process flags high cost developments and helps maintain costs at a reasonable level.
- With the Qualified Allocation Plan (QAP) for the 2014 Low-Income Housing Tax Credits (LIHTC), we added a selection criterion that gives preference to the 50 percent of tax credit applications with the lowest TDC per unit.

- In 2014, we also launched the Minnesota Challenge to Lower the Cost of Affordable Housing, which was initiated as an idea competition to identify and address system-level factors (such as land use policies or design standards) that increase costs for all developments. Since this initial competition, we have carried out several activities to address these systemic-cost drivers. We try to carry out at least one initiative each year.

More information on these initiatives is provided in the report’s next section.

To effectively contain costs, we must understand the factors that drive costs. Table 1 provides a break out of costs by project type, location and cost component.

- New construction with tax credits in the Twin Cities metro area is the most expensive type of project, while rehabilitation without tax credits in Greater Minnesota is the least expensive.
- Not surprisingly, construction accounts for the clear majority of costs in new construction projects, while construction and acquisition costs are both key cost drivers of rehabilitation projects. Addressing these costs will have the largest impact in reducing or containing TDCs.
- While soft costs account for a smaller share of TDC (13 percent to 24 percent), they should be a key focus of cost containment strategies. Reducing construction costs can affect the quality, durability, and energy efficiency of the housing; and reducing acquisition costs can affect location efficiency. While soft costs are a necessary component of a housing development, eliminating inefficiencies in these costs will not affect the quality of the housing.
- Low-Income Housing Tax Credits (LIHTC) appear to add five to eleven percentage points to the share of TDC attributable to soft costs, which is not surprising given the added complexity and cost of putting together and financing a tax credit deal. For developments without tax credits, soft costs account for 13 percent to 16 percent of TDC. That percentage jumps to 21 percent to 24 percent for developments with tax credits.

**Table 1: Share of TDC by Project Type, Location and Cost Component
Developments Completed between 2003 and 2018 (Adjusted for Construction Inflation, 2019 Dollars)**

			Avg. TDC per Unit	Share of TDC			N
				Construc- tion	Acquisi- tion	Soft	
New Const.	LIHTC	Metro	\$256,806	69%	7%	24%	84
New Const.	No-LIHTC	Metro	\$205,179	74%	10%	16%	18
New Const.	LITHC	Greater MN	\$212,201	73%	5%	22%	57
New Const.	No-LIHTC	Greater MN	\$187,625	79%	8%	13%	14
Rehab	LIHTC	Metro	\$202,934	35%	41%	23%	38
Rehab	No-LIHTC	Metro	\$136,850	42%	45%	14%	23
Rehab	LITHC	Greater MN	\$127,455	41%	38%	21%	43
Rehab	No-LIHTC	Greater MN	\$87,239	41%	43%	16%	17

Strategies for Containing and Reducing Multifamily Costs

As mentioned earlier, we have taken a three pronged approach to containing costs.

1. Assess Cost Reasonableness
2. Incent Cost Containment and Reductions in the Selection of Projects for Housing Tax Credits
3. Address Systemic Cost Drivers

Strategy 1: Assess Cost Reasonableness

Minnesota Housing assesses each development for cost reasonableness. An important tool for identifying high cost developments is our predictive cost model. The model predicts a development's TDC per unit based on its characteristics. To develop the parameters for the model, we run a multivariate regression analysis on the inflation-adjusted costs and characteristics of the developments that the Agency financed between 2003 and 2018. The analysis uses the historical data to assess the effect that each of the following factors simultaneously has on TDC per unit:

- Activity Type:
 - New Construction
 - Extensive Rehabilitation⁴
 - More Limited Rehabilitation
 - Combination of New Construction and Rehabilitation
 - Conversion/Adaptive-Reuse
- Building Type:
 - Walkup
 - Elevator
 - Townhome
 - Single Family Home/Duplex
- Number of Stories
- Unit Size – based on average number of bedrooms per unit in the development
- Gross Square Footage
- Location:
 - Minneapolis or Saint Paul
 - Suburbs in Twin Cities Seven-County Metro Area
 - Greater Minnesota – Large City⁵
 - Greater Minnesota – Regional Job Center⁶

⁴ This involves more extensive work on the interior, exterior, electrical, and mechanical systems of a property. "Extensive" versus "more limited" is determined by staff using internal definitions.

⁵ The large cities are Duluth, Rochester, St. Cloud, Moorhead, and Mankato; and include a five-mile commute shed around the cities.

- Greater Minnesota - Rural
- Year Built
- Garage Type:
 - None
 - Above ground
 - Underground
- Acquisition:
 - Land
 - Structure
 - None
- Financing:
 - Tax Credits
 - Number of Funding Sources
- Special Costs:
 - Historic Preservation
 - Environmental Abatement
 - Supportive Housing

Using those same factors for a proposed development and the model's cost parameters for those factors, the model provides a predicted cost for that development. The model is also benchmarked against industry-wide cost data to ensure that our costs are in line with the industry.

Overall, the model has worked very well for us. It explains a sizable portion (55 percent to 76 percent) of the variation in the costs for developments that we financed between 2003 and 2018, which is a robust result.⁷ For comparison, Abt Associates (a national consulting firm) released in August 2018 a cost analysis of housing tax credit developments from across the county, and their regression models explained 52 to 54 percent of the variation in the national data.⁸ Similarly, the U.S. Government Accountability Office (GAO) released in September 2018 another cost analysis of tax credit developments, and their regression models explained 63 to 65 percent of the variation in their national

⁶ There are 51 regional job centers, which are the top 15 percent of cities and townships in number of jobs. They include: Albert Lea, Albertville, Alexandria, Austin, Baxter, Bemidji, Brainerd, Buffalo, Cambridge, Cloquet, Cold Spring, Crookston, Detroit Lakes, Elk River, Fairmont, Faribault, Fergus Falls, Goodview, Grand Rapids, Hibbing, Hutchinson, International Falls, La Prairie, Little Falls, Marshall, Montevideo, Monticello, Morris, North Mankato, Northfield, Onamia, Owatonna, Park Rapids, Perham, Pipestone, Red Wing, Roseau, Saint Michael, Saint Peter, Sartell, Sauk Rapids, Thief Rivers Falls, Virginia, Waite Park, Waseca, Willmar, Windom, Worthington, and Wyoming. These areas also include a five-mile commute shed around the cities.

⁷ The model explains about 79% of the variation in construction costs and about 64% of the variation in acquisition and soft costs.

⁸ Abt Associates, *Variation in Development Costs for LIHTC Projects* (prepared for the National Council of State Housing Agencies, August 30, 2018). The adjusted R-Squared values shown in the appendix varied from 0.5222 to 0.5433.

data.⁹ Besides the statistical rigor, the model has proven very effective over the last 13 years in objectively and systematically flagging developments with high costs. Each year, we revise and enhance the model based on the previous year's results and staff feedback.

Over time, we have tested models that predict costs on a per-unit and a per-square-foot basis. Based on our testing, the per-unit models have explained a larger share of the variation. We believe that this has occurred for two reasons. First, some costs are clearly tied to the unit and do not increase with the size of the units. For example, apartments regardless of unit size have one kitchen (unless single-room-occupancy). Second, and most importantly, the per-unit model that we use includes a cost factor that accounts for unit size. Developments with larger units and more bedrooms have higher predicted costs.

Under the current practice, when staff recommend to the Board developments for funding, they identify the developments that have a proposed cost that is more than 25 percent higher than the predicted cost from the model, and the Board can decide to grant a waiver allowing the higher cost. For these projects, staff explains why the proposed costs are reasonable even though they are above the 25 percent threshold. There are a wide range of reasons why the costs could be reasonable. For example, a housing development and site may be critical to meet a local housing need, but the site requires an unusually large amount of environmental remediation.

While the predictive cost model is a useful tool to identify high-cost developments, it is not the only way that Agency staff review cost reasonableness. The professional judgment and expertise of our underwriting and architectural staff also play a critical role in the assessment of cost reasonableness. Even if a project has costs that are within the 25 percent predictive cost model threshold, staff will still question costs if they seem high given the context of the development. Our staff has extensive experience reviewing funding applications and development costs. Each year, they typically evaluate 75 or more applications.

Strategy 2: Incent Cost Containment and Reductions in the Selection of Projects for Low-Income Housing Tax Credits

Starting with our Qualified Allocation Plan (QAP) for the 2014 Low-Income Housing Tax Credits, we added a cost criterion for selecting developments to receive the credits. The 50 percent of tax credit applications with the lowest TDC per unit are eligible to receive six points in the selection process. We control for activity-type and location cost differences by dividing the applications into four groups.

1. New Construction in the Twin Cities metro area
2. New Construction in Greater Minnesota
3. Rehabilitation in the Twin Cities metro area
4. Rehabilitation in Greater Minnesota

⁹ U.S. Government Accountability Office (GAO), *Low-Income Housing Tax Credit: Improved Data and Oversight Would Strengthen Cost Assessments and Fraud Risk*, (September 2018, GAO-18-637). The adjusted R-Squared values shown in Appendix II varied from 0.626 to 0.648.

Within each of the four groups, the applications with the lowest costs are eligible for the points. As a result, projects are only competing with similar projects for the points. When comparing costs and awarding points, we also adjust the costs to account for unit size differences. Projects with predominantly smaller units (efficiencies and one bedroom) have their costs adjusted upward when making comparisons; and projects with predominantly large units (three or more bedrooms) have their costs adjusted downward.¹⁰ This levels the playing field when comparing costs.

We added the criterion to encourage cost reductions, not just cost reasonableness. With cost reasonableness and the predictive cost model, developers only have the incentive to propose costs that are in line with previous projects that we have funded. With the scoring criterion, they have the incentive to identify costs that may not be necessary, and reduce their costs in the hope of being in the 50 percent of developments with the lowest costs. Because the competition is “blind” (developers do not know the costs of the competing applications and how their development will rank on cost), developers have an incentive to reduce their costs as far as prudently possible.

We do not want the competition to become a “race to the bottom,” with developers sacrificing quality and other policy objectives in the name of cost reduction. Thus, we strategically chose to award six points to projects that meet this criterion.

Table 3 provides the maximum points awarded under each selection criteria for the 2020 QAP.

- Six points are meaningful in the selection process and should influence the decisions of developers. In many years, there is only a one point difference between the last project selected for credits and the first one not selected. There are often several projects within six points of the selection threshold. For example, with the November 2018 selections, 15 of the 45 applications for 9% tax credits scored within this range.
- The six points for cost containment are no more than the points awarded for workforce housing, location efficiency, economic integration, homelessness, people with disabilities, and large families. Developers do not have an incentive to sacrifice those other funding priorities to achieve cost containment.
- Finally, developers cannot sacrifice quality and energy efficiency because all developments must meet our design and green standards.

¹⁰ To be classified as a development with small units, 75 percent or more of the units have to be efficiencies or have one bedroom. To be classified as a development with large units, 50 percent or more of the units have to have three or more bedrooms.

Table 3: Tax Credit Selection Points, 2020 QAP

Criterion	Points	Criterion	Points
Preservation	30	Large Family	7
Rental Assistance	26	Intermediary (Soft) Costs	6
Unacceptable Practices	-25	Workforce Housing Community	6
Supportive Housing for Homeless	22	Cost Containment	6
Financial Readiness to Proceed / Leveraged Funds	16	Higher Performing Schools	4
Lowest Income / Rent Reduction	13	Community Development Initiative	3
People with Disabilities	10	Minority- / Women-Owned Business	3
Other Contributions	10	Universal Design	3
Rural/Tribal	10	Smoke Free Building	1
Economic Integration	9	QCT / Community Revitalization	1
Location Efficiency	9	Eventual Tenant Ownership	1
Long-Term Affordability	9		

We have limited the application of this selection priority to just developments applying for housing tax credits for two reasons. First, tax credit developments generally have higher costs and containment is a larger issue. Second, the level of work done on tax credit developments, particularly rehabilitation, is more consistent across tax-credit projects and allows for more appropriate and equivalent cost comparisons. The level of rehabilitation, particularly for non-tax credit developments, can vary a lot, and we do not want to incent developers to just pick the projects with minimal rehabilitation needs. Even though non-tax credit applications (those applying just for first mortgages or deferred loans) do not receive points under this selection priority, they are subject to a cost reasonableness analysis, including the requirement that it receive a waiver if the per unit TDC exceeds 25 percent of the predicted costs.

Like other scoring criterion, we monitor it closely for unintended consequences by assessing the type, size, nature, and location of developments scoring and not-scoring well on it to make sure that the selected projects meet our overall strategic and funding priorities.

One of the challenges for developers created by the cost-containment criterion is managing fluctuations in construction costs, particularly labor costs. Figure 4 shows the annual changes in multifamily construction costs. The blue line shows changes in the Produce Price Index (PPI) for residential construction materials, and the green line shows changes in wages for multifamily residential construction workers in Minnesota.¹¹ Wages in particular can vary dramatically from year to year. Developers may plan for a modest 2 percent increase in wages in their funding application, only to find they have increased by 7 percent when construction starts. By taking the cost containment points in the selection process, developers are held accountable for keeping their costs down when construction occurs, even if costs spike. If final actual costs come in too high, we can assess developers with *negative* four points for their next tax credit application.

¹¹ Construction material cost data is from the Bureau of Labor Statistics, and the construction wage data is from the Minnesota Department of Employment and Economic Development’s *Quarterly Census Employment and Wages*.

Figure 4: Residential Construction Inflation, 2003 to 2018



Strategy 3: Address Systemic Cost Drivers

The first two tactics address costs that are specific to individual developments. We also understand that systemic cost drivers outside the control of developers are a critical issue that we need to address. These cost drivers ranged from local policies and regulations that increase the cost of housing (such as maximum densities), to the large cash reserves that funders and investors may require for affordable housing developments, to the complexity of assembling the multiple sources of funding that make an affordable housing deal work.

In January 2014, Enterprise Community Partners and the Urban Land Institute’s (ULI’s) Terwilliger Center for Housing released a report on best practices from across the country to address these systemic cost drivers.¹² Overall, the report finds that containing and reducing costs in a prudent and effective way does not involve a single magic bullet. Rather, affordable housing costs are driven by dozens of small inefficiencies. As one of the lead authors described it, “death by a thousand cuts.”¹³

To take on these cost drivers, we partnered with the McKnight Foundation, Enterprise, and ULI/Regional Conference of Mayors to create an initiative for Minnesota to implement these types of practices, which became the MN Challenge to Lower the Cost of Affordable Housing. It began in the winter of 2014 as an idea competition. We asked the development community to create cross-discipline teams (developers,

¹² Enterprise Community Partners and Urban Land Institute’s Terwilliger Center for Housing, *Bending the Cost Curve on Affordable Rental Development: Understanding the Drivers of Costs* (January 2014).

¹³ Michael Spotts, Enterprise Community Partner, presentation to the Affordable Housing Investors Council (AHIC), Portland Oregon, October 9, 2014.

funders, attorneys, local officials, housing advocates, etc.) and develop and submit ideas to address these systemic cost drivers. From the 12 submissions, we selected one to receive \$70,000 for implementation.¹⁴

The winning idea was submitted by the Center for Urban and Region Affairs at the University of Minnesota, the Housing Justice Center, and Becker Consulting. Their proposal addresses the issue of local practices and policies that add to the cost of affordable housing, including fees, land-use and zoning policies, approval processes, and others. These cost drivers have been identified and known for years. The value of this idea was identifying and implementing best practices to address them, which included providing technical assistance to communities to pursue the practices and encouraging regional organizations to incorporate the implementation strategies into their policies and guidelines, including the Metropolitan Council's Planning Handbook and Housing Performance Scores and ULI's Tool Box for local communities.

As part of our overall cost containment strategy, we try to initiate at least one cost containment initiative each year.

- **2014 – Minnesota Housing's Multifamily Remodel Project.** While the MN Cost Challenge was kicking off, we were also initiating a remodel project for our Multifamily Division to redesign and streamline our application and funding processes - everything from proposal inception through application, selection, underwriting, closing, construction management, and lease up. The purpose of the remodel is to reduce the time it takes a development to move from concept to occupancy. A key finding from the Enterprise/ULI report identified complexity, uncertainty, and delays in the funding process as cost drivers. Several issues identified in the MN Cost Challenge's submissions addressed complexity, uncertainty, and delays in our application and funding processes. These issues and ideas were passed on to the Agency's team leading the remodel project. Even though the redesign is still being implemented, it has already achieved some positive outcomes. For example, we created a customized online portal to receive funding applications for the multifamily consolidated RFP, eliminating paper applications.
- **2015 – MinnDocs – Consolidated Legal Documents.** Most affordable housing projects have multiple deferred loan funding sources, each with their own set of legal documents and attorneys, which add unnecessary costs. The Enterprise/ULI report highlighted Massachusetts' practice that consolidates legal documents for all subordinate debt into a single set. Because the development community in Minnesota was intrigued by this idea, we decided to pursue it. In 2015, we received a grant from the McKnight foundation to implement the practice. With the number of community partners involved, Minnesota Housing and community partners have struggled to finalize a single set of loan documents. Massachusetts estimates that consolidated legal documents have reduced their costs by about \$10,000 per subordinate loan for each development. Because the context is different in Minnesota, we are unlikely to achieve that

¹⁴ The initiative was jointly funded by the McKnight Foundation and Minnesota Housing.

level of savings. Nevertheless, MinnDocs has the potential to chip away at the soft costs associated with multifamily funding sources.

- **2016 - Minnesota Housing's Design and Construction Standards.** As part of our annual preparation for the consolidated RFP, we review these standards. During 2016, we specifically reviewed the standards with an emphasis on cost containment. We focused on reducing life-cycle costs (which includes ongoing maintenance, repair, and utility costs), not just upfront development costs. Specifically, we surveyed architects, general contractors, and developers who work on the developments that we finance about the standards and costs. We received 66 responses. Based on the feedback, we made several design changes that should reduce costs. For example, we clarified that a separate dining room is not required in units with two or more bedrooms but that a dining area (or eat in kitchen) is sufficient. Each of the changes to the standards will unlikely result in significant savings, but they are more examples of small savings that can lead to larger savings when combined with each other over time.
- **2017 – Developer Fees.** These fees compensate developers for the time, compliance requirements, and risks associated with developing affordable housing and can account for a substantial portion of a development's softs costs. The maximum developer fee that Minnesota Housing allows is 15 percent of TDC for the first 50 units and 8 percent for additional units. In 2017, we assessed our fees and found that they are consistent with other states and that the average fee taken by our developers is 7 percent of TDC, well below our maximum. Given our cost containment incentives, it appears that developers are typically taking the minimum fee that still allows the deal to work for them. If developers applying for tax credits take a higher fee, their applications will be less competitive in a highly competitive process, particularly for 9% tax credits. Based on this analysis, we decided not to adjust our developer fee structure at this time, but it is an area that we will continue to assess given the size of these costs.
- **2018 – Housing Task Force.** Minnesota Housing was a lead sponsor of the Task Force, providing much of the staff support. The cost of developing housing was a primary issue addressed by the Task Force, which made several cost-related recommendations, including:
 - Position Minnesota as a national leader in the advancement of housing innovation and technology, which should increase the efficiency and productivity of developing housing and reduce the costs.
 - Grow the pool of talent in Minnesota's building trades to enable the sector to meet current and future demand, which should address the current shortage of skilled labor.
 - Create a statewide review panel to evaluate regulations related to building standards, land use, and environmental stewardship for their impact on housing affordability.

While these actions are largely outside the scope of our work, they will directly impact the cost of the housing that we finance.

- **2019 – Construction Revolution Summit.** We recently helped organize and co-sponsored the Summit, which brought together construction industry leaders to discuss barriers and opportunities to advancing offsite construction (including modular and panelized), which has struggled to take hold in the United State but has the potential to significantly reduce the cost of housing construction.

Housing construction is ripe for a major systemic change. Unlike other industries, it has not experienced meaningful productivity increases over the last few decades. We are building homes the same way we did 50 years ago.

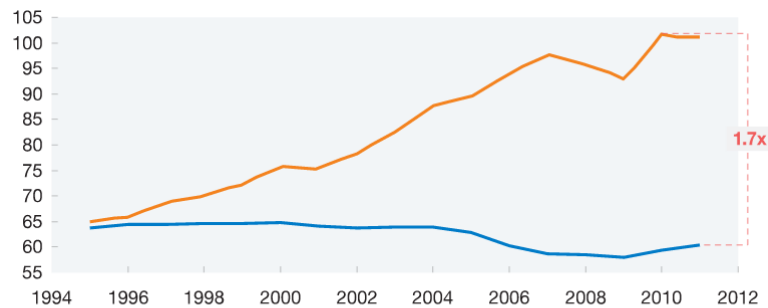
Productivity in manufacturing has nearly doubled, whereas in construction it has remained flat.

Overview of productivity improvement over time

Productivity (value added per worker), real, \$ 2005

— Manufacturing
— Construction

\$ thousand per worker



Source: Expert interviews; IHS Global Insight (Belgium, France, Germany, Italy, Spain, United Kingdom, United States); World Input-Output Database

McKinsey&Company

Without productivity gains, reducing the cost of housing construction will remain elusive. Some estimates suggest that offsite construction could reduce costs by as much as 20%. The Summit was held on September 16, and the planning team, of which we are a member, is developing an action plan for moving forward.

SINGLE FAMILY COSTS

While we typically distribute over \$150 million annually for multifamily development, we typically distribute less than \$10 million for single family development through our Community Homeownership Impact Fund. Consequently, we have focused our cost containment efforts more heavily on multifamily projects. In addition, while we directly administer multifamily funding to developers, we rely on local administrators to identify and fund the single-family projects. As a result, the level of cost data that we collect at the Agency for single-family projects is less detailed.

Nevertheless, single-family cost containment is also critical, and we are in the process of enhancing our strategies.

Overview of Single-Family Costs

The total development costs for the single-family projects that we have financed are reasonable and consistent with industry benchmarks. Table 5 shows the median cost per home by location and activity for developments that we have financed over the last six and one-half years.

**Table 5: Impact Fund – Median TDC by Location and Project Type
Loans Closed October 1, 2012 through April, 2019**

Location	New Construction	Acquisition/Rehab/Resale
Greater Minnesota	\$170,549	\$201,777
Metro	\$367,924	\$286,283
Total	\$360,875	\$281,720

Excludes projects by Habitat for Humanity and Community Land Trusts

The costs in Table 5 are generally consistent with industry standards. Table 6 shows the RSMeans industry-wide costs for new construction (excluding acquisition and some soft costs) in Minneapolis/Saint Paul for different sized homes. Our costs are in line with these benchmarks.

- The RSMeans construction costs for a 1,600 square-foot 2-story home with an unfinished basement and average class design is \$247,379, which is in the middle of the cost range shown in the Table 6 (\$181,198 to \$311,098).
- Assuming that construction costs account for 75 percent of the TDC and that acquisition and additional soft costs account for the remaining 25 percent, the TDC would be \$329,839.
- The \$367,924 median TDC for new construction financed by Minnesota Housing in the metro area (see Table 5) is relatively consistent with the RSMeans costs, but it is 12% higher.

**Table 6: RSMeans Estimated Construction Costs, 2019 (Excluding Acquisition and Some Soft Costs)
In Minneapolis/Saint Paul, Average Class, Wood Siding, Attached One-Car Garage, One Full Bath**

	1,000 Sqft	1,400 Sqft	1,600 Sqft	2,000 Sqft
Two Story				
No basement	\$181,198	\$213,998	\$233,685	\$265,808
With unfinished basement	\$191,310	\$226,423	\$247,379	\$281,514
With finished basement	\$206,640	\$247,961	\$271,553	\$311,098

Source: RSMeans, *Residential Cost Data, 2019*

Strategies for Containing and Reducing Single-Family Costs

Until 2015, we relied solely on the professional expertise and judgment of our staff to assess the cost reasonableness of single-family projects. We are now becoming more systematic and objective in our assessment. Table 7 shows the range of costs per home that we have financed for new construction over the last six and one-half years. The benchmark for the 80th percentile is our threshold for flagging developments with a high cost per home. For example, if a new construction project in Minneapolis/Saint Paul proposes a TDC per home that exceeds \$402,255, it will be flagged for additional scrutiny by staff. This is similar to using the threshold of 25 percent above the predictive model for multifamily projects.

As we collect better single-family cost data over a longer period of time, we will start reporting trend data and potentially develop a predictive cost model. This will allow us to create an accurate and formal process for reporting cost outliers to the Board when making selection and funding recommendations. While the current threshold of the 80th percentile has proven valuable for an initial discussion, it has deficiencies. It does not account for cost difference resulting from home sizes, garages, number of bathrooms, and other factors.

Table 7: Impact Fund – TDC Benchmarks for New Construction, by Location

TDC	
Greater Minnesota	
Median	\$170,549
20 th percentile	\$153,053
80 th percentile	\$227,987
Twin Cities Metro	
Median	\$367,924
20 th percentile	\$340,863
80 th percentile	\$402,255
Total	
Median	\$360,875
20 th percentile	\$251,362
80 th percentile	\$384,563

Excludes projects by Habitat for Humanity and Community Land Trusts

CONCLUSION

Over the last decade and a half, we have successfully contained development costs while adding new policy initiatives that tend to increase costs. However, given the shortage of affordable housing, limited resources, and the need to do more, cost containment remains a critical issue. As this report highlights, there is no magic bullet. Rather, we must pursue multiple efforts to address the dozens of inefficiencies in the affordable housing development process. Minnesota Housing cannot do it alone. It will take an industry-wide partnership.