



Planning, Research & Evaluation

2015 Cost Containment Report

9/15/2015

OVERVIEW AND CONTEXT

Containing the cost of developing housing is a critical issue in Minnesota. In 2013, nearly 600,000 Minnesota households were cost burdened by spending more than 30 percent of their income on housing. Since 2000, this number has increased 68 percent because median household incomes have declined by 7.1 percent (after adjusting for inflation) and median housing costs have increased by 4.7 percent.¹ If we are to address the growing need for affordable housing, we must build and preserve as many affordable units as possible with the limited resource 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 desirable locations can save money, but it can also reduce the tenants' access to opportunity, including jobs, services, amenities, safe neighborhoods, public transportation, good schools, and other benefits.

We based our 2016-19 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 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 – maintaining relatively consistent total development costs (TDC) while pursuing other policy objectives that tend to increase costs, including supportive housing for people experiencing long-term homelessness, energy-efficient and healthy homes, and location efficiency. 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 *2000 Decennial Census* and *2013 American Community Survey*.

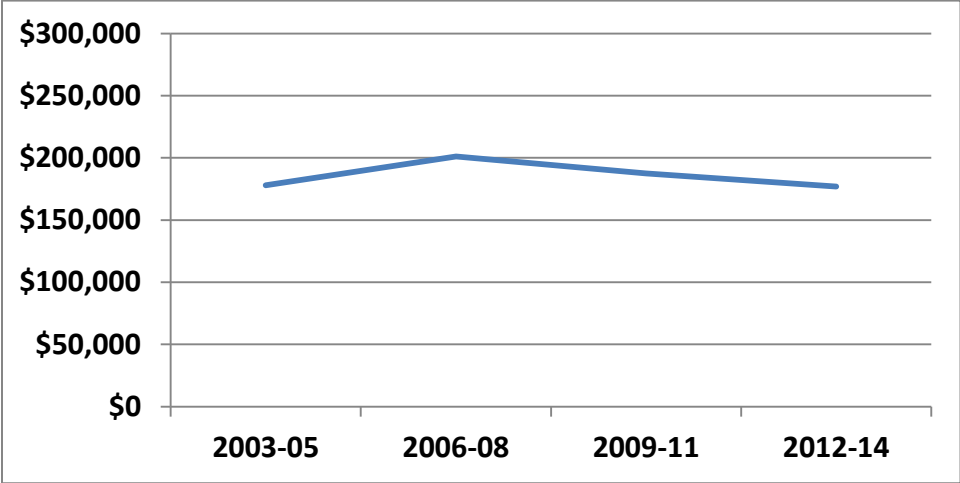
MULTIFAMILY COSTS

In a typical year, we distribute just under \$100 million for multifamily development. We must ensure that these funds are efficiently and effectively used to address the growing need for affordable housing. This section of the report shows how we have taken steps to maximize production by containing development costs. The first part of the 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 remained at or below \$200,000 for the last decade, after controlling for inflation. 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.² For example, a larger share of resources going to new construction developments with tax credits in the metro area will increase costs, while a larger share going to rehabilitation developments without tax credits in Greater Minnesota will decrease costs.

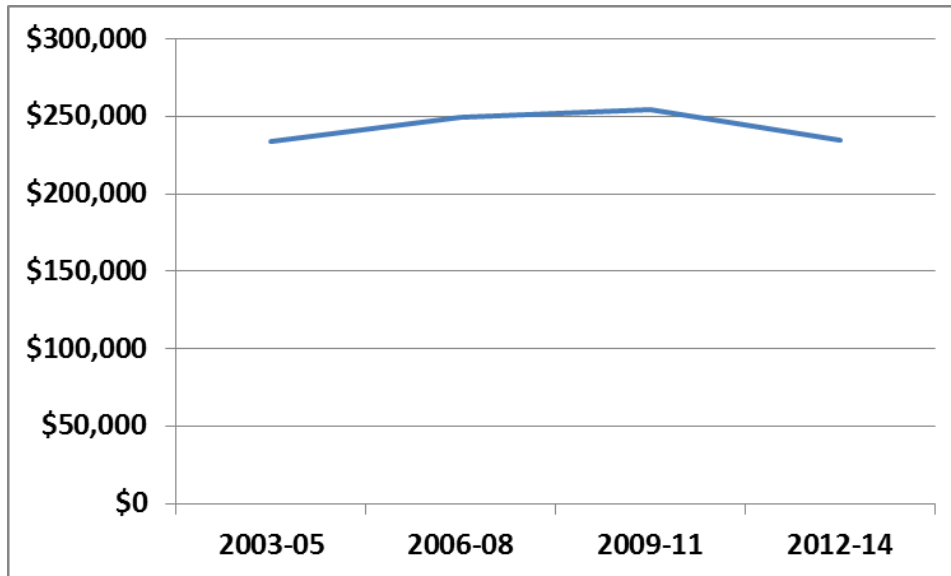
Figure 1: Average TDC per Unit 2003 to 2014 – All Types of Developments (Adjusted for Construction Inflation, 2015 Dollars)



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.

² 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.

Figure 2: TDC per Unit 2003 to 2014 – New Construction with Tax Credits in the Metro Area (Adjusted for Construction Inflation, 2015 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 long-term 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 couple 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, jobs, and other amenities can be more expensive.

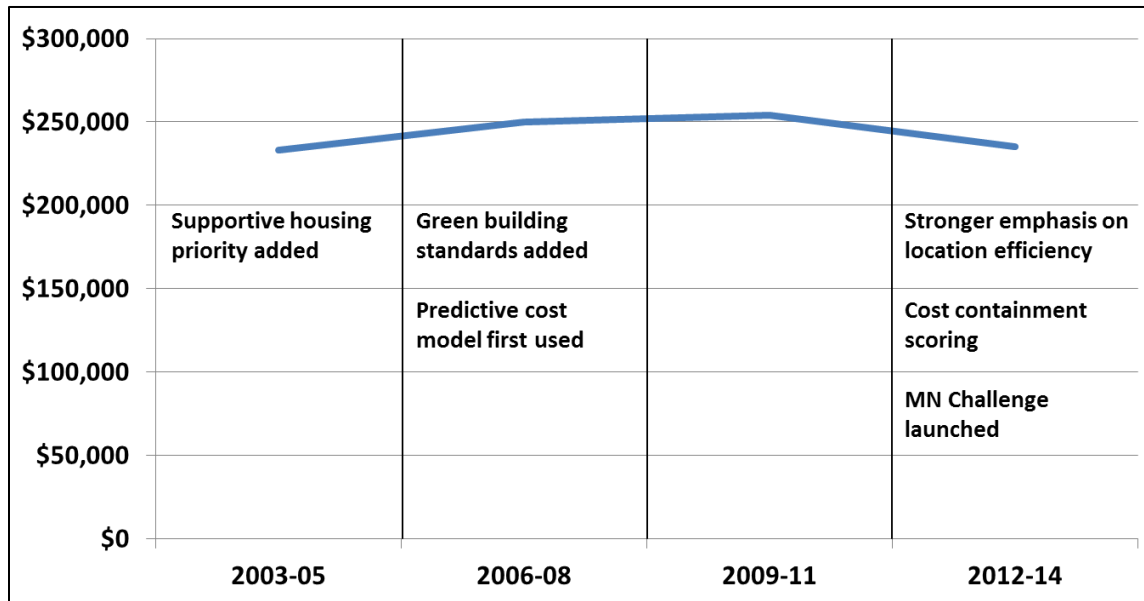
While we added or enhanced these policy priorities, we also added cost containment provisions.

- 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 ensures that costs are reasonable.
- With the Qualified Allocation Plan 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 MN Challenge to Lower the Cost of Affordable Housing, which was initiated as an idea competition to identify and address system-level factors that increase costs.

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

Figure 3 shows the trend line from Figure 2, but also includes information about when we added the new policy and cost containment initiatives.

Figure 3: TDC per Unit 2003 to 2014 – New Construction with Tax Credits in the Metro Area, with Information about New or Enhanced Policy and Cost Containment Initiatives (Adjusted for Construction Inflation, 2015 Dollars)



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

- As discussed previously, 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 (14 percent to 25 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 and desirability. 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 nine 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 14 percent to 17 percent of TDC. That percentage jumps to 21 percent to 25 percent for developments with tax credits.

**Table 1: Share of TDC by Project Type, Location & Cost Component
Developments Completed between 2003 and 2014
(Adjusted for Construction Inflation, 2015 Dollars)**

			Avg. TDC per Unit	Share of TDC			# of Projects
				Construc- tion	Acquisi- tion	Soft Costs	
New Con	LIHTC	Metro	\$242,997	67%	8%	25%	80
New Con	No-LIHTC	Metro	\$189,485	72%	11%	17%	19
New Con	LITHC	Grtr. MN	\$196,570	72%	6%	23%	52
New Con	No-LIHTC	Grtr. MN	\$172,565	76%	7%	17%	22
Rehab	LIHTC	Metro	\$183,220	38%	39%	23%	34
Rehab	No-LIHTC	Metro	\$126,058	42%	44%	14%	31
Rehab	LITHC	Grtr. MN	\$116,604	39%	40%	21%	30
Rehab	No-LIHTC	Grtr. MN	\$97,636	44%	40%	16%	18

Over time, each of the three cost components have accounted for a consistent share of TDC, indicating that we are containing each cost component, not just overall costs. See Table 2.

**Table 2: New Construction with Tax Credits in the Metro Area –
Cost Component Share of TDC 2003 to 2014**

	Construc- tion	Acquisi- tion	Soft Costs	# of Projects
2003-05	69%	7%	24%	28
2006-08	68%	8%	24%	28
2009-11	63%	9%	27%	13
2012-14	67%	8%	25%	11
2003-14	67%	8%	25%	80

Strategies for Containing and Reducing Multifamily Costs

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

1. Predictive Cost Model and Cost Reasonableness Assessment
2. Tax Credit Selection Priority for Developments with Lower Total Development Costs per Unit
3. MN Challenge to Lower the Cost of Affordable Housing

Strategy 1: Predictive Cost Model and Cost Reasonableness Assessment

We have developed a cost model that predicts a development’s TDC per unit based on its characteristics. To develop the parameters for the model, we run a linear regression analysis on the inflation-adjusted costs and characteristics of the developments that the Agency financed between 2003

and 2015. 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 Rehabilitation³
 - More Limited Rehabilitation
 - Combination of New Construction and Rehabilitation
 - Conversion/Adaptive-Reuse
- Building Type:
 - Walkup
 - Elevator
 - Townhome
 - Single Family Home/Duplex
 - Other
- Unit Size – based on average number of bedrooms per unit in the development
- Gross Square Footage
- Amount of Non-Residential Space
- Location:
 - Minneapolis or Saint Paul
 - Suburbs in Twin Cities Seven-County Metro Area
 - Greater Minnesota – Large City⁴
 - Greater Minnesota – Regional Job Center⁵
 - Greater Minnesota - Rural
- Year Built
- Garage Type:
 - None
 - Above ground
 - Underground
- Acquisition:
 - Land
 - Structure
 - None

³ 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.

⁴ The large cities are Duluth, Rochester, St. Cloud, Moorhead, and Mankato; and include a five-mile commute shed around the cities.

⁵ 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, Wyoming. These areas also include a five-mile commute shed around the cities.

- 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, the model provides a predicted cost for that development. The model is also benchmarked against industry-wide cost data provided by RSMeans to ensure that our costs are in line with the industry.⁶

Overall, the model has worked very well for the Agency. It explains a sizable portion (61 percent to 77 percent) of the variation in the costs for developments that the Agency financed between 2003 and 2015, which is a statistically robust result. In addition, over the last ten years, it has proven very effective at 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 for that accounts for unit size. Developments with larger units and more bedrooms have higher predicted costs.

Under the policies of Minnesota Housing's Board, when staff recommend to the Board developments for selection and funding, they must identify the developments that have a proposed cost that is more than 25 percent higher than the predicted cost. Staff must also explain why the proposed cost is reasonable even though it is more than 25 percent greater than the predicted cost. There are a wide range of reasons why the costs could be reasonable. For example, a housing development and site may be critical to meeting a local housing need, but the site requires an unusually large amount of environmental remediation.

The professional judgement 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 threshold, staff will still question costs if they seem high given the context of the development. Our staff

⁶ RSMeans, *Building Construction Cost Data, 73rd Annual Addition, 2015*. According to RSMeans, construction costs for a 21,000 square-foot walkup apartment with 19 units in Minneapolis are \$115,434 per unit (excluding acquisition and soft costs). Our model initially predicts \$124,793 per unit for construction costs for this development, or 7 percent higher. As a result, when providing a final predicted cost, our model lowers the initial prediction for construction costs by 7 percent to bring it in line with the RSMeans data.

has extensive experience reviewing funding applications and development costs. Each year, they typically evaluate 75 or more applications.

Strategy 2: Tax Credit Selection Priority for Developments with Lower Total Development Costs per Unit

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. Under the new criterion, the 50 percent of tax credit applications with the lowest TDC per unit are eligible to receive four points in the selection process.⁷ 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

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 costs to account for unit size differences. Projects predominantly with smaller units (efficiencies and one bedroom) have their costs adjusted upward when making comparisons; and projects predominantly with large units (three or more bedrooms) have their costs adjusted downward.⁸

We added the new 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 new scoring criterion, they now 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 very strategically chose to award four selection points to projects that meet this criterion.

Table 3 provides the maximum points awarded under each selection criteria for the 2016 QAP.

⁷ The criterion only applies to applications requesting nine percent credits. It does not apply to applications requesting four percent credits with tax-exempt bonds. Receiving four percent credits is a non-competitive process, where projects only need to meet a minimal threshold. The costs of developments seeking four percent credits are assessed using the predictive cost model.

⁸ 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.

- Four points is 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 four points of the selection threshold. For example, with the October 2014 selections, 12 of the 52 tax credit applications scored within this range.
- Four points is less than the points awarded for workforce housing, location efficiency, economic integration, and homelessness. Developers do not have an incentive to sacrifice those other funding priorities to achieve cost containment.

Table 3: Tax Credit Selection Points, 2016 QAP

Criterion	Points	Criterion	Points
Supportive Housing for Homeless	10 with 100 bonus	Economic Integration	9
Preservation	35	Location Efficiency	9
Unacceptable Practices	-25	Intermediary (Soft) Costs	6
Rental Assistance	21	Workforce Housing Community	5
Financial Readiness to Proceed	14	Universal Design	5
Lowest Income / Rent Reduction	16	Cost Containment	4
Strategically Targeted Resources	12	High Speed Internet Access	1
Federal/Local/Other Contributions	10	Smoke Free Building	1
Household Targeting	10	QCT / Community Revitalization	1
Foreclosure	10	Eventual Tenant Ownership	1

Finally, developers cannot sacrifice quality and energy efficiency because all developments must meet our design and green standards.

We have limited this selection priority to just developments applying for nine percent 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 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.

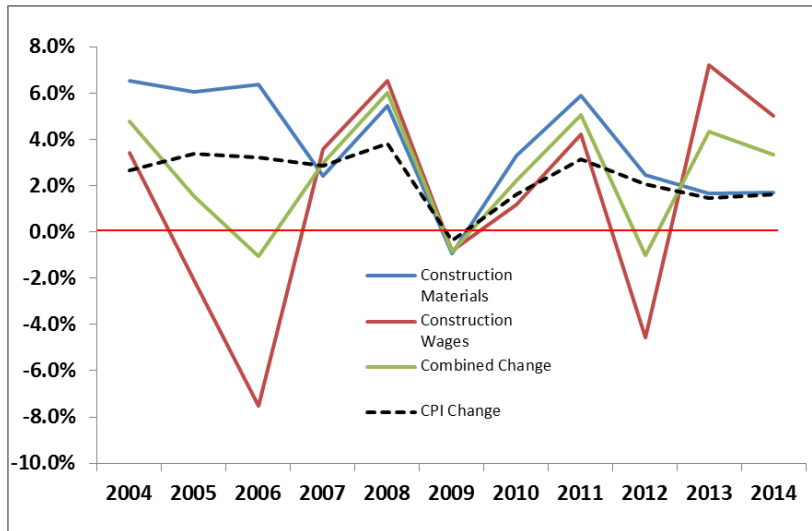
Because the scoring criterion is relatively new, we continue to monitor it closely for unintended consequences by assessing the type, size, nature, location, and scope of developments scoring and not-scoring well on it to make sure that the selected projects meet our overall strategic and funding priorities.

One of the challenges for developers created by the cost-containment criterion is managing fluctuations in construction costs, particularly labor costs. Figure 4 shows changes in multifamily construction costs. The blue line shows changes in the Produce Price Index (PPI) for multifamily construction materials, and the maroon line shows changes in wages for multifamily construction workers in Minnesota.⁹ Wages in particular can vary dramatically from year to year. Developers may plan for a modest 2 percent increase

⁹ Construction cost data is from the Bureau of Labor Statistics, and the wage data is from the Minnesota Department of Employment and Economic Development's *Quarterly Census Employment and Wages*.

in wages in their funding application, only to find they have increased by 6 percent or 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 when costs spike. If final costs come in too high, developers will be awarded negative four points for their next tax credit application.

Figure 4: Measures of Cost Changes, 2004 to 2014



The green line in Figure 4 combines the material and wage cost changes from the blue and maroon lines. This is the combined inflation data that we use to bring historical construction costs into 2015 dollars. The dashed black line is the Consumer Price Index (CPI), which is the standard measure of inflation faced by consumers. While overall construction inflation (green line) is more volatile than the CPI, they are quite similar in the long run. Between 2004 and 2014, the CPI increased on average by 2.3 percent annually, while construction inflation increased by 2.5 percent. The large decreases in construction wages in some years offset the large increases in other years.

Strategy 3: MN Challenge to Lower the Cost of Affordable Housing

The first two tactics address costs that are specific to individual developments. However, as we used the predictive cost model over the last several years and used the new cost selection criterion for tax credits for the first time in the fall of 2013, it became clearer that systemic cost drivers outside the control of developers are also a critical issue that needs to be addressed. These cost drivers ranged from local policies and regulations that increased 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.

Fortunately, at that time, Enterprise Community Partners and the Urban Land Institute’s (ULI’s) Terwilliger Center for Housing were finishing a report on best practices from across the country to address these systemic cost drivers. 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 hundreds of small inefficiencies. As one of the lead authors described it, “death by a thousand cuts.”¹⁰

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. To avoid becoming overwhelmed by the complexity of the issues and wide range of cost drivers, we pursued a tangible and manageable effort that would generate concrete ideas with implementable strategies. Specifically, we:

- Asked the development community to create cross-discipline teams (developers, funders, attorneys, local officials, housing advocates, etc.) and develop an idea to address a systemic cost driver that could be implemented in the near future;
- Received concept papers from 12 teams;
- Selected three finalists and provided each \$10,000 to develop an implementation plan for their idea; and
- Selected the winning idea and team, which received \$70,000 to implement their plan.¹¹

The winning idea was submitted by the Center for Urban and Region Affairs at the University of Minnesota, the Housing Justice Center (formerly Housing Preservation Project), and Becker Consulting. Their proposal addressed 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. The team’s implementation plan had five key steps:

1. Identify best practices for addressing these local cost drivers;
2. Identify communities in the Twin Cities region who have effectively implemented them and assess lessons learned;
3. Identify opportunities for increasing the use of the practices in communities across the region;
4. Provide implementation recommendations and technical assistance for communities to pursue the practices; and
5. Encourage regional organizations to incorporate the best practices and 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.

¹⁰ Michael Spotts, Enterprise Community Partner, presentation to the Affordable Housing Investors Council (AHIC), Portland Oregon, October 9, 2014.

¹¹ The initiative was jointly funded by the McKnight Foundation (\$75,000) and Minnesota Housing (\$25,000).

The team's implementation plan as funded by the MN Cost Challenge was completed in August of 2015. However, this effort just got the ball rolling and ongoing work is needed to ensure that these practices are implemented as widely as possible. It is too early to predict the final impact, but the potential is significant. In its research, the team found that broad implementation of a range of best practices across the region and state could reduce the cost of affordable housing by tens of thousands of dollars per unit.

While the proposal addressing local practices and policies won the idea completion, other concepts and strategies identified in the MN Cost Challenge have been investigated further and/or pursued.

- **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 remodel will 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 original 12 concept papers 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. As currently planned, we should have most of the process changes in place by the end of 2017, but incorporating all the technology supports may take more time.
- **MinnDocs – Consolidated Legal Documents.** Most affordable housing projects have several funding sources, each with their own set of legal documents and attorneys, which adds unnecessary costs. The Enterprise/ULI report highlighted Massachusetts' practice that consolidates legal documents for all subordinate debt into a single set. While none of the 12 concept papers from the MN Cost Challenge proposed this concept for Minnesota, the idea had a lot of interest in the development community, and we decided to pursue it. In the spring of 2015, we received a \$70,000 grant from the McKnight foundation to hire a project manager and a third party attorney to implement the practice. Massachusetts estimates that the consolidated legal documents have reduced their costs by about \$10,000 per subordinate loan for each development; however, the context is different in Minnesota, and we may not achieve that level of savings. If we did, MinnDocs would save \$1,000 per unit for a 40-unit development with four subordinate loans. While this reduces total development costs by less than one percent, it is a very tangible way of chipping away at costs and addressing one of the many inefficiencies. Furthermore, these unnecessary legal costs add up when Minnesota Housing typically finances 2,000 to 3,000 units each year. As currently planned, the initiative should be largely in place by June 2016.
- **Pooled, Guaranteed or Insured Reserves.** In a concept paper that was selected as one of the three finalists under the MN Cost Challenge, Project for Pride in Living proposed the idea of pooling, guaranteeing or insuring reserves. According to their analysis, operating and deficit reserves can account for four percent to five percent of a development's total development costs, and in most cases, most or all of the reserves are never needed. Rather than carrying the

full cash reserves, they proposed that a portion be pooled, insured, or guaranteed, which would more efficiently manage the reserves and reduce the cash requirements and total development costs. We found the concept very intriguing. While the proposal did not win the idea competition, we organized a brainstorming session with a cross-section of industry experts in November of 2014 to see if it is viable in Minnesota. In the end, we decided that the complications and costs of setting up the guarantee or insurance were large enough that pursuing other cost-reduction strategies would be more productive at this time.

While the MN Cost Challenge started out as an idea competition, it has turned into an ongoing effort to continually identify and eliminate inefficiencies and unnecessary requirements in the development process. As a leading partner in this initiative, we must start with our own requirements and processes. The remodel project is a first step. By next spring, we will also review our:

- Design/construction standards, as part of our annual document revision process in preparation for the consolidated RFP. However, this time, we will review them with an emphasis on cost containment. We will focus on reducing life-cycle costs, not just upfront costs but also ongoing maintenance, repair, and utility costs. The review will be based on past experience and consultation with architects, general contractors, and developers.
- Green/sustainability standards in light of recent changes to the state building code and Enterprise Green Communities' national standards. Our standards are a Minnesota-specific outlay to Enterprise's national standards, making them more applicable and appropriate for Minnesota. Whenever the underlying standards change, we update the Minnesota overlay, which involves consulting with Enterprise, the University of Minnesota's Center for Sustainable Building Research, our funding partners, energy raters, mechanical engineers, architects, general contractors, and developers.

SINGLE FAMILY COSTS

While we typically distribute a little less than \$100 million annually for multifamily development, we only distribute \$6 million to \$8 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 4 shows the median cost per home by location and project type for developments that we have financed over the last two and half years.

**Table 4: Impact Fund – Median TDC by Location and Project Type
Loans closed October 1, 2012 through March 31, 2015**

Location	New Construction	Acquisition/Rehab/Resale	Owner-Occupied Rehab
Rural Greater MN	\$149,597	\$126,267	\$12,014
Greater MN Large City	*	\$154,700	*
Minneapolis/Saint Paul	\$289,903	\$205,692	\$17,020
Suburban Twin Cities	\$245,124	\$208,450	*
Total	\$218,628	\$174,901	\$13,582

*Fewer than 10 loans.

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

- The industry-wide construction costs for a 1,400 square-foot 1½ story home with an unfinished basement and average class design is \$196,558, which is in the middle of the cost range shown in the Table 5.
- Assuming that these costs account for 65 percent of the predicted TDC and that acquisition and additional soft costs account for the remaining 35 percent, TDC is \$302,397.
- The TDC for the same home in the economy class, rather than the average class, is \$256,846. (This economy class figure is not derived from the average class data shown Table 5 but from other RSMeans data.)

- The \$289,903 median TDC for new construction financed by Minnesota Housing in Minneapolis/Saint Paul (see Table 4) falls in the middle of the industry-wide range of \$256,846 to \$302,397 for economy and average class construction.

Table 5: RSMMeans Estimated Construction Costs, 2015 (Excluding Acquisition and Some Soft Costs) In Minneapolis/Saint Paul, Average Class, Wood Siding

	1,000 Sqft	1,400 Sqft	1,600 Sqft	2,000 Sqft
One Story				
No basement	\$143,001	\$174,934	\$191,243	\$226,432
With unfinished basement	\$158,059	\$193,225	\$211,174	\$249,795
With finished basement	\$183,028	\$226,398	\$248,554	\$295,413
1 ½ Story				
No basement	\$143,776	\$182,219	\$194,698	\$226,432
With unfinished basement	\$155,125	\$196,558	\$209,934	\$244,148
With finished basement	\$173,229	\$221,128	\$237,393	\$277,476
Two Story				
No basement	\$151,471	\$182,839	\$201,607	\$232,411
With unfinished basement	\$161,270	\$195,008	\$214,983	\$247,801
With finished basement	\$176,384	\$216,012	\$238,722	\$276,811

Source: RSMMeans, *Residential Cost Data, 2015*

Strategies for Containing and Reducing Single-Family Costs

Until this year, we have relied solely on the professional expertise and judgement of our staff to assess the cost reasonableness of single-family projects. We are now becoming more systematic and objective in that assessment. Table 6 shows the range of costs per home that we have financed for new construction over the last two and half years. The benchmark for the 80th percentile will be a test case 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 \$313,625, it will be flagged for additional scrutiny. 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 test case proved valuable for initial discussion, it has deficiencies. It does not account for cost difference resulting from home sizes, garages, number of bathrooms, and other factors.

Table 6: Impact Fund – TDC Benchmarks for New Construction, by Location

TDC	
Rural Greater MN	
Mean	\$152,335
Median	\$149,597
20 th percentile	\$124,130
80 th percentile	\$178,686
Greater MN Large City	
Mean	*
Median	*
20 th percentile	*
80 th percentile	*
Minneapolis/Saint Paul	
Mean	\$280,761
Median	\$289,903
20 th percentile	\$234,698
80 th percentile	\$313,625
Suburban Twin Cities	
Mean	\$237,378
Median	\$245,124
20 th percentile	\$216,761
80 th percentile	\$247,910
Total	
Mean	\$221,253
Median	\$218,628
20 th percentile	\$146,197
80 th percentile	\$297,102

*Fewer than 10 loans.

CONCLUSION

Over the last decade, we have successfully contained development costs while adding new policy initiatives that tend to increase costs. However, given the growing need for affordable housing, limited resources, and the increasing pressure to do more with less, 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, which was initiated under the MN Cost Challenge.