Introduction and Key Takeaways

Northfield has an economic foundation that is unusually strong for a city its size. Its three dominant economic sectors (education, medical services, and manufacturing) are all base industries—meaning they derive revenues from outside of the city and its immediate surrounds, which are paid to local workers and then recirculate in the Northfield economy through local spending. Its quality of life attributes also bolster its economy through tourism, residential growth, and workforce attraction.

This memorandum includes a set of observations and findings from an analysis of Northfield's economy, with a focus on the following topics:

1. Economic drivers
2. Economic sectors
3. Commuting patterns
4. Fiscal impacts of development

Key Takaways

The economic analysis detailed below supports a set of key takeaways. First and foremost, Northfield is fortunate to have a very strong economic foundation. Part of that foundation is its three dominant economic sectors—education, medical services, and manufacturing—details of which are developed in some detail below. Northfield's population growth is evidence of the other key anchor of Northfield's economic strength—it's overall quality of life. Northfield's identity as a livable city with a broad set of community and civic assets, and a distinctive, walkable central business district, make it attractive for visitors and residents alike, and for employers who benefit through improved workforce attraction.

Other key findings from this analysis include the following:

- Increases in Northfield's population and business employment are important drivers of its economic growth and development.
- In its strong education, health care and manufacturing sectors, Northfield has an enviable set of base industries that all pay livable wages and indirectly support other economic activity.
- Northfield's growing population of residents who work outside of Northfield—including a population of professionals to and especially those who commute and telecommute to the Twin Cities and Rochester—have bolstered the local economy through their consumer spending and support of local businesses.

Prescriptively, the final section of this analysis offers a discussion of the fiscal impacts of different development patterns, and identifies considerations that can be borne in mind to foster fiscal sustainability as Northfield continues to grow in the future.

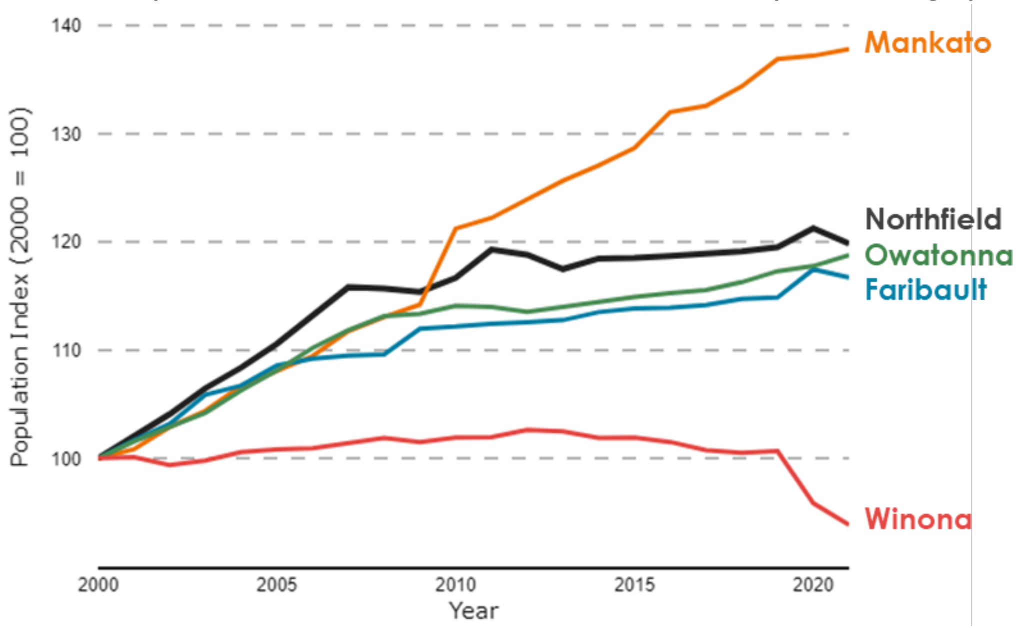
Economic Drivers

Population Growth

Exhibits 1 & 2 show that Northfield's population has grown by 20% since 2000, whether measured by number of residents or number of households. That growth is stronger than most of the comparison geographies in the charts.

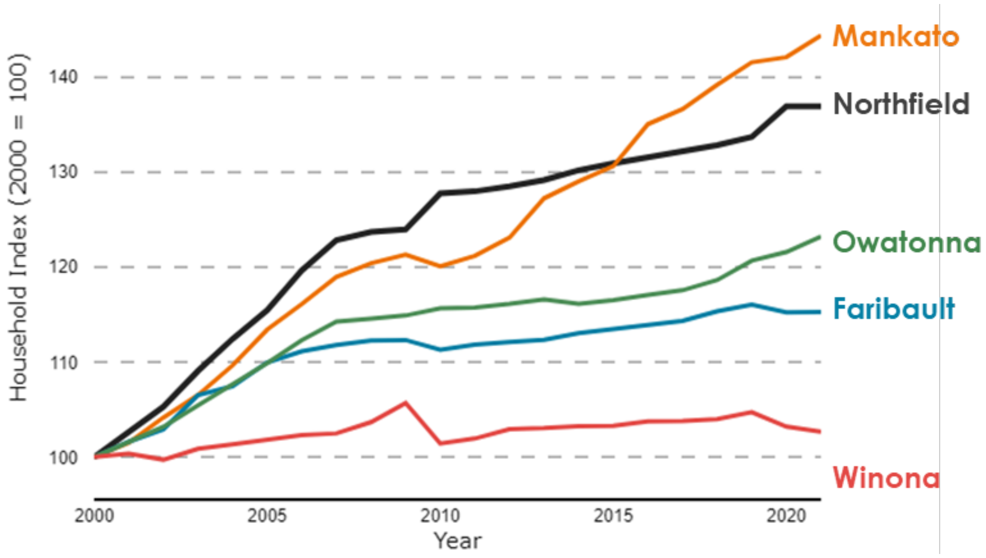
Note that these charts are index charts indexed to a base of 100, with the year 2000 being the base year. Each integer above 100 represents 1% percent of growth relative to the 2000 value. For example, 135 represents 35% growth since 2000. Indexes are helpful when assessing the rate of change rather than absolute numbers.

Exhibit 1. Population Growth Since 2000 – Northfield and Comparison Geographies



Source: US Census

Exhibit 2. Household Growth Since 2000 – Northfield and Comparison Geographies



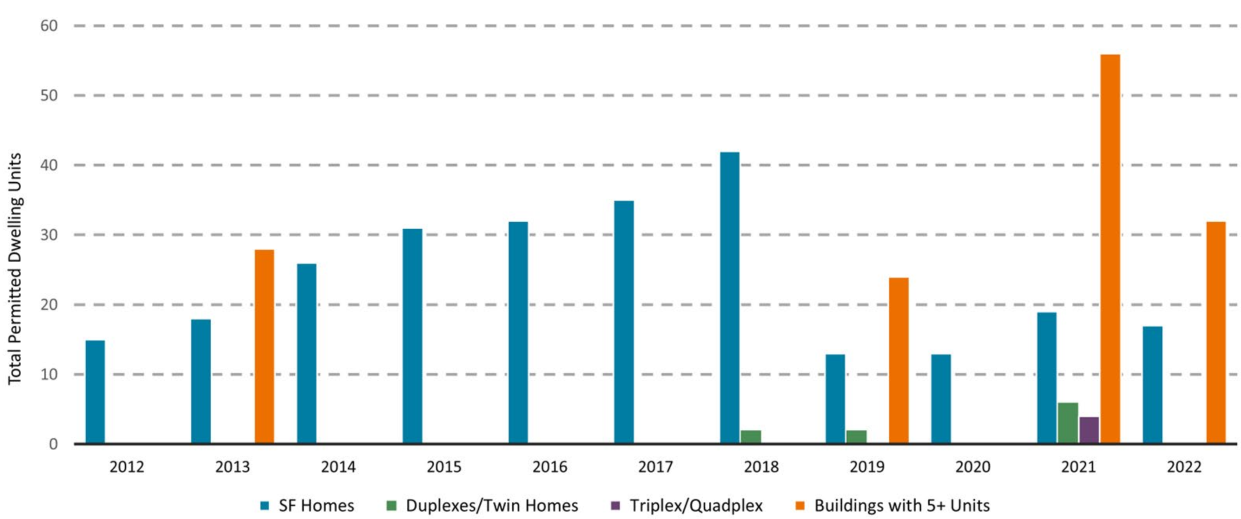
Source: US Census

Housing Growth

Housing development responds to demand for housing. As the job base grows and/or people want to live in Northfield for other reasons, people will look for housing, and housing development will follow. Northfield's housing growth is an indicator of its desirability and economic vibrancy.

Exhibit 3 shows that Northfield has experienced ongoing, steady housing growth over the last decade. Single family home development was predominant from 2012 to 2018. Beginning in 2019, housing development has been a mix of single family and multifamily building formats.

Exhibit 3. Northfield Housing Development, 2012 to 2022

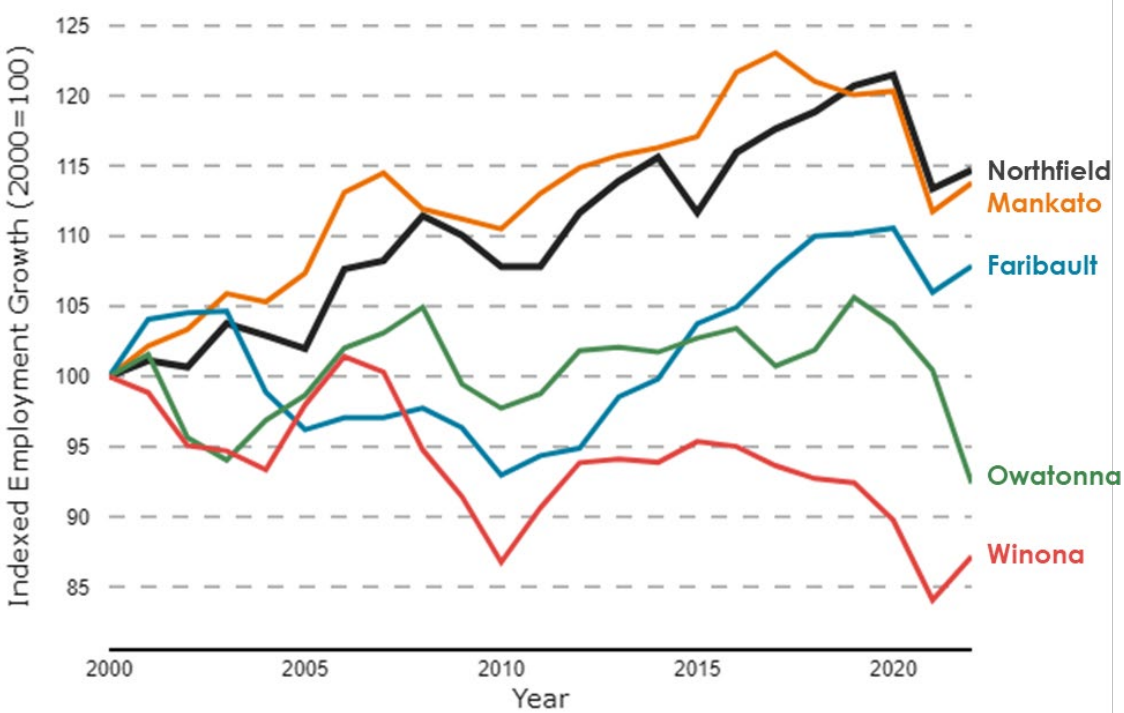


Source: US Census – Building Permits Survey

Employment Growth

Northfield's job base has grown 15% since 2000, equivalent to the growth rate in Mankato and stronger than the other comparison cities. While a COVID-caused contraction in jobs is evident in 2020-21, the employment growth has otherwise been very consistent over the course of the two-plus decades. This is a testament to the resilience of its economic base.

Exhibit 4. Employment Growth Since 2000 – Northfield and Comparison Geographies



Source: Bureau of Economic Analysis

Economic Sectors

To understand a local economy, it is helpful to situate it in the broadest economic categories. For this analysis, the four super-sectors that have emerged in The New Economy are useful in illustrating broad trends. Those super-sectors are:

- Blue Collar sectors
  - Construction
  - Manufacturing
  - Utilities
  - Agriculture, Forestry, Fishing, and Hunting
  - Mining, Quarrying, and Oil and Gas Extraction
- Eds, Meds and Gov sectors
  - Educational Services
  - Health Care and Social Assistance
  - Public Administration
- New Economy High Wage sectors
  - Finance and Insurance
  - Real Estate and Rental and Leasing
  - Information
  - Management of Corporations
  - Professional and Business Services
- New Economy Low Wage sectors
  - Transportation and Warehouse
  - Wholesale Trade
  - Retail Trade
  - Arts, Entertainment and Recreation
  - Accommodation and Food Services
  - Other Services

Additional information about the new economy and its super-sectors is located in the sidebar.

Economic Super-Sectors

The New Economy refers to transitions in the North American industrial structure post-globalization and the central drivers of regional economic development.

Blue Collar sectors contain industries historically central to a manufacturing-based economy and contain tradeable goods that benefit from economies of scale. Manufacturing in particular has become more mobile in an era of globalization. These jobs often have lower educational requirements, but due to higher productivity, skill demands, and union density, wages remain higher than service sector work. They, likewise, are major drivers of regional economic development.

Eds, Meds and Gov contain industries have higher proportions of middle-income wage earners due to educational requirements. These jobs concentrate both in regional hubs driven by New Economy High Wage jobs and in historic regional centers. They are non-tradeable goods and place-bound, but in the case of higher education institutions or sizeable public sector installations (Army Bases or State governance), can drive regional economic development.

New Economy High Wage sectors are knowledge-based jobs that remain concentrated in urban centers and are historically less prone to geographical relocation. These industries remain the main catalyst for agglomeration – or spatial concentration – of industries. Knowledge production is a tradeable good that often drives urban development. Wages in these sectors drive effective demand for other service-based industries, medical services, and education.

New Economy Low Wage sectors grow in proportion to other regional economic drivers. They are rooted in a particular location. Due to lower labor productivity, growth in demand is met with increased labor. Wages remain low, although exceptions exist (such as Wholesale Trade). These are often a sizeable sector in a regional economy.

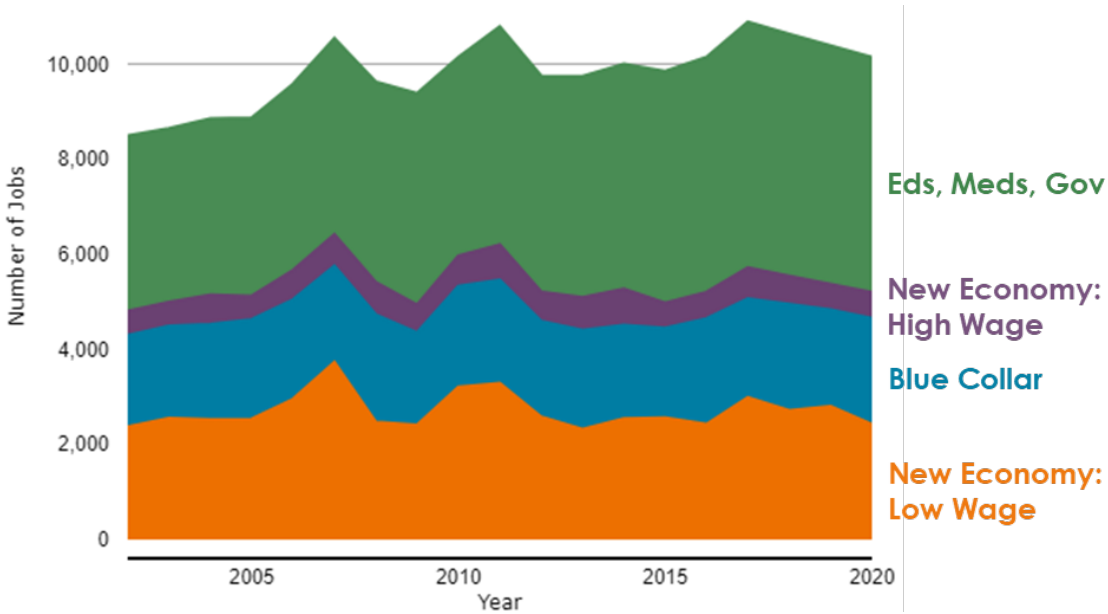
Employment in Northfield

Northfield's economy reflects its unique economic anchors. Exhibit 5 shows the number of jobs in each super-sector over time. The importance of the "Eds, Meds, Gov" super-sector to

Northfield's economy is clear from the exhibit, accounting for almost half of the jobs in Northfield.

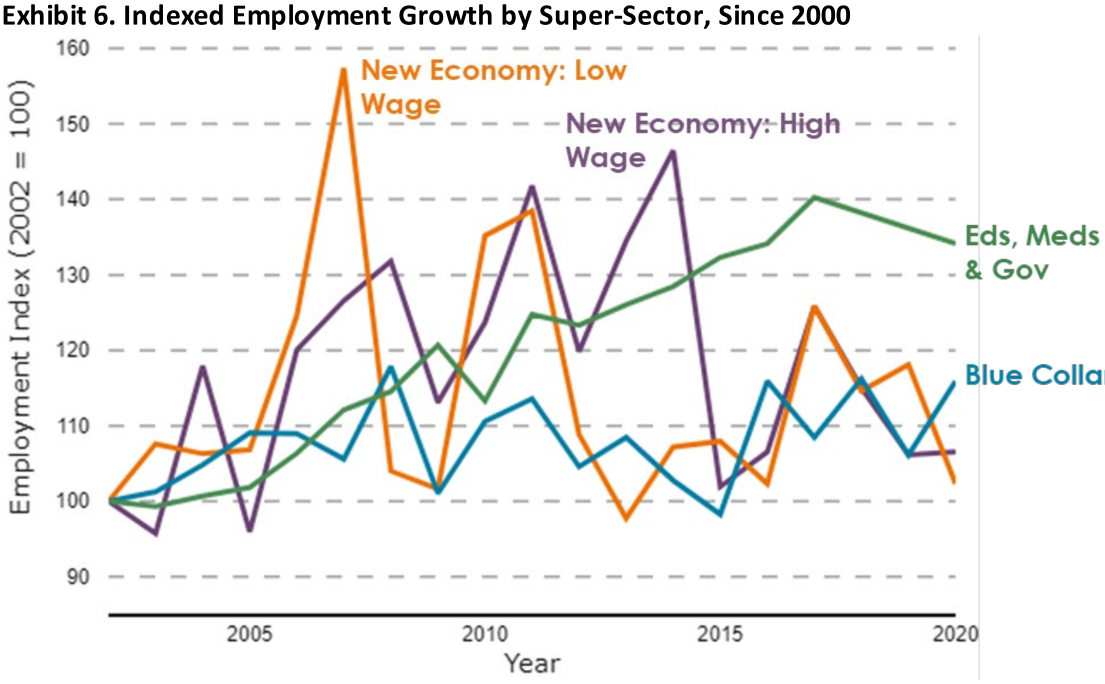
Exhibit 6 shows that, while all of the super-sectors have experienced some growth, the Eds, Meds, Gov super-sector ha had the greatest growth in employment over the time period. Jobs in that super-sector increased by around 35% over the 20 year time frame.

Exhibit 5. Northfield Employment by Super-Sector Since 2000



Source: OnTheMap

Exhibit 6. Indexed Employment Growth by Super-Sector, Since 2000



Source: OnTheMap

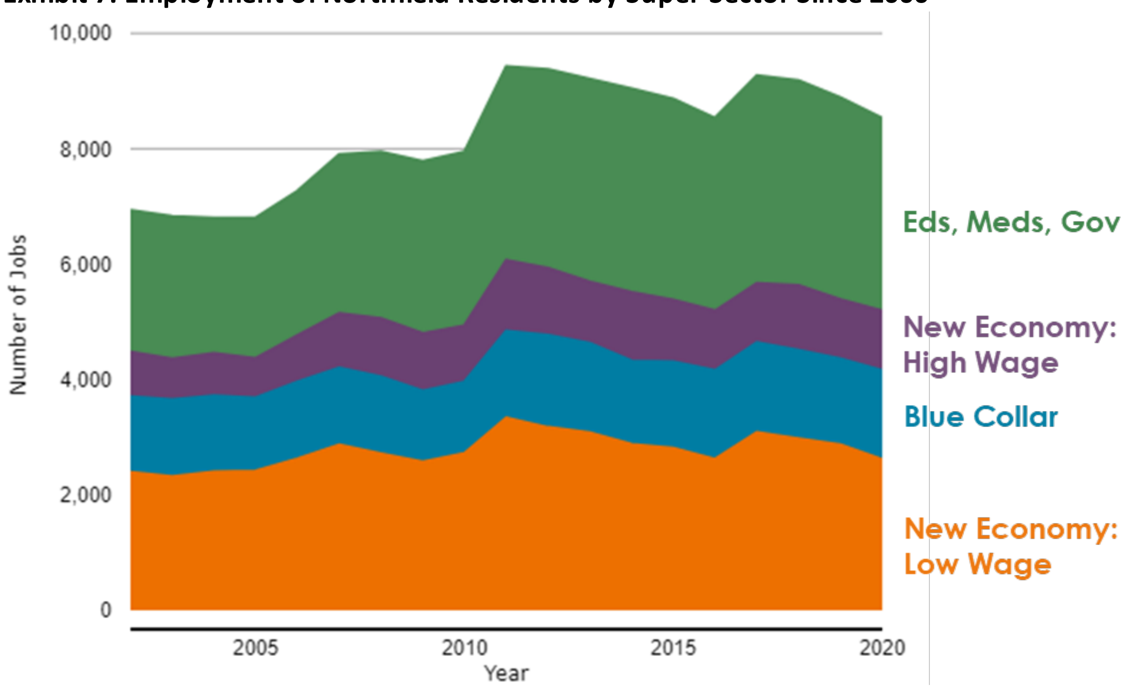
Employment of Northfield Residents

While Exhibits 5 and 6 are focused on the super-sectors of jobs that are located in Northfield, Exhibits 7 and 8 illustrate the jobs of Northfield residents, some of which are located outside of Northfield. At first glance, Exhibits 7 and 8 may resemble Exhibits 5 and 6, but there are some notable distinctions. The share and number of Northfield residents who working in the "New Economy High Wage" super-sector is greater than the share and number of Northfield jobs that are in that super-sector. That means that many Northfield residents who are working outside of Northfield are working in higher wage professional jobs.

The reverse is true in the Blue Collar super-sector. The share and number of Northfield residents working in Blue Collar jobs is lower than the share and number of Northfield jobs in that sector.

In summary, there are many northfield residents in professional jobs who are out-commuting or telecommuting to their jobs. And there are many Northfield employers in the blue collar super-sector that are drawing an in-commuting workforce from outside of Northfield.

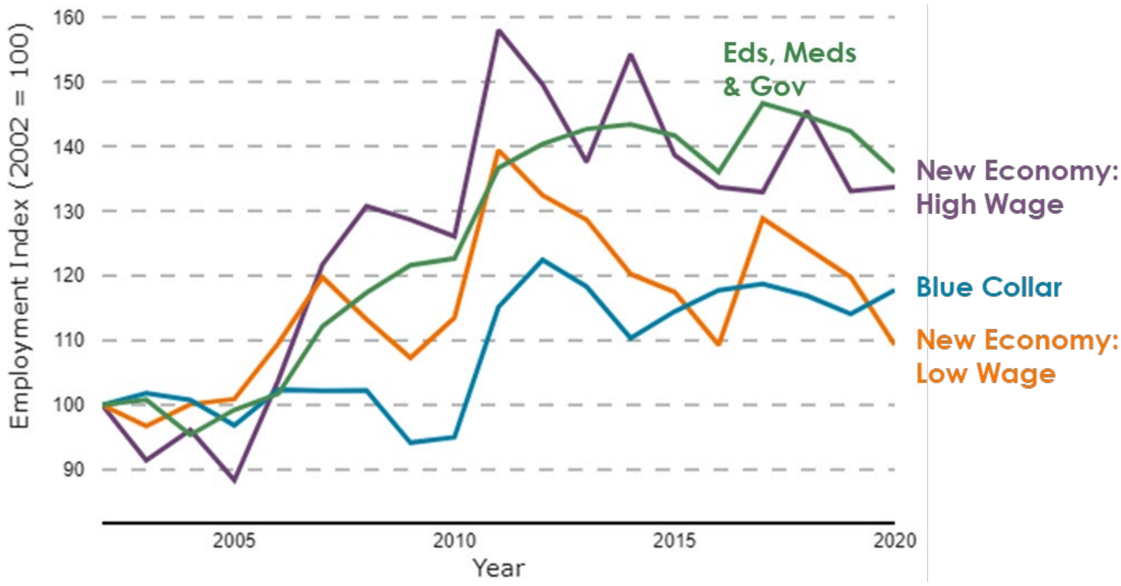
Exhibit 7. Employment of Northfield Residents by Super-Sector Since 2000



Source: OnTheMap

Exhibit 8 shows that Northfield's population growth has resulted in its residents having greater employment in all of the super-sectors. But the increase in their employment has been particularly strong in the "New Economy High Wage" super-sector and the "Eds, Meds and Gov" super-sector.

Exhibit 8. Indexed Employment Growth of Northfield residents by Super-Sector, Since 2000



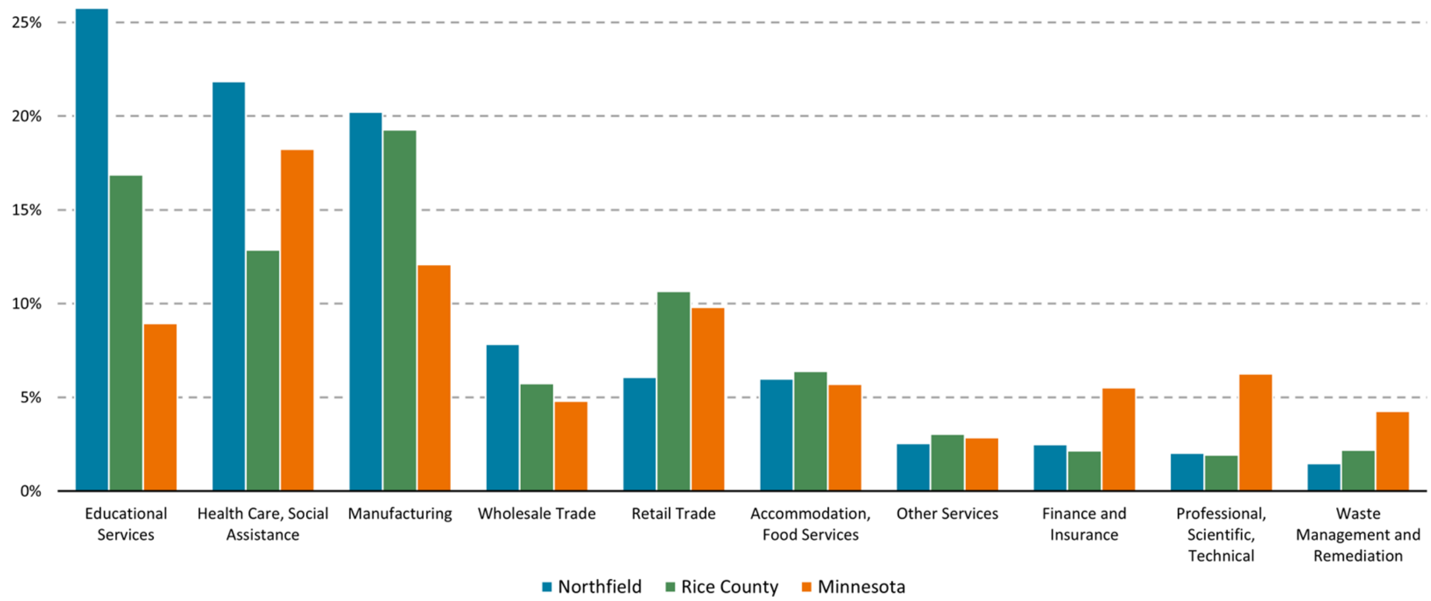
Source: OnTheMap

Top Employment Sectors

When we disaggregate Northfield employment further, breaking out all twenty economic sectors as defined in the North American Industry Classification System (NAICS), the foundations of Northfields economy become even more clear. Exhibit 9 shows the ten economic sectors that are strongest in terms of jobs that are situated in Northfield. It shows the share of all Northfield jobs that are situated in each employment sector, and it compares the job concentrations in Northfield with those in Rice County and the State of Minnesota. That provides a point of reference for understanding how overrepresented or underrepresented Northfield jobs are in those categories.

It is clear from Exhibit 9 that three economic sectors dominate Northfield's economy—Educational Services, Health Care, and Manufacturing. The share of Northfield's employment in these three employment sectors is significantly greater than it is in Rice county or the state of Minnesota as a whole. Jobs in these three sectors account for almost 70% of all Northfield jobs! It's worth noting that, to varying degrees, these three sectors all tend to provide living wage jobs—in contrast, for example, to jobs in the retail or food service sectors. And they are all arguably base industry sectors—meaning that they bring revenues into the Northfield area which after being paid out in wages are recirculated in the local economy.

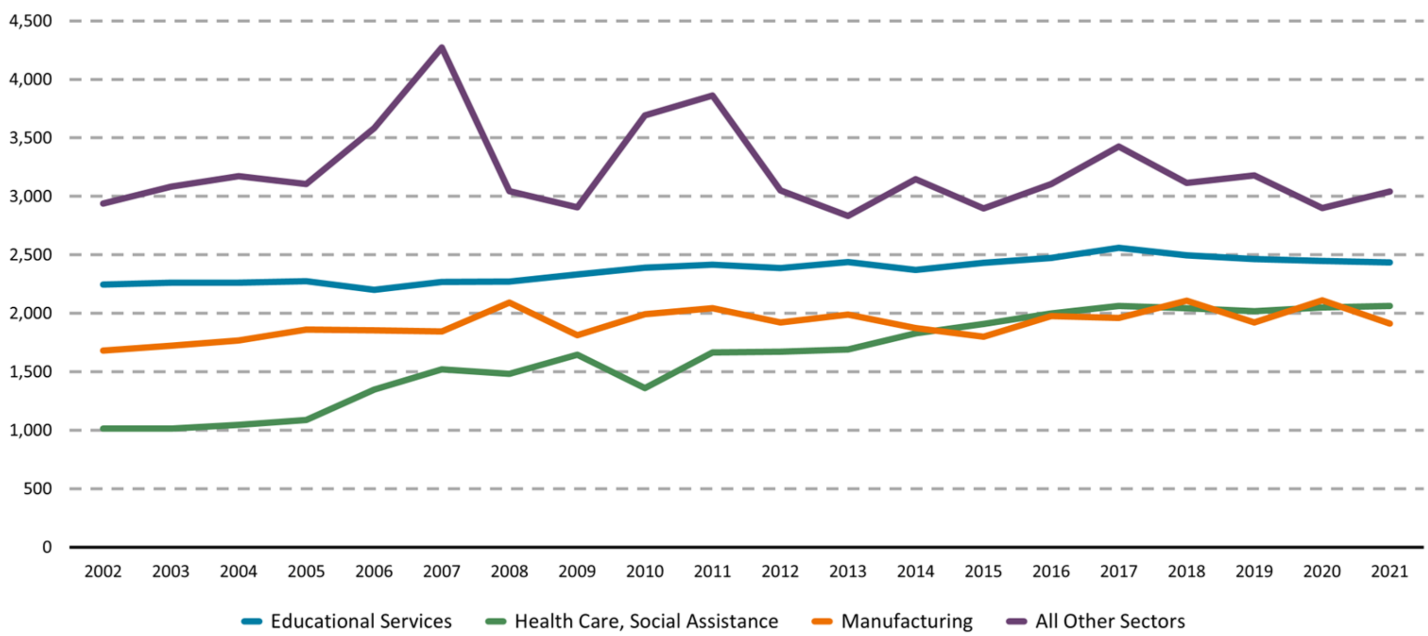
Exhibit 9. Top Ten Economic Sectors Represented in Northfield's Employment



Source: OnTheMap

Exhibit 10 isolates Northfield's top three economic sectors to illustrate how they have changed over time. All three have grown over the two decade time period. The health care sector had the greatest growth, with employment roughly doubling over the period. The chart also underscores the dominance of these sectors by showing them alongside the total employment in all of the other NAICS sectors.

Exhibit 9. Top Ten Employment Sectors in Northfield Jobs, 2002 to 2021



Source: OnTheMap

Employment by NAICS Sector

The following exhibits fill out the picture by diagramming Northfield's employment in each NAICS sector, in terms of numbers of jobs and their location quotient relative to the State of Minnesota. (Location Quotients are described in the sidebar.)

Information for individual NAICS sectors is presented by super-sector, with key observations noted.

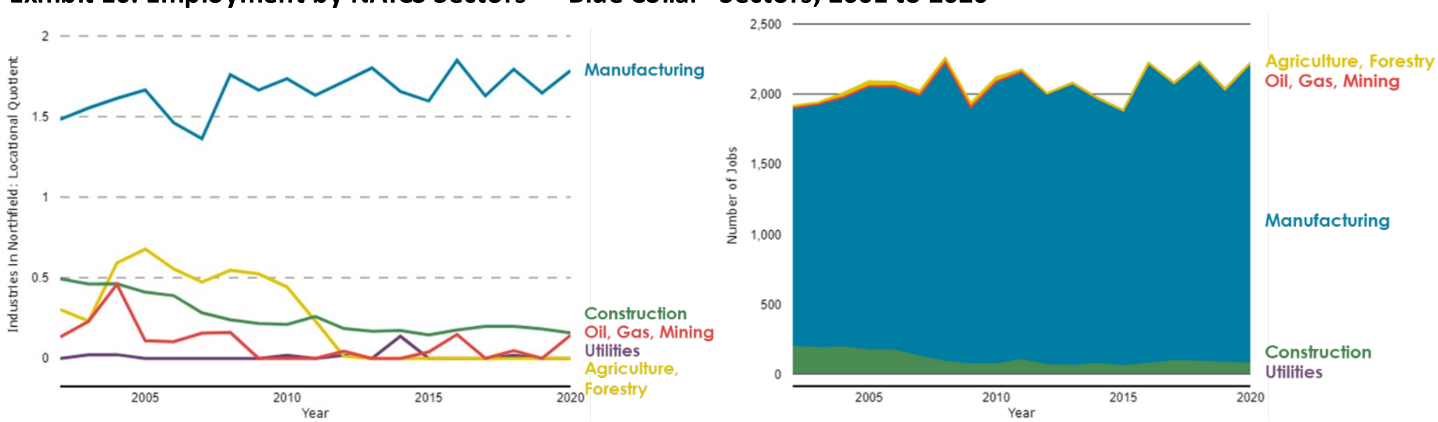
"Blue Collar" economic sectors. Narrative. Manufacturing jobs dominate Northfield's blue collar employment. They have grown in Northfield over the last two decades, despite representing a declining share of the jobs in the state as a whole. Other blue collar economic sectors are largely absent in Northfield.

Location Quotients

A location quotient is a comparison of the local share of employment in an economic sector to its share in a comparison geography.

For example, if manufacturing jobs comprise 10% of the jobs in a city, but 20% of all jobs in the state, the location quotient of manufacturing jobs in the city is 0.5. If jobs in the retail sector comprise 15% of jobs in a city, but 10% of jobs state-wide, the location quotient for retail jobs in the City is 1.5.

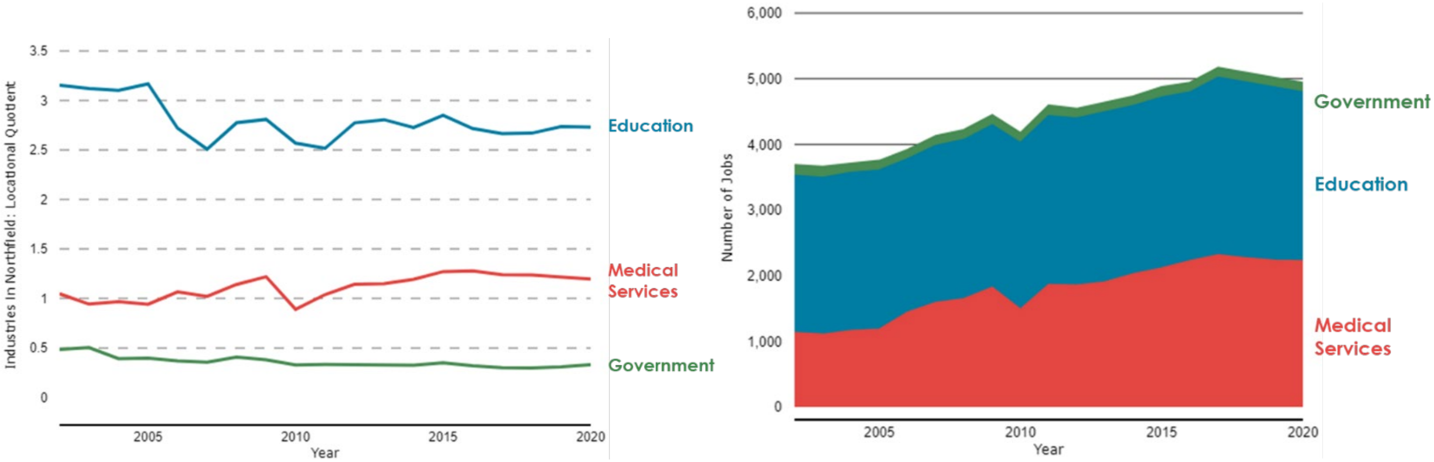
Exhibit 10. Employment by NAICS Sectors – "Blue Collar" Sectors, 2001 to 2020



Source: OnTheMap

"Eds, Meds, and Gov" economic sectors. Education and medical services are dominant in the Eds, Meds and Gov" category. Two of Northfield's three anchor employment sectors are in the "Eds, Meds & Gov" category. The education sector is most overrepresented in comparison to the state of Minnesota. The medical services sector has experienced the greatest growth in absolute job numbers—growing faster than medical services job growth in the state as a whole.

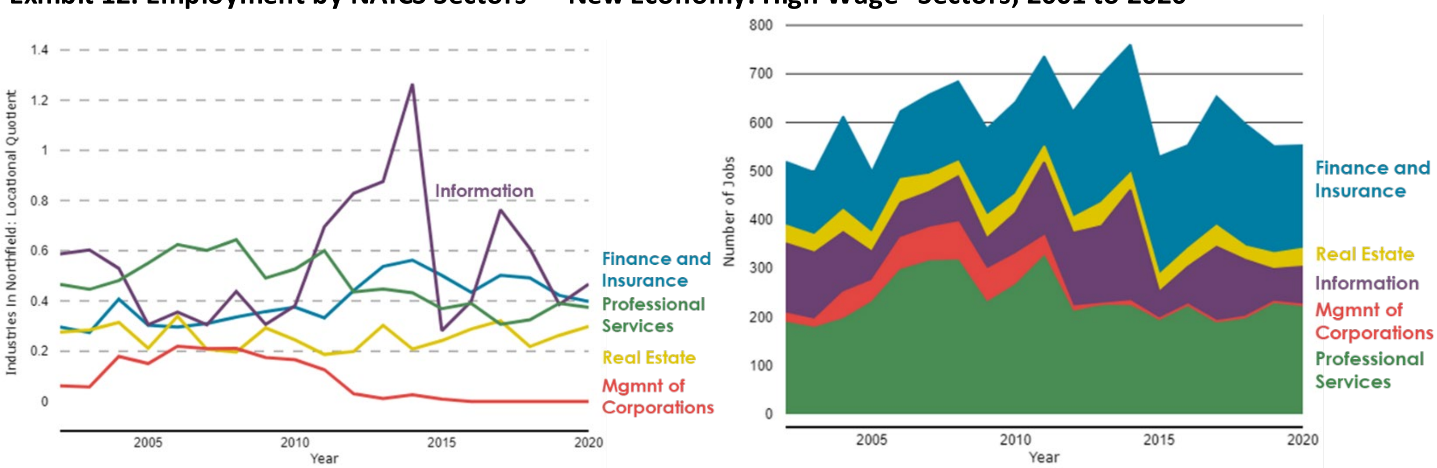
Exhibit 11. Employment by NAICS Sectors – "Eds, Meds, and Gov" Sectors, 2001 to 2020



Source: OnTheMap

"New Economy: High Wage" economic sectors. High wage new economy jobs include a mix of professional job categories. High wage new economy jobs are underrepresented in Northfield, and they shrank as a proportion of Northfield's employment from 6.1% of all jobs in 2002 to 5.5% in 2020.

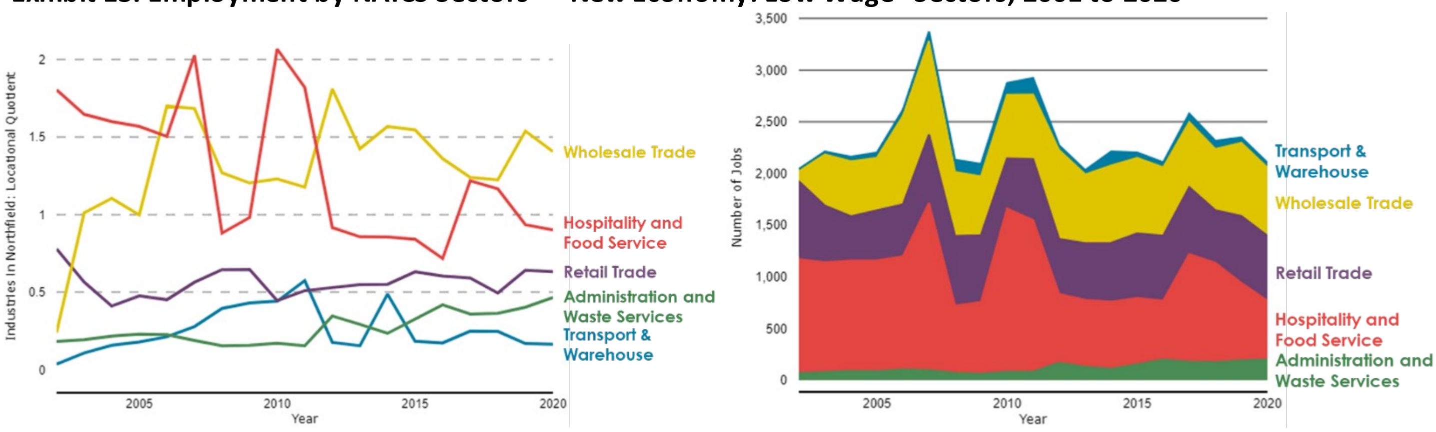
Exhibit 12. Employment by NAICS Sectors – "New Economy: High Wage" Sectors, 2001 to 2020



Source: OnTheMap

"New Economy: Low Wage" economic sectors. Wholesale trade, retail, hospitality and food service jobs are strongest in this category. Northfield is not a transportation and warehousing hub, but it is overrepresented in wholesale trade employment. Retail provides a good share of the jobs in this sector, although retail jobs are underrepresented in comparison to the state as a whole. Hospitality and food service jobs are also prevalent.

Exhibit 13. Employment by NAICS Sectors – "New Economy: Low Wage" Sectors, 2001 to 2020



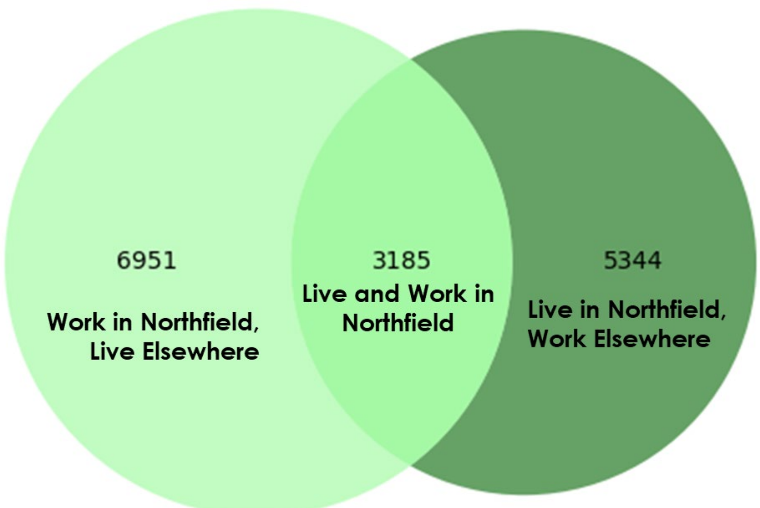
Source: OnTheMap

Commuting Patterns

Employment Inflow/Outflow

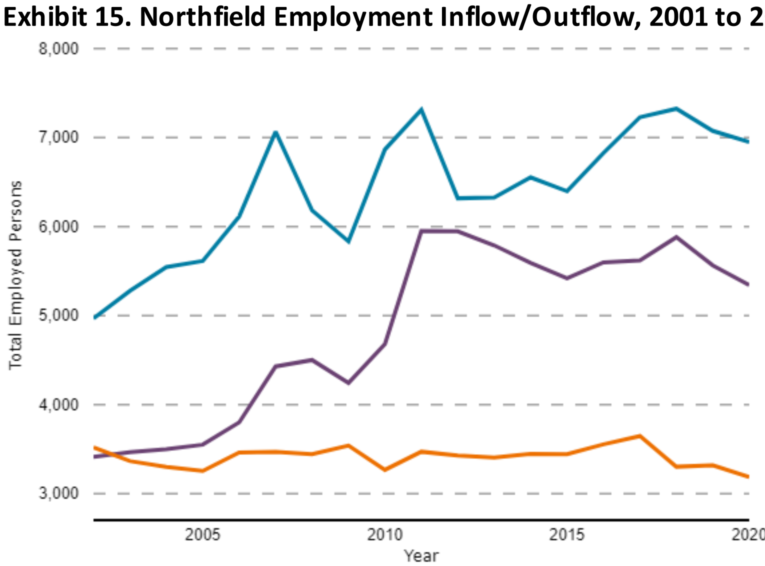
Northfield is a job destination. More people commute in to Northfield for work than live in Northfield and out-commute. However, Northfield is growing in its identity as a place to live even for those who are working elsewhere. It is attracting residents who are employed outside of Northfield at a faster rate than it is increasing its community of in-commuters. The share of residents who both live and work in Northfield has declined over the period.

Exhibit 14. Northfield Employment Inflow/Outflow, 2020



Source: OnTheMap

Exhibit 15. Northfield Employment Inflow/Outflow, 2001 to 2020



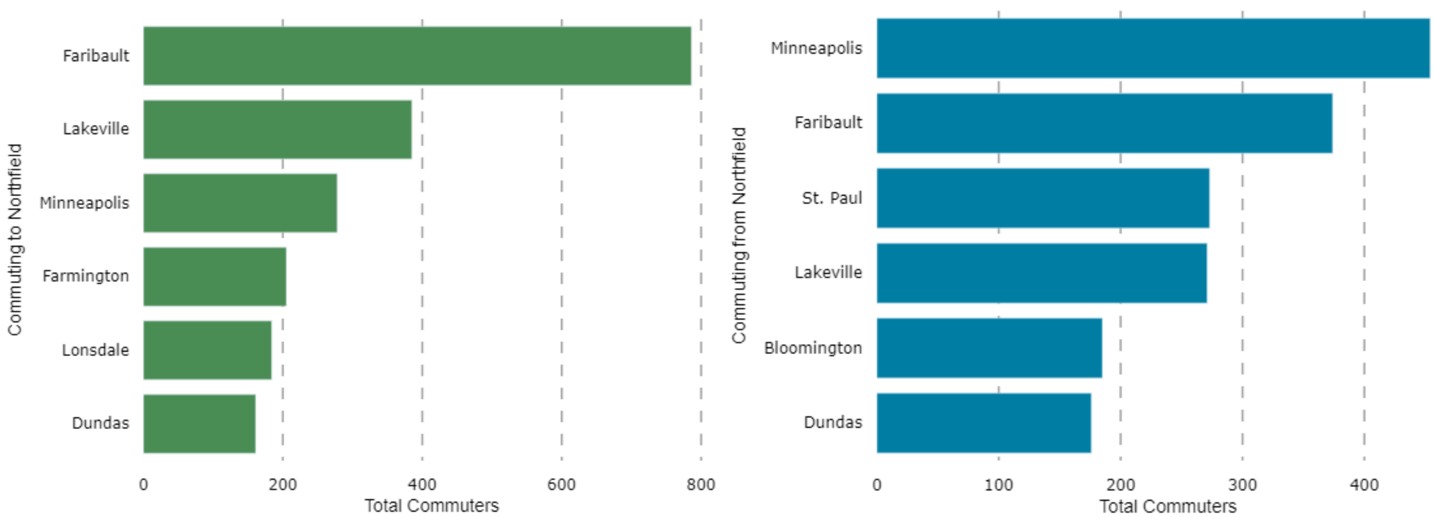
Source: OnTheMap

Origins and Destinations

The origins of Northfield workers are different from the destinations of Northfield residents who commute to jobs outside of Northfield. Northfield employers are primarily drawing their workforce from the surrounding communities, although there are certainly some who are driving a further distance, including some who commute from the Twin Cities. Many of those who live in Northfield and work elsewhere, on the other hand, are working in larger employment centers like the Twin Cities. Some of this group are undoubtedly telecommuting to work, either entirely or partly. Exhibit 16 shows the top origins and destinations of Northfield workers and residents.

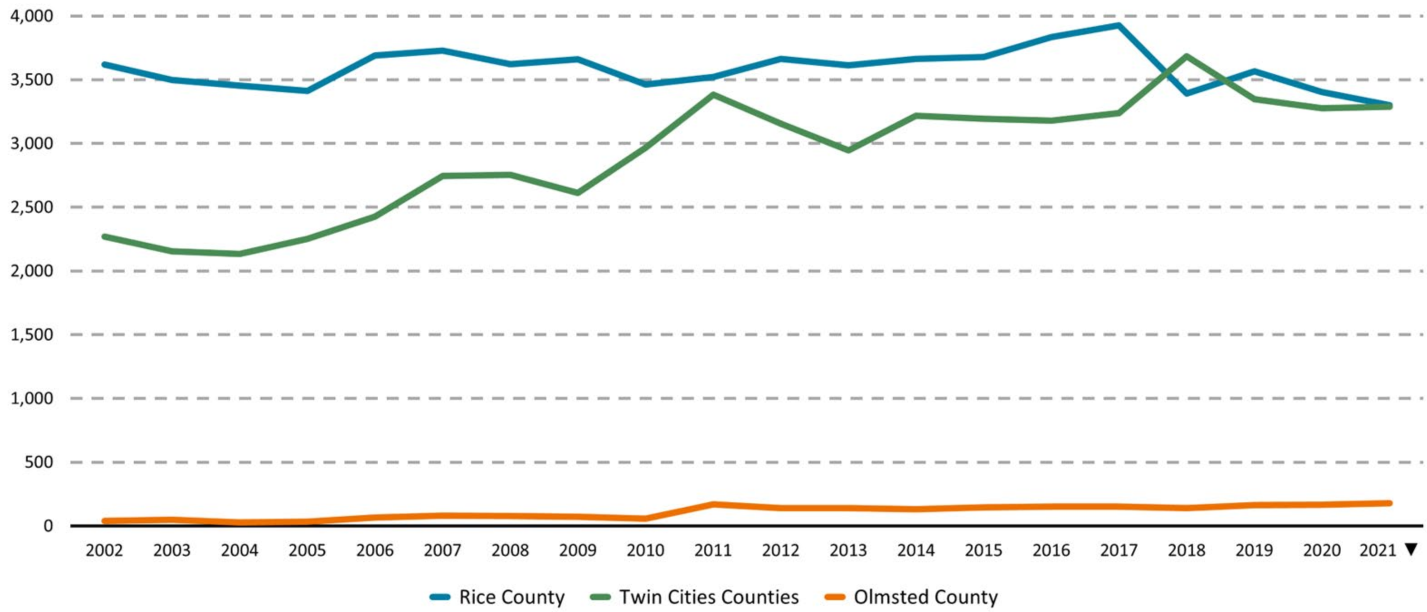
Exhibit 17 highlights the large and growing number of Northfield residents who are commuting or telecommuting to jobs in the Twin Cities. That number rose from roughly 2,300 in 2002 to roughly 3,300 in 2021. In other words, Northfield seems to be an increasingly desirable place for Twin Cities workers to reside.

Exhibit 16. Top Origins and Destinations of Commuters Into and Out of Northfield, 2020



Source: OnTheMap

Exhibit 17. Northfield Residents Who Work Elesewhere, 2020



Source: OnTheMap

Fiscal Impact of Development

Fiscal impact analysis considers the impact of development on a public sector budget. In Minnesota, new development generates revenue for cities by paying local property taxes. But new development also increases city operating costs, because its associated households or workforce are supported by city services such as road and utility infrastructure, fire and police protection, parks and recreational programming. The net fiscal impact of new development is the revenue generated minus the increased cost of providing required public services.

While the fiscal impact of specific development alternatives in Northfield will not be analyzed in detail in the comprehensive planning process, some core considerations can be borne in mind to inform land use guidance and growth scenarios.

Fiscal Revenues/Property Tax Generation

Differential property tax rates. In Minnesota the class rate for commercial and industrial property is up to twice as high as the class rate for residential property. That results in the property taxes paid to local governments (cities and counties) being proportionately higher for commercial/industrial properties than it is for residential properties, for properties of the same value.

Development intensity. Differential class rates are only one factor in property tax revenue generation. Other determinative factors are the developed floor area and overall property value generated for a given land area. Industrial development may cover 50% of a parcel, but the value it generates per square foot of floor area is generally lower than most development types. Retail development is another category of commercial property, with a high class rate. But it often covers a small fraction of the commercial parcel because of the land dedicated to parking. At the other end of the spectrum, some multistory development creates an amount of developed floor area that exceeds the property's land area.

Fiscal Costs/Service Burden

Cost by development type. New development will require city services. The service burden of commercial development is generally estimated to be lower than the service burden of residential development—whether measured by land area, floor area or value. That's because residential buildings are occupied for more hours of the day, and some city services are targeted to city residents.

Cost by land area/development intensity. The cost of providing some city services are as correlated or more correlated with the land area of development as the size of the population being served. Snow plowing is a clear example of this, where the length of the street network has a greater relationship to parcel land areas and the lenth of street networks than to the number of people living or working on that property. Resurfacing or reconstructing streets and utilities is another example of this.

Land intensive development can be fiscally challenging, and that becomes more apparent when life cycle costs related to rebuilding far-flung roads and utilities is taken into consideration.

Average cost vs. marginal costs. The cost of providing city services to new development doesn't always scale up in a straight-line fashion. For some budget lines there is a physical or administrative infrastructure that has already been established that doesn't need to scale up proportionately with the new development. In those instances, costs for services can be divided into fixed components and variable components, and the marginal cost of providing services to new development is the increase in the variable cost component. That will be lower than a straight-line increase in the average cost of providing those services.

Redevelopment. Redevelopment in areas that were previously developed tend to be fiscally benefits in comparison to "greenfield development." New development is typically many times the value of the development it replaces—increasing property tax revenues. On the cost side, it utilizes preexisting street and utility infrastructure, and doesn't stretch out the service areas of safety and emergency services

Conclusions

The considerations above can be borne in mind when planning for future growth in Northfield.

All other things being equal, commercial development generates more property tax revenue than residential development. But the higher class rate of commercial development can be offset by other factors such as development intensity. Perhaps more critically, the rate of commercial development can also be difficult to impact through municipal policies because, for example, retail businesses and community serving professional offices tend to grow proportionate to population growth. A common truism in real estate is, "Retail follows rooftops." Consequently, in many instances, zoning additional land commercial isn't likely to increase the rate of commercial development beyond the rate of population growth.

Other factors related to fiscal sustainability are more subject to local government policies and practices, including the following:

- Redevelopment is likely to be fiscally beneficial when it intensifies development in areas that are serviced by preexisting road and utility infrastructure.
- Higher density development of any development type is more fiscally sustainable than lower density development
- The fiscal sustainability of new home subdivisions increases as lot sizes are reduced.