

Housing for the Region's Future

Executive Summary

North Texas is growing, by millions over the next 40 years. Where will they live? What will tomorrow's neighborhoods look like? How will they function in a regional system? *Housing for the Region's Future* considers the policies and practices that will shape the future of North Texas's communities.

Selected Indicators

The housing indicators selected for Vision North Texas are designed to measure three important facets of the housing market. The first, **availability**, assesses the variety and location of housing opportunities that are accessible to consumers in a community. It serves as an evaluation of the extent to which the supply of housing meets the varying needs of consumers along dimensions such as income, housing type, and location of housing. Next, **sustainability** assesses the effect of a particular dimension on the environmental, economic, and social sustainability of a community, mindful of the fact that housing and development decisions have implications on the quality of life and advancement of a community. Finally, **value** assesses the condition and cost of housing opportunities available to consumers.

Five indicators will measure North Texas's progress along these three important areas. They are presented below. The careful reader will note that original draft metrics for housing included an indicator labeled *Housing Migration*. Upon further exploring the data and metric definitions, the research team felt that the concepts represented by housing migration largely duplicated the data and information portrayed by *Alignment of Supply and Demand*.

Indicator	Intent	Metric
Housing Development Intensity	Measures the concentration and depth of housing opportunities available in the region.	Number of Housing Units per Square Mile
Housing Affordability	Measures the distribution of economic variety in the region's housing opportunities.	Percent of population with housing costs exceeding 30% of Income
Alignment of Supply and Demand	Measures the extent to which existing housing supply meets the demand within the region.	Weighted Average Commute
Housing Variety	Measures the style, density, and structural diversity of housing opportunities within the region.	Adjusted Index of Structure Variety
Housing and Neighborhood Condition	Measures the physical condition of available housing within the region.	Percent of Housing Units with 2 or More Indicators of Distress

Impacts on the Region's Future

With millions projected to move to North Texas in the coming decades, there is little doubt that housing will be important. More important than providing basic shelter, though, the housing choices we make as a region today will impact almost every area of our tomorrow. Successfully aligning a variety of housing choices with the job

market will decrease commutes, increasing productivity and reducing air pollution. Developing neighborhoods of diverse opportunities will restore many communities to economic vibrancy while retaining the individual character that makes them special. The table below presents a brief synopsis of how North Texas will fare on the selected indicators under the proposed alternative futures. A brief discussion of the logic underlying these assessments follows.

Indicator	Return on Investment	Connected Centers	Diverse, Distinct Communities	Green Region
Housing Development Intensity	+++	++	+	-
Housing Variety	+/-	-	++	+
Housing Affordability	++	-	0	-
Alignment of Supply and Demand	+	++	++	-
Housing and Neighborhood Condition	+	+/-	0	+/-

Legend: +++ Significant Increase ++ Moderate Increase + Slight Increase
 --- Significant Decrease -- Moderate Decrease - Slight Decrease
 +/- Mixed Results 0 No Anticipated Change

Housing Development Intensity

Recall that housing development intensity is measured at the gross level in dwelling units per square mile. In 2007, North Texas had 22 dwelling units per square mile.¹ This ranged, however, from a low of 14 units per square mile in Erath County to a high of 1,053 per square mile in Dallas County.

It is important to note that under a **Business as Usual** scenario one might expect housing intensity to increase: more dwelling units will be built on an existing and finite supply of land. However, we would expect to see the greatest relative increase in housing development intensity under the **Return on Investment** scenario, where new development is purposely mapped into areas of existing building and infrastructure investments. We would also expect greater intensity relative to business as usual under the **Connected Centers** and **Diverse, Distinct Communities** alternatives. Both scenarios would promote growth beyond the scope of existing infrastructure, which would result in less of an increase in housing intensity, and we would expect slightly smaller increases under the diverse, distinct communities, which would permit greater influence of low-density preferences. Finally, we would anticipate a relatively smaller growth in intensity under the **Green Region** plan, which would focus first on development in areas away from natural resources, and could foster a greater spread of housing development than the current business as usual path.

Housing Variety

We measure housing variety with a simple “variety index” that captures the variety of housing types available in a community, where values closer to 1.0 indicate more variety, and values closer to 0 indicate less variety. In 2007, the variety score for North Texas was 0.64.² As with housing intensity, this region-wide number masked a good deal of variety across counties, with six counties showing scores lower than 0.20.

¹ Source: IUPR Analysis of U.S. Census Bureau 2007 American Community Survey, 2009.

² Source: IUPR Analysis of U.S. Census Bureau 2007 American Community Survey, 2009.

Relative to the **Business as Usual** scenario, we would expect to see the largest increase in variety under the **Diverse, Distinct Communities** alternative, whose focus on individual community character and expression, while it might not improve micro-level variety, would yield a larger variety of housing opportunities across the region. Likewise, we would anticipate an increase in variety under the **Green Region** alternative, as community efforts to better integrate with the environment might yield an increase in variety. We would anticipate mixed results under **Return on Investment**; while the pressures of focusing development on finite existing areas will encourage the introduction of new housing choices, the resulting increase in intensity might eventually serve to limit some choices as well. Finally, under the **Connected Centers** approach to development, we would anticipate a lessening of variety as the scenario focuses more on connectivity between centers that are roughly similar in design and mixed usage.

Housing Affordability

Housing affordability is measured at the regional level by the percent of households with more than 30% of their income going toward housing expenses. In 2007, 35% of North Texas households were thus burdened.³ There was less variability across counties on this indicator than the others, with all but five counties having rates exceeding 30%.

Among the alternative futures presented, we believe the greatest increase in affordability, relative to **Business as Usual** will come under the **Return on Investment** approach to development. Under such an approach, the cost of housing development should be less, as the majority of new development would be focused in areas of existing infrastructure investment. As such, these costs savings might be passed on to the consumer. **Diverse, Distinct Communities**, as an approach to development, will likely show no change to existing affordability patterns, as continued patterns of variety will lead to continued patterns of costs. Under the scenarios of **Connected Centers** and **Green Region**, we would anticipate affordability to lessen. With Green Region, the costs of integrating environmentally friendly design might negatively impact affordability, while under **Connected Centers**, we anticipate that the focus of future development on concentrated areas of connectivity, all of similar quality, scale, and design, might create an amenity effect, actually increasing costs in those new developments relative to surrounding areas.

Alignment of Supply and Demand

We measure the alignment of supply and demand at the regional level using information on the distance between each resident's home and place of business. In 2006, this average home-to-work distance estimate for North Texas was 21.8 miles.⁴

Compared to expected trends under **Business as Usual**, alignment of supply and demand is expected to fare better under the **Connected Centers** and **Diverse Distinct Communities** alternative futures. Both scenarios focus on providing housing- and transportation-based solutions to closing the home to work gap. Under Connected Centers, this emphasis is through the provision of housing opportunities in connection with an integrated, efficient, and environmentally friendly transit system, while the Diverse, Distinct Communities approach would increase more remote and telecommuting opportunities, in addition to enhanced transit options. The

³ Source: IUPR Analysis of U.S. Census Bureau 2007 American Community Survey, 2009.

⁴ Source: IUPR Analysis of U.S. Bureau of Labor Statistics 2006 Longitudinal Employee-Household Dynamics Data, 2009.

concentration of new development in areas of existing infrastructure investment, as embodied by the **Return on Investment** approach, would mean that new housing opportunities would be brought closer to existing and new employment opportunities, increasing alignment of supply and demand to a slightly lesser extent than the other alternatives. Finally, the **Green Region** alternative, relative to Business as Usual, would produce an anticipated decrease in the alignment of supply and demand, although, should sizeable employment opportunities also take shape in the eco-friendly development strategy, we might anticipate a small increase in alignment on the scale of what might be expected under Return on Investment.

Housing and Neighborhood Condition

We measure the condition of housing at the macro level using data on the number of housing units impacted by one or more of four conditions: housing costs exceeding 30% of resident income, more than 1 person per room, lack of complete kitchen facilities, and lack of complete plumbing facilities. In 2007, 2% of North Texas' more than 2 million housing units were listed as suffering from 2 or more of these 4 conditions.⁵ This, of course, ranges from lows of 1% in some counties to highs of 3% in others.

Housing Condition is perhaps the least impacted by our choices of alternative futures. Compared to **Business as Usual**, we would anticipate a larger improvement in housing condition under the **Return on Investment** scenario. Much of our region's older housing is concentrated in areas of existing infrastructure development; we would anticipate that as development efforts are targeted toward these areas we would see those housing units most in need receiving the assistance they require. Both the **Connected Centers** and **Green Region** alternatives would produce, we suspect, mixed results. In the case of Connected Centers, the concentration of new development around regional transit opportunities, combined with the expansion of transit oriented design concepts into already occupied neighborhood, will likely increase the number of good quality units available in the region; however, it is not clear how this concentrated development plan will remediate existing conditions in some of the region's neighborhoods most in need. Likewise, in the case of Green Region, we would expect that new units developed in harmony with the concepts of green building would no doubt increase the volume of higher quality units available in the market, but methods of addressing quality deficiencies in existing stock remain to be seen. Finally, under the **Diverse, Distinct Communities** we would anticipate no departure from the levels of quality that exist under Business as Usual. While the development strategy promotes the influence of local community character in regional housing development, too few safeguards exist to prevent the deliberate development of lower quality units targeted to lower income residents.

Implications for the Region

Among the housing indicators outlined above is the intensity of housing development. Figure 1 presents the change in number of housing units (single- and multi-family units) from 1990 through 2008⁶. Note that no single county in our region has gone without seeing net increases, most with areas receiving from 200 to 1,500 new housing units. More importantly, the map illustrates the drastically different levels of growth experienced by areas in Palo Pinto, Erath, and Wise counties, for instance, compared to the corridor bordering Denton and Colin counties. In the former, most areas saw a moderate increase in the number of housing units (these are the areas

⁵ Source: IUPR Analysis of U.S. Census Bureau 2007 American Community Survey, 2009.

⁶ Source: Institute for Urban Policy Research analysis of Claritas 2008 Demographic Updates, 2009.

shaded yellow on the map). In the latter, however, block groups experienced growth of 6,000 housing units or more (these are the areas shaded in dark blue on the map). Neighborhoods in Kaufman, Rockwall, Ellis, and Tarrant counties also saw sizeable increases of 3,000 to 6,000 housing units (shaded in greens and light blues). In the face of these patterns, it is critical that we act as a region to align our housing demands with our existing infrastructure, planned infrastructure investments, and inclusionary growth opportunities. Figure 2 illustrates the change in housing intensity (units per square mile) by county from 1990 through 2008. As the map in Figure 1 would lead us to suspect, Collin and Rockwall counties have faced the largest increases in density, nearly tripling over the last 18 years.

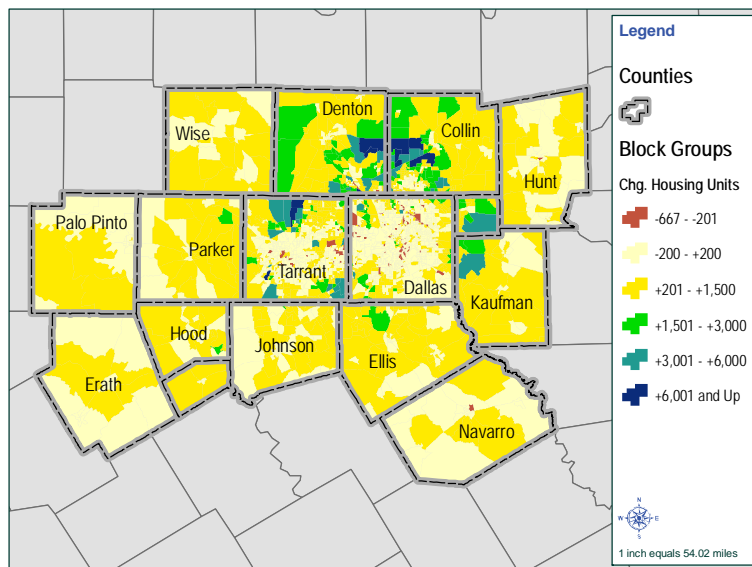


Figure 1. Net Change in Housing Units, 1990-2008

One might consider the intensity patterns in these figures as representative of *Business as Usual*, with inadequate advanced planning to ensure an alignment of infrastructure and social services with new development. Under the five alternative regional growth scenarios, we would anticipate divergent patterns of change in housing intensity. For instance, under a scenario of *Diverse, Distinct Communities*, one would envision increased densities throughout the region, concentrated around areas of core community and infrastructure investments. Housing intensity and the remaining five indicators will illustrate the implications of the various growth strategies in North Texas.

Another implication of the findings outlined above is the need for more granular data on housing conditions in North Texas. Much of the data that is needed already exists, but to date has not been put toward the regional planning effort. As an example, we currently measure housing condition using the American Community Survey's measure of housing units with 2 or more of the trouble indicators (see discussion above). More granular data, such as that available publicly from the Dallas Central Appraisal District, allows for a more detailed exploration of issues of housing quality. Looking to such simple measures as the reported condition for single family residential units and multifamily residential units, we find that in 2008 there were more than 200 census block groups in Dallas County that had less than 1% of their housing units indicated in poor condition. Conversely, there were more than 60 units with 50% or more of their housing units

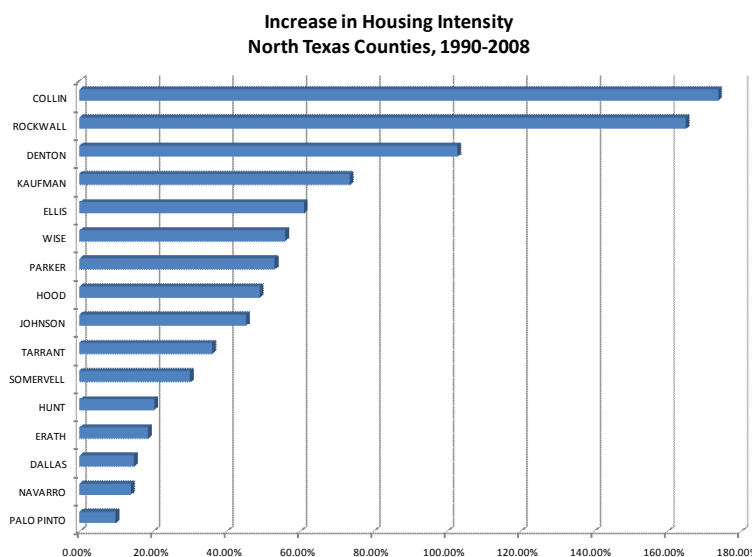


Figure 2. Percent Change in Housing Units per Square Mile, 1990-2008

reported to be in poor condition.⁷ This level of granularity is what is needed to direct the investment of future resources targeted to improve these and other housing conditions. Current housing research efforts are further expanding into these more granular analyses.

⁷ Source: IUPR Analysis of 2008 Dallas Central Appraisal District Data, 2009.