

*Metro Vision 2020*  
Urban Growth Boundary  
History and Process

**Updated Report  
2004**



## The Extent of Urban Development Core Element

In 1997 DRCOG adopted the regional development plan *Metro Vision 2020*. The plan is organized around six core elements, one of which is the 'extent of urban development'. The original plan stated, "the extent of urban development will occur within 700 square miles by 2020, accommodating expected population growth and adding 165 square miles to the existing (1995) urbanized area." This report describes how the 700 square mile goal was determined and the changes that have occurred in the growth area since the plan's adoption.

The Denver metro area Urban Growth Boundary (UGB) did not happen overnight. It has been a collaborative process that has occurred over a multi-year period of time. It is also an evolving process that continues to be refined, reviewed, and explored as each community begins to implement and interpret this regional growth strategy.

In 1995 the DRCOG Board of Directors adopted the *Metro Vision 2020 Framework*. The Framework served as a guiding document for creating the regional development plan, *Metro Vision 2020*. It defines the major features of the regional plan for land use, transportation, environment and open space. More specifically, the Framework identifies goals and recommendations for the 2020 extent of urban development.

The intent of the extent of urban development goal is to set down on paper the desired vision for future development in the region given the projected population growth of 700,000 people between 1995 and 2020. This process began by studying alternative development scenarios for the region. The development scenarios

experimented with land consumption and its effect on air and water pollution, cost of infrastructure, congestion, and other variables associated with growth. This alternative development analysis played an important role in the development of Metro Vision 2020.

## Development Scenarios for Accommodating Growth in the Denver Metro Region<sup>1</sup>

Four development alternatives - compact, corridor, satellite (freestanding communities), and dispersed (current trend) - were compared looking at a range of options for future land use and transportation scenarios. The alternatives varied primarily in the shape and size of urban pattern, overall land consumed by urban and rural development, and the transportation network needed to serve the development.

### *Compact Development Alternative*

The goal of the compact development alternative was to limit urban sprawl in the region. New population and employment growth would take place on infill or redevelopment sites within the central city and existing suburbs, including new Urban Centers. There would be high transit investment including the completion of a light rail transit system connecting all of the region's major Urban Centers. A greenbelt buffer would limit the future growth of the urban area and contain the development within the region.

### *Corridor Development Alternative*

The goal of the corridor development alternative was to serve new

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<sup>1</sup> Complete documentation about each of the alternatives is available in *Metro Vision 2020 Urban Form Alternatives and Evaluation Criteria*, 1995.

development with transit service and close-by regional open space. Population and employment growth would be located along major transportation routes including transit lines. This would allow for the preservation of major open space areas as wedges between development corridors. This alternative would require a high investment in transit.

#### *Satellite Development Alternative*

The goal of the satellite development alternative was to promote the opportunity for creating a greater sense of community in newly developing suburban areas. Growth in the region would be channeled to existing satellite communities or new planned communities, physically separated from the central urban area by open space or agricultural land. Most new growth would shift from the urban fringe to more distant locations. Satellite development would be planned to contain a balance of housing and jobs, to be more self-contained, and reduce commuting to the central urban area. The major transportation investment would be commuter rail to connect the satellites to the core urban area. Satellite development would be chosen based on the capacity for growth and an existing highway or transit connection to the central urban area.

#### *Dispersed Development Alternative*

The goal of the dispersed development alternative was to demonstrate the expected land use pattern that would result from implementing current development policies and market trends. Single-family detached residences would be the predominant land use and would continue to occur at the edge of the existing urban area in low-density developments. Nonresidential development would continue to occur in single purpose shopping districts and

office parks scattered throughout the region. Transit investment would be limited and transportation investment would continue to favor building more roads to serve growth.

### **Evaluation of Urban Form Alternatives<sup>2</sup>**

In order to analyze the cumulative effects of each alternative, each was evaluated against a set of criteria or development objectives. The criteria measured how well each alternative met the goals and objectives of the Metro Vision Principles and Policies. The criteria fall into five major categories: land use, transportation, environment, open space, and implementation.

#### **Evaluation Criteria**

##### *Land Use*

- Limits amount of new urban land required
- Provides housing close to jobs
- Maximizes use of existing developed infrastructure
- Promotes development in areas with roadway accessibility
- Supports redevelopment of CBD, other Urban Centers, and Activity Centers
- Promotes transit accessible development
- Provides services close to housing

##### *Transportation*

- Reduces vehicle travel on highway system
- Reduces delay and congestion on the highway network
- Encourages the use of alternate travel modes

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<sup>2</sup> Complete documentation of how the alternatives rated against each of the evaluation criteria is available in [Metro Vision 2020 Urban Form Alternatives and Evaluation Criteria](#), 1995.

- Provides increased access to the CBD and other Urban Centers
- Minimizes total travel time
- Reduces total regional transportation costs
- Reduces total private transportation costs

#### *Environment*

- Provides for improved air quality
- Reduces water quality degradation from stormwater runoff
- Reduces the amount of advanced wastewater treatment required
- Provides for maximum use of water supplies

#### *Open Space*

- Amount of different landforms converted to urban development, preserved, or left undeveloped
- Relative location of open space in relation to the region's population
- Amount of open space needed to make the alternative work

#### *Implementation*

- Costs of infrastructure development
- Consistency with adopted local governments
- Level of legislative change required

### **The Extent of Urban Development**

As a result of the evaluation process, it was determined that land developed in excess of 700 square miles by 2020 would create undesirable consequences, and that, within that target, maximum benefits could be achieved without constraining growth. In 1995 the urban area was estimated at 535 square miles. The 700 square-mile goal provides 165 square miles of land for urban development over a twenty-five year period. The addition of 700,000 people

to the region creates a gross average density of 3,900 people per square mile<sup>3</sup>.

At \$1.3 billion –\$1.55 billion, the local cost of infrastructure for the 700 square miles of developed land area would be considerably less than the dispersed alternative (\$5.4 billion). The compact alternative, 650 square miles of development, resulted in lower local costs for infrastructure (\$1.1 billion) and VMT, however it had higher levels of congestion associated with higher densities. The 750 square-mile development alternatives indicated higher costs for infrastructure (\$1.6 billion - \$2.0 billion) and higher levels of air and water pollution. The dispersed alternative with 850 square miles of development substantially increased VMT, air and water pollution, congestion, costs of infrastructure, and greatly decreased the ability to provide for alternative modes of travel, opportunities for open space, and the viability of activity centers.

### **Arriving at a 2020 UGB Map**

With a regional growth area target determined, the next issue was to determine where and how that development would occur.

In order to assist jurisdictions in planning for growth to the year 2020, mapping criteria were established. The criteria reflect the principles and policies of Metro Vision 2020 and the elements of the Vision Framework in early 1996. Jurisdictions were asked to follow guidelines in determining the land area to be included with their 2020 Urban Growth Boundary. The guidelines fell into three major categories: the regional

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<sup>3</sup> This density assumes 20 percent of the projected population and employment growth will occur as in-fill or re-development, and 3 percent will occur outside of the UGB.

open space system, the urban growth area and the urban centers.

*Local Urban Growth Area Planning Guidelines:*

- When possible exclude agricultural lands on periphery of current developed area
- Exclude all regional open space, large parcels of public lands and national forests (parcels > 160 acres)
- Do not exceed the area shown as urban in the local comprehensive plans
- Current municipal boundaries should not be used to define the urban growth area
- Avoid areas of environmentally sensitive lands
- Plan for appropriate development along regional beltways
- Identify infrastructure plan for your area and discuss consistency
- Identify existing or anticipated large-lot development

**Creating Subregions**

The mapping effort began with a composite of local comprehensive plans. This yielded an urban area of 1,200 square miles, but was not staged to a particular forecast year. As a result, DRCOG was asked to come up with a growth target for each subregion. Population and employment growth was forecast by subregion yielding a range of expected growth in land area. To recognize the differences of each jurisdiction, the metropolitan area was divided into five subregions, each centered around major transportation corridors: North, South, East, West, and Mountain (see Map 1). Each subregion is comprised of jurisdictions with similar market, commuting, and demographic characteristics that share contiguous areas of future development. Each subregion was to collaboratively establish a reasonable growth area.

Communities met by subregion to discuss an urban growth boundary map for their subarea. After an initial round of meetings, the sum of the areas for the total region equaled about 800 square miles.

**Setting Growth Area Targets<sup>4</sup>**

To make the process easier for each jurisdiction, DRCOG was asked to derive a target for each jurisdiction. Building permit and population data from 1990 and 1995 were compiled by jurisdiction to create a growth projection or target from past trends. Population growth was reviewed by jurisdiction in order to arrive at a reasonable projection. In those communities that had not yet experienced much population growth, but had land to develop, the regional average percentage was assumed. Several communities stated a desire not to grow at their past rates, and submitted a projection smaller than what would have otherwise been forecasted, while others assumed a much higher percentage of growth than the regional average.

The following tables breakdown building permit, population, and land area assumptions used to create the growth targets for each member government (see Figures 1-5). There were four basic factors considered in forecasting growth by jurisdiction.

1. population growth, and dwelling units per acre (density)
2. number of building permit approvals

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<sup>4</sup> Building permit and population data was compiled from 1990-1995. During this time period the region grew by 2.5 percent per year. This growth rate is expected to continue to 2020.

3. amount of land area consumed, in total and as a percentage of regional growth
4. employment as a percentage of land area, and in absolute numbers

Once the targets were forecasted a second mapping effort was undertaken. Most jurisdictions agreed with the targets, however some did not. For those jurisdictions that did not, compromises were made to reach goals acceptable to each community. Longmont for example gained an additional six square miles of land area because the other jurisdictions within their subregion, such as Boulder, did not want further growth. In other jurisdictions, the local political climate did not allow for further reductions in land area.

The second effort to map the 2020 extent of urban development yielded a regional map indicating approximately 730 square miles of land to be urbanized by 2020. This result was much better than the initial 1,200 square miles of planned development and just 30 square miles over the 700 square mile goal. Once jurisdictions identified where future growth would occur, planning tools began to be developed in order to realize this vision.

### **Regional Acceptance and Adoption**

After much debate by the Metro Vision Policy Committee (MVPC)<sup>5</sup>, they recommended to the Board of Directors

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<sup>5</sup> Metro Vision Policy Committee is made up of DRCOG Board members, leaders from business, environmental and other interests. Responsibilities include, but are not limited to, ensuring that the basic tenets of Metro Vision 2020 (MV) are pursued, refinement of MV implementation strategies, and review and recommend changes to the urban growth boundary.

that it was appropriate to keep the 2020-700 sq. mile extent of urban development goal. They also recommended that the 730 sq. mile map be adopted as the Interim 2020 Urban Growth Boundary (UGB).

The UGB distinguishes between land that is urban and that which is unimproved, protected open space or rural and defines land that is planned by local governments to urbanize by the year 2020. It is intended to encourage contiguous and orderly urban development and deter leapfrog development that places a greater burden on utility and infrastructure systems.

In December 1997 the DRCOG Board of Directors passed a resolution accepting the 2020 Interim Urban Growth Boundary Map (see Map 2), with the requirement that local governments be given the ability to change the location of the Boundary through Flexibility Provisions<sup>6</sup>.

The Flexibility Provisions enable both the local and regional UGB maps to be modified in three ways: self-certification, regional review and input, and changes requiring DRCOG Board action. Self-certification enables local governments to make small changes that do not have a regional impact. Regional review and input occurs when the proposed change does not meet the criteria for self-certification. Changes that require DRCOG Board approval are those that would require amending other regional plans or requests for expansion of the Urban Growth Boundary.

### **Changes since 1997**

Between 1997 and 2000, only minor changes were made to the Interim 2020 Urban Growth Boundary Map. Some changes were self-certifications that had

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<sup>6</sup> See Appendix

no impact on the regional total. However, the Board at the request of Adams and Boulder counties made two amendments that did increase the 2020 area. The Adams County change reflected some existing urban areas that were not covered by the cities in the county. The Boulder County change provided a mechanism for recognizing the county's transfer of development rights program. These changes increased the regional UGB to 735 square miles.

In addition, several communities implemented the urban growth boundary into their local planning efforts through the use of the area total rather than a specific local map. To recognize this implementation approach, references to the process were changed to "urban growth boundary/area (ugb/a)."

During the 1999 Metro Vision Plan Assessment, the Board revised the 2020 regional forecast from 2.8 to 3.2 million people and directed the staff to evaluate the impact of this change on the urban growth boundary/area. In 2000, the staff recommended that the 735 square mile map be adopted as the official extent of development goal. The Board appointed as special ad hoc committee to consider this proposal.

### **Ad Hoc Committee on the Extent of Development**

The Ad Hoc Committee on Extent of Development was given the charge by the DRCOG Board of Directors to consider several issues related to the Extent of Urban Development, including the assessment of the 2020 urban area forecast, Urban Growth Boundary/Area (UGB/A) issues in several individual jurisdictions and the update of the flexibility process. The committee undertook several efforts to address these topics.

The committee also asked the DRCOG communities to review and update their urban area mapping. Maps of 1995, 2000 and 2020 urban areas were prepared for each county and municipality. This required that the committee update the definitions of urban and non-urban land. Those updated definitions are included in this report for Board consideration. As a result of this review, urban area mapping across all jurisdictions has become more uniform and the resulting information more accurate.

In some cases, the expected 2020 UGB/A has been reduced due to new open space and golf course definitions or because growth pressure in that community has lessened. In many cases, the revisions to the 2020 UGB/A in a community were minor and resulted in less than 1 square mile of change. In four communities, the proposed changes were more significant and the Extent of Development Committee asked for a detailed response to specific questions posed by the committee for these four proposals. After considering those responses, the committee recommended that these four changes be accepted. The minor adjustments and four community requests resulted in an increase in the regional urban growth area from 735 square miles to 747 square miles.

In response to the committee's charge, the DRCOG Board adopted amendments to the Metro Vision 2020 Plan in January 2002. These also included updated language for the Flexibility Provisions. The Board also accepted the committee's recommendation to review the UGB/A every two years and to develop more criteria for considering local area changes in the next review.



## **Appendix**

Resolution Accepting the Interim Urban Growth Boundary Map and Flexibility Provisions for Use in the Metro Vision 2020 Plan Process, December 17, 1997.

Urban Growth Boundary Flexibility Provisions, December 17, 1997.