VI. Urban Service Criteria and Standards

Purposes of Urban Service Standards

The urban service standards set the benchmark for providing a full range of urban services in the Boulder Valley. A basic premise of the Boulder Valley Comprehensive Plan is that "adequate urban facilities and services" are a prerequisite for new urban development and that, within the Boulder Valley, the city of Boulder is the provider of choice for urban services since it can meet all the service provision requirements embodied in the urban service criteria and standards.

These standards are intended to be minimum requirements or thresholds for facilities and services that must be delivered to existing urban development, or new development and redevelopment to be considered adequate. These adequacy standards allow the county to determine if an urban level of services is met prior to approving new urban development in the unincorporated area, and they provide the city a basis for linking the phasing of growth to the planned provision of a full range of urban services in Area II, annexation, and capital improvement decisions.

The urban service standards for defining adequacy of urban services are included in this section of the Comprehensive Plan. They provide a tool for implementing Policy 1.27 of the Comprehensive Plan. Adequacy standards are included for those urban services that are required for urban expansion in Area II. These include: public water, public sewer, stormwater and flood management, urban fire protection and emergency medical care, urban police protection, multimodal transportation, and developed urban parks.

Urban Service Criteria

Five criteria are to be used in the determination of the adequacy of proposed or existing urban facilities and services consistent with Policy 1.27. The urban service standards are written within the framework of these criteria. They include:

1. Responsiveness to Public Objectives

It is desirable and necessary that all urban service systems be coordinated and integrated with other service systems; evaluated periodically for need, efficiency and cost effectiveness; and studied for possible duplication of other service systems so as to be responsive to local public objectives and general public need as determined by the governing body.

As public funds and resources are limited, primary emphasis must be given to an effective allocation system that, to the greatest extent possible, effects a consistency of legislative intent; public policy; urban service programs funding; a periodic assessment of the type, quantity and quality of various urban services; realistic estimates of revenue sources and future income; maximization of the availability of outside funding sources (state, federal, etc.); and consistency of the long-range program direction in accordance with a capital improvements plan. It has been determined that the municipal budget of the city of Boulder is such an allocation system.

2. Sufficiency and Dependability of Financing

Financing for each urban service program must be based, to the greatest extent possible, on predictable annual revenues that are broad enough to support initial improvements, maintenance, and extensions of facilities and

services in relation to, at least, minimum program requirements and unexpected contingencies. Where financing is tied solely to users' fees, serious problems may result if and when the demand for such programs may diminish. At the same time, programs relying heavily on real property revenues or state and federal supplemental funding could be severely restricted if such sources of financing fall short of initial predictions. While no guarantees can be given, financing from a variety of potential sources and spread over a broad base, including sufficient latitude so that funding can be adjusted in the future as changing conditions occur, should be preferred over single-source revenue programs.

3. Operational Effectiveness

Each urban service program may have distinct operational needs and a wide array of operational activities might be considered. The end result is whether or not a given public program is able to function in a direct, efficient manner. As an example, a volunteer fire department, depending upon personnel employed in other endeavors and scattered throughout the area of service, may not respond as quickly and effectively as firefighting personnel located where the fire suppression equipment is stored. Also, a small sewage treatment plant receiving only limited flows might not be adequately financed to permit proper and continuous monitoring and management.

Measures of operational effectiveness include current and long range project forecasting, coordination with other urban service programs, maximization of economies of scale in urban service provision, and the incorporation of operational processes and organizational methods that have proven effective in similar situations.

4. Proficiency of Personnel

Conditions and factors that may affect the competency of personnel include the following: 1) education and experience of personnel in meeting job demands; 2) interest and willingness of personnel to implement programs; 3) on-the-job training opportunities; 4) working conditions and fringe benefits related to employees' effectiveness; 5) the ability of the urban service agency to pay salaries commensurate with personnel requirements; and 6) the effectiveness of recruitment programs. As with other criteria, extremes may be involved, but in general, the measure of whether or not urban services are being provided must in part be determined by the skills of individuals carrying out such programs. For each job a comparison should be made of qualifications of the individual employed or to be employed, against personnel standards established by generally recognized public or technical agencies for similar positions.

5. Adequacy of Equipment and Facilities

This factor may be more easily measured than any other since "generally accepted standards" are involved. As an example, as residences are located in closer proximity to each other, interest in developing neighborhood parks will normally increase. As evidenced by recreation programs desired by similar population groupings, certain standards for park areas, spaces and facilities may be predicted. In a similar manner, most of the other public services and facilities described in this study have minimum locational space, equipment and building needs related to given population groupings.

Urban Service Standards

The remainder of this section contains standards for necessary urban services, according to the five primary criteria outlined above. The required urban services and facilities are as follows: public water, public sewer, stormwater and flood management, urban fire protection and emergency medical care, urban police protection, multimodal transportation, and developed urban parks. Each of the preceding seven services (together with schools) are considered necessary for service to residential areas; the first six are required to serve industrial and commercial areas.

Public Water

(1) Responsiveness to Public Objectives

(a) Provide a sufficient degree of reliability for raw water, treated water, and sufficient transmission/distribution system capacity to meet the demands of the population 24 hours per day.

(b)Provide full-time personnel 24 hours per day at the water treatment plant to assure water quality, monitor equipment and make emergency repairs.

(c)Have personnel on call 24 hours per day for water service emergencies.

(2) Sufficiency of Financing

(a)Have revenue sources that are guaranteed so that revenues are available for water related materials, capital improvement projects, equipment, facilities and personnel.

(b)Use Plant Investment Fees as possible revenue for water rights acquisition, raw/treated water storage, treatment plant improvements/expansions and construction of water mains.

(c)Be organized to request and receive state, federal, and Northern Colorado Water Conservancy District funds, when available, for equipment, facilities and projects.

(d)Have the ability to obtain financing through the use of revenue bonds.

(3) Operational Effectiveness

(a)Use annual budget for personnel, equipment, projects, facilities and materials.

(b)Meet standard specfications as exemplified by the American Water Works Association.

(c)Meet or surpass acceptable levels of federal and state water quality standards.

(d)City of Boulder Design and Construction Standards should be used for standards for water main design for the Boulder Valley.

(4) Proficiency of Personnel

(a)All water treatment plants will be staffed by personnel who have obtained the appropriate Water Operator Certification.

(b)All water maintenance crews will be staffed by personnel who have obtained the appropriate Water Distribution System Certification.

(5)Location and Adequacy of Equipment and Facilities

(a)Have capacity to deliver sufficient treated water to maximum day demand conditions.

(b)Have existing treatment plant capacity with planned expansion that will be capable of serving projected population of the Service Area.

(c)Plan and provide treatment capability to meet required water quality standards.

(d)On the divided highways, place hydrants on each side of highway.

(e)In single family residential areas, fire hydrant spacing shall be no greater than 500 feet. No dwelling unit shall be over 250 feet of fire department access distance from the nearest hydrant measured along public or private roadways ofire lanes that are accessible and would be traveled by motorized fire fighting equipment.

(f)In multiple family, industrial, business or commercial areas, fire hydrant spacing shall not be greater than 350 feet. No exterior portion of any building shall be over 175 feet of fire department access distance from the nearest hydrant measured along public or private roadways orfire lanes that are accessible and would be traveled by motorized fire fighting equipment.

(g)Provide essential equipment and vehicles for water maintenance activities and emergency use.

Public Sewer

(1)Responsiveness to Public Objectives

(a)Provide full-time personnel 24 hours per day at the wastewater treatment plant to assure treatment quality, monitor equipment, and make emergency repairs on equipment and facilities.

(b)Have personnel on call 24 hours per day for sanitary sewer service emergencies.

(2)Sufficiency of Financing

(a)Have revenue sources that are guaranteed so that revenues are available for wastewater-related materials, projects, equipment, facilities, and personnel.

(b)Use Plant Investment Fees as possible revenue for construction of sanitary sewer mains and wastewater treatment plant improvement or expansion.

(c)Be organized to request and receive state and federal funds, when available, for equipment and facilities.

(d)Have capability to finance through the use of revenue bonds.

(3)Operational Effectiveness

(a)Use annual budget for personnel, equipment, projects, facilities, and materials.

(b)Meet standard specifications as exemplified by standards of the Water Environment Federation.

(c)Meet standards established by the Colorado Water Quality Commission and enforced by the Colorado Department of Health and the Environmental Protection Agency and as set forth in the National Pollutant Discharge Elimination System Permit.

(d)City of Boulder Design and Construction Standards should be used for standards for sanitary sewer design for the Boulder Valley.

(e)Require all new urban development to connect to the central sewer system.

(4)Proficiency of Personnel

(a)All wastewater treatment plants will be staffed by personnel who have obtained the appropriate Wastewater Operator Certification.

(b)All wastewater maintenance crews will be staffed by personnel who have obtained the appropriate Wastewater Collection System Certification.

(c)Provide a variety of equipment and vehicles for wastewater maintenance activities and emergency use.

(5)Location and Adequacy of Equipment and Facilities

(a)Have treatment plant capacity with planned expansion capable of serving projected population of the service area.

(b)Design central collection system for present and future growth.

(c)Provide easily accessible repair equipment and replacement equipment for emergency use.

Stormwater and Flood Management

(1)Responsiveness to Public Objectives

(a)Have personnel on call 24 hours per day for stormwater and flood emergencies.

(2)Sufficiency of Financing

(a)Have revenue sources that are guaranteed so that revenues are available for stormwater and flood management related projects, materials, equipment, facilities, and personnel.

(b)Be organized to request and receive Urban Drainage and Flood Control District, state and federal funds, if available, for projects, facilities and equipment.

(3)Operational Effectiveness

(a)Use annual budget for personnel, equipment, projects, facilities and materials.

(b)Meet standards as exemplified by the Urban Drainage and Flood Control District.

(c)Adopt regulations consistent with the Federal Emergency Management Agency.

(d)The following are standards for stormwater and flood management criteria for new urban development within the Boulder Valley:

(i)Runoff analysis will be based upon proposed land use and will take into consideration all contributing runoff from areas outside the study area.

(ii)Storm runoff will be determined by the Rational Method or the Colorado Urban Hydrograph Procedure.

(iii)All local collection systems will shall be designed to transport the following storm frequency: Single Family Residential - two (2) year storm All other area - five (5) year storm

(iv)The major drainageway system will be designed to transport the 100 year event or a modified standard in an approved plan.

(v)Storm runoff quantity greater than the “historical” amount will not be discharged into irrigation ditches without the approval of the flood regulatory authority or the appropriate irrigation ditch company.

(vi)The type of pipe to be installed will be determined by the flood regulatory authority and will be based upon flows, site conditions and maintenance requirements.

(vii)All new urban development in the Boulder Service Area, which will be annexed, will be required to meet the intent of the adopted city of Boulder flood plain regulations.

(viii)Erosion and sedimentation control will be exercised. (ix)Detention storage requirements will be reviewed by the flood regulatory authority.

(4)Proficiency of Personnel

(a)All flood control maintenance crews will be staffed by personnel trained and capable of operating the equipment necessary to maintain the stormwater and flood management system.

(5)Location and Adequacy of Equipment and Facilities

(a)Provide essential equipment and vehicles for stormwater and flood management maintenance activities.

Urban Fire Protection and Emergency Medical Care

(1)Responsiveness to Public Objectives

(a)Provide fire protection 24 hours per day with full-time, trained personnel maintaining appropriate state and/or national certifications as firefighters, emergency medical technicians, and hazardous materials responders.

(b)Have the ability to respond with a minimum of three firefighters per pumper or ladder truck.

(c)Respond to emergency calls with the first unit dispatched arriving within six minutes 80 percent of the time and all additional units dispatched arriving within 11 minutes 80 percent of the time.

(2)Sufficiency of Financing

(a)Have funds available to provide a consistent level of fire protection.

(b)Be organized to request and receive state and federal funds, when available, for equipment and facilities.

(3)Operational Effectiveness

(a)Use annual budget for personnel, equipment and facilities.

(b)See Public Water 3-d, i & ii.

(c)Adopt, administer and enforce fire prevention and life safety codes.

(d)Inspect building plans to ensure they meet applicable fire prevention and life safety codes.

(e)Inspect commercial and industrial structures approximately once a year.

(f)Upon request, provide a voluntary home inspection program for potential fire hazards.

(g)Maintain an inventory of industrial hazardous material storage.

(h)Review the design of land development in relation to provision of fire protection.

(4)Location and Adequacy of Equipment and Facilities

(a)Locate fire stations so that they are within a six-minute response time.

(b)See Public Water, Section 5 d, 5 e, 5 f.

Urban Police Protection

(1)Responsiveness to Public Objectives

(a)Provide police protection, enforcement and investigative services 24 hours a day.

(b)Provide a comprehensive mix of patrol, investigative, community collaboration, problem solving, and support services to meet community needs for proactive and responsive police services and to maintain effective service levels.

(c)Provide response to the scene of any potentially life-threatening police emergency normally within four and a half minutes from the time the call for assistance is received by the Communications center (however, the range for that average within the established city shall not exceed six minutes).

(2)Sufficiency of Financing

(a)Plan and budget to meet community needs for police services and maintain levels of service.

(b)Request and utilize state and federal funds, when available, to meet special needs or newly emerging concerns.

(3)Operational Effectiveness

(a)Manage expenditures to accomplish budgeted goals and operate within budgetary constraints.

(b)Enforcement of vehicular and pedestrian traffic laws.

(c)Provide routine patrol to residential, business and industrial areas.

(d)Maintain complete and accurate records of crimes, accidents, summonses and arrests to ensure issuance of reliable reports, as required by the appropriate government agency and the Federal Bureau of Investigation.

(4)Location and Adequacy of Equipment and Facilities

(a)Ensure the availability and maintenance of police equipment, particularly that affecting officer safety.

(b)Locate patrol districts based on crime rates and geography/neighborhoods, so that they are within an average four and a half minute emergency response time 24 hours per day.

Multimodal Transportation

(1)Responsiveness to Public Objectives Implement the goals and objectives of the Transportation Master Plan through the following:

(a)Develop a complete and connected street system of local, connector and arterial roads following the Transportation Standards of the city's Design and Construction Standards.

(b)Minimize the traffic impacts of development through the traffic or transportation studies required in the development review process as defined in the Boulder Revised Code.

(c)Develop the complete and connected bicycle, pedestrian and transit systems defined in the city's Transportation Master Plan.

(2)Sufficiency of Financing

(a) Maintain the existing revenue sources that fund transportation activities and actively pursue new sources to support the investment program contained in the city's Transportation Master Plan.

(3)Operational Effectiveness

(a) Maintain and operate the transportation system to maximize the efficiency of all modes of travel and for long term sustainability following the investment priorities of the city's Transportation Master Plan.

(4)Location and Adequacy of Equipment and Facilities

(a) New development and redevelopment projects will dedicate Rights of Way (ROW) and provide transportation facilities as required through the development review process contained in the Boulder Revised Code.

Developed Urban Parks

(1)Responsiveness to Public Objectives

(a)Provide full and part-time personnel for design, construction, maintenance, operations, and programming of parks and recreation facilities and programs.

(b)Have key personnel on call 24 hours per day for special service needs.

(2)Sufficiency of Financing

(a)Pursue adequate funding, including state and federal sources, to ensure the timely implementation of the Parks and Recreation Master Plan.

(b)Use special fees from new residential development to acquire and develop parks to serve these areas.

(c)Prior to implementation of new programs or facility development, ensure adequate operations and maintenance funds are available.

(3)Operational Effectiveness

(a)Manage the annual budget for efficient use of personnel, equipment and facilities.

(b)Provide parks and recreation services by using appropriate equipment and trained personnel on a continuing basis.

(4)Location and Adequacy of Equipment and Facilities

(a)Provide neighborhood parks of a minimum of five acres in size within one-half mile of the population to be served.

(b)Provide community parks of a minimum of 50 acres in size within three and one-half miles of the population to be served.

(c)Provide playground facilities for toddlers, preschoolers and school-age children up through age 12 within one-quarter to one-half mile of residents.

(d)Provide other park and recreation facilities accessible to the public and in quantities sufficient to address public demand. Ensure availability of parks and recreation services to all economic segments of the community.
(e)Schedule existing developed facilities for redevelopment as conditions and use dictate.