

patterns for Ridgeway have already been determined. While the I-25 Corridor and Lone Tree have the highest potential for growth in the project area, this growth has been accounted for with additional highway and transit capacity currently under construction or in the planning stages.

The Highlands Ranch development, located in northern Douglas County bordering C-470 west of Lone Tree, is approximately 80 percent completed, with the remaining residential and retail/office growth projected to occur by 2010. Highlands Ranch is also a planned unit development, with the future development patterns determined. The dispersed land use patterns in this suburban area reflect a low-density mix of residential development, with pockets of commercial and office use at major arterial intersections. Full development is anticipated to occur over the next ten to fifteen years.

The communities north of C-470 and to the west of Santa Fe are generally older and more established and are now undergoing some infill or redevelopment. With the exception of the DTC, Littleton, Centennial, and Greenwood Village are nearing build-out and are now experiencing a turnover in housing stock or retail/commercial uses, typically of slightly higher density.

The Santa Fe Drive corridor north of C-470 in the City of Littleton is part of a specific redevelopment plan to increase mixed-use development and create stronger connections between land uses and the existing Southwest Corridor light rail service.

Other land uses in the area are comprised of public property such as Chatfield State Park, owned by the USACE and operated by Colorado State Parks. The USACE constructed the Chatfield Reservoir to control flooding in the South Platte River basin. The USACE leases the land surrounding the reservoir to Colorado State Parks, which operates the Chatfield State Park Recreation Area. Denver Water uses its own water rights to fill and maintain water volumes

in the reservoir, manage the water supply for municipal needs, and maintain sufficient water levels for recreational purposes. Chatfield State Park also includes camping, a full-service livery, hiking and biking trails, the Chatfield marina, and a hot-air balloon launch area.

### 3.2.5.2 Environmental Consequences No-Action Alternative

The No-Action Alternative would be consistent with both existing and future local land uses within the C-470 project area. Because this alternative would not result in any ROW acquisition or change the access to and from C-470, it would not require a direct change in land use plans, zoning, or land use types within the project area.

Ultimately, changes in land use are guided by zoning of local governments. Local governments should consider the community's transportation and infrastructure needs and the impacts of the land use on the existing transportation infrastructure. The No-Action Alternative could shift projected development and population growth to areas outside of the project area. However, as traffic congestion on C-470 increases, local arterial congestion will also increase. Ease of access to land uses along these local arterials could be indirectly affected by increased congestion and increased travel time. As such, the No-Action Alternative could potentially reduce the viability of land for commercial or new home development and subsequently impact the timing of land development decisions and growth patterns. Indirectly, these factors may result in future modifications to land use or re-zonings by local jurisdictions in accordance with market demand.

### General Purpose Lanes Alternative

The GPL Alternative would not affect changes to existing land use patterns, particularly for land that is already developed. However, it may provide opportunities for development to occur more quickly due decreased congestion. The highway improvements support current local land use objectives for property adjacent to C-470 and are consistent with long-range plans

1 to increase travel capacity and provide access to  
 2 existing development. Because the GPL  
 3 Alternative would occur largely within the  
 4 CDOT ROW, it would not require changes in  
 5 local agency zoning codes or site-specific zoning.  
 6

7 Modifications in land uses adjacent to C-470,  
 8 while not required by the GPL Alternative, are  
 9 within the purview of local land use agencies. As  
 10 discussed in **Section 3.2.4**, the economic benefits  
 11 of decreased travel times associated with the  
 12 GPL Alternative may provide better market  
 13 conditions through improved transportation  
 14 access, and provide opportunity for devel-  
 15 opment to occur more quickly within the project  
 16 area than it would under the No-Action  
 17 Alternative. Local development plans can be  
 18 influenced by better transportation access and  
 19 different market conditions. Minor variations in  
 20 land use development could include higher or  
 21 lower densities or different mix of uses. As such,  
 22 while much of the project area is expected to  
 23 reach build-out over the next 10 to 15 years, the  
 24 GPL Alternative improvements may support  
 25 build-out quicker than the No-Action  
 26 Alternative, possibly as soon as seven to ten  
 27 years from now.  
 28

29 These effects on land use could mean that local  
 30 jurisdictions find opportunities to accommodate  
 31 higher-intensity uses, or increase the density of  
 32 existing uses at certain high-demand locations.  
 33 For example, Douglas County or the City of  
 34 Littleton's development plans at Santa Fe Drive  
 35 and C-470 could reflect higher density uses not  
 36 only at this site but also further north and south  
 37 along Santa Fe Drive, once increased capacity  
 38 and accessibility to C-470 are realized at this  
 39 interchange. While transportation improvements  
 40 at the Santa Fe Drive interchange may effect  
 41 development decisions to promote higher  
 42 density development along the Santa Fe  
 43 Corridor, this redevelopment is already  
 44 happening in response to the success of the  
 45 existing Southwest LRT Corridor. Future  
 46 expansion of this LRT line into Douglas County,  
 47 with a potential station near C-470 and Lucent  
 48 Boulevard, as proposed in RTD's FasTracks Plan  
 49  
 50

would provide an intermodal link between  
 Douglas County and northern portions of the  
 Santa Fe Corridor. Land use density, intensity or  
 pace of development could also occur along the  
 I-25 Corridor, Lone Tree, and Highlands Ranch.  
 51  
 52  
 53  
 54  
 55  
 56

The GPL Alternative improvements would not  
 require the conversion of land use types or the  
 displacement of existing land uses or structures  
 along C-470. All partial ROW acquisitions are  
 unimproved portions of already developed  
 land. However, the properties are zoned for  
 particular uses. While the partial acquisitions  
 would not result in an actual change in existing  
 use, it would result in a direct effect on the  
 existing zoned use of the parcel and its  
 allowable future use.  
 57  
 58  
 59  
 60  
 61  
 62  
 63  
 64  
 65  
 66  
 67  
 68

Temporary construction effects to land use may  
 include changes in access and route alignments  
 for recreational facilities. In addition,  
 construction effects may include temporary  
 adverse noise effects. Access to the Chatfield  
 State Park Recreational Area would be  
 maintained.  
 69  
 70  
 71  
 72  
 73  
 74  
 75  
 76

### Express Lanes Alternative (Preferred Alternative)

 77  
 78

The EL Alternative would not affect changes to  
 existing land use patterns, particularly for land  
 that is already developed. This alternative  
 supports current local agency land use objec-  
 tives for property adjacent to C-470 and is  
 consistent with local agency interests and long-  
 range plans to increase travel capacity and  
 access to local land use. As with the GPL  
 Alternative, the EL Alternative would occur  
 largely within CDOT ROW and would require  
 no changes in local agency zoning codes.  
 79  
 80  
 81  
 82  
 83  
 84  
 85  
 86  
 87  
 88  
 89  
 90

Modifications in land uses adjacent to C-470,  
 while not required by the EL Alternative, are  
 within the purview of the local land use  
 agencies. Local development plans can change  
 and be influenced by better transportation  
 access and different market conditions. While  
 some areas can expect minor variations that  
 could include higher or lower densities or a  
 91  
 92  
 93  
 94  
 95  
 96  
 97  
 98  
 99  
 100

1 slightly different mix of uses, the overall land  
 2 use patterns are not expected to change from the  
 3 existing, planned uses. As with the GPL  
 4 Alternative, the EL Alternative improvements  
 5 may provide better market conditions through  
 6 improved transportation access, and provide  
 7 opportunity for development to occur more  
 8 quickly within the project area than it would  
 9 under the No-Action Alternative. The EL  
 10 Alternative improvements may support devel-  
 11 opment completion in as few as seven to 10  
 12 years.

13  
 14 The effects of the EL Alternative on land use are  
 15 similar to those for the GPL Alternative for all  
 16 four of the areas containing undeveloped land  
 17 within the project area, including the I-25  
 18 Corridor, Lone Tree, Highlands Ranch, and the  
 19 Santa Fe Drive Corridor. However, implemen-  
 20 tation of the EL Alternative would result in  
 21 redirecting traffic to locations where express lane  
 22 access to C-470 is provided, specifically at  
 23 Kipling Parkway, Wadsworth Boulevard, Lucent  
 24 Boulevard, and Colorado Boulevard. This could  
 25 mean that local jurisdictions would find oppor-  
 26 tunities to modify zoning, accommodate higher  
 27 intensity uses, or increase the density of existing  
 28 uses at these locations.

29  
 30 The EL Alternative improvements would neither  
 31 require the conversion of land use types nor the  
 32 displacement of general land uses. All partial  
 33 ROW acquisitions are currently vacant and  
 34 contain no structures or active uses. However,  
 35 the properties are zoned for particular uses -  
 36 commercial, residential, or other. While the  
 37 taking of a portion of the parcel would not result  
 38 in an actual change in use, it would result in a  
 39 direct effect on the existing zoned use of the  
 40 parcel and its allowable future use.

41  
 42 Temporary construction effects to land use  
 43 would be the same as for the GPL Alternative.

### 44 3.2.5.3 Mitigation

45 No mitigation measures are anticipated for  
 46 permanent effects. Temporary construction  
 47 effects to land use would be mitigated with the  
 48

49 use of alternative and temporary access to  
 50 existing development and the use of clear detour  
 51 signing for trails. Other construction mitigation  
 52 measures are described in **Section 3.3.17.3**.  
 53  
 54

55  
 56 Since local governments are responsible for  
 57 approving changes to local zoning, it is imper-  
 58 ative that land use and rezoning decisions made  
 59 at the local level take into consideration the effect  
 60 to the adjacent transportation system.  
 61

## 62 3.2.6 Parks & Recreation

63 The C-470 Corridor provides access to many  
 64 popular parks and recreation areas within and  
 65 beyond the project area. These include several  
 66 neighborhood parks, Chatfield State Park, South  
 67 Platte Park, Bear Creek Lake Park in Lakewood,  
 68 and other recreation opportunities in the  
 69 foothills to the west of the project area.  
 70

### 71 3.2.6.1 Affected Environment

72 Outdoor recreation is a popular activity in the  
 73 Denver area. As a result, numerous recreation  
 74 areas exist along the C-470 Corridor within the  
 75 project area to support the growing population  
 76 base. Governmental agencies, private citizens,  
 77 and local organizations have made concerted  
 78 efforts to preserve and improve existing recre-  
 79 ational opportunities and plan for future oppor-  
 80 tunities. Existing parks and recreation facilities  
 81 include state and local parks, trails, community  
 82 swimming pools, and golf courses. There are  
 83 also open space properties that exist within the  
 84 project area, but are not open to public recre-  
 85 ation. For the purposes of this analysis of parks  
 86 and recreation areas, only those areas within and  
 87 adjacent to the project area have been reviewed.  
 88 These are listed in **Table 3-9** and shown in  
 89 **Figure 3-6**.  
 90

### 91 3.2.6.2 Environmental Consequences

92 Minor effects to parks and recreational resources  
 93 are anticipated as a result of the action alterna-  
 94 tives under consideration. These effects include  
 95 higher noise levels, changes to vehicle access,  
 96 and changes to view sheds from recreation areas.  
 97 In addition to the effects discussion in this  
 98 section, noise and visual effects are also  
 99

discussed in **Sections 3.3.3** and **3.3.14**, respectively. The likelihood of adverse effects is evaluated based on the proximity of the roadway to the parks and recreational resources.

Correspondence and other documentation related to parks and recreational effects are included in **Appendix B**.

### No-Action Alternative

The No-Action Alternative would have no direct effects to recreational areas within the project area. With increased traffic and congestion on C-470, recreation areas within and adjacent to the project area would be indirectly affected by increased noise levels. Access to and from these parks and recreation areas would also become

more difficult as a result of increased delay from congested conditions on C-470 and the surrounding arterial street network.

### General Purpose Lanes Alternative

Due to the highway's close proximity to some of the parks and recreational resources in the project area, additional direct and indirect effects from the GPL Alternative are likely, as described in the following sections.

**CHATFIELD STATE PARK.** Noise levels at the northern perimeter of Chatfield State Park would increase as a result of the GPL Alternative. Five active use locations in the park were evaluated. Noise modeling

**Table 3-9  
Recreation Resources Within or Adjacent to the Project Area**

Resource Name	Recreation Use
Meadows Golf Course	Private golf course
Deer Creek Park & Pool	Public pool
Wingate South Park	Public park
Centennial Reservoir*	Drinking water source and recreation area
Chatfield State Park	State park and recreation area
South Platte Park	Public park and natural area
Mission Viejo Buffer/High Line Canal Trailhead	Open space/trailhead
High Line Canal Trail	Recreational trail
Links Golf Course	Private golf course
David A. Lorenz Regional Park	Public park

\* This is the current site of the Kiewit gravel pits. Future use as a water supply reservoir and passive recreation is planned by Centennial Water and South Suburban Parks and Recreation District

**Table 3-10  
Noise Level Evaluation at Chatfield State Park**

Location	Impact Threshold (dBA)	Existing/No-Action Noise Level (dBA)	GPL Alternative Noise Level (dBA)	EL Alternative Noise Level (dBA)
USACE offices east of Wadsworth	71	70/71	73*	74*
Picnic area at dam	66	58/59	61	62
C-470 trail at closest location to highway	66	70/71	74*	74*
Interpretive off-leash area	66	59/60	62	62
Park permit office	71	64/65	68	68

\* These locations exceed CDOT's noise abatement criteria

**Figure 3-6  
Parks and Recreation Resources**



1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50

51  
52  
53  
54  
55  
56  
57  
58  
59  
60  
61  
62  
63  
64  
65  
66  
67  
68  
69  
70  
71  
72  
73  
74  
75  
76  
77  
78  
79  
80  
81  
82  
83  
84  
85  
86  
87  
88  
89  
90  
91  
92  
93  
94  
95  
96  
97  
98  
99  
100