Application

**Lone Tree Corridor Specific Plan**

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City of Flagstaff
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GENERAL INTRODUCTION

In 2001, the City of Flagstaff adopted its comprehensive plan entitled Flagstaff Area Regional Land Use and Transportation Plan (herein referred to as the Regional Plan). The Regional Plan identified the Lone Tree Road corridor as a primary north-south connection. The Flagstaff Mobility Study (herein referred to as Mobility Study) identified a need to alleviate congestion along Milton Road, the primary north-south corridor. With the intent of the Regional Plan and the Mobility Study in mind, the commissioned Lone Tree Corridor Study explored ways to provide the circulation system a north-south solution to the motor vehicle congestion.

**Figure 1. Regional Plan, Map 8**

The Lone Tree Road Corridor Study explored road alignments and improvements to determine a detailed and preferred road concept. While there were a number of options explored, the study produced a preferred alignment with two options. Both options are very similar but differ in the vicinity of Kinsey Elementary School. Option A passes to the east of Kinsey along the current Lone Tree Road alignment, Option B passes to the west. The preferred alternative, with options A and B, though not adopted, has been seen as a guide for development to date.

The Juniper Point Specific Plan, adopted by City Council through Resolution Number 2006-08 established the Lone Tree alignment through the proposed Juniper Point Traditional Neighborhood Development. That same resolution acknowledged the Juniper Point Specific Plan may be amended to address and/or complete the following items prior to the adoption of any rezoning “in particular, those items include the following: Section 3.c Street section changes (if any) for emergency, service and transit vehicle access; and Section 3.d, Final right-of-way width and road sections for arterial roads”.

The Juniper Point Specific Plan implements the southern portion of Option A providing connections to J.W.Powell Blvd, Coconino Community College, and to I-40. This document, the Lone Tree Corridor Specific Plan will implement the northern portion, the remainder, of Option A. However, if the Juniper Point Specific Plan is not utilized for
any reason, *Lone Tree Corridor Specific Plan* should be amended to complete Option A in its entirety.

The intent of the Lone Tree Corridor Study was to advance the vision of the Regional Plan. In other words, by directing growth, making efficient use of land, and delivering public facilities and services, the Lone Tree Corridor Study enhances and affirms the Regional Plan. By further evaluating this specific plan according to the Regional Plan, the Lone Tree Corridor Specific Plan is shown to provide greater detail to, and thereby reinforce, the Regional Plan.

Procedurally, with the intent of implementing the northern portion of Option A, an application for a specific plan is hereby submitted. The application must review the plan according to a series of subjects articulated in the Arizona Revised Statutes and repeated in the City of Flagstaff Land Development Code.

The purpose of this document is to submit the Lone Tree Corridor Specific Plan for adoption by the City Council of the City of Flagstaff. This document addresses the topics required by the Land Development Code for a Specific Plan as well as the goals and policies of the Flagstaff Area Regional Land Use and Transportation Plan. A concluding portion of this document will present opportunities still available for exploration.
The Lone Tree Corridor Specific Plan describes the intended ultimate improvements to the Lone Tree Road minor arterial. The limits of the Lone Tree Corridor Specific Plan extend from the southern reaches of the proposed ADOT right-of-way south of I-40 north to E. Route 66. Per the Regional Plan it includes an interchange with I-40 and a railroad overpass connection between Butler Avenue and E. Route 66. The interchange is located approximately ½ mile east of the existing Lone Tree Road I-40 underpass, requiring a realignment of Lone Tree Road to the east.

The Lone Tree Corridor Specific Plan recommends a four lane, median divided, arterial roadway with signals or other types of improvements at the following locations:

- J.W.Powell Blvd
- Existing and new Lone tree Road
- Pine Knoll Road
- Woodland Drive
- Franklin Drive
- Butler Avenue
- E. Route 66

**Figure 2. Lone Tree Corridor Specific Plan Area**
OPTIONS EXPLORED

The Lone Tree Road Corridor Study split the road into north and south sections then developed thirteen and eight options respectively. From that group of north and south alternatives, four alternatives were derived. Full descriptions of the alternatives may be found in Section 8 of the Lone Tree Corridor Study.

The preferred alternative of the Lone Tree Corridor Study is comprised of options A and B. Both options follow the existing alignment of Lone Tree Road from just south of Butler Avenue to Woodland Drive. Approaching Butler Avenue from the south, both options A and B curve to the east to align with Colorado Street, which tracking north-easterly, connects with Lumber Street, then to Route 66. Traveling south along Lone Tree Road from Woodland Drive, option B curves west of Kinsey Elementary to San Francisco Street while option A stays east of Kinsey. Both options curve back east and parallels the south side of the Rocky Mountain Research Center.

Figure 3. NAU Skydome Village

The issues that advantage one option over the other deal with Northern Arizona University, the Flagstaff Unified School District and the improved road. Option A would infringe on the operations of Kinsey Elementary School so much that the campus would need to be redesigned which would likely include major expense to the building if not total reconstruction. The building of schools is a topic that is addressed by the school facilities board on a state level and determined by enrollment. In this case, a new school would have to be funded by resources other than the state.

The recently developed NAU Athletics Master Plan, prepared by Ayers Saint Gross, identifies a number of improvements to the south campus adjacent to the Kinsey Elementary School. Improvements in the area include a new basketball arena, new field for women’s softball, a new football stadium, and improvements to the Skydome; collectively, those improvements comprise the Skydome Village. The location of the Skydome Village in its current configuration is far more supported by Option A than Option B.

The city is interested in improving Lone Tree Road. NAU is interested in improving the campus. FUSD is interested in improving Kinsey Elementary School. Prior to implementing the improvements to Lone Tree Road, the City of Flagstaff, Northern Arizona University, and Flagstaff Unified School District will need to strike an agreeable balance of interests. Fortunately, the three entities have been communicating throughout the development of the Lone Tree Corridor Study and this Specific Plan which will promote success with the overall project.
BUSINESS, INDUSTRY, and EMPLOYMENT

Implementation of the Lone Tree Corridor Specific Plan is integral to the success of the community south of Route 66 and east of Northern Arizona University. Northern Arizona University, Coconino Community College, the Law Enforcement Agency Facility, Rocky Mountain Research Center, the soon to be developed Sawmill project, and other businesses employ great numbers of people from around the community. The implemented specific plan facilitates efficient and safe transport to and from employment and residences from existing and growing areas within the community.

Connecting Route 66 and I-40, the improved Lone Tree Corridor may foster development interest along the corridor. Safety and efficiency on the minor arterial will not only attract new development but will improve accessibility and viability of existing businesses and neighborhoods.

An enhanced roadway connecting the downtown and the community at large will greatly assist all operations in the downtown area. The connection from points south over the railroad would immediately ease the load that exists on Milton Road and on the pair of one-way, at grade crossings. Accessibility, being a great determining factor of success for businesses, also allows commercial ventures a more convenient and safe route for distribution and consumption. The residential neighborhoods along the roadway benefit greatly as household trips to employment and to services may be completed on a modern, safe, and aesthetically pleasing roadway. The proximity to educational opportunities and to employment centers may facilitate greater workforce development opportunities as well.

Along the Lone Tree Corridor are two areas that could accommodate commercial development according to the Regional Plan. The first area is the Sawmill Project which is a mixed use development that is currently under construction. The forty (40) acre project is developing approximately twenty eight (28) acres of residential and twelve (12) acres of commercial/retail. The commercial section of the development is zoned Urban Commercial. The second such area, located at the intersection of Pine Knoll Drive and Lone Tree Road, is approximately one and one quarter acres and is zoned Suburban Commercial. In both instances, the land use and the zoning are consistent. Additionally, both areas are either developed or under construction according to their zoning.

Any changes in zoning along the corridor would be addressed through standard and lawful processes. The Planning and Zoning Commission and the City Council are the deciding voices on any land use or zoning change within the City of Flagstaff jurisdiction and would therefore be the determining factor regarding any change that could produce more commercial development along the corridor.

Currently many parcels to the south and east of the Lone Tree Corridor are Planning Reserve Area lands. As such, land planning will need to be addressed at a regional level once the lands become the focus of development efforts. In addition, parts of the Juniper Point project and the impending development in Section 26 to the east of Juniper Point, which are both south and east of this project, may provide, in some areas, commercial opportunities that do not exist at present. By adopting and implementing the Lone Tree
Corridor Specific Plan, the City of Flagstaff could see an increased interest in commercial and residential development.

**CIRCULATION**

The maps displayed are from the Regional Plan. Both display the anticipated changes to Lone Tree Road including the connections to Route 66, to I-40, and to J.W.Powell Blvd. The Juniper Point Specific Plan on the next page displays the southern section of Lone Tree Road from I-40 to J.W.Powell Blvd.

*Figure 4: Regional Plan Map: 10*

The implementation of the Lone Tree Corridor Specific Plan transforms the existing roadway network. For example, the addition of a traffic interchange on I-40 and a grade separated crossing of the BNSF railroad dramatically improve accessibility and performance of the entire roadway network in the City of Flagstaff.

*Figure 5: Detail of Lone Tree Corridor, north section*
The existing roadway network has some challenges. The BNSF railway which bisects the City adjacent to Route 66 through the middle of town, with a limited number of crossings, creates increased travel times, congestion and delay. Milton Road, Beaver Street, and San Francisco Street carry much of the north-south traffic from Northern Arizona University area to the downtown central business district. Improvements to the Lone Tree Corridor would:

- Contribute to the roadway capacity needed for existing and future conditions
- Facilitate the implementation of the Southside 2005 Plan.
- Establish an interchange at I-40
- Establish a grade separated crossing of the BNSF
- Provide greater viability to existing and future businesses
- Link to J.W.Powell

Figure 6: Juniper Point Specific Plan
Traffic Volumes and Level Of Service

The traffic volumes generally increase from south to north as traffic is collected from southern residential areas and delivered to central employment areas. Significant traffic is collected from the east along Butler Avenue and the northeast from E. Route 66. Table 1 identifies traffic volumes from the latest Flagstaff Metropolitan Planning Organization Build Out Model. It reflects the impacts of development from the planning reserve areas south of I-40.

Table 1. Existing and Project Traffic Volumes on the Lone Tree Corridor

<table>
<thead>
<tr>
<th>1st Cross Street</th>
<th>2nd Cross Street</th>
<th>Existing Volume</th>
<th>Volume at Build Out</th>
</tr>
</thead>
<tbody>
<tr>
<td>I-40</td>
<td>Existing Lone Tree</td>
<td>0</td>
<td>25,000 to 23,000</td>
</tr>
<tr>
<td>Existing Lone Tree</td>
<td>Pine Knoll</td>
<td>7,600</td>
<td>23,000 to 35,000</td>
</tr>
<tr>
<td>Pine Knoll</td>
<td>O’Leary</td>
<td>9,100</td>
<td>35,000 to 36,000</td>
</tr>
<tr>
<td>O’Leary</td>
<td>Butler</td>
<td>11,000</td>
<td>27,000 to 30,000</td>
</tr>
<tr>
<td>Butler</td>
<td>E. Route 66</td>
<td>0</td>
<td>40,000</td>
</tr>
</tbody>
</table>

The following table is a glance at Level of Service (LOS) in a no-build scenario of Lone Tree Road. As indicated with a LOS of C to F, the no-build level of service indicates that the existing two lane Lone Tree Road will not be sufficient for projected future demand.

Table 2. Level of Service with No-Build Plan

<table>
<thead>
<tr>
<th>Control</th>
<th>Location</th>
<th>2020 AM Peak Hour</th>
<th>2020 PM Peak Hour</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Direction</td>
<td>LOS</td>
</tr>
<tr>
<td>Signal</td>
<td>Butler Avenue/ Lone Tree Road</td>
<td>E</td>
<td>F</td>
</tr>
<tr>
<td>2-way</td>
<td>Franklin Avenue/Lone Tree Road</td>
<td>EB</td>
<td>F</td>
</tr>
<tr>
<td>stop</td>
<td></td>
<td>2-way</td>
<td></td>
</tr>
<tr>
<td>stop</td>
<td>Sawmill Road/Lone Tree Road</td>
<td>WB</td>
<td>D</td>
</tr>
<tr>
<td></td>
<td>Brannen Circle/Lone Tree Road</td>
<td>WB</td>
<td>F</td>
</tr>
<tr>
<td></td>
<td>Paseo del Flag/Lone Tree Road</td>
<td>WB</td>
<td>D</td>
</tr>
<tr>
<td></td>
<td>Pine Knoll Drive/Lone Tree Road</td>
<td>EB</td>
<td>F</td>
</tr>
<tr>
<td></td>
<td></td>
<td>WB</td>
<td>F</td>
</tr>
<tr>
<td></td>
<td>Zuni Drive/Lone Tree Road</td>
<td>EB</td>
<td>F</td>
</tr>
<tr>
<td></td>
<td></td>
<td>WB</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td>J.W.Powell Blvd/Lone Tree Road</td>
<td>SB</td>
<td>B</td>
</tr>
</tbody>
</table>

10
Safety

At present Lone Tree Road experiences grades up to 7% which adversely affects sight distances especially in front of Kinsey Elementary south of Woodland Road., where many students either cross the road as pedestrians or they are dropped off by parents. In each case, there is a dangerous combination of poor visibility of pedestrians and vehicles. This particular area represents the greatest deficiency on the roadway concerning safety and overall performance. To leave the road in the current state is to accept poor visibility in a high pedestrian volume and high vehicular volume area knowing that, due to growth there will be more vehicles and more pedestrians in the future.

COMMUNITY FACILITIES, SERVICES, AND COSTS

As a minor arterial roadway, the implemented Lone Tree Corridor Specific Plan will serve as the conduit of infrastructure and public services for existing and future development. Cost estimates for the roadway which extends beyond the scope of this specific plan were provided in the Lone Tree Corridor Study. Total construction costs based on 2005 costs are approximately $70.5 million (Lone Tree Corridor Study Appendix D-2).

The Lone Tree Corridor Specific Plan connects ADOT roads, traverses Northern Arizona University lands, and abuts Flagstaff Unified School District lands and the Coconino Community College. Based on the variety of adjacent ownership and the overall benefit to the community, the development of a fair and balanced funding structure is imperative for success.

Regarding police and fire services, the Lone Tree Corridor Specific Plan improves the vertical and horizontal alignment as well as carrying capacity thereby affecting emergency services positively. Fire, police, and other emergency services will be able to service a greater area with increased performance as a result of the improvements to Lone Tree Road.

As per City Standards, the road will be maintained by Public Works Streets Division.

ENVIRONMENTAL PROTECTION

The Lone Tree Corridor Study reports that the City of Flagstaff Environmental Services Division does not anticipate encountering any significant cultural sites in the study area. Logging railroad beds are seen as a cultural resource and may be present in the area. Regarding hazardous materials, the high density commercial development of the area north of Butler Avenue is of concern regarding contamination. The potential for soil contamination is high at that location.

Sections of Lone Tree Road south of Butler Avenue cross rolling and mountainous terrain and travel through a floodplain along Sinclair Wash and through the existing and re-aligned Rio de Flag channels. As the roadway is improved through the wash and the
floodplain, Lone Tree Road will need to be built to manage storm water and related runoff through the City.

Prior to construction, it is imperative that the area be surveyed for environmental and cultural resource impacts.

**HOUSING**

The Lone Tree Corridor Specific Plan has the opportunity to significantly affect housing in Flagstaff. Housing, in the form of rent of mortgage payments, is the highest household cost and runs a close second to transportation costs. As such, affordable housing and transportation need to be viewed together.

The City of Flagstaff Housing Section works with all city resources to ensure adequate supply of affordable housing and an adequate variety of housing stock and opportunities. As such, the Housing Section engages private development that comes on-line to provide a mix of unit types and a mix of price points that are integrated into the development. Approximately four hundred housing units of varied affordability programs lie within or adjacent to the Lone Tree Corridor. Some of those units are existing, the rest are proposed or planned; Aspen Place, Brannen Homes, Rio Homes, Clear Creek Villages North and South, Juniper Point, John Wesley Powell, and Pinnacle Pines. The affordable units all lie within larger residential or mixed use developments.

Current national trends indicate a growing desire for housing near transit which is precisely the scenario on the Lone Tree Corridor. The U.S Department of Housing and Urban Development Office of Policy Research and Development (HUD) and the U.S. Federal Department of Transportation Federal Transit Administration (FTA) joint sponsored a report on the inter-connections between housing and transportation. The report suggests that the majority of potential homebuyers want to live in neighborhoods that are walkable, and adjacent to transit. Whereas the developments along the Lone Tree Corridor will have various levels of walkability, they will have immediate access to a variety of transit opportunities. Implementation of the Lone Tree Corridor Specific Plan will substantially increase the success of adjacent housing, both market and affordable housing, by providing proper access and infrastructure, and by providing various types of transportation opportunities. Noteworthy, the busiest public transportation route with the highest ridership runs along Lone Tree. As populations and intensity of uses increase, public transportation will likely respond with greater frequency and possibly more buses.
**LAND USE**

Whereas the Lone Tree Corridor Study does not propose changes to land uses along the corridor, land uses are certainly affected positively and in a manner consistent with the guiding planning documents for the City of Flagstaff. The Regional Plan and the Land Development Code work together to direct development and land uses into meaningful, consistent, and compact additions to the infrastructure, services, and other public systems. As a support to Milton Road and north/south travel through the City, the Lone Tree Corridor connects residential uses from the south on J.W. Powell Blvd to commercial, industrial, and institutional uses to the north. An arterial, Lone Tree aims to be a highly efficient transportation corridor among those uses. By connecting J.W. Powell to Route 66, the transportation system is complemented with another connection across the railroad tracks while directing development towards the existing activity center thus facilitating compact development patterns.

*Figure 7. Regional Plan Map 4*
Table 3 displays existing land uses between street intersections along Lone Tree Road and land uses as planned in the Regional Plan. The Planning and Zoning Commission and the City Council are the deciding voices on any land use change within their jurisdiction and would therefore be the determining factor regarding any district change request along the corridor.

**NEIGHBORHOOD, COMMUNITY CHARACTER and DESIGN**

The Lone Tree Corridor Specific Plan typical section is a four-lane, median-divided arterial with bike lanes, parkways and sidewalks. As a minor arterial, on-street parking is prohibited. Transit service will be accommodated within the corridor. As a corridor, Lone Tree serves neighborhoods and the various scales of community characters that the road transects.
The Lone Tree Corridor proceeds through residential neighborhoods, educational facilities, research facilities, commercial and business facilities, and retail opportunities. Each group of uses has a distinct character that has developed over time and will presumably continue to evolve. The commercial areas at the intersections of Butler and Lone Tree and at Pine Knoll and Lone Tree will continue to exist as urban and suburban commercial areas respectively. The commercial areas may continue to increase in intensity of use as they mature and as the surroundings mature as well. The residential areas will continue to grow according to the direction of the community leaders as they interpret the guiding documents for the city. The growth and increase in intensity of uses may occur regardless of the improvements to the road; perhaps growth would take longer without the improvements but it appears the growth may occur regardless. Concerns therefore about any change in community character because of improvements to a road are unfounded; growth is inevitable; growth has been directed to the south and east in the City of Flagstaff’s guiding documents. Providing a safe route with multi-modal opportunities responds to the desires of the community in the immediate area and beyond.

Neighborhoods that currently view Lone Tree as a boundary or edge to their neighborhoods on one side may find that they are more centrally located as development occurs around them. Based on the configuration of the city limits and the opportunities for growth left in the city, the change for some neighborhoods from edge to center is inevitable. As the area continues to change, it is important to keep the transect in mind; the organic flow of land uses and intensity of uses along the corridor. Change is inevitable and that growth can occur in a way that respects existing neighborhood character and allows that character to change and grow too.

Can an increase in the size of a road and volumes the road can carry efficiently strengthen the neighborhoods and the distinct characters therein? The answer is yes. As community leadership encourages the development of neighborhoods and appropriate scales of development, distinct nodes and character districts connected by efficient roadway systems will strengthen the community character.

Will the improvements to Lone Tree challenge the existing neighborhoods, districts, and characters? Of course, yet nothing of value needs to shy away from the challenge of change. With the introduction of traditional neighborhood development into the land use and form based code into the zoning, the city is in a great position to improve facilities and respect the unique qualities that comprise our districts that are collectively Flagstaff.

**OPEN SPACE, PARKS, RECREATION, and TRAILS**

While the corridor does not create parks or open space, the Lone Tree Corridor does connect people to open space, parks, recreational opportunities and trails in an efficient and aesthetic manner. A raised and landscaped median per the recently adopted Landscape Standards essentially greens the entire corridor maintaining the highly desirable forested experience within the city limits. Bike lanes on the road facilitate connections to trails from Route 66, the Rio de Flag at Sawmill Park, all the way to J.W. Powell and its FUTS connection at Pine Canyon and to Lake Mary Road and points west, south, and east. From a grade separated crossing over the BNSF to an interchange at I-40 and all points in between, the implemented Lone Tree Corridor Specific Plan is an amenity for the community at large connecting the urban to the outdoors.
There is a loss of open space as a result of improvements to Lone Tree through the specific plan. Lone Tree Road currently crosses Sinclair Wash between Sawmill and Pine Knoll. Improvements to Lone Tree Road, facilitated by widening the road, will affect the open space through which the road already crosses. Fortunately, such improvements will be engineered to allow the wash to move water as it does currently. The existing FUTS trail will remain on both sides of Lone Tree through Sinclair Wash.

Figure 8. Regional Plan Map 5

STATUS/OPPORTUNITIES

Two concerns regarding the alignment of the Lone Tree Corridor Specific Plan are Kinsey Elementary School and the Rocky Mountain Research Center. At present, the Flagstaff Unified School District and the Arizona Board of Regents continue to discuss various possibilities. Those discussions lean in the direction of the school being moved. The Rocky Mountain Research Center has not been engaged in conversation beyond the writing of this plan. However, the USFS owns and operates the Rocky Mountain Research Center and has not yet completed a master planning effort. The desire is the adoption of the Lone Tree Corridor Specific Plan. With continued good relations and lines of communication between the City and USFS, the corridor may be preserved and any adjustments to property may be made at the time of the master planning efforts for the USFS.

As the improvements to Lone Tree Road are implemented, the adjacent land uses may need to be revisited, not just as a result of the improvements but also based on the changing market. Property owners desiring to develop their property must conform to those uses articulated in the Regional Plan, as approved or as amended, or seek change through the processes defined in the City of Flagstaff Land Development Code.
**SUMMARY**

The Lone Tree Corridor Specific Plan is the future street alignment plan for the Lone Tree Corridor from I-40 north to Route 66. Based on the evaluations of the options provided in the Lone Tree Corridor Study, this plan recommends the adoption of “Option A” as the specific alignment for this portion of the Lone Tree Corridor. This Specific Plan will direct all street improvements and potential development in this area for the future.