

---

## CITY COUNCIL REPORT

DATE: February 12, 2015  
TO: Mayor, Vice-Mayor and Council Members  
FROM: Mark Landsiedel, Community Development Director  
CC: Josh Copley, Barbara Goodrich, Jerene Watson & Leadership Team  
SUBJECT: Route Transfer Discussions with Arizona Department of Transportation

---

This report is an update on Route Transfer discussions with Arizona Department of Transportation.

**BACKGROUND:** During recent Council discussions with staff on the Marriott Project and the associated purchase of right-of-way along Humphreys Street, there was a follow-up Council request for staff to disclose any conversations or documentation with ADOT staff regarding potential Route Transfers.

When ADOT completed the East Flagstaff Interchange project, there was an intergovernmental agreement adopted which required the City accept a route transfer of several, adjacent roadways. These roadways consisted of B40, Country Club, and US 89 from Fanning to the City Limits. In addition, ADOT and the City agreed to perform a Route Transfer Study which was completed, with the assistance of the FMPO and Coconino County, in January 2008 and amended in September 2010. This voluminous document was recently emailed to the City Council.

**DISCUSSION:** City staff and ADOT staff have occasional dialogue regarding route transfers when discussing funding issues and associated Capital Improvement Program preparation. Much of our historic correspondence is simple clarifying the terms of the existing route transfer and restrictions on excess right-of-way usage/disposal.

Our last major discussions with ADOT on suggestions of a route transfer happened in 2009 in an effort to program the Lone Tree Traffic Interchange into ADOT's 5-year CIP. I've attached a letter, with supporting documentation, from former City Manager Burke to former District Engineer Harper. Unfortunately, this effort failed as the cost of the Lone Tree T.I. escalated to over \$80M due to further study by ADOT.

All recent conversations have simply been about possible scenarios surrounding Milton Road jurisdiction and future improvements as was discussed with Council as part of the recent Specific Plan prioritization.

**RECOMMENDATION/CONCLUSION:** This report is for information only.

November 4, 2009

Mr. John Harper, Flagstaff District Engineer  
Arizona Department of Transportation  
1801 South Milton Road  
Flagstaff, AZ 86001

Re: ADOT 5-Year Construction Program Request

Dear John,

Thank you for your continued support and consideration of the Lone Tree Traffic Interchange as a district candidate project for the 5-Year Construction Program. Our corridor study estimates construction costs at \$20,000,000 and we estimate the required right-of-way at \$5,000,000. We look forward to discussing how the City can contribute to this project and make it feasible for ADOT to deliver. The attached paper identifies considerations worth approximately \$29,000,000 that we believe are worthy of discussion.

Central to these considerations are the transfer of two segments of state highway to city jurisdiction. The *ADOT/City of Flagstaff Route Transfer Study* from January 2008 is a solid framework upon which to build. A key term in the discussions – addressed only as capital replacement costs in the study - will be when and how the City adds necessary capital equipment to it's fleet, as we are at capacity now. Many events, including a potential new city public works yard and road projects affecting ADOT offices, present prospective and creative solutions to increase our mutual benefit.

The interchange is integral to Flagstaff's future. It decreases delay, shortens travel time and distances, and creates access to major regional destinations and future development including Northern Arizona University and the Flagstaff Pulliam Airport. The City's position and the project with its benefits are more fully explained in the attached white paper.

I hope that the strength of our partnership with ADOT and the value of our position succeed in moving this project forward.

Please let us know if we can help to educate decision-makers throughout this process and don't hesitate to call me at 779-7685, x7604, if you have any questions.

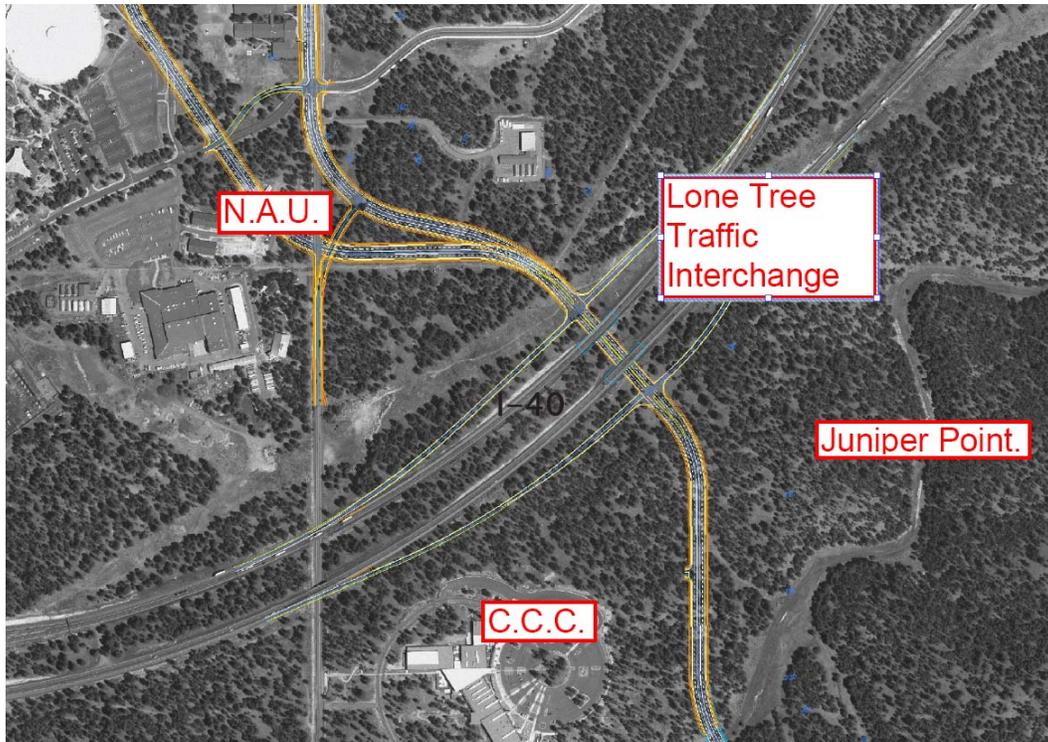
Sincerely,

Kevin Burke, City Manager

Cc Mayor and Council  
Mark Landsiedel  
Ben Fisk

Att. *Lone Tree Traffic Interchange Justification*

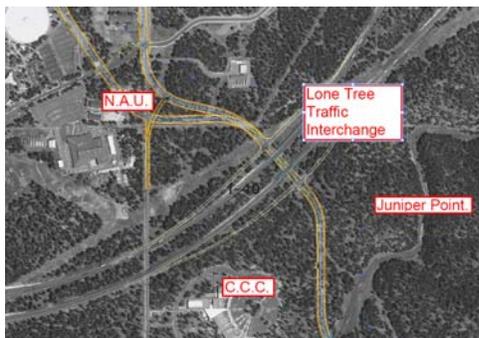
**Lone Tree Traffic Interchange  
Justification for the Arizona Department of Transportation  
2015 Program Year**



**Prepared by the Flagstaff Metropolitan Planning Organization  
for the City of Flagstaff  
October 20, 2009**

**Executive Summary**

The City of Flagstaff, together with its regional partners - Northern Arizona University, Coconino Community College and the Flagstaff Metropolitan Planning Organization - requests that the Arizona State Transportation Board place the Lone Tree Traffic Interchange into the Arizona Department of Transportation 5-Year Construction program in year 2015.



The City will consider negotiation of a joint powers agreement (JPA) with ADOT to provide cash and other considerations the City estimates at \$29,000,000 in value. Estimated construction and right-of-way costs are \$25,000,000. The City will consult with ADOT about creating a value for value trade within the items identified in the \$29,000,000.

The Lone Tree Traffic Interchange is integral to Flagstaff’s future. This facility on I-40 decreases delay, shortens travel time and distances, and creates access to major regional destinations and future development including Northern Arizona University and the Flagstaff Pulliam Airport.

The estimated \$20,000,000 cost in construction will yield a first year benefit of \$112,000,000 followed by \$92,000,000 per year, thereafter. These benefits are realized in time and gas savings and the benefits of construction jobs and development. The project will also forge stronger partnerships between major stakeholders in the region.

The region is hopeful that the Board will recognize the value of the contributions made by the City and its partners and direct the Arizona Department of Transportation to take the lead on the Lone Tree Traffic Interchange.

### Project Background

The Lone Tree Traffic Interchange has been part of the City’s future vision for decades. The general plan from 1987, *Growth Management Guide 2000*, shows the interchange on the circulation element map. This document recognizes that I-40 “severely inhibits north-south access within the City.”

The Lone Tree Traffic Interchange is featured prominently in the *Flagstaff Area Regional Land Use and Transportation Plan*, an update to the general plan, ratified by City of Flagstaff voters in November 2001. The plan states, “a well-connected continuous system of streets for north-south movements is lacking.” It set network connectivity as a high priority and strategy T1.1(b) calls for establishing multimodal corridors in a “gridded network throughout the community.”



Citing *Regional Plan* support for the corridor, the City Council adopted resolutions 2008-65 and 2008-66 on November 18, 2008 declaring a recent corridor study as a public record and the recommended alignment as a minor amendment to the regional plan. The traffic interchange received considerable discussion and support at a Council retreat just days earlier, noting its critical role to future growth and the vitality of Northern Arizona University, our major employer.

The corridor, including the traffic interchange, is also supported by the Flagstaff Metropolitan Planning Organization (FMPO). The FMPO Executive Board authorized Chairman Scott Overton to send a letter of support for the traffic interchange to Representatives Kirkpatrick and Mitchell for consideration in the next highway bill. On October 24, 2007 the Board sent a letter of

support for the corridor to the City Community Development Director stating, “The Lone Tree Corridor is critical to meet the long term mobility needs of our region. The study successfully addresses route connectivity and accommodation of all modes along the length of the corridor.”

An ADOT effort from January 2004, the *Flagstaff Urban Mobility Study*, confirmed the corridors importance to resolving regional mobility and congestion on Milton Road. More specifically to the interchange, an ADOT Design Concept Report in May 1993 determined its acceptability and design.

## **Project Description**

*Location:* The Lone Tree Traffic Interchange is a proposed urban diamond located at approximately milepost 196 on Interstate 40. This is more or less the same location recommended in the May 1993 DCR.

*Design:* The City of Flagstaff consultant, DMJM-Harris (now doing business as AECOM) completed a study of the corridor in March 2006. Their recommendation supports the original location moved slightly east. This creates greater separation from the I-40/I-17 system interchange and permits the Lone Tree arterial to pass under I-40. This change improves constructability, right-of-way impacts, and affordability.

*Arterial Relationship:* The interchange ties a realigned Lone Tree Road to Interstate 40. This connection helps to establish Lone Tree, a minor arterial, as the critical north-south corridor long sought by the City. Lone Tree will eventually extend from Route 66 in the north to J.W. Powell Boulevard in the south.

The City enjoys only one north-south arterial, Milton Road. The next north-south road of consequence is Fourth Street, 3 miles to the east. This is far greater than the industry recommended standard of 1 to 1 ½ miles. Lone Tree fills a large gap in the network.

*Corridor Relationship:* Within the corridor, the interchange will serve several purposes. First, it will provide long-distance interstate and intrastate travelers alternate access to regional destinations such as Northern Arizona University, downtown, and alternate access to the Arizona Snowbowl. Secondly, it will provide important regional circulation access for a key growth area. More than 1,000 acres of Flagstaff’s famously limited development potential will be positively affected by the interchange.

*Cost:* The construction cost estimates for the interchange in 2009 dollars is \$20,000,000. Right-of-way is expected to be nominal because the City has exacted right-of-way for the east side ramps from two private developers. The west ramps are located on property owned by the Arizona Board of Regents and NAU is an ardent supporter of the project.

## Funding Plan

The following table outlines the \$29,000,000 in cash and other considerations the City and its partners may offer in support of this project.

Item	Value
Right-of-way (1)	\$5,000,000
Developer exactions (2)	\$2,000,000
Route Transfer: B40 – Fanning to Switzer (3)	\$9,000,000
Route Transfer: US 180 – Columbus to limits (3) (4)	\$7,000,000
Route Transfer: Maintenance (3) (5)	\$3,000,000
System benefits (ADOT customers) (6)	\$3,000,000
<b>Total</b>	<b>\$29,000,000</b>

- (1) Approximately 12 acres of right-of-way, \$10 per square foot, 100% provided by City and partners
- (2) Existing and ongoing payments from Pine Canyon; future payments from Juniper Point
- (3) *ADOT/Flagstaff Route Transfer Study, January 2008, HDR Engineering*, inflated, rounded down, transfer effective on completion of the traffic interchange
- (4) Transfer effective on negotiated time-frame, 5 to 10 years post interchange construction
- (5) \$150,000 per year for 20 years
- (6) Delay and gas benefits (see next table) to ADOT customers estimated as external and external-internal trips to the region or 5% of total over 23 years from construction (c. 2017) to regional build out (c. 2040). FMPO Regional Traffic Model.

## Benefits

As the following table demonstrates, the Lone Tree Traffic Interchange and the corridor it supports yield many benefits to the region:

<b>Lone Tree Traffic Interchange</b>			
<b>Summary of Monetized Annual Benefits</b>			
Benefit	Description	Calculation	Annual Value
Congestion Relief	Saves 183 hours of delay per week day at buildout	183*230 days*\$12/hr; reduced for year 2017	\$506,000
Motorist Cost Savings	Saves 75,000 miles per week day	75k / 20 mpg * 2.10/gal * 230 days	\$2,000,000
Access - Snowbowl	Provides secondary access to I-40, reducing delays on Milton and US 180.	98 k skiers / 3 per car * 60% weekends * .5 savings * \$8/hr	\$78,000
Development (including State Land)	Provides access to 1,000 acres or 4,000 homes	1k acres * 4/ac * 300k /home at 300 per year	\$90,000,000 (for 13 years)
Construction and indirect jobs	Short term construction	40k jobs/\$1B * \$23 M * 8 hr * \$12 / hr	\$20,000,000
		<b>TOTAL – year 1</b>	\$112,584,000
		<b>Total – after</b>	\$92,584,000
<b>Summary of non-Monetized Annual Benefits</b>			
Environmental Benefit	Reduction in vehicle miles traveled and delay reduce greenhouse gases (GHG)		
Connectivity	New connections to the arterial network yields system resiliency		
Multimodal Access	Pedestrian, bike and transit access promotes urban form, health and reduces GHG		
Emergency Access	Higher connectivity and access to high speed routes improves service		
Access – NAU & CCC	Provides access to large events and supported in their master plans.		

Money for the Economy

*Congestion Relief:* The Lone Tree Traffic Interchanges provides significant congestion relief. It provides an alternate route to Milton Road and its central location will decrease vehicle miles of travel. The Flagstaff Metropolitan Planning Organization modeled the region in the future with and without the Lone Tree corridor. It finds significant volume reductions on surrounding facilities, as shown in the following table.

Primary Street	Cross Street	Cross Street	No-Build Volume	Build Volume	% Difference
"Old" Lone Tree	I-40	J.W. Powell	18,000	13,000	-28%
Milton Road	Sitgreaves	Butler	54,000	48,000	-11%
Milton Road	Butler	Route 66	55,000	53,000	-4%
Milton Road	Route 66	Plaza Way	48,000	45,000	-6%
Milton Road	Plaza Way	Forest Meadows	46,000	43,000	-7%
Lake Mary Road	High Country Trail	Beulah	27,000	21,000	-22%
Pine Knoll	Lone Tree	San Francisco	14,000	12,000	-14%
Fourth Street	J.W. Powell (future)	Butler	21,000	17,000	-19%

*Motorist Cost Savings:* The shorter routes created by the corridor will save more than \$2,000,000 in gasoline costs annually. Motorists from south of I-40 trying to access the interstate have a circuitous and lengthy path to take without the Lone Tree Traffic Interchange. The I-17/I-40 and Butler interchanges require back-tracking and delay at many intersections. Additional savings can be realized by weekend travelers at the Arizona Snowbowl. Delays of 2 to 3 hours are not uncommon on weekend evenings during ski season. The ability to divert traffic to the Lone Tree traffic interchange will benefit arterial operations during these peak periods. The following table, also showing results from the FMPO model, illustrates the benefits.

System Performance	No-Build	Build	% Difference
Vehicle Miles Traveled	4,251,509	4,176,000	-2%
Congested Vehicle Hours Traveled	135,985	123,163	-9%
Veh. Hours of Congestion Delay	46,529	35,633	-23%

*Development:* Construction jobs and real estate are an important part of the Flagstaff economy. More than 1,000 acres of land will be open to development. This includes over 400 acres of Arizona State Land Department holdings that will enjoy increased value from access improvements. At a conservative 4 homes per acre and \$300,000 per home, this translates to more than \$1,000,000,000 in sales. Because this is one of the few areas left to develop it is not unreasonable to assume it will carry about 75% of the market, or 300 homes per year, for some time. This means \$90,000,000 in annual sales. Not represented in the table are the hundreds of thousands of dollars in materials, wages, and permit fees.

*Construction Jobs:* Spending \$20,000,000 on an interchange will yield hundreds of jobs. The multiplier effect will yield additional benefits for the community.

Benefits to the Community

Beyond the direct monetary benefits created by the traffic interchange, the other improvements are noteworthy.

*Connectivity:* Additional connectivity in the system creates a more resilient system. There are currently few alternate routes for traffic to take during construction, accidents, congestion or other road closures.

*Access:* This connectivity also creates access to some important regional attractions. Northern Arizona University with 15,000 students and 2,000 employees is the region's largest employer and major traffic generator. The interchange is integrated into the University's Campus and Athletics Master Plans as it allows NAU to better manage special events like football and basketball games, regional tournaments and graduation.

Coconino Community College is another major employer and attracts students from a wide area. Access via the interstate will make their travel more efficient and create an important secondary access.

Flagstaff Pulliam Airport presently takes access off of I-17 and Pulliam Drive, a major collector that serves a growing business park and residential community. The Lone Tree Traffic Interchange and corridor will provide access from I-40 via J.W. Powell Boulevard, a minor arterial in the region's planned system.

Other important destinations taking access from the interchange will be future residential subdivisions, the Flagstaff Citizen's Cemetery, and a new commercial activity center, Aspen Place at the Sawmill.

*Emergency Access:* Arterial connectivity will greatly enhance the ability of the Flagstaff Fire and Police Departments and ambulance service to meet their expected response times to these future growth areas and Flagstaff Pulliam Airport.

## **Funding Sources**

Funding could be provided directly or in-kind by several partners. Sources for funds include:

State and Federal Funding: ADOT receives millions of dollars annually in state and federal gas tax revenue for the delivery of their annual construction program. Funding in recent years has been tight. Leveraging funds through partnerships will make dollars go further. Scoping for the project is already funded through the I-40 Design Concept Report. A new highway bill and an economic recovery should present ADOT with better funding scenarios soon.

City Transportation Tax Funding: The City of Flagstaff has fully programmed this source of funding for the next five-years and beyond.

In-kind: Nearly 6 acres of right-of-way required for the interchange ramps is either already exacted or will be exacted from private development. An additional 6 acres of land is controlled by the Arizona Board of Regents and NAU is a strong supporter. At \$10 per square foot for the entire 12 acres, this is valued at more than \$5,000,000.

Development Fees: The City negotiated fees with Pine Canyon for improvements in or around the Lone Tree Traffic Interchange. A similar fee will likely be negotiated with Juniper Point, a 1,900 unit development southeast of the interchange. Together, fees could total between \$3,000,000 to \$4,000,000.

Bond Proceeds: The City of Flagstaff will present a bond election to the voters in November 2010. The City Council may consider a share of the interchange costs and the cost of connecting arterial roadways as part of the bond program.

FMPO Funds: The FMPO funds are fully programmed for the next five-years. It is possible to reprioritize funds. Sufficient funding may be available to fund design or to advance funds for design if such a reprioritization were to occur.

Federal Highway Bill reauthorization: The City of Flagstaff has applied to the offices of Representatives Mitchell and Kirkpatrick for \$23,000,000 to be authorized in the next highway bill.

Route Transfer: Transferring one or more segments of state routes over time to the City of Flagstaff for consideration in the ADOT construction program will be part of the equation. The City of Flagstaff worked with the Flagstaff Metropolitan Planning Organization, ADOT and Coconino County to establish a basis for future route transfers. The draft report identifies five segments for consideration representing a total of \$43,000,000 in total capital improvement needs with the value of the segments ranging from \$7,000,000 to \$12,000,000. The entire system represents \$340,000 in annual maintenance costs. Not all of the capital costs are the responsibility of ADOT.

Advanced Construction – Though not a separate source of funds this may permit the project to be accelerated. It may be possible for the City to advance either design or construction funds to ADOT to be reimbursed over time. This is dependent on bond elections and the political interest to place such a question before voters, so this is very uncertain at this time. Alternatively, the FMPO has sufficient or near sufficient funds for design and could loan ADOT these monies.