

US Highway 16

CORRIDOR STUDY

Public Involvement Meetings #2 Summary, December 10, 2019

Pennington County, South Dakota

January 21, 2020



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1.0 Public and Stakeholder Meetings Overview

Tuesday, December 10, 2019

BLACK HILLS ENERGY, EVENT CENTER

RAPID CITY, SD

US16/US16B/CATRON BOULEVARD INTERSECTION: 10 A.M.

US16/NECK YOKE ROAD INTERSECTION: 1:00 P.M.

US16 CORRIDOR SOUTH OF NECK YOKE ROAD: 3:00 P.M.

PUBLIC MEETING: 5:30 P.M. - 7 P.M.

Study Website: www.US16corridor.com

1.1 Overarching Themes to US16/US16B/Catron Boulevard Intersection and US16/Neck Yoke Road Intersection Build Options

US16/US16B/Catron Boulevard Intersection Build Options

Single Point Interchange

- Support for US16 northbound/southbound free movements over US16B/Catron Boulevard
- Interchange familiarity (both for tourists and locals).
- Safety benefits of the interchange (no signal for US16 mainline, fog concerns).
- Required closure of Addison Avenue was noted as a drawback.
- The potential for higher speeds (compared to the DLT) was noted as a benefit and a drawback.

Displaced Left-Turn Intersection

- Support for this intersection often centered on the potential for access at Addison Avenue. A significant amount of discussion focused on the DLT was related to Addison Ave access.
- Unfamiliarity was noted as a drawback.
- The potential for lower speeds with an at-grade DLT (compared to the SPI) was noted as a benefit and a drawback.

US16/Neck Yoke Road Intersection Build Options

Reduced Conflict Intersection (RCI)

- Most attendees seemed to support the RCI over a signalized intersection.
- Primary benefits noted by attendees included US16 through traffic not needing to stop at the bottom of the valley, benefits for large trucks/RVs, and safety benefits.
- There were several questions regarding how RCIs function, where someone's turn would be located, etc.
- Interest in a second partial access option to the north

Signalized Intersection

- Limited support for a signalized intersection.
- Primary drawbacks noted by attendees included having to stop at the bottom of the hill, long steep grades to get out of the valley, long steep grades coming into the intersection, winter weather impacts, isolated intersection safety concerns, and intersection operations.
- Interest in a second partial access option to the north.

Preliminary US16 Corridor Concepts West of Neck Yoke Road

Comments were also received on preliminary concepts developed for US16 outside of these two intersection areas.

2.0 Written Comments

Written comments provided to the study team through the following methods:

- Comment card (at meeting or following meeting)
- Email
- Website

Method: comment card

Comments:

Excellent presentation.
Very complex project to try & satisfy
all of diverse interests.
* Thank the Displaced left Thank you.
Turn Intersection Concept

Method: comment card

Comments:

Please Change my email
address immediately
DO NOT USE - my old one

Method: comment card

Comments:

(SPI)
The single lane access overpass, seems like
an excellent option (even though more ##)
one concern is controlling the speed as
drivers head north into the city.
The "U-turn" option @ Neck Yoke seems most
beneficial.

Method: comment card

Comments:

We need a Right hand Turn Lane at
the Wellington and Cotton Intersection.
The TRAFFIC going EAST is going too fast for a safe
Right hand turn -

Method: comment card

In the July 2019 meeting Steve Gramm stated that Mt. Rushmore Rd
Comments: South to Moon Meadows is considered an expressway - 55 to 60 mph speed
Consider keeping an option in alternative # 2 that replaces the expressway
speed limit down to 45 MPH, or lower, on Mt. Rushmore Rd to Moon Meadows
This should allow us to keep Addison Ave access to our shop and
keep open an option for future access at Section Line Rd.

Method: email (12/5/19)



December 5, 2019

Mr. Jon Wiegand
Project Manager US 16 Corridor

Dear Mr. Wiegand:

The Mount Rushmore Road businesses, property owners and interested citizens formed the Mount Rushmore Road Group (MRRG) in 2005 to encourage reconstruction and rehabilitation of Mount Rushmore Road. MRRG's mission continues to be development of Mount Rushmore Road south to the city limits as a vital corridor for commerce and as a gateway to our Black Hills and Downtown. As stakeholders in the U.S. 16(Mount Rushmore Road) Corridor Study we continue to advocate for safety, aesthetics and the economic viability of this vital corridor.

As Mount Rushmore Road develops more retail, hospitality, other services including schools, a road designed for safe, easy access is critical for the regional economy and is in line with the 2010 Mount Rushmore Road Study, The Rapid City Comprehensive Plan regarding gateway entrances and MRRG mission.

Considering the objectives of safely moving traffic and decreasing congestion, the MRRG urges the DOT to consider the desire of many businesses, residents and the travelling public to change the speed limit to 45 MPH and 35 MPH where warranted. U turns should also be designed to easily access existing businesses and known future business sites.

As stated in your concluding report, "The Corridor is constantly evolving". It is necessary to consider safety, aesthetics and economic viability as you finalize design to successfully develop the Corridor to 2050.

Sincerely,

Mount Rushmore Road Group
Debra Jensen - President
Nick Dupont- President-elect
Lisa Modrick- Treasurer
Dennis Wagner- Treasurer-elect
Melinda Mansfield- Secretary
Mike Quasney- Public Awareness
Bob Rick - Public Awareness

Method: email (12/11/19)

I was traveling home from Alaska yesterday and unable to attend the meeting in Rapid City, but I would like to be kept on the email list for upcoming meetings. Our family trust owns 40 acres directly across from BH Energy so we are interested in the US 16 corridor study.

Method: email (12/11/19)

My secretary lives near Highway 16 and told me that there was a meeting of stakeholders last evening to hear about proposals concerning traffic in the area between Fairmont Blvd and the Keystone Wye. As the administrator of Rapid City Christian School located on Spring Creek Road, I am very interested in results of any completed study and proposals for future projects as well as offering input from the school's perspective. This year we have 250 students/families as well as 45 staff members at the school. I would appreciate communication regarding future meetings as well as access to digital information that has been dispersed to stakeholders.

Thank you for recognizing the potential issues for this growing area. I look forward to hearing from you and learning more about the plans for traffic on Highway 16.

Method: email (12/11/19)

I have been unable to attend recent public meetings. I did meet with both state and city engineers in the past as a landowner at 6005 Mount Rushmore Road. What are the plans for the service road that allows access to my land at 6005 Mount Rushmore Road? What is the plan for the Promise Road and service road intersection?

Method: email (12/12/19)

Great job on the public meeting presentation and layouts. I would strongly support the Combine EB & WB US 16 on Southside of Rockerville alternative for the Rockerville design. This would provide the safest and easiest to learn new routing systems.

Method: email (12/17/19)

Millions of tourists will travel thru this intersection each year. In fact I believe it will have more traffic than intersection of East North and I - 90 over the coming decades. It seems completely unsafe to expose tourists who travel the intersection one or two times in their lifetime to an oddly functional Displaced Left Turn. This intersection is the most important intersection in western SD for tourism travel. Because this area generates the sales tax and fuel tax of this State, it follows that the money should be spent on this intersection to make it Safe.

Over my life time I have attended numerous highway meetings. Usually the #1 concern of the DOT is Safety. At this intersection, the Single Point Interchange seems to be the only option for this intersection to be SAFE.

Method: email (12/24/19)

Thank you for your extensive work on the planning for US Hwy 16 in Rapid City area!

After reviewing your information presented in the most recent public meeting, I maintain the best option for the Catron/16 intersection is the continuous flow intersection/displaced left turn. This area has already seen significant residential growth and I believe that particular area of growth will continue. There is already a need being addressed for a change of zoning in the neighborhood east of Healing Way. The continuous flow intersection is a much more fiscally responsible decision and maintains better access to the established businesses on Addison. That access will in turn help protect the residents in the neighborhoods east of Healing Way by allowing right turns in and out of Addison (thus decreasing impact of heightened traffic on Healing Way).

I also like what has been presented on the other intersections within the plan.

Method: email (12/24/19)

My preference regarding the Rockerville area options being considered in the Hwy 16 study is the combined East-West Hwy 16 on the south side of Rockerville. Having lived in the area for 16 years, I strongly believe the south side option would provide greater traffic visibility compared to the combined north side option because there are less curves and less elevation variance. Currently, there is only about 10 seconds of visibility for traffic on the westbound lane as it passes throughout the split highway in the Rockerville area. There is much greater visibility for the eastbound traffic currently traveling on the south side of Rockerville because of the terrain difference. The thanks for the opportunity to comment.

Method: email (12/9/19)

I am writing to provide my public feedback in regard to the above referenced Study as I will be unable to attend the December 10 Public Information & Stakeholder Meetings. My wife and I both commute daily in separate vehicles from the Hill City area to Rapid City along the entire length of the Study area. Following is my input:

1. US16 & US16B/Catron Blvd. Intersection: I believe the Single Point Interchange alternative to be the best alternative for the following reasons:
 - a. It allows north/south US16 traffic to flow freely without signal. US16 serves traffic that often is commuting long distances, while much of Catron's traffic is local urban point-to-point. Priority should be given to minimizing the signalized interruptions of commuting US16 highway speed traffic to minimize commute interruption.
 - b. It is most similar to the US79/Catron intersection. Consistency of intersection experiences along Catron may contribute to safer outcomes.
 - c. The elevated intersection fits the natural contours of the geography of the intersection.
2. US16 & Neck Yoke Road Intersection: Unlike the 2004 Study recommendation, I would like to see US16 elevated over the intersection, with on and off ramps to US16. I believe this would be a better design for the following reasons:
 - a. Same reason as 1a above.
 - b. Elevating US16 fits the natural contours of the geography of the geography of the intersection.
 - c. While I recognize that the cost of constructing a bridge likely exceeds the cost of a signalized intersection, the former is consistent with the true nature of US16 as a major highway corridor where not interrupting highway traffic is given preference over feeder road traffic. The traffic from the surrounding roads and businesses already have to stop to enter the highway, so there would be no difference to those vehicles. The question comes down to whether US16 traffic should be interrupted by signal, which it should not when there are other alternatives more consistent with high speed highway treatment of US16.

Overall, I believe treating US16 consistent with its true nature as a highway, many times servicing long commutes, should be a priority objective in any proposed designs. The 2004 Study's recommendation to signalizing US16 at many intersections would turn US16 functionally into more of an urban street than a highway, with no viable highway alternative for those needing to travel long distances along what had been a previously high speed highway. Speed limits should also be determined in line with this treatment of US16 as a highway, with lower speed local roads servicing adjacent businesses and development.

Method: mail (12/23/19)

From a thriving tourist & local Rock Shop with "Location, Location, Location" which we have enjoyed for seven years of our 15 year business to "collateral damage" is too much to accept. We all can do better.

Numerous women at our local YMCA, where I volunteer to lead an aquatics exercise class, told me that they heard Mr. Gamm in a tv interview say that with a project of this size, there will be some who get hurt. In other words, we're collateral damage. It's in the military, an attack is planned in a combat situation, those in charge estimate, calculate & figure into the plan the collateral damage. It is obvious that you have chalked us (Ondigo Iris Rock Shop) up to acceptable collateral damage as you move forward on your Corridor long-term plan & to take away Addison Ave. which provides our safe and convenient access to our business.

If there were no alternatives to ruining our business, perhaps I would take a different stand. But since there are other reasonable alternatives, I will not be silent as you destroy my business. If the Rock Shop at the cross road represented your income, livelihood, and your retirement, I'm certain you'd fight to keep the shop open & productive. This is not warfare, and we don't need to be collateral damage for you to make your improvements. If we could work together with real dialogue, perhaps a solution to

Please consider our additional comments.

- 1) Keep Addison Ave & put in a signal light. Why not? B&E paid for theirs; Buffalo Crossing paid for theirs; can we pay for one for us?
The distances from the intersection are almost the same. Addison Ave. is actually a little farther south from the intersection. So, tell me your reasoning for no signal light at Addison Ave. Why can't we work out a reasonable and healthy solution for your options and our safe and convenient access needs? "See the shop, turn in" works for tourists!
- 2) Sooner rather than later in your long-term plan, the speed limit for Rapid City in this area will be lower. Sooner rather than later there will be access off & on Mt. Rushmore Rd, just as there are in the current "city proper", between Cathedral Drive and the intersection,

on 5th St to the south to the Catron Bypass, and on Catron Bypass to the west of the intersection. The problem for us is timing, because the sooner rather than later may not be in time to save our business. Of course, I am biased, but I believe we should protect and save the only Rock Shop in Rapid City. It is a meaningful, attractive, interesting and contributing factor to our tourism economy - not to mention a part of the love of the West. As citizens who have lived in Rapid City and contributed time, energy, and expertise in many ways to the community for over 40 years (through volunteerism, issue & advocacy work, and employment), we and this shop with its vitality & retirement nest-egg status need to be protected rather than lost as "collateral damage." There must be some way we can work together on our issues.

- 3) Surveys were done by the SD DOT in several Black Hills communities including Keystone, Hill City & Rapid Gardens with both residents and tourists according to your reports. As I lived in these communities, I'd "vote" for a 60 mph speed limit, as well. It's so straight-forward, understandable, & expedient - there's no need to even list the reasons why! But, if your employment, business, home, health service, church, banking, recreation and/or daily commute through the animals on the road and the frequent fog conditions through all seasons, you would most likely have a different opinion. Living in the area and doing research about the area are two very different things. Lowering the speed limit will increase safety.

if on 5th Street - not 60 mph.

if on 8th Street / Mt Rushmore Rd - not 60 mph (previous location of my shop)

is in Rapid Valley — not 60 mph

is on Omaha, Chicago, or Jackson Blvd. — not 60 mph. etc., etc.

No other road in Rapid City has a 60 mph speed limit, and this one won't stay that for long. (Check the number of deer killed within the city limits; even over 10 years ago, the statistic reported to the public was over 200.)

4) Look at the example of 5th Street expansion to the south to the Catron By-pass.

I had a friend who lived adjacent to the current "new" water park location when it was

only prairie, countryside, & rattlesnakes. The expansion of 5th Street happened so fast. Now, it is full of housing, doctor's clinics, businesses, Walmart, gas stations, restaurants, etc. and it is indistinguishable from any other Rapid City neighborhood which combines commercial with residential zoning. It surely doesn't resemble the countryside I knew to visit my friend. No more dirt road. And, of course, no 60 mph speed limit because it looks and feels like city dwelling which it is. It will be the same along the Corridor to Moon Meadows within only 5 to 10 years at the current rate of investment and expansion. SDSD long-term planning invites us to consider phenomena such as 5th Street. The over-pass option for high speed traffic that costs twice as much as the other option does not seem like a significantly better long-term choice between the two plans. Why spend double the money for no outstanding improved traffic flow, safety, or long-term sustainability? It will be swallowed up into city living just as 5th Street evolved in almost the blink of an eye — long term speaking!

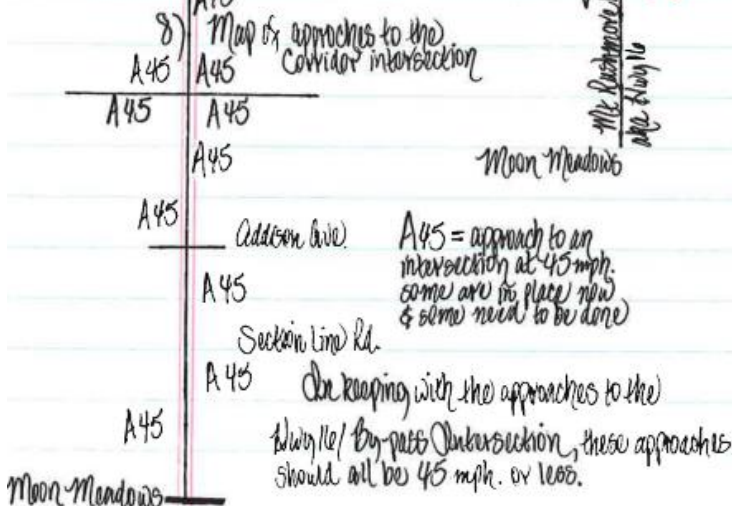
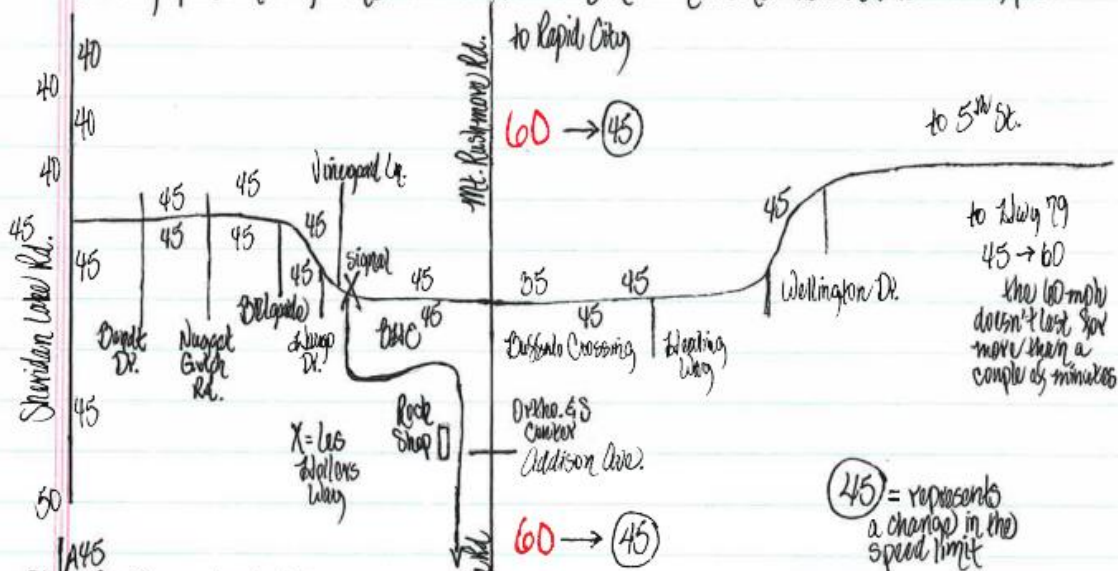
5) I'd like to mention that there is a difference between people who drive this area on a daily basis and those who look at data and design plans from a remote location. Just as there is a difference between those educated, experienced, and with degrees to decide these matters and the common man. There are many considerations to be balanced in planning these major projects. I would just like you to keep in mind that direct experience of how people are utilizing the area, driving the area, & behaving in the area are of considerable importance to the overall success of a final plan. In 2016, I pointed out the psychology in the choice of a change can have a significant impact on its initial and long-term success. This aspect, however, is rarely researched or given the consideration it should have in the planning process.

6) There must be reasons for the SD DOT to have designed and built the By-pass around the east side of Rapid City, but is it currently meeting the criteria of a by-pass? Driving it, I'm having difficulty with it "feeling" like a By-pass from

King 79 to the Corridor intersection. I drive it numerous times each week, and most people drive it like a race course. It's surprising that stretch of road doesn't have more accidents. If you were looking toward an updated Bypass around Rapid City,

saving 15 million on the (less expensive) Corridor intersection would be a decent start on a new and safer by-pass. Years ago, an update to Nemo Road was done at 1 million dollars per mile; 15 million could make a dent. Most travelers I know appreciate by-passes, even when their destination is the city. Bypasses offer such a convenience for travelers.

7) Other than being a very rough, not to scale drawing, what's wrong with this picture? It is all Rapid City. Business, living, or services are everywhere along these city streets. And, they are all 45 mph or lower — except for one street. It seems reasonable to set city speed limits for the "Corridor" street in line with all the others in this area of R.C.



Look at the city limits and speed limits as they are now & project realistically how quickly the mushrooming of progress has taken place and will continue to occur in this area of long-term Corridor planning. The time is NOW to see Rapid City for what it has become. Thank you.

Method: website (12/11/19)

What will be done to accomodate the number of cyclist and pedestrians that go through the intersect at hwy 16 and Catron? It is important to make it as safe for eveyone not just vehicles such as trucks and cars. As a bicycle commuter that uses this intersection regularly I am concerned about use. Using the bike path through town adds almost an hour to my commute. Something must be done to accommodate cyclists.

Method: website (12/12/19)

Please do not close Addison Avenue access to Indigo Iris Rock Shop. I go there several times a year. It is a valued business to me.

Method: website (12/12/19)

Catron & Hwy 16

Fire the person that came up with option #2. Clearly they don't know how to navigate through traffic.

Option #1 is perfect. Easy to understand and driver friendly.

Method: website (12/12/19)

Please also consider the eastern intersection of Wellington and Catron as there is much development planned for this area with one access point to Catron. A traffic light is not warranted, therefore a second point of access is preferred. The most logical connection is to Healing Way.

Method: website (12/12/19)

I missed the Dec 10 mtg, but wanted to make a comment. we moved to Tablerock road 4 years ago. Since that time traffic levels have increase substantially. It used to be easy to right turn onto hiway 16 but now I usually have to wait before turning . I rarely left turn unless there is low traffic flow. I foresee significant increases in traffic with your proposals and think that lower speed limits especially in the area with schools and access & egress turn lanes will have to be included in the plan to prevent accidents & fatalities.

Method: website (12/12/19)

Alternative 5. If you choose alternative 2 then you will need to change it to alternative 5 in the near future. Do it right the first time.

Method: website (12/14/19)

As I don't live in rapid but in yankton,SD so possibly my voice is pointless and won't count but we do visit rapid at least a couple times a year and spend money in the city and it's surroundings. But Has anyone ever thought up the idea of doing a roundabout? First and foremost I'm no expert in it all let alone traffic/road related stuff And I'm fully aware it's a European idea and Americans have a hard time to comprehend what to even do in one but studies do say they are about 75% safer then a normal intersections and cost seem to be a lot cheaper? (long term the Maintance and hardware cost would be cheaper since there is no traffic signals like a standard American intersection.) now when it comes to winter/snow/plowing I don't know how that will come into play during those seasons but I'm sure something will be figured out. Just googled some info on roundabouts and there's many pictures of a standard tight circle vs a long oval shape (that may be easier for Americans to wrap their heads around and make it easier.) But the business that are worried about the current drawn up plans a round about would seem to make a lot of people happy as long as it is drawn up correctly with some input and ideas to the roundabout plan. I do have a couple of pictures I found just googling of a long oval shape round about but I'm sure just searching and doing some research on them you can probably find it yourself. But I think a roundabout (Maybe longer oval shape) would be a better idea, long term cost could benefit and if looked at and drawn up correctly I think it would make an ideal set up. If our European partners use them all the time why can't we? I'm sure if roundabouts are being takes about have people submit roundabout plans heck I think I can probably design many based on looking at pictures and maybe even contacting overseas for some input of what works and don't work for them. Now I understand cost to that but long term it may be a better solution then just a now one time idea.

Method: website (12/17/19)

Our comments are regarding the US 16/Neck Yoke Road intersection.

The proposal to close the side road access east of US 16 causes major concern.

1. There is a school bus stop in front of Happy Holidays. There is no reasonable way for this bus to pick up and drop off students without right turn access to US 16.
2. Our driveway is off of US 16. Eliminating the access points makes it more dangerous/difficult for us to get to Rapid City and to get home. If all access points are cut off, when coming from Rapid City we would have to turn onto Neck Yoke from US 16 and then make an immediate left onto the access road. This runs the risk of us getting rear-ended because people would not expect an immediate left turn. Additionally, this could add to more accidents if people were blocking the access road so that we would have to stop to turn left. If we would want to go to Rapid City from our driveway without the access roads, we would have to go to Neck Yoke and then wait for an opening at Neck Yoke (people tend to block this road) to turn right.
3. Happy Holidays campground has many RVs coming in and out. When these RVs come from Rapid City, they could create a potential hazard and could block US 16 trying to take an immediate left turn onto the access road to get to Happy Holidays.
4. There are many RVs and travel trailers at the US 16/Neck Yoke intersection and area. For any of these vehicles wanting to go south on US 16, the U-turn option would be almost impossible. A big rig is unable to make a U-turn without stopping traffic because they would block all lanes, making this a more dangerous intersection.

Method: website (12/21/19)

I drive this road daily. Tourists and locals already get confused by the existing extended turning lanes. Making it more complicated will not help the matter. Spend more on the over/under pass and keep it simple.

Method: website (12/21/19)

In reference to the highway proposals being considered near the Rockerville area, my preference is for the Combine EB & WB US16 on Southside of Rockerville. I believe this proposal would provide a much higher level of safety and quality of life for those of us who live in the area and share these roads on a daily basis with tourists. As a former township supervisor for Mapelton township adjacent to Sioux Falls, I have seen the effects that poor road planning can lead to and I appreciate the extensive research and planning going into making this project a success. Thank you for your consideration and accepting comments from the public. Please contact me with additional comments or questions.

Method: website (12/24/19)

... we would like express our support for the plan which call for combining northbound and southbound Rt 16 in a common corridor running to the south and east of Rockerville.

Method: website (12/24/19)

I'd like to comment on the Rockerville area options being considered. I prefer the combined East West Hwy 16 on the south side of Rockerville option because the highway on that option has less curves and elevation variance than the combined northern option. This results in greater visibility and will allow traffic to have substantially more time to deal with traffic crossing and entering and leaving the highway.

Method: website (12/28/19)

US Hwy 16 / Neck Yoke Road Junction -

"Signalized Intersection" Alternative:

Vehicles are moving down-hill on US Hwy 16 into the intersection. The risk of accidents, as vehicles are unable to stop for a traffic light (in-attention, weather conditions, etc.), will likely increase. The effect of stopping traffic on US Hwy 16 will likely result in trucks / tractor trailers having difficulty regaining momentum to climb the hills (to the north or south), and in-turn actually cause a greater risk of vehicle accidents, as passenger vehicles try to get around the slow moving trucks.

"Reduced Conflict Intersection" Alternative:

This Alternative maintains US Hwy 16 traffic flow - so trucks / tractor trailers can maintain momentum for climbing the hills - and in so doing reducing the potential for accidents. Of the 2 Alternatives, this alternative appears to addresses both issues the best.

Thank you for the public meetings, they have been most helpful at understanding the traffic decision that we need to make for the future use. Please keep me informed.

Method: website (12/28/19)

"Displaced Left" Alternative: Very Confusing to the motorist (I've driver a similar interchange at Cheyenne, WY). Requires lots of signs. Also requires lots of traffic lights - specifically it will take a minimum of 3 traffic lights when traveling from Catron Blvd. onto US Hwy. 16 (given the intersections to the east & west), or 4 traffic lights if traveling on Catron Blvd crossing US. Hwy 16. Issues with these lights include: 1) synchronization for efficient flow, 2) real-time monitoring to effectively keep traffic from backing up during peak flow - holiday weekends, etc. (consider visual cameras or other monitoring ?) - so who is going to do this for the next 30+ years ?, 3) restoration of the synchronization after a power outage (consider independent generator / battery backup ?). Although a less expensive up front cost, continual maintenance of 'traffic monitoring', traffic light synchronization, and maintenance of a emergency generator/battery backup & additional traffic lanes - makes me wonder if the long-term cost will actually be closer to the "Single Point" Alternative.

"Single Point" Alternative: Less confusing - what people are normally used to. Less traffic congestion - as it reduces the number of traffic lights to get thru the series of intersections. Synchronization of traffic lights is less critical, as well as traffic monitoring and power loss. Given a Bridge on US Hwy 16 with 'no-stopping' traffic, there should be fewer 'intersections' which in turn should result in fewer accident opportunities (?). Personally, even at the higher cost, long-term I think this Alternative is more effective at moving traffic thru the intersection, and would be the Alternative I would recommend.

Other Notes:

1) If you do nothing else, I would recommend reducing the speed on US Hwy 16 to a consistent 50 MPH from Cathedral Drive / Fairmont Blvd. to Reptile Gardens, then 60 mph from Reptile Gardens to Wilderness Canyon Road.

2) The profile of US Hwy 16 at Addison Ave should be significantly lowered to: a.) improve sight distance at the Catron Blvd/ US Hwy 16 intersection, b.) reduce the downhill grade into the Catron Blvd. intersection. It seems to me this large 'dome' (or 'hill') in the profile of US Hwy 16 was left there as a material source for the day when the bridge was to be added to US Hwy 16. Now with the addition of Addison Ave., and the entrance to Black Hills Power Corp/Horizon Point, the situation is more complicated, and these side streets should be relocated, and US Hwy 16 lowered, to address these safety issues.

Please continue to keep me apprised of this project as it continues forward. I really appreciate the three (3) public meeting, I have attended over the years, to explain the Alternatives. Keep up the good work!

Method: website (12/30/19)

I drive through the Highway 16 Catron Blvd intersection every day during the school year. In my experience, the only time the intersection is a safety concern is during dense fog which makes the stop lights impossible to see until very close to the intersection - too late to stop if traveling at the posted speed limit. I don't think any solution involving a level intersection will solve this problem. Although the overpass option is considerably more expensive, I think it is necessary at this location. I believe the overpass will save lives and encourage you to select this option.

Method: website (12/30/19)

In regards to the options for Catron Blvd & US HWY 16. I would urge you to build Option #1 the single point interchange. Yes it may cost more money to build but i feel that this option will serve the needs of the area and the added traffic count for years to come. it will also be easier and less confusing for the tourist accessing the Black Hills to navigate.

As an item to point out. When CDOT rebuilt I25 in Denver to the Southeast under the T-REX project. multiple interchanges with I25 were changed to single point interchanges. after 15 years and the large growth all of the single point interchanges are handling the growth well. Again I cannot stress enough the importance to plan for the future and even though the price may be larger that option 2 I feel that this will benefit the region far greater than opting for saving money in the short term.

Method: website (1/1/20)

Looking at your two options and have traveled from carton to Hwy 16 for 20 plus years it is obvious that Hwy 16 needs to cross over carton and you need 2 turn lanes off carton going south for the large number of summer tourists. The option of signaling the entire intersections would slow traffic and create wrecks as it does now. the cross over right turns south off carton would not have enough lane length to hold the number of campers busses cars etc. during the summer months, they backup to healing way now and if you shorten this distance you would create more problems. Is the moon meadows intersection going to get signals soon? This intersection is becoming more dangerous everyday with the meadows apartments filling up traffic has increased also the folks coming across 16 from the west take there lives in there own hands getting to the middle before turning north. This intersection needs help now also someone should look at the snow removal issue at this intersection, the plows leave a large pile in the middle of the road so you have trouble seeing turning or oncoming traffic. Lastly will there be any more metings on this project and how can I stay informed?

3.0 Stakeholder Meeting Notes

Tuesday, December 10, 2019

BLACK HILLS ENERGY, EVENT CENTER

RAPID CITY, SD

US16/US16B/CATRON BOULEVARD INTERSECTION: 10 A.M.

US16/NECK YOKE ROAD INTERSECTION: 1:00 P.M.

US16 CORRIDOR SOUTH OF NECK YOKE ROAD: 3:00 P.M.

A fourth group of stakeholders was identified to possibly have an interest in multiple segments throughout the US16 corridor. These stakeholders were invited to attend any of the three US16 corridor stakeholder meetings.

The following notes summarize transportation need-related discussion and stakeholder comments/questions during each of the three stakeholder meetings. The notes are generally summarized as a comment and/or question. Subsequent discussion points are also noted to provide additional information and context. Study advisory team questions to the stakeholders are also noted.

3.1 US16/US16B/Catron Boulevard Intersection Stakeholder Meeting

US16/US16B/Catron Boulevard Intersection

Q. Why do Tucker St and Addison Ave have to be closed in the Single Point Interchange option?

- These access points would be in the ramp area (merge/diverge) and would not be safe to have vehicles entering/exiting when US 16 cars are making a decision about main intersection.
- The project team is evaluating access at the Section Line Rd and at Moon Meadows Dr. North access is being evaluated at Promise Road.

Q. What is the future speed limit with SPI and DLT?

- Both the SPI and DLT can be built at various speeds and the speed is still being considered. For the SPI, the selected speed will be a factor in whether Promise Road can be maintained at its existing location and whether it can be signalized. At higher speeds, the interchange ramps need to be longer and would extend up to or through the Promise Road intersection. This would require intersection closure, relocation, or restricted movements.

Q. Will the light (traffic signal) be on 24 hours on DLT / what happens if you lose power?

- Yes, light would be on 24 hours. There are battery backup systems that can be used.

Q. Is driver familiarity an issue as there is no DLT in the area?

- The DLT has crossover movements that are similar in operation to DDI at Lacrosse and I-90.

Q. Which intersection functions better in the future?

- Intersection/interchange operations are improved under either build option.

Q. What level of traffic are the simulations based?

- 2050 PM peak traffic volumes were used to assess the SS US16 to WB Catron Blvd to SB Les Hollers movement conflict (PM peak included the highest volume for this movement).

Q. Are there any DLT in SD, and if not is the only reason you are proposing is cost?

- The SPI cost is ~\$29-30 million and the DLT \$14-18 million. The SPI is higher because of the structure costs.
- Cost is a notable benefit to the DLT intersection and one of the reasons it was carried forward from the 2016 study.

Q. Why doesn't the current intersection work?

- High volumes in 2050, particularly the left-turn movements, cannot be accommodated by the existing intersection configuration. The DLT has the benefit of freeing up a traffic signal phase which equates to approximately 25 sections that can be re-allocated to other traffic movements. In order for existing intersection to work, 3 left turn lanes and 4 through lanes are needed. Generally as the intersection gets bigger green time is reduced for individual movements and there is more time needed for yellow and red phases.

Q. Is one of the Build Options safer than the other?

- Both options improve safety over the existing conditions.

C. Based on my driver experience at the DLT example provided in presentation, the first time through DLT is confusing. The commuter traffic will adjust but there is a lot of tourist traffic which may struggle in unfamiliar intersection.

C. The fewer stops vehicles have to make on US 16 the safer it will be. It is worth the financial investment to not stop through traffic.

- The project team is still working on signing plan which will help with safe movements. It is necessary to space signs correctly so drivers are making decision to turn too soon.

C. There will be stop lights at Promise Rd and Moon Meadows Dr which still stops traffic on US 16.

- There is also fog concerns at Moon Meadows Dr.

C. It appears there a lot more pavement markings for DLT which could be an issue with fog and snow.

C. If trucks have to stop, it's hard to keep the flow of US 16 traffic moving, especially if they know they have to stop. We need warning lights to let drivers know when light is about to change.

C. There is concern for closing Addison Ave and Tucker St and the impact for businesses. What can be done to lessen impact?

- Access still has to be provided to businesses. The access may not be as direct, e.g. in the NE quadrant there would be a Promise Road rearge to accommodate access. The project team will also be looking at access to the south at Section Line.

C. Loss of access and/or visibility affects property values and that needs to be considered. Access can be meandering even if visibility is good.

- Section Line Road will help with access and it is being considered.

Q. Will Forest Service administration building access be maintained?

- Yes

Q. Will you close service road to existing businesses?

- The concepts do not show the service road being closed. The access between the service road and US16 may be closed depending on the Build Option and forthcoming analysis. You could still access the service road from Section Line (if added) or Les Hollers Way, or other rearge if provided. Additional rearge would be dependent on the future development in the area

C: This is not a good option for business owners on service road.

Q. Does the orthopedic doctor know about the access change? What about other business?

- Yes, they are aware of the potential changes with each Build Options.

C. The project needs to follow city plans there were presented several years ago with businesses along US 16 and residences behind.

C. If Addison Ave is closed the Rock Shop will be hurt because drivers will see the shop but can't get there. The shop is part of the overall tourism in the area and the only shop in Rapid City. There is need to slow traffic down along US 16.

C. Section Line road was originally planned to be an underpass of US 16.

C. Addison Ave is tough to use to get to the doctor office, especially with the high speeds on US 16.

C. To accommodate Buffalo Crossing and Black Hills Energy a signal is needed at Addison Ave.

Q. If Addison Ave or Tucker St are closed, what is the extra travel distance/time?

- The time/distance depends on direction of travel. If you are going North from the doctor to US 16, you would have the distance of getting from US 16 to Healing Way and back to US 16.

Q. Is there a plan for improving the frontage road?

- Not at this time. The project team is considering what the accesses will be first and then look at additional improvements. DOT is responsible for maintenance of the frontage road.

Q. Who is responsible for snow removal on US16?

- The city and DOT have an agreement. DOT maintains US16/Mt. Rushmore Rd to Tower Road.

Q. What is the distance between Section Line Road and Addison Ave?

- ~1/3 mile or 1780 feet

Q. What is the standard for access?

- US 16 is considered an expressway so access should be provided no more than every ½ mile but existing conditions have more accesses. Rearage is part of the evaluation for looking at access to properties west of US 16.

C. Thank for meeting with stakeholders and discussing the transportation considerations before the area is built out.

3.2 US16/Neck Yoke Road Intersection Stakeholder Meeting

Neck Yoke Road Area

C. The focus is on one access. But for campers and trailers, a second access is necessary as it wouldn't work to have these vehicles make left-hand turns at Neck Yoke.

C. It is easier for campers/RVs to make a turn directly into Happy Holiday.

Q. Can you confirm that Build Option 1.2 doesn't require a bridge widening?

- Correct, the bridges do not need to be widened.

Q. Can you explain the access road across the Reptile Gardens parking lot?

- The road is needed to provide access to adjacent properties. The roadway shown in the layouts is 24 foot in width plus shoulders. This would need to be purchased by SDDOT. There would be a small loss of parking and SDDOT would work with RG to identify a solution to address lost parking.

C. It is our understanding that Reptile Gardens discourages left-hand turns.

- Yes.

Q. At the far right access points (north) on the Build Options we would like to have the ability to make right turns to go to Rapid City.

- Study team will look at this further.

C. We understand that no left-hand turns improve safety but a lot of traffic goes back to Rapid City not just continues right to Mt. Rushmore so there is a need to provide left movements.

- This movement would be provided in the RCI Build Options (and signalized Build Options).

Q. What is the volume that would make the U-turn back up onto US 16. We don't want any cars to back up in the through lane.

- Volumes wouldn't be expected to fill the U-turn lanes.

C. Reptile Gardens has been doing surveys and are finding the number of people coming from Hill City is increasing; therefore, they are making left-hand turns into Reptile Gardens. If there is only 1 entrance and cannot make a left hand turn lane they may not stop.

Q. Do you need a left-hand deceleration lane?

- The left-hand turn lane storage is 600 feet which is the standard storage amount. All turning movements have their own turn lanes. The length of the right-turn lane into Happy Holiday shown in the figure is the minimum length.
- At Build Option 1.2, you have two ways to make turns into Reptile Gardens: left turn and through U-turn followed by making a right turn.

Q. At 60 mph can you get slowed down enough to make a left-hand turn?

- Left-turn lanes are designed to provide adequate deceleration distance and storage.

C. There is a preference of some to build Option 1.1 because there is less pavement at Happy Holiday.

Q. Can you drop the speed limit from 60 to 50 mph though the bottom sag at Neck Yoke?

- You need to make the decision at the top of the hill not midway down; therefore, it would be better to slow traffic at the top of the hill if you are going to have to stop.
- The project team will consider the change as part of the larger corridor study.

C. Are there any restrictions for federal signs? Can you put turn coming up for Reptile Gardens and other attractions? It is very important from reptile Gardens perspective that there is a warning sign at $\frac{1}{2}$ - $\frac{3}{4}$ mile before the turn.

- Signs add to safety by giving drivers time to make decisions. Necessary signage for safety will be provided.

Q. Will the RCI include roadway lighting?

- Yes, it would be anticipated that the intersection would have roadway lighting similar to what was recently installed.

Project Team summary: The input heard today was to have a main RCI with secondary access as needed depending on the grades and if they can be accommodated. Secondary access would include: WB left-hand turn and right-out at north access and right-in/right-out for Reptile Gardens.

C. Would expect more rear-end crashes with the signal.

C. The signal is a horrible idea as this would disrupt trucking and increase secondary accidents. If the trucks have to stop and it's slick/icy, they may not be able to get back up the hill without chains. You would have more rear end crashes when it's icy.

C: It would be difficult to make a light cycle on US 16. Folks wouldn't want to be behind the stopped truck so it would back up the other lanes.

- This was addressed in the traffic signal review and is the reason for an additional 3rd EB lane.

C. Thank you for meeting with stakeholders and taking our input.

Q. Can you leave the north Reptile Garden access to right in / right out?

- There will have to evaluation as every access left in place has the potential to increase crashes. This will be investigated further.

C. There is a need to have a northern access for getting farm equipment across US 16 for land on both side the road.

Q. Is 2026 when the intersection improvements would be started or finished?

- The intersection improvements would take one construction season. SDDOT will work with Reptile Gardens on timing so any improvements that need to be made in the parking lot would not be disrupted with intersection improvements.

Q. How long to construct Catron Boulevard?

- Two construction seasons.

3.3 US16 Corridor South of Neck Yoke Road Stakeholder Meeting

US16 Corridor Comments: Neck Yoke Road to Busted Five Lane

Rockerville Concepts

Q. Will there be turn lanes at the primary intersection?

- Yes, there will be a left turn lane and the project team will look at the need for a right turn lane.

C. There is a campground going in where the new road is shown on Concept 3 so a different road connection may be needed.

C. The proposed concepts clean up the access and that is a good improvement over the existing conditions.

C. Shifting US 16 to the north improves visibility but moving US 16 to the south makes the road straighter.

- Moving US 16 to the north eliminates the skew that is still present if US 16 is shifted to the south.

C. The crashes that are currently seen are at the skew

Q. When would the Rockerville improvements be made?

- The cost benefit of making improvements in this location are hard to justify at this time with the existing conditions.

C. Rockerville should be the focus with less emphasis or need at Silver Mountain Road.

Q. Is there a learning curve with using RCIs?

- By the time an RCI would be provided at this location there would potentially be other RCI improvements in the corridor.

Busted Five Concepts

Q. Can an RV with a trailer maneuver a U-turn at 65mph?

- The RCI is being designed for WB67, which is a semi-truck and trailer. This vehicle length would be similar to a RV setup.

C. Preference for the merge lane straight across from the campground

- A RV can merge back into traffic from the U-turn by waiting at the bulb-out. This allows for less exposure time in traffic than the existing conditions thereby reducing angle conflicts. Currently, the median cannot accommodate a large RV or truck in the narrow median.

Wilderness Canyon Concepts

Q. Can secondary access be closed near fire station?

- Fire Department is open to closing the access as they see many cut-throughs from 47th Avenue. The cut-throughs are occurring during training and pose safety concerns. Eliminating access will improve safety.

Q. Can an additional median accommodate emergency vehicle?

- A mountable median can be installed. This allows emergency vehicles to pass but the normal vehicles would not be able to pass.

Bear Country/Croell Curve Concepts

C. The intersection near the Bear Country gift shop is a problem area for traffic/crashes. Putting an RCI in the location is a good.

Neck Yoke Concepts

C. The lighting in this area has been a huge benefit.

Q. Will you be able to make a left turn at Happy Holiday? There would be an issue with big RVs or trailers not being able to make the left turn at Neck Yoke. Right now they can't make the turn and get stuck in the median.

- Anticipate that an additional left turn would reduce this problem.

Q. On concept 1.2, Happy Holiday may be confusing for the drivers; prefer Build Option 1.1

Q. Which concept is preferred?

- There isn't a preferred option yet but the RCI is less expensive than a signal because of the need to build an additional EB through lane for the signal

C. If the RCI is provided at Neck Yoke it may be possible to provide secondary access at Reptile Gardens and at the north service road.

C. Neck Yoke intersection is the biggest issue and the RCI eliminates the confusion

C. It seems that there is a likelihood of increased rear-end crashes if you put a signal in at Neck Yoke.

Project Team summary of items to still be considered as part of concept study: guardrail in the narrow median, use of sinusoidal rumble strips to reduce noise, signage and other safety improvements.

C: A sign is needed at the curve before the Hillside Cabins to let people know there could be cars pulling out or in and alert them to be aware.

C: Can you please keep us up to date on improvements proposed and schedule to share with customers as necessary?

4.0 Additional Outreach

Public meeting media coverage:

<https://www.newscenter1.tv/public-meetings-all-day-regarding-the-future-of-hwy-16/>

<https://www.kotatv.com/content/news/Some-business-owners-are-not-to-keen-on-the-plans-for-modifying-US-Highway-16-566057841.html>

https://rapidcityjournal.com/news/local/options-proposed-for-busy-highway-intersections/article_f5539a8d-aaa0-5c4d-9d98-a597299ac650.html