

Transit Subgroup Meeting #3

Minutes

05 December 2019 / 2:30PM - 4:30PM / Teton County Engineer's Office/Webex

STAKEHOLDER ATTENDEES

Nick Hines WYDOT Facilitator
Jack Koehler (Friends of Pathways)
Heather Overholser (Teton County)
Amy Ramage (Teton County)
Melissa Turley (Teton Village Association ISD)
Darren Brugmann (Southern Teton Area Rapid Transit)
Bob Hammond (Wyoming Department of Transportation)
Tyler Sinclair (Town of Jackson)
Susan Mick (START Board Member)
Jared Smith (Resident)
Jeff Dior (Operations Manager, Southern Teton Area Rapid Transit)

Additional Attendees

Joel Meena (WYDOT Traffic)
Jeff Mellor (WYDOT Traffic)
Ryan Shields (WYDOT Traffic)
Kelly Rounds (WYDOT Project Development)
Ted Wells (WYDOT D3 District Construction Engineer)
Stephanie Harsha (WYDOT D3 Public Relations Specialist)
Darin Kaufman (WYDOT D3 District Traffic Engineer)
Meg Mordahl (WYDOT NEPA Coordinator)
Marshall Newlin (WYDOT)
Hank Rettinger (FHWA)
Bob Bonds (FHWA)
Dustin Woods (FHWA)
Anna Olson - Jackson Hole Chamber of Commerce
Brian Smallowskie
Brent Crowther
Jim Charlier (Charlier Associates)
Cody Cottier (Jackson Hole News and Guide)

Agenda

1. Additional Comments on Transit Report dated 11/27/19

[Brent Crowther \(Kimley-Horn\)](#) summarized the addition to Transit Study (pg. 29-31), which included the number of buses needed to accommodate the demand in year 2040. Fifty-eight buses in each direction would be needed to accommodate the additional traffic and maintain

WYDOT Jackson-Wilson Snake River Bridge Project

LOS B. Data was purchased to analyze three street zones. Using a 2.5 percent growth rate, if demand was shifted to buses in year 2040, this additional demand would not fill 58 buses.

Question: Could Transit Study show buses and HOV analysis?

Yes - However, 2.5 occupants (used in the Transit Study) meets HOV definition.

Question: Why not analyze HOV lane?

WYDOT can not currently establish an HOV lane, because it can not be regulated (no state statute). The study accounts for four lanes, which can accommodate HOV/transit in the future.

Question: Can we still fit an HOV lane on the current proposed bridge?

The bridge width is sufficiently sized that by restriping the lines WYDOT can fit a HOV/Turn Lane on the bridge in the future.

Jared Smith discussed a KML file showing proposed transit (bus queue jump, one dedicated EBL, conflicts with RH turning movements, etc.).

Per WYDOT/Kimley-Horn, traffic does not warrant queue jump. An alternative would be a transit signal priority (addressed in Transit Study - pg. 39). Group agreed that Teton County could pursue these strategies county-wide to improve transit times

Question: What about a new transit signal in and out of Stilson?

This would have to go through the Access Review Committee and be reflected in the Stilson Master Plan, which is currently being developed. Nothing in the Snake River Bridge and 22/390 project will preclude a signal from happening in the future.

2. Review Public Comments received

No questions pertaining to the public comments.

3. Review Recommendations from the Transit Report

The group is focusing on how to make buses more desirable than driving, to increase ridership.

All options were discussed (Table 10 in Transit Study).

- 1) Westbound Queue Jump Lane - Option dependent on transit signal at Stilson and WY 390, which group opted to move forward - **Group recommends not moving forward**
- 2) Westbound Queue Jump with Receiving Lane - **Group recommends moving forward**
- 3) Traffic Signal Prioritization at the Intersection - See Table 12 in Transit Study for benefits (pg. 49) - **Group recommends moving forward**. Group would like this option advanced prior to construction of this project

WYDOT Jackson-Wilson Snake River Bridge Project

- 4) Southbound Queue Jump Lane - Still needed if transit priority signal put in - **Group recommends moving forward**
- 5) Traffic Signal with Bus-Only Access - Needs to be reviewed with #8. Currently putting up a signal at a new intersection was not recommended. **Group recommends not moving forward now and completing later**, after Stilson Master Plan is completed
- 6) Traffic Signal with Northbound Left-Turn Lane on WY 390 - **Group recommends moving forward and implementing as part of 5** - Once complete, the Stilson Master Plan will aid in implementation
- 7) Bus Stops on WY 390 - difficult in winter, some interest in summer, would cause conflicts **Group recommends not moving forward**
- 8) New Traffic Signal at Existing Stilson Ranch Road (buses only) -Group looked at combination of #5 and #8. Put signal in at stilson Ranch road until the Stilson Master Plan is completed. Then once Stilson design is completed move this signal to new location shown in #5 and make it for transit only. **Group recommends moving forward**

Group would like WYDOT to produce a document specifying Stakeholder recommendations (referencing the Transit Study). These recommendations will be added to the Master Summary of Recommendations.

Question: Group would like to start action now for a signal at Beckley Park Road/Stilson Ranch Road. What steps are needed?

A formal request will need to be sent to the District (DCE: Ted Wells) in order to execute an Authority to Render Services. Ballpark cost for a flashing beacon is \$60K.

Group would like WYDOT to put language on the project webpage stating that WYDOT is not precluding transit in the design of this project.

WYDOT Jackson-Wilson Snake River Bridge Project



Keith Compton
Wyoming Dept. of Transportation
1040 Evans Rd, Jackson, WY 83001

November 19, 2019

Dear Mr. Compton,

Following the recent Technical Update to the Teton County Integrated Transportation Plan, a group of concerned citizens (see letter attached) outlined a recommended course of action to our local Teton County elected officials regarding the critical nature of responses needed for each section of the plan.

As you can see from the list, we know we need some changes locally to help action the plan for efficient regional and local travel and with this in mind we invite WYDOT to join us to meet these goals by changing your lens and working with the Town and County to address the HWY 22 corridor in its *entirety* as opposed to the current "sectional" approach.

The message from transportation planning expert Jim Charlier, hired by the Town and County, to our community was stark and honest. "If your plan is to reduce traffic, then your hopes are going to be dashed. There will be a bottomless demand for travel in this region."

We share the same goal with WYDOT of improved mobility. But given the unique character of Jackson Hole and our regional tourism-based economy, we believe that working together to achieve this goal may require a less traditional approach to highway widening.

Our community's Comprehensive Plan and Integrated Transportation Plan (ITP) both forecasted this growth and set the goal of moving people, not single occupancy vehicles. Transit and carpools are critical tools to mitigate traffic on Hwy 22 and meet visitor expectations. In July, 23,283 vehicles travel on Hwy 22 daily, with an estimated 50,000 empty seats.

If Highway 22 is expanded to four lanes without any HOV designation, we know it will only serve to increase traffic by incentivizing single occupancy vehicle use and we will return to our

WYDOT Jackson-Wilson Snake River Bridge Project

current traffic congestion. It's not a matter of if, just a matter of when. Teton County relies on a visitor economy and we need to protect our scenic corridors, quality of life and visitor experience by presenting better transportation options.

We request WYDOT study the entire Hwy 22 corridor, in conjunction with community partners, including START Bus, before making decisions at the intersection and bridge that limit what is possible on Hwy 22. We understand WYDOT is going to build a four lane bridge over the Snake River, but we want Hwy 22 to have dedicated transit or High Occupancy Vehicle (HOV) lanes to incentivize transit by allowing buses to move more quickly during times of peak traffic congestion. And, we need an intersection at 22/390 that is going to support dedicated lanes.

As you have shared, there are a number of options for implementing successful transit/HOV lanes:

- Expanding Shoulders into transit only lanes
- Dedicating two of four lanes proposed in the 2014 PELS study as HOV
- Implementing transit queue jumps (concepts 2 and 4) on Hwy 22/390 intersection
- Variable HOV limits that could respond to demand, seasonality and future growth

We also recommend implementation of some smart transit recommendations by Kimley – Horn to alleviate winter congestion for visitors, employees and residents.

Concept 8 – New traffic signal at existing Stilson Ranch Road for buses

Table 10: Recommendation 1A

Table 10: Recommendation 3

With the recent approval of \$18.5 million SPET tax to improve the Jackson/Teton County Vehicle Maintenance Facility and the new START Bus Route Study, our community has affirmed our support of transit, we strongly hope you can be part of the traffic solutions we seek.

Thank you,

Anna Olson - Jackson Hole Chamber of Commerce

Melissa Turley - Teton Village Association ISD

CC:

Teton County Commissioners

Jackson Town Council

WYDOT Jackson-Wilson Snake River Bridge Project

----- Forwarded message -----

From: **Sara Flitner** <sara@flitner.net>

Date: Fri, Nov 15, 2019 at 12:38 PM

Subject: Re: Technical questions/comments for November 20th call with WYDOT staff

To: Jared Smith <jaredasmith@msn.com>

Cc: Keith Compton <keith.compton@wyo.gov>, Darin Kaufman <darin.kaufman@wyo.gov>, bob.hammond@wyo.gov <bob.hammond@wyo.gov>, Ted Wells <leroy.wells@wyo.gov>, nick.hines@wyo.gov <nick.hines@wyo.gov>, Jeffery Mellor <jeffery.mellor@wyo.gov>, DBaker@tate.com <DBaker@tate.com>, tom@newlandprojectresources.com <tom@newlandprojectresources.com>, Michael Brennan (mike@mjbrennanlaw.com) <mike@mjbrennanlaw.com>

This is so helpful and interesting. FYI, I am working on a summary of our discussions with you, Keith, so we can keep track.

If you would send me a screenshot of your notes, I'll read and incorporate. Especially that first part when you said such nice things!

Sara Flitner, President
Flitner Strategies
www.flitner.net
307.734.1322

On Nov 15, 2019, at 12:36 PM, Jared Smith <jaredasmith@msn.com> wrote:

Hi Keith,

Per your request I have compiled some questions and comments from my past emails over the last weeks. Sorry for any repetition in the text below as I merged together some past emails. Please forward to the WYDOT staff who will be part of the discussion scheduled on November 20th with Dan Baker, Tom Newland and me.

I hope WYDOT staff could use a web based call so we can pull up graphics from the WYDOT preliminary plan set and other documents in the WYDOT files.

WYDOT Jackson-Wilson Snake River Bridge Project

Is it possible to have Kimley Horn staff on this call to get their real time technical input and minimize iterations as we talk through the technical issues and questions related to their proposals?

Thanks for setting this up and please have staff give me a call in advance of the Nov. 20th meeting if it would help clarify the questions below..

Questions and comments:

We want to better understand the technical information that led to the selection of the Florida T concept as the preferred alternative at 22/390. We want to be supportive of WYDOT's preferred alternative but would like a more detailed explanation of why this option was selected. We also understand that WYDOT will be hopefully analyzing the Hwy 22 corridor in an upcoming additional NEPA analysis for the 22 corridor and want to make sure the 22/390 intersection and bridge work will complement the alternatives that will likely be analyzed in the future work.

The available information that has been presented or is shown on the web site seems to be limited to some matrix level evaluations but does not give enough detail to understand the technical level analysis. It would be helpful to know which alternatives performed better in the design year but may have not been selected because of cost or other considerations. Could WYDOT provide the technical detail regarding traffic/Level of Service analysis and walk through the technical information? Of particular interest is the grade separated flyover option and 2 lane roundabout options.

In addition, we hope WYDOT could have Kimley Horn analyze what type of channelization plan would be used across the bridge and through the 22/390 intersection if the future widening on Hwy 22 were to include transit/carpool lanes from 390 to the "Y" in Jackson. This will answer the concern about how (and if) the width of the bridge and merge lane and 22/390 storage lane length requirements can be accommodated with the proposed four lane bridge section and future transit dedicated lanes to the east. It will also help answer the question regarding the bridge shoulder width requirements for the future. For instance, if the option for westbound bus only lanes across the bridge could be accommodated with shoulder running transit, it would be advisable to increase the initial shoulder width from 8 feet to a wider section to not preclude this option in the future (and negate the need for future costly bridge widening when Hwy 22 is widened into town). Or could the westbound bus/HOV lane be accommodated with restriping of the lanes to narrow the shoulders and travel lanes and accommodate a 5-lane section across the bridge with a transit/HOV westbound lane?

It is my working assumption that an eastbound transit/HOV lane from the 390 intersection to the east limits of the bridge would not be needed because the transit and carpool vehicles would be given priority at the signal and would merge and weave with the eastbound bypass traffic from Wilson before transitioning to an eastbound transit/HOV lane starting just east of the bridge where the lanes merge. I understand why Kimley Horn said a westbound lane dedicated to transit/HOV would not provide benefit in the near term 22/390 project but believe it will be essential if the future 22 corridor includes dedicated transit/HOV lanes

Given the focus of Kimley Horn's current work, my question is how would the channelization and intersection design work with a future transit/carpool only lane in each direction on Hwy 22 and would the bridge cross section be adequate if WYDOT were to run transit on the shoulder across the bridge or restripe to add a westbound transit/HOV lane. There is a lot happening in a short distance between 390 and the merges to the east of the bridge at the project limits and it seems it would be good to make sure the design does not preclude options when Hwy 22 is widened or shoulder running transit is provided in the future.

This request is also premised on the adopted ITP which assumes widening on Hwy 22 would look at the potential for one transit/carpool lanes in each direction rather than four general purpose lanes (see last

WYDOT Jackson-Wilson Snake River Bridge Project

paragraph on page 30 of ITP). We realize WYDOT has not endorsed that proposal yet but the Kimley Horn effort could hopefully look at this option so we can make an informed decision on the current intersection and bridge project so as to not preclude the option if and when Hwy 22 is improved.

This transit and carpool focused concept for eventual widening on Hwy 22 is also premised on the political dynamic we have seen over the last many years where local elected officials, community members and groups have said they will oppose widening for general purpose lanes but might support transit focused widening. This concept would increase the "people moving" capacity of the corridor and possibly negate the need for adding general purpose lanes which could save WYDOT the cost and political controversy of adding general purpose lanes. Given the average occupancy of vehicles already in the traffic flow (with even higher occupancy during peak winter and summer periods of the year), this may be a viable and politically acceptable way to achieve consensus among the vocal stakeholders and achieve a "win-win" that provides needed congestion relief while giving transit priority in the widened facility. Since the traffic flow seems to already have enough 2 and 3 (or more) person "carpools", the added lanes would likely be well used as transit/carpool only. Modeling by Kimley Horn, in coordination with the Cambridge Systematics County modeling effort, would answer this question and may help break the political log jam that has existed to date - so I hope WYDOT would consider the effort.

Here are the comments I provided specific to Kimley Horn's study at the intersection:

Thank you for the informative on-line meeting last Friday and thanks to Brent and the staff at Kimley Horn for their great work to date. Hopefully, most of their recommendations can be incorporated into the design and funding partnerships can be agreed on as the project moves forward. These suggestions will help make the project work better with transit and greatly improve the "people moving capacity" of the proposed intersection as we move more people into transit in the coming years.

I wanted to follow up with a few comments and suggestions that can hopefully be addressed as Kimley Horn finalizes their draft and the design is refined by WYDOT this fall and winter:

1. Hopefully, as we discussed, year 2040 modeling analysis for the Hwy 22 corridor from Hwy 390 to the "Y" can be added to the Kimley Horn scope of work in coordination with the County effort being performed by Cambridge Systematics - including peak operations in both winter and summer. (see comment # 5 below)
2. In addition to the westbound transit only lane/queue jump on Hwy 22 at the intersection, consider adding a continuous southbound bus only turn lane on Southbound 390 starting north of Stilson that would allow a right turn into Stilson and also allow a transit only and queue jump lane between the Stilson/390 intersection and Hwy 22 (or allow shoulder use by transit in this section?)
3. Consider carrying the northbound 390 lanes north of the Stilson/390 intersection before merging the 3 lanes
4. Consider starting the 3 lanes for SB 390 to EB 22 and WB 22 north of the Stilson/390 intersection
5. Examine how a future four lane Hwy 22 from Hwy 390 to the "Y" in Jackson would integrate with the current bridge and 22/390 project lane configuration (assuming the new added WB and EB Hwy 22 lanes would be used for transit and 3 or more person carpools in the peak periods.
6. Is the merge length for Eastbound 22 and left turning SB 390 to EB 22 traffic adequate?
7. With additional storage or green time could the eastbound 22 to NB 390 turning traffic be improved to a higher LOS in 2040 without impacting the other movements?

Thanks!

Jared

WYDOT Jackson-Wilson Snake River Bridge Project

Why were trip times tracked only for July? It doesn't make sense to build our permanent road for the absolute busiest it ever is. That leads to building over capacity.

Why were HOV lanes not fully evaluated? They would definitely be impactful at peak times and also support a transit ready future.

→ Was there TAC or other public input in setting those?

Where do the Level 1 and Level 2 screening processes come from? Who determines those performance measures? For example, why aren't wildlife collisions or greenhouse gas emissions considered?

does the traffic simulation model
compare bus travel time to regular
vehicle travel time to show the
difference/advantage provided to transit?

What greenhouse emissions reduction can be expected
of moving the LOS from failing to a grade of C?

does the traffic simulation model
compare bus travel time to regular
vehicle travel time to show the
difference/advantage provided to transit?

What greenhouse emissions reduction can be expected
of moving the LOS from failing to a grade of C?

- NEPT process?

(# of Lanes)

How will you ensure that we aren't going to be looking at a six lane road in the next 25 years if there aren't HOV lanes or any reasons encourage people to get on the bus.

Where is WYDOT in encouraging travel demand management or choice of the bus?

WYDOT

① - IS THERE A WAY TO DROP NIGHT SPEED LIMITS TO 25 MPH FROM THE 390/22 INTERSECTION TO BEEHIVE LANE - ? OR SOMEWHERE IN THE VICINITY.

② - HOW FAR NORTH ARE THE PROPOSED WILDLIFE FENCING/CROSSINGS GOING FROM THE INTERSECTION OF 22/390?

③ ~~WHY ARE THE LIZARDS~~
~~BOTTLED~~

WHY SHOULDN'T JACKSON HOLE MOUNTAIN RESO GRAND TETON PARK & YELLOWSTONE PARK HELP PAY FOR ANIMAL CROSSINGS, INTERSECTION REDO ETC?? (SINCE A REASON THIS AREA IS SO POPULATED IS -

PEL Study

- 2040 -

(Transit)

ITP prioritizes ~~getting~~ increasing transit use -
How does this design encourage drivers to take the
bus instead? How does it encourage carpooling?
Is improving the bus route travel time enough to get
people to take the bus? Don't we want the bus
2040 - 4 lane highway to go faster than cars?
How do we do that?

- X ① How will an accessible pathway
be provided under the west ~~bank~~ side of Bridge?
(Need ADA Access to South West Level Trail)
- ② ~~How~~ ^{In Pedestrian} will access be provided ~~from~~
along the south side of W422 from Green Lane
to the South West level trail?



Comment Card

Snake River Bridge & Intersection

Name: Robert Reagan
Address: 41545 Green Circle Drive, Wilson
Email: rtf@aspartanwb.com Phone: 307 690-4229

Comments:

Florida I live off Green Lane. Our concerns
are not being addressed and included in
this.
No Florida T please.



Comment Card

Snake River Bridge & Intersection

Name: Wes Gardner

Address: 2290 Apache Rd / 1194th, 83001

Email: khutays@gmail.com

Phone: 307-690-4209

Comments:

Thank you for working w/ the local stakeholders to improve the congestion and impact of the WY22/390 Corridor.

Currently, summertime traffic during peak hours is completely unacceptable. There's nothing more frustrating than idling in my vehicle stuck in traffic on WY22, staring at the Tetons, and wondering how the emissions from my vehicle are melting the Tetons' glaciers. The recent greenhouse gas emissions study shows that 64.4% of our emissions come from ground transportation. Because of this, I suggest that we make the bridge wide enough so that the westbound shoulder allows for BRT carpool lanes (which could theoretically extend all the way to the Y intersection in town).



Comment Card

Snake River Bridge & Intersection

Name: Alex Murovec

Address: PO Box 11887 Jackson 83002

Email: _____ Phone: _____

Comments:

- 1) Presenting a Transit Plan w/o also discussing wildlife crossing at 22/390 intersection is a disservice!
- 2) Relocating the bus stop to 390 is stupid and displays a complete misunderstanding of how Stinson functions as a transit hub
- 3) In winter, hundreds of cars park to the west of the Stinson bus stop (which is heated and has bathrooms) to expect them to walk all the way to a 390 bus stop is delusional. with this & books
- 4) I fear you are measuring the wrong criteria and therefore will have flawed conclusions.

6. RECOMMENDATIONS

The following recommendations are provided based on the Level 1 and Level 2 screening (**Table 13**). Recommendation 1A and 1B are alternatives (both would not be constructed). Recommendations 2 and 3 can both be implemented.

Table 13: Recommendations Summary

	Recommendation	Timeframe
1A	Construct a traffic signal on WYO 390 at the existing boat launch access road along with a transit-only access roadway to Beckley Park Way with a northbound left-turn lane for buses only (Strategy 6)	The traffic signal should be constructed when delay experienced by buses making a left turn from Beckley Park Way to northbound WYO 390 significantly impacts on-time bus performance or poses a safety risk.
	OR	It should be noted that a traffic signal at Beckley Park Way that is open to general traffic would likely not meet traffic signal warrants as specified in the Manual on Uniform Traffic Control Devices (MUTCD).
1B	Construct a traffic signal at the existing intersection of WYO 390 and Stilson Ranch Road (Strategy 8)	
2	Relocate transit stops to WYO 390 consistent with the Stilson Master Plan (Strategy 7).	Relocation of bus stops to WYO 390 provides significant travel time savings and reduces bus route distance. However, the bus stops should only be relocated upon redevelopment of the Stilson Park-and-Ride. Pedestrian improvements are required for both northbound and southbound WYO 390 between the park-and-ride and the bus stops.
3	Implement system-wide TSP	Implement TSP at WYO 22/WYO 390 when system-wide BRT implemented is on the Teton Village route. At that time, TSP should also be implemented at all major signals along the route.

Estimates of capital costs and operations and maintenance costs (Level 3 performance metrics) are provided in **Table 14**. Capital costs were based on a conceptual design of each of the recommended alternatives.

Annual operations and maintenance costs were developed using the travel time savings calculated during Level 1 screening and operating expenses per vehicle revenue hour reported by START to the National Transit Database (NTD). The 2016 reported operating expense per vehicle revenue hour (latest available) is \$148.27. The current summer schedule, as well as schedules from past seasons, were utilized to determine the number of round trips per year on the Teton Village route.

WYDOT Jackson-Wilson Snake River Bridge Project

Table 14: Criteria Screening Results

	Recommendation	Capital Cost	Annual Operations/Maintenance Savings
1A	Construct a traffic signal on WYO 390 at the existing boat launch access road along with a transit-only access roadway to Stilson Ranch Road/Beckley Park Way with a northbound left-turn lane for buses only (Strategy 6)	\$300,000	\$87,500
	OR		
1B	Construct a traffic signal at the existing intersection of WYO 390 and Stilson Ranch Road/Beckley Park Way (Strategy 8)	\$210,000	\$64,200
2	Relocate transit stops to WYO 390 consistent with the Stilson Master Plan	\$165,000	\$184,700
3	Implement system-wide TSP*	N/A*	\$18,100**

* Cost depends on the number of signals where TSP is implemented as well as the number of buses where communication devices are installed; therefore, a system-wide cost cannot be estimated at this time.

**Savings as a result of implementing TSP could only be calculated for the WYO 22/WYO 390 intersection. Implementation across the whole Teton Village route would result in a higher corridor travel time and operations/maintenance benefit.