STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION BUREAU OF HIGHWAY DESIGN

MEETING SUMMARY

PROJECT: BOW-CONCORD 13742

Interstate 93 Improvements – Part B

DATE OF MEETINGS: May 31, 2017, Bow

June 1, 2017, Concord

LOCATION OF CONFERENCE: Bow Memorial School, Bow, NH

Rundlett Middle School, Concord, NH

ATTENDED BY PROJECT TEAM:

NHDOT McFarland Johnson (MJ)

Don Lyford Gene McCarthy
John Butler Brian Colburn
Rebecca Martin Jeff Santacruce
Marc Laurin Scott Ozana
Jennifer Zorn

Christine Perron
Cindi Bourrie

GENERAL PUBLIC:

Bow: Approx. 70 attendees (see attached sign-in sheets) Concord: Approx. 40 attendees (see attached sign-in sheets)

SUBJECT: Public Informational Meetings

NOTES ON MEETINGS:

Part B of the Interstate 93 (I-93) Bow-Concord project includes Preliminary Engineering and environmental documentation with the goal of selecting a preferred alternative and holding a Public Hearing. The project covers the I-93 corridor from just south of its intersection with Interstate 89 (I-89) to just north of its intersection with Interstate 393 (I-393) at Exit 15. Exits 12, 13, 14 & 15 on I-93 are included along with Exits 1 on I-89 and I-393.

Two Public Informational Meetings (PIM), one in Bow and one in Concord, were held to inform the public about the project and present the concepts currently under consideration. The meetings consisted of an Open House from 4:00 PM to 7:00 PM with a Formal Presentation at 7:00 PM. The Agenda for the meetings is attached. The presentation is also attached.

The presentation included the project history, scope, purpose and need, and resource information. However, the project concepts were its focus. I-93 will be widened to a basic six (6) lane interstate, three lanes in each direction, with auxiliary lanes between interchanges in many areas.

Below is a summary of the concepts under consideration for each interchange. Attached is a comparisons matrix sheet that was distributed to the PIM attendees.

I-89 Area

Concept C – Lengthen Weaves at Exit 1

Concept K – Eliminate Weaves at Exit 1 and new NB I-93 to NB I-89 directional ramp

Concept P – Eliminate Weaves at Exit 1 and eliminate loops at I-89/I-93 interchange with new directional ramps

Exit 12

Concept E – Partial Cloverleaf with signals at ramp terminals

Concept F – Partial Cloverleaf with hybrid roundabouts at ramp terminals

Exit 13

Concept A – Signal for NB off-ramp right turn onto Manchester Street.

Concept A – Signal and widening to 2 lanes for NB off-ramp right turn onto Manchester Street.

Exit 14/15

Concept D2 – Existing configurations but eliminate NB entrance ramp at Exit 14

Concept F – Single Point Urban Interchange (SPUI) at Exit 14 and Cloverstack at Exit 15.

Concept O3 – I-93 under Loudon Road at Exit 14, eliminate NB entrance ramp at Exit 14, and eliminate two loop ramps at Exit 15 with new directional ramps

Public comments were received verbally, written, e-mailed, website and via the telephone. Below are the public comments received verbally at the meetings, those submitted electronically, and those over the telephone. Copies of written comments are attached. *Any website comments should be summarized as well.*

May 31, Bow

General Questions/Comments on Project

- What is the design year of the project? *Need to also document what responses were given to questions or rephrase as a comment if no significant answer was given.*
- Were sound walls considered for the project?
- Are there two separate funding sources for the project i.e. Turnpikes and/or Federal?
- Are any ITS/electronics being considered for the project?
- Are accommodations for autonomous vehicles being incorporated?
- What considerations are given for storm water?
- A comment was made that driverless cars should be considered

- There was a comment about stormwater treatment needing to be incorporated
- The Chairman of the Bow Heritage Commission commented that he does not see many impacts on historic properties in the town.
- A comment was made that highway safety and traffic are important.
- There were questions about the duration of the construction and when different parts of the project will begin- an explanation was provided that the funding is still in question and the earliest dollars are in 2024.

I-89 Exit 1 / I-89 and I-93 Interchange

- One person expressed concern with how Concept C SB Ramp had such a large impact on the Colby Property which was just rezoned as mixed use by the town.
- One person did not like how Concept C NB ramps impact Cilley State Forest.
- Several citizens were concerned with the overall cost of Concepts K and P and thought that Concept C should be considered because of cost.
- One person wanted to make sure that under Concept C that the sight lines looking north from SB ramp intersection at Logging Hill Road were sufficient to improve operations.
- Several people expressed concern about eliminating the direct connection between I-89 and 3A.
- Several people indicated that they liked Concept P because it eliminated all weaves but they were concerned that it would not be considered because of the higher cost.
- General feeling was that the Exit 1 ramps were dangerous and that anything was an improvement.
- One person asked if Bow Mobil Station had been contacted to tell them that they were being acquired with Concept K or P.
- One person expressed concern that the walkway from the park and ride on 3A to Valley Rd was not being accommodated in Concept P in the I-89 area.
- Two people did not like the idea of the signal at the end of the I-93 to new local road loop (*Concept K*). They believe it will cause backups and delays on the ramp.
- Two people that have property adjacent to the I-89 project area were pleased to see that there were no concepts that add access to the land that was recently re-zoned as mixed use by the town.
- One person thought that Concept C at I-89 brings the merge on the SB barrel further north on I-89 where the traffic tends to be moving at a higher speed. He thought this could make merging onto I-89 more difficult than the current condition.
- At the I-89 area most people liked Concepts K and P over C. Although most wondered if the configuration of K and P at Exit 1 could be incorporated with something that keeps the direct connection to 3A. People's preference seemed to lean more to Concept K out of the three options presented because it has less out of the way route to 3A from I-89 SB.
- The truck traffic at Bow Junction is very noisy, will there be sound walls in that area?
- Archeological impacts along the Turkey and Merrimack Rivers should be investigated.
- Are the ramps at I-89/I-93 interchange single or double lane?
- Will the high speeds on I-89 SB be addressed with this project?
- Several citizens commented that at I-89/Exit 1 they avoid the on ramp because of the weave and excessive speed of vehicles.
- A comment that at I-89/Exit 1 Concept C does not solve the speed issue.
- At I-89/Exit 1- a few were not pleased with the access restrictions in Concept K

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- One person was concerned about maintaining trails and recreational access at I-89/Exit 1.
- One person commented that a concept for I-89/Exit 1 should be selected that will support development in the town.
- At I-89/Exit 1 could a multi-use trail be located along the local road in Concept P.
- One person likes Concept K better than Concept C because it addresses the problem.
- Several comments about the current weave and safety concerns from citizens.
- One citizen was not happy with impacts to Cilley State Forest.
- There were several positive comments about Concept P.
- One person commented that Concept P will accommodate future traffic.
- There was one citizen that commented that the current alignment of I-89 leads to visibility problems due to the angle of the road in relation to the sun.
- A citizen commented that Concept C does not allow time to get up to speed.
- One person commented that an additional lane should be added for I-89/Exit 1.
- One person said that at I-89/Exit 1 lengthening the weave is very positive.
- One person asked about wildlife concerns with the impacts to Cilley Forest.
- At I-89/Exit 1 one person commented that it will be important to foster new development.
- The Bow Police Chief commented that at I-89/Exit 1 numerous accidents occur. The officer expressed concern about impacts to the area that has been designated for future development and concern about impacts to businesses.
- A comment was made at I-89/Exit 1 that 3A access is important- this commercial area represents a lot of Bow's businesses.
- A citizen was concerned about noise at Bow Junction from trucks' jake brakes coming in two directions.
- There was a question about people driving too fast at I-89/Exit 1 and potential for speed limit controls or more enforcement.
- There was a question about sound walls and if the topography at Bow junction might make the noise travel in a way that would prevent a noise wall from being useful.

Exit 12

- One person did not like the use of roundabouts at Exit 12 and did not understand why it was still being shown because the City of Concord did not approve previously.
- One person liked the idea of roundabouts, but was concerned with the safety because outof-towners don't know how to drive them. They referenced the new Route 4 two-lane roundabout in Lee as an example and called it "White knuckle" driving.
- One person thought it worked fine like it is and could not understand why any improvements were being considered at all.
- One person wanted to know if the roundabouts had been looked at with the additional traffic that would be diverted to them because of the connector road under Concepts K and P.
- People didn't seem to have strong opinions at Exit 12 between Concepts E and F. The majority seemed to like the idea of dropping the tight off ramps in both concepts though.
- A comment was made that at Exit 12 the Concept F roundabouts would be confusing.

Exit 13

- Most people seemed to like both options at Exit 13, however it was unclear on whether they felt long term solution should be constructed now as part of the project. One person wanted to know if the signalization could happen now before the project because they were concerned with how long it would take to get the project under construction.
- Many people were initially concerned with the cost of the concepts because they did not understand that the Red List Hall Street bridges were included in this cost.
- People seemed to like both options at Exit 13, but were leaning towards the long-term fix of Concept B.
- One person would like to see signal metering used at the ends of the on ramps at Exit 13 to help with the merge on the interstate.

Exit 14-15

• General comment from several people was that they strongly disliked using Exit 15 and felt it was unsafe because of the short weave.

- Only one person commented on the elimination of the NB On-Ramp at Exit 14 by saying they thought it was a great idea if it eliminated cost and impacts to private property.
- Most people were concerned with the overall cost of Concepts F and O3 and did not feel we needed all the new bridges.
- Several did not seem too interested in this area as it did not affect them.
- Exit 14-15 are very close to one another, was eliminating Exit 14 ever considered?
- There were multiple people who believe that D2 doesn't help the problem at Exit 15
- A bicyclist was concerned about Exits 14/15 and the current lack of shoulders.
- A citizen commented that Exit 14 could be eliminated all together.
- A person asked about the end of the Turnpike at Exit 14 and funding for the project.

June 1, Concord

General Questions/Comments on Project

- One person expressed his concern with the whole project and stated that he thought nothing should be done.
- Are the signals proposed on all concepts to be coordinated with adjacent signals?
- One person commented that the top priority should be eliminating the weaves.
- Are people going to be able to acclimate to hybrid roundabouts?
- Are there going to be barriers through Concord?
- Are you planning to close Loudon Road during construction for any of these concepts?
- Are there going to be provisions for pedestrians and cyclists during a Loudon Road closure?
- Was any thought given into "smart" roads and automation?
- Could you possibly close ramps during times of heavy traffic or meter traffic at on ramps?
- What is the funding picture for the project (Federal/Turnpike)? How does funding affect the final decision?

- This project seems a little more "engineery" than a previous project that was pursuing a walkable livable city. Can the walkable livable city concept be accommodated with this project?
- One person was concerned that the project would move too far forward in the process with a preferred alternative and not give the public the chance to give input.
- One person commented that the Boston to Montreal Rail line has been abandoned north of Concord and converted into a recreational rail trail. Also they stated there is a state statute that states a rail R.O.W. has to be maintained even if the rail has been abandoned to allow for future rail possibilities.
- Are sound walls and grooved pavement (parallel grooves for noise reduction) being considered?
- What type of environmental analysis being done?
- Can the whole process be made faster by obtaining a T.I.G.E.R Grant?
- Can a trail being developed by the City of Concord be accommodated by this project?
- Are there options that completely take the buildings on the Ralph Pill parcel, if so which options? (This question came from a representative of the parcel owner)
- One person commented that the only way you could access the Ralph Pill Parcel from Concept F would be with an at grade crossing from Storrs St.
- Do these designs consider HOV/bus lanes on the interstate?
- A suggestion was made about closing certain ramps during periods of congestion.
- A suggestion for metering traffic and more signs.
- Concern about lack of funding.
- Discussion about the Turnpike ending at Exit 14.
- Interest in making a livable city (Concord).
- Discussion about the Concord-Montreal line- how will conversations with Pan Am go?
- Comment about bus ways, carpool, van pool dedicated lanes, are they considered?
- A comment about noise levels form the grooved pavement.
- A comment about indirect impacts and how they will be evaluated.
- Comment about the City of Concord in 2020- what trails, rail, bus, or competitive projects from the City- could this be incorporated?
- Citizen commented that they will support whichever options will improve traffic conditions.
- A couple of citizens commented that it was a lot of information for one session, difficult to 'take it all in'.
- A second person was interested in how the State (DRED) responds to the concepts that impact Cilley Forest.
- One citizen felt that the full 6 lanes was overkill- suggested considering 5 lane options.
- Concern about cost of red listed bridge rehab/replacement.
- One person commented that they do not like roundabouts.

I-89 Exit 1 / I-89 and I-93 Interchange

• One person liked Concept C because it was cheapest. They were not concerned with impact to developable land because Concord is so close to Bow and has everything they need (i.e. shopping, post office, etc.)

- Two people liked getting rid of the weave at Exit 1 but were not as concerned with I-93 weave, so they wanted to know if there was an option like K but keeping loop ramps at I-93.
- One person wanted to know how this would affect the bike path at I-89 Exit 1 as this was always supposed to extend further out I-89 towards Exit 2 and the existing bike path by Audubon and they were afraid this would cut it off and prevent further access.
- Numerous people were concerned with how direct access between Route 3A and I-89 would affect Exit 12.
- A citizen commented that the I-89 interchange is a mess and dangerous.
- A comment was made that at I-89 Exit 1 there are currently a lot of accidents
- One person said that for Concept K at I-89 they are not concerned with loss of business because people can use the indirect connection.
- I-89 Exit 1 Concept C- someone commented on concerns about 'chunking up' (segmenting) Cilley Forest.
- A comment was made about the Bow junction connection being a 'big deal' for Bow residents.
- What is the traffic volume using the direct access between I-89 and 3A? The person didn't see a huge problem losing this access because traffic could go up to Exit 12.

Exit 12

- One person concerned with truck traffic through roundabout because they were aware it was such a problem in Boscawen.
- One person wanted signals because they strongly dislike roundabouts.
- One person liked signals but was concerned with cars backing up and blocking side streets.
- One person liked signals and but did not like quick merges because they felt it caused higher speeds as people raced each other to get ahead of each other.
- Several felt roundabouts were the best option.
- One person wanted to know what the problem with the current configuration at Exit 12 is. After explaining to him the safety problems he understood the reasoning and stated that he preferred the roundabouts to the signal.

<u>Exit 13</u>

- Several people liked both options, but they wanted to know if Concept A could be done now.
- One person wanted to make sure the ped/bike path under Manchester St. would remain at Exit 13 for both options.

Exit 14-15

- One person was concerned about eliminating the Exit 14 NB on ramp because they felt the traffic would use Fort Eddy Road and that was already congested. They were not concerned with impact at Ralph Pill.
- One person wanted to know what happens with the train station that is shown as part of the Capital Corridor project under Concepts F and O3.

- One person did not like lowering I-93 because they were concerned with groundwater and flooding and wanted to know how we were handling stormwater under options F and O3 because it seemed like there was a lot of new pavement.
- One person liked Concept F because it eliminated the weaves and the extra signal on Loudon Road, but maintained Exit 14 NB On-Ramp.
- Two people liked the idea of lowering I-93 and placing Loudon Road over until they saw
 the visualization and realized there would be walls because the ramps still had to climb up
 to Loudon Road.
- Several people liked Concept O3 because it preserved access to Stickney Ave and opened that area for development. However, one of those same people indicated they were concerned that the ramps might be too confusing.
- Some were concerned about the impact on the bus station under Concepts F and O3 because it looked like it would be gone.
- A couple people liked Concept D2 because it was simple, provided some improvement at Exit 15 and was the cheapest.
- One person commented on Concept O3- that is 'makes good sense' to move the railroad.
- Citizen commented that he would prefer a hybrid approach for Exit 14/15. For Exit 14 he prefers D2 (fewer impacts) and he would like the cloverstack at Exit 15.
- A comment was made about Exit 14/15 that the businesses might like to have northbound traffic pass through and preference for saving money at Exit 14 with option D2.
- Exit 14/15 someone commented that they like Concept O3 but the price is difficult to swallow and it will be hard to navigate during construction.
- Exit 15 Concept D2- A citizen was concerned about accidents at the clover weave.
- There was concern about eliminating the Exit 14 northbound ramp
- A comment was made about the importance of Fort Eddy Road intersection improvements
- Questions were posed about buses and access to Stickney Ave for Concept F at Exit 14.
- Comments were made about option O3 and the closure of Loudon Road- how would this impact pedestrians and bicyclists.
- Concord 2020 could connect downtown to the River- how does O3 impact?
- One person was concerned about eliminating the Exit 14 NB on ramp. He thought maybe it could be kept by pulling the ramps in closer and using retaining walls.
- Will Concept D2 allow for a reconfiguration of Loudon Rd under I-93 to improve "fengshui"?
- Concept F appears to impact access to the bus terminal, has there been any thought into how to keep access?
- How do you access I-93 NB if the Exit 14 on ramp is eliminated?
- One person commented that Concept O3 eliminated the connection with the Concord to Montreal rail line. This person also commented that they preferred Concept D2 because most of the access remained.
- One person brought up the Concord 2020 meetings that propose sinking the interstate to better see the river from downtown. Does Concept O3 produce better views of the river from downtown?

Comments Received from Open House/E-Mail/Website/Telephone

Comments Received on May 31 from Gil Rogers (Bow resident):

At the I-89 and Exit 1 area Mr. Rogers recommended taking the best parts of each concept to make a composite design which could be built in phases and solve the three major weaving section problems while leaving the existing local services intact (I-89 connecting to NH 3A). More specifically, he favors:

- A grade-separated ramp for the I-89 southbound to I-93 southbound movement (Concept K & P). He felt this was the most critical safety issue and warranted elimination of the weaving section. This could be done as an early stand-alone project.
- Moving the I-89 northbound ramps at Exit 1 northerly (Concept C). He felt this weaving section does not operate as poorly as the southbound weaving section, so lengthening the weaving section should be adequate.
- A directional ramp for the I-93 northbound to I-89 northbound movement that goes over (not under) I-93. This would allow the direct connection between I-89 and NH 3A to remain. Designing an acceptable location for this ramp to tie into I-89 northbound would be challenging given the location of the other on and off ramps in the vicinity.

At Exit 14:

• Agreed that eliminating the northbound on-ramp is a good idea.

At Exit 15 Mr. Rogers favors:

• Elimination of the cloverleaf configuration and its associated weaving sections. He felt the cloverleaf configuration with the short weaving sections would not operate well in the long term, and would not be seen by the public as a long-term improvement. He favored the Concept F configuration over O3, but was concerned that there may be steep ramp profiles where the directional ramps from I-393 pass over I-93 then need to get under the I-393 bridge.

Comments Received on May 27 from Jack Rich:

My name is Jack Rich, and I am a senior at Bow High School. Just to let you know, I have some experience in the engineering field, as I have job shadowed with multiple firms, including the NH DOT. I have also completed a semester long internship at a local engineering company, and am planning to get a Civil Engineering degree in college.

With that in mind, I have some ideas to share on this I-93 Bow Concord Improvement Project, as I have followed it for many years. I tried to contact the project team via the website, but it did not work, so that is why I am e-mailing you directly. In fact, I have attached a drawing that I did of the I-89/I-93 interchange from memory when I was just six years old, before I even knew about the project. For the I-89 area, from my perspective, Concept C is the best, simplest, and least costly option. The configurations and costs of the other concepts are very unreasonable for several reasons. First, multiple bridges will have to be built, which costs a significant amount of money. Second, there is a small business car service center in the path of the proposed I-93 South on-ramp, which would have to be taken by eminent domain. Third, they are inconvenient for local traffic because if you want to travel to the Bow Junction area coming from Lebanon, you will be forced to take exit 1, turn left at the end of the off-ramp, and then turn right at the bottom of Logging Hill. That will cause serious backup and further increase the chances of deadly crashes at the

intersection of the end of the I-89 South exit 1 off-ramp, Logging Hill Road, South Street and Short Street, which are already present. Additionally, I firmly believe that replacing the Mobil gas station with a roadway will result in a significant risk of oil leaks. In turn, this would result in serious environmental consequences, including affecting the water quality of the Turkey River and surrounding groundwater in a negative way, which would also affect its ecosystem.

Next, for exit 12, Concept E is the most viable alternative because it eliminates an on- and off-ramp that are unnecessary. I don't understand why Concept F, which contains roundabouts, was proposed because back in 2012 before the exit 12 bridge was replaced, the Concord City Council voted against a proposal to put roundabouts on both sides of the bridge. Moreover, for the Pinch Point, I believe that Concept D is the best option because it is flexible to the Burlington Coat Factory, unlike Concept O, which is another case of eminent domain.

Now, here is where it gets really complicated, at the exit 14-15 area. I believe that Concept C is the most logical option for two reasons. One, it costs less compared to all the other incredibly complex alternatives. Second, this option resembles the I-495/US-3 interchange in Lowell, Massachusetts. I have traveled through that area several times, and the traffic flow was very smooth. I do have some suggestions for this alternative, however. You should keep the I-93 North exit 14 off-ramp as it is today. Also, you should get rid of the access road from the proposed extension of Storrs Street to Stickney Avenue to allow for a possible commuter rail station to be built there in the future. Lastly, you should incorporate enhanced river access into this concept by digging a tunnel underneath I-93 and installing a Riverwalk, like in Manchester. In conclusion, I believe that it is very important that whatever alternatives are selected accommodate the currently very busy travel periods, including weekend and New Hampshire Motor Speedway traffic.

Comments Received June 1 from Jonathan Miner:

• How about trying to build a balanced transportation infrastructure? The never ending lane widening projects have not provided a long term solution. It becomes more costly to maintain the wider highways: more lanes to repave, more snow to clear, more lines to repaint. The only ones who stand to profit are the construction industry and their lobbyists, and maybe the politicians?

Comments Received June 6 from Alan Johnson:

- What committee or department will be making the final determination as to the final design and modifications?
- Will there be public hearings prior to the final determinations (either one or a series)?
- Will there be any effort to reach out to the impacted business community and property owners on Manchester Street, Fort Eddy Road and Loudon Road?
- Is there consideration for providing specific "neighborhood" meetings in order to generate feedback and provide additional education as this process moves forward?
- What is the specific process, including detail of the individual components from additional community education to final decision or determination?
- For each concept: Has there been any study prepared projecting potential damages and loss in business revenue that the extended construction schedule and restriction or significant disruption for property access will have on the business community along Fort Eddy Road and the Loudon Road Corridor? If so, will there be any consideration for compensation by

the State or City to any to these damaged businesses due to obstructed or restricted access, loss of revenues, decline in property value, etc.?

Additional Comments (Exits 14 and 15 Concepts):

- Concept D2: It appears that this concept is the most practical and appropriate of the three provided in the Concord Monitor article dated May 29, 2017. This design would cause the least amount of disruption to the property owners along Fort Eddy Road and Loudon Road. The loss of the northbound entrance ramp to I-93 for westerly bound Loudon Road traffic could be accommodated via I-393 access from either Eastside Drive or Fort Eddy Road.
- Concept F: This design appears overly complicated, will likely be confusing to motorists, could be excessively expensive and would force the elimination or expensive relocation of area businesses and the utility substation.
- Concept O3: This appears to be by far the most damaging for existing area property owners and businesses along Fort Eddy Road and Loudon Road. It would appear to be excessive in both cost and time of construction and would obstruct access to area businesses.
- The configuration of the Exit 15 clover stacks and the parallel road systems will be confusing for motorists and will also appear to offset any visual improvement anticipated to be gained by the lowering of I-93.
- Lowering I-93 also conflicts with City code/requirements of maintaining the Capitol Dome visibility between Exits 12/13 and 15.
- As a historical note, in the past this policy has restricted proposed building heights for certain downtown projects. One reported positive of this plan would be to shift the railroad tracks closer to I-93 thus expanding the development opportunities for the Stickney Ave. parcel. It appears that this may also be accomplished in Concept D2.
- Additionally it is noted that traffic to Loudon Road would be closed "for months" during the extended construction process. What this timeframe would be is not disclosed. This would cause serious and potentially irreparable harm to the businesses along Fort Eddy Road and the Loudon Road corridor.
- I would appreciate your providing me with answers to my questions. I have included my contact information below. I also would appreciate your including my comments with others that you have and will collect as part of your summary or report.

Comments Received June 6 from Dick Lemieux:

I very much appreciate the opportunity to comment on the I-93 Bow-Concord project. I have a strong interest in the project, as a member of the first technical steering committee (representing FHWA) prior to 2006, as Chair of the Concord Transportation Policy Advisory Committee, as President of the Friends of the Merrimack River Greenway Trail, and as a Concord resident who lives just 700 feet from the "Opportunity Corridor" and 1,700 feet from I-93, as the crow flies. Comments below are mine alone and not necessarily representative of the City of Concord, TPAC or FMRGT.

1. I would be opposed to the closing of the northbound on-ramp from Loudon Road to I-93. I have lived on Washington Street, near North Main Street, for 25 years. Washington Street is used as a cut-through for pm traffic generated by Concord Hospital and Concord High School, headed for I-93 and I-393. There are large highway signs on North State Street directing traffic to I-393 via residential Washington Street, diverting traffic from commercial Centre Street. PM peak hour counts on this 1-lane, 1-way street average nearly

- 600 vehicles. That's 4 times the number of vehicles entering the Exit 14 NB on-ramp from the same direction. I can't help but think closing the NB on-ramp from Loudon Road would result in increased traffic on Washington Street.
- 2. I think the idea of a single point urban interchange at Exit 14 is worth pursuing further. The primary objection to it seems to be the impacts on the Ralph Pill building. If Loudon Road was realigned further to the north, between the Holiday Inn and the river, could a SPUI be squeezed in without taking the Ralph Pill building?
- 3. If the answer to the previous comment is "yes", and if Loudon Road crosses I-93 above I-93, could access to the Ralph Pill building be maintained from the north, under Loudon Road? If yes, that might make it seem less isolated than the access from the southwest that shows on Concept O3.
- 4. I favor any alternative(s) that would allow North Main Street, between Centre Street and Bouton Street, to be reduced to one through lane in each direction. Except for that section, Route 3 through Concord is 2 lanes from city line to city line.
- 5. I would like to see modeled the full 4-way intersection of Route 202 with Commercial Street and South Commercial Street (i. e., removal of the barrier that prohibits the north-south movement and left turns). Most of the traffic getting off I-93 SB and I-393 WB turns left/south onto North Main Street. Allowing left turns onto South Commercial Street, then connecting with Storrs Street, should reduce the traffic through the North Main/Bouton Streets intersection, hopefully allowing the road diet on North Main Street.
- 6. With north-south traffic accommodated on Commercial/South Commercial Streets, as suggested in the previous comment, Constitution Avenue could be cul-de-saced, north of Route 202, allowing a shorter bridge over the rail and allowing more land for development south of Route 202.
- 7. I would like to see an alternative that connects Storrs Street and Loudon Road (i. e., an atgrade intersection) modeled. That would connect Exit 15 with Loudon Road, further relieving traffic on North Main Street.
- 8. If both ideas 5 and 7 were implemented, the new street would relieve traffic on North Main Street and possibly serve as a replacement for the NB entrance ramp at Loudon Road, if the SPUI doesn't work as suggested in Comment 2.
- 9. Regardless of which of the design options are selected for Exits 14 and 15, the north-south mainline rail should be relocated as far to the east as possible, maximizing the potential for redeveloping the underutilized land in the rail yards.
- 10. As long as the former Northern Rail corridor remains a designated "high speed rail" corridor, a right of way needs to be preserved. A rail-trail could, and should, be on that preserved right of way, as it is now from Boscawen to West Lebanon.
- 11. Strong consideration should be given to placing the trail at the west edge of the Pan Am rail yards, providing non-motorized access to downtown via Storrs Street.
- 12. With Stickney avenue gone (presumably), with Constitution Avenue discontinued south of Route 202 (Comment 6) with the rail up against the east side of the Opportunity Corridor (Comment 9), and with the trail up against the west side (Comment 11), Storrs Street could be relocated more centrally between the rail and the trail, providing access to future developments on both sides. How many acres of land would be available for development under that scenario?!
- 13. One of those future developments should be a multimodal transportation center.
- 14. I would like to see the Merrimack River Greenway Trail illustrated on all the alternatives, from Exit 15 to I-89, as assurance that you have taken it into account in the design and that no current possibilities would be eliminated by the widening project.

- 15. Concord is a Bicycle Friendly Community with an adopted Comprehensive Transportation Policy that is based on "Complete Streets" concepts. I fully expect that the preferred option, when finally designed, will safely accommodate bicyclists and pedestrians through all the intersections with Concord streets.
- 16. I would like to see a reconsideration of the pedestrian bridge over I-93. In fact, a signature pedestrian bridge crossing the rail, the Interstate, and the Merrimack River, south of Loudon Road, would implement the longstanding dream to connect Downtown Concord with the Merrimack River. The bridge, and in fact the entire trail, would be eligible for several Federal funding categories. Consideration should be given to constructing the trail as an incidental part of the widening project.
- 17. To repeat a comment I made at the public information meeting last week, consideration should also be given to applying for a TIGER grant before the program expires. I think a multimodal, multi-jurisdictional, application would be competitive.

Most of what I have suggested above is predicated on the assumption that Pan Am Railways will relinquish its land between Exits 14 and 15, except for what is needed for the mainline rail that would remain. If that effort fails, the "Opportunity Corridor" will remain a crud corridor.

Comments Received June 7 from Mike Otis:

- I attended the project open house and presentation in Bow last week. Thank you and your team for the time, patience, and thought that you put into this effort. I was very impressed by the different perspectives traffic, bike-ped, historical, environmental, financial that were addressed in detail. I have considered the alternatives in depth since that meeting. Please accept my feedback below.
- <u>I89 area</u>: Two keys I heard were Logging Hill Road to I89 southbound is a bigger problem than I thought and maintaining access from I89 to 3A is locally important. The existing C-D road serving I93 northbound to I89 northbound is getting the job done. Also, vehicles are still coming up to speed I89 northbound to Exit 1, that weave isn't as serious an issue. Considering impact to the Cilley Forest, I favor 50% of Concept D serving I89 southbound.
- Exit 12 area: Better level of service, no signals to stop traffic during non-peak times, only +\$100K, Concept F is a no-brainer. I imagine there is nothing that can be done to improve geometry of the curve between Exits 12 & 13 driving I93 southbound; that curve now comes up faster and tighter than drivers think.
- Exit 13 area: Queuing is already back to I93 northbound, given funding constraints mentioned at the meeting, it'll probably be 2035 before it's built anyway. Got to be Concept B. That serves I93 northbound to Manchester Street southbound, Old Turnpike Road to Regional Drive and Pembroke, therefore was extending I89, full interchange with I93, across the river to the intersection of 3 & 106 considered?
- Exit 14 & 15. I have reversed my initial impression that favored exit 14-15 concept F: too impactful, two much pavement, too costly. Also don't like that I93 is back to just two through lanes (yeah, plus the C-D lanes here). I gave a lot of thought to the exit 14 access because two of these concepts eliminated the Bridge Street to I93 northbound ramp. First thought was not good, but upon reflection I concur and would go further to eliminate the I93 southbound exit 14 off ramp too. These ramps serving points north are an anachronism that were there before 393 was built. Now, from points north, exit 14 destinations can be reached with little more effort from exit 15E or 393. Throwing out exit 14 altogether, as someone mentioned, is not feasible because I93 between exits 13 & 14 is the Downtown Concord Bypass (I remember those signs from the 1970s). Getting rid of those two ramps

would help bike-ped access, as someone else inquired, on the north side of Bridge Street between North Main Street and Fort Eddy Road. Way too much to handle I93 southbound to exit 14 in concept O3. One more thing getting rid of the I93 southbound exit 14 ramp too: drivers don't want to get off the highway where can't get back on to return. Exit 15 I like the clover stack, fewer bridges, in Concept F; without the exit 14 ramps in play anymore, I93 can still be shifted east to avoid pinch point impacts, the C-D roads could be eliminated, and Stickney Ave. to Bridge Street connection can be retained. Seems this solution would fulfill the requirements and the constraints.

Comment Received June 1 from Ron Rayner

- At the I-89 and Exit 1 area Mr. Rayner favored Concept C to address the Exit 1 weaving sections and the I-89 southbound to I-93 northbound flyover ramp from Concept P to address the I-93 CD road weaving section. He liked the simplicity of Concept C, but felt that the CD road weaving section also needs to be addressed.
- At Exit 14 and 15 he favored the Concept D2 at Exit 14 combined with Concept F at Exit 15. He liked that this combination minimized property impacts and associated cost, and eliminated the weaving sections at Exit 15.

Comments Received June 11 from Gordon McLachlan:

Considering the objective is to solve the dangerous weave at Exit 1 on I-89 and at I-93 N to I-89 the best long term solution is Option K. If any other option shown is chosen it does not really solve the problems and likely would require another costly design change & re construction in the future. Option K seems to offer the least long term cost approach to solving the weaving problems at I-93 I-89 interchanges. People wanting to connect to Route 3A from Bow could get on 93 north and exit at the Route 3A interchange. I don't believe the elimination of the current direct access from 89 to route 3A is really an issue.

ATTACHMENTS:

Pubic Informational Meetings Agenda Presentation Concept Comparison Matrices Comment/Question Forms Submitted List of Attendees

Submitted By:

Gene McCarthy, P.E.

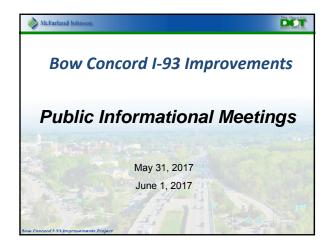
Bow-Concord I-93 Improvements

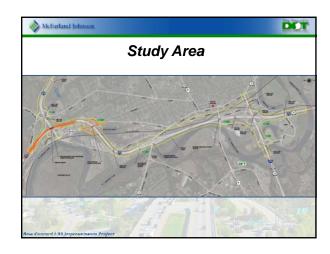
Public Informational Meetings

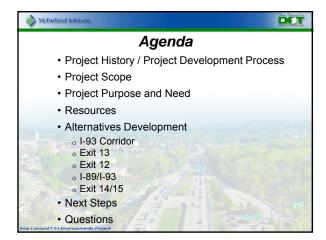
AGENDA

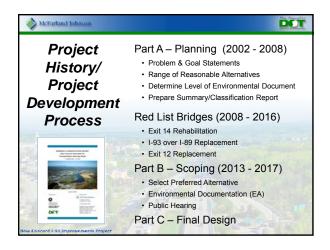
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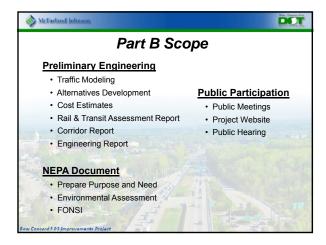
- 1. Project History / Project Development Process
- 2. Project Scope
- 3. Public Purpose and Need
- 4. Resources
- 5. Traffic
- 6. Alternatives
 - a. I-89 Area
 - b. Exit 12 Area
 - c. Exit 13 Area
 - d. Exit 14/15
- 7. Next Steps
- 8. Questions

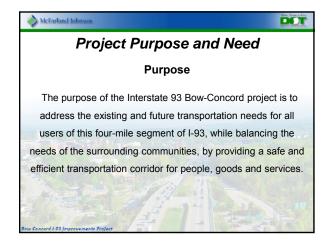






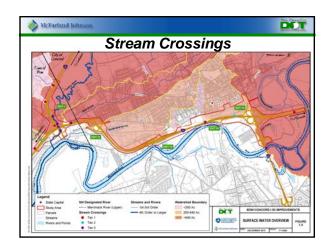


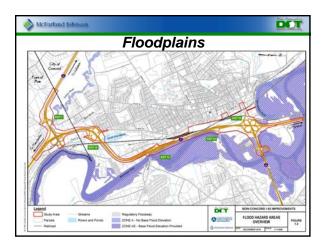


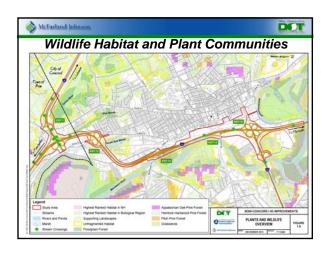






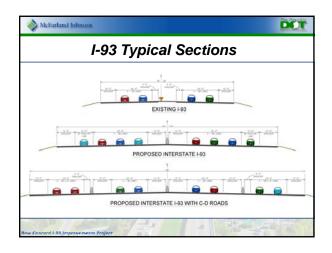






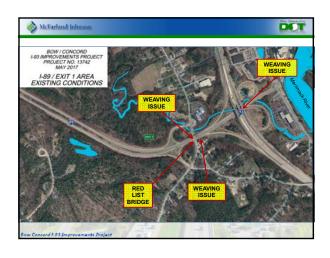




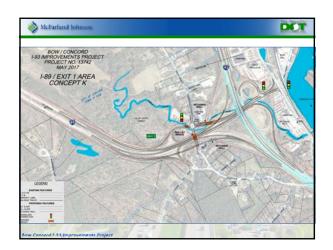


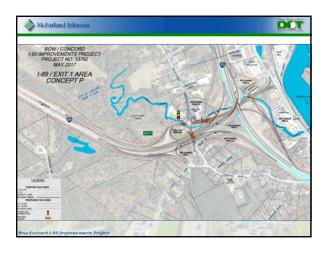


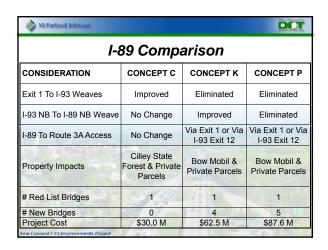






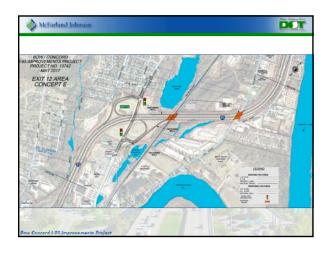




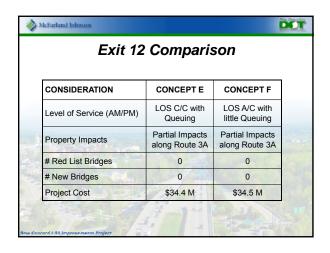






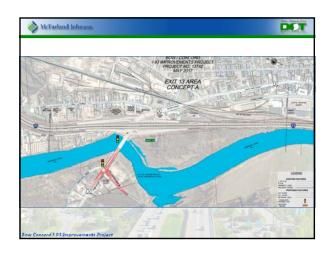


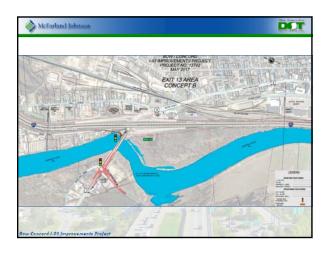




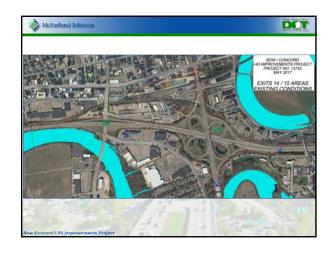
















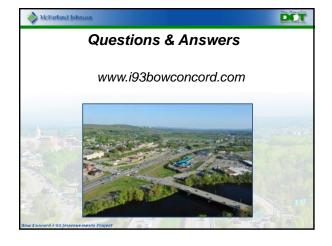
















I-89 Comparison

| CONSIDERATION | CONCEPT C | CONCEPT K | CONCEPT P |
|--------------------------|---|-----------------------------------|-----------------------------------|
| Exit 1 To I-93 Weaves | Improved | Eliminated | Eliminated |
| I-93 NB To I-89 NB Weave | No Change | Improved | Eliminated |
| I-89 To Route 3A Access | No Change | Via Exit 1 or Via I-93 Exit 12 | Via Exit 1 or Via I-93 Exit 12 |
| Property Impacts | Cilley State Forest & Private Parcels | Bow Mobil & Private Parcels | Bow Mobil & Private Parcels |
| # Red List Bridges | 1/ | | 1 |
| # New Bridges | 0 | 4 | 5 |
| Project Cost | \$30.0 M | \$62.5 M | \$87.6 M |

Bow Concord I-93 Improvements Project





Exit 12 Comparison

| CONSIDERATION | CONCEPT E | CONCEPT F |
|--------------------------|--------------------------------|--------------------------------|
| Level of Service (AM/PM) | LOS C/C with Queuing | LOS A/C with little Queuing |
| Property Impacts | Partial Impacts along Route 3A | Partial Impacts along Route 3A |
| # Red List Bridges | 0 | 0 |
| # New Bridges | 1/ | 1 |
| Project Cost | \$34.4 M | \$34.5 M |





Exit 13 Comparison

| CONSIDERATION | CONCEPT A | CONCEPT B |
|-------------------------|-------------------|------------------|
| Queuing on NB Exit Ramp | Onto I-93 by 2035 | Acceptable |
| Property Impacts | None | 1 Private Parcel |
| # Red List Bridges | 1 | 1 |
| # New Bridges | 0 | 0 |
| Project Cost | \$28.6 M | \$33.1 M |





Exit 14 / 15 Comparison

| CONSIDERATION | CONCEPT D2 | CONCEPT F | CONCEPT 03 |
|-----------------------------|---------------|---|--------------------------------|
| Exit 14 to Exit 15 Weaves | Improved | C-D Roads | Eliminated |
| Exit 15 Weaves | Improved | Eliminated | Eliminated |
| NB Entrance Ramp at Exit 14 | Eliminated | No Change | Eliminated |
| Property Impacts | Higgins Place | Ralph Pill Bldg., Unitil Sub Station, & Burlington | Higgins Place & Bus Station |
| # Red List Bridges | 4 | 4 | 4 |
| # New Bridges | 0 | 3 | 6 |
| Project Cost | \$86.5 M | \$186.2 M | \$163.2 M |



| Name | M-alalla M |
|-----------------|--|
| Address | Mi chelle M |
| 7441099 | |
| | |
| City | Bow |
| State | |
| ZIP | |
| E-Mail Address | |
| Phone Number | |
| Message/Comment | the issues getting onto |
| | IB9 at exit I on Friday |
| | & Sundays. It just moves |
| | the conflict point into a |
| | higher speed area. |
| | concept K & P are both |
| | great improvemento to connect logging Hill Rd to R+3A |
| | These concepts will eliptimate |
| | on Fridays & Sundays driving to concord to avoid the traffic back-ups. |
| | |



| Name | Evan Mulholland |
|---------------------------------------|--|
| Address | p v bis i v s j mo j |
| | Concord NH |
| City | |
| State | |
| ZIP | |
| E-Mail Address | |
| Phone Number | |
| Message/Comment | Please Choose 03 for |
| 9100 for better | 14/15. Please also include |
| | a bile lare on of Kest |
| 11 bol + plolestrain Connectivity for | Sufficient Space to work and |
| Man St + Re | bike over 93. I bike |
| River : | from the Statehouse area to |
| _ | Hazen Dr. his is very |
| Thouts | suportant to me and others |
| EVAN | |



| Name | 1000 |
|-----------------|--|
| Address | LARRY Haynes |
| | 594 JRT 3A |
| _ | |
| City | Bow |
| State | NH |
| ZIP | 03304 |
| E-Mail Address | |
| Phone Number | |
| Message/Comment | Very concerned about The convoluted access to Rt 3A from 1-89 South as well as getting to 1-89 North from Rt 3A. If this approach is adopted (Thepenot) Talso think for 1-89 Straffle exiting to Logging Hill Rd That you will need a light - It is difficult doing a left hend turn onto Logging Hill Rd. Thonk you. |



| Name | MATT GATZKE |
|-----------------|--|
| Address | I Shore View P.R. |
| | |
| O!h. | |
| City | Baw |
| State | N 6f |
| ZIP | 03304 |
| E-Mail Address | |
| Phone Number | |
| | |
| Message/Comment | for exit 1 (89) 1:10 |
| | T and the state of |
| | concept K the most |
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| | puedall far cancard |
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| | Exits partect all views |
| | of water 15. End mars 9 |
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| Need for pedestrian connector in Exit 15 area-too far between Loudon Rd & Delfa Dr |
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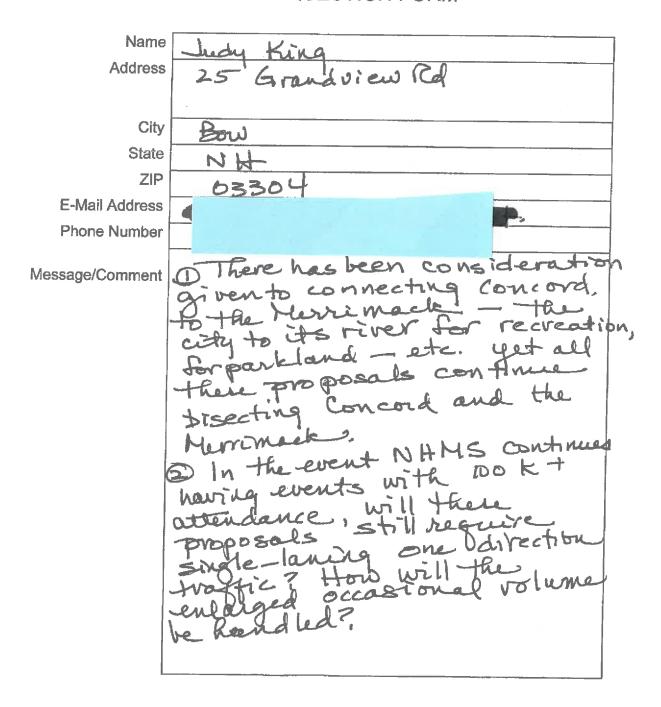


| Name | |
|-----------------|--|
| Address | |
| | |
| City | |
| State | |
| ZIP | |
| E-Mail Address | |
| Phone Number | |
| Message/Comment | Need Alt. C. for exit 12 - retain existing Config but start 1st ramp sooner - elim 1-93 NB to 3A SB if added to Exit I area |



| Name Address City State ZIP E-Mail Address Phone Number | Danoy Cystall |
|--|---|
| Message/Comment | I like concept 03 for concord and concept K for Bow, The extra space shown in Concept C. is inadequate to address wearing 15800s. Thank you |







| Name | Jest Undehill |
|-----------------|--|
| Address | 7 Men'll Crasing |
| | |
| City | Bow |
| State | NA |
| ZIP | 03304 |
| E-Mail Address | |
| Phone Number | |
| Message/Comment | I-89 Gx+1 |
| | Concept appears to be a bandaide |
| | & only slightly imposes a dangens |
| , in | intersection that the chill wester |
| | more, there will be ever more traffic |
| | werry. Option K appears to Fix the |
| | dangens situation with reasonable Cost |
| | Gyids 13 \$ 14 I-93 |
| | Until Free way is widered place consider |
| | 9 traffic meterny system to spiend out |
| | the surges of on-coming thefix. There is |
| | just too much comms on at once duma |
| | peak perods leading to hard brating & |
| | Suden wasves on I-93. |
| | |



COMMENT/QUESTION FORM

Name
Address
City
State
ZIP
E-Mail Address
Phone Number

Message/Comment

RESIDENT OF CONCORD 1957-68 SOUTH END BOW 1968 TO COMPANY

CONCORD 70 67-69 BOW PO 69-75 NHFEL 75-82 AS CHAIRMAN OF THE BOW

IFERITIVE COMMISSION I LOCKED

AT WHAT HISTORICAL PROPERTIES

WEIZE AFFECTED, I DIDNOTTING

ANY PROPERTY AFFECTED IN THE

CONCEPTUAL PLANS THAT WAS

LOCATED ON BOW. HAVING ALSO

BEEN BON'S FIRST FULL TIME

POLICE CHIEF I LOURED AT

TRAFFIC & SAFETY. THE CONCEPT

3 AT EXIT 1-89 AREA ADDRESS ALL

THESE ISSUES, CONCEPT I AFF

ESTIT 12 LOOULD BE MY CHOICE

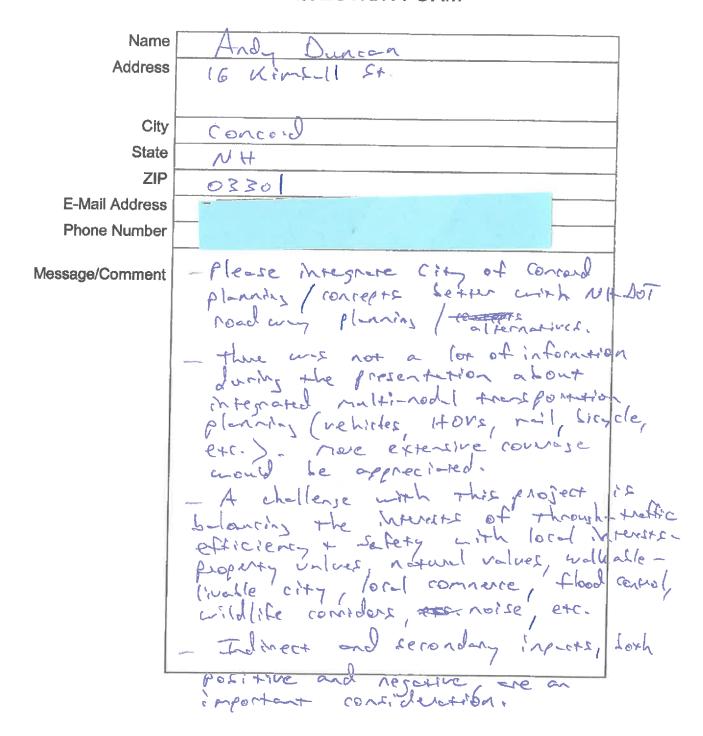
CONCEPT (1) IN EXIT 12, CONCEPT

3 IN EXIT 144 15.



| Name | LEE LATOIE |
|-----------------|-----------------------------------|
| Address | 494 MOUNTAIN RO |
| | E |
| City | Concord |
| State ZIP | NH |
| E-Mail Address | 03301 |
| Phone Number | |
| | |
| Message/Comment | PERSONALLY I USE EXIT 14 NORTH |
| | ON RAMP REGULARLY SO AM CONCERNED |
| | ABOUT LOSING IT, I UNDERSTAND THE |
| | REASONS BUT IT STILL WOULD BE |
| | PELSONALLY INCONVENDENT, |
| | |
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COMMENT/QUESTION FORM

| Name | Kin Passlee |
|--|--|
| Address | 32 Carter St |
| City State ZIP E-Mail Address Phone Number | Concord NH 03301 |
| Message/Comment | For exit 12 I prefer |
| | concept F with votaries. They are more flexible + aestheticly pleasing (flowers etc.) For exit 14 1 puper concept Falso. I like eliminating weares + also like that the capital is still visible and the addition of C+D rocids is socil for both local + third trafforc. |

I did not never exit 1 or 13 with any detail

Themk you for an the hard work a providing is with a chance to weigh in.

K

Public Informational Meeting May 31, 2017

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Public Informational Meeting May 31, 2017

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| Affiliation | Bow SEGETHAN | Resident | Kondent | LEGISLATURE / REDIDENT | L | Resident Bow | GNZ / Rasidad/Famer | 10 | BOW RESIDENT | Bas Resident | 11 | Bos, Renders | 1.4 | Bow Police Dest | Hopkinton resident | |
| Name | FRIC ANDEZSON | Liz Worth | Golo Sami | REP. LAST AFFAIR | Rob Worth | Kent Alice Chase | Tarren Bood | Bir O'Downer | GIL ROURS | Susan Hartford | 7. Hystory Bad | Sary Woods | Dan Laylon | Margant Lower | NI. | |

Public Informational Meeting May 31, 2017

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| Name | HERBERT BENSIG | Michelle Marshall | SAMETH. Show | Kay Cote | Oucia Cote | LASRY HAMES | Will Giran | Carol Brooks | Knishin Dowle | Donna Incland | GARYD. NYLEN | Kena Woods | JOHN ZIMMENMM | JOHN HARE | Roy Schwecker | Mike Shomman |

Public Informational Meeting May 31, 2017

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| Affiliation | Bow REs. | RIM RES. | FHWA | WHIND | NACAT | | Po wheel file met sen in | Ends of Buil | | | | |
| Name | MATT FURK | MARCH BASSEN | JAMIE SIKORA | DAYPI STUMBE | Sill (2005) | | Plas 8 more | all vest | | | | |

Public Informational Meeting June 1, 2017

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| Name | Pete Dearness | Betsey Patter | Seft Howard | Gody Malone | John Fournier | Mark Gbbo-4 | Jeff Collins | Melissa Bernardin | LEE LADDE | The Same | SAM LANGKEY | Return ARCAND | STEVIED FEMERICER | And Duncon | Sector CAR | John Rose | |

Public Informational Meeting June 1, 2017

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| Name | Rob Magk | Hen floured | M. Wet and It | Kin Pease | DICK LEMIELY | Paul Bradshaw | Dand Without | Emma Bast | Craig Tuffes | BILL HENRS | Service work | > | | | |

Public Informational Meeting June 1, 2017

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| Phone Number | | | | | | | | | | |
| Affiliation | CHWA | Acmiachor, 22-24 | Resident | | | | | | | |
| Name | Leiah Levine | Donna Kill | Rycan Place | | | | | | | |