Task Force Meeting #11 Questions and Answers

General

1. Why try to maintain 40 mph if NLSD is a Boulevard?

The existing posted speed limit on NLSD is 40 mph and there hasn’t been a desire expressed by any of the Project Study Group agencies to reduce the speed. The Purpose and Need though addresses improvements to safety and mobility for all modes of transportation.

2. Will the speed limit remain 40 mph and how do you intend to enforce it as most of the current issues with the drive is the lack of safe driving?

There is no intention to change the posted speed limit as a result of the NLSD improvement. Speed enforcement along NLSD is challenging, however, the proposed design provides clear zone areas behind the back of curbs along with intermittent emergency pull-off areas to improve safety operations and allow for speed enforcement. Currently there is legislation in place that prohibits cameras from being used for speed enforcement on NLSD.

3. When will the overpass for bikes be completed at Grand Ave?

Construction of the full Navy Pier Flyover trail is currently expected to be complete by the end of 2020.

4. What does Clear Zone mean?

Twenty percent of all crashed on NLSD are fixed-object collisions, primarily with guardrails which line much of the roadway at the faces of curb. With Clear Zones, the roadside barriers would be moved 10 feet from the face of curbs to provide designated spaces added along the roadway edges for disabled vehicles, incident management, and speed enforcement. These spaces will help provide improved safety.

5. Are you factoring in the current trend for reduced workforces and increased work at home jobs?

6. Is the new Work at Home change in our world given any consideration in traffic and public transit use projections?

7. On Slide 46, it's stated that downtown employment growth is expected. After the WFH success that COVID-19 has highlighted, is this still a realistic expectation? Is CMAP or MPC conducting a study to determine if workplaces being located downtown is still realistic in 2040? If not, are they considering it?

8. Thank you to the project team and presenters. Given recent events there's discussion of a permanent increase in telecommuting. Coupled with the likely drop in VMT due to the economic recession, we seem to be entering a new travel environment. Granted there's a huge amount of
uncertainly, but has the project team addressed these emerging trends in their modeling? If not, would it be possible to do so? Our fear is we may be planning based on assumptions about private vehicle trips that may no longer be valid and missing an opportunity to encourage an even greater shift to equitable and sustainable transit options.

We know that there’s been a large reduction in auto and transit trips in the short term. Some cities that have begun to reopen have actually experienced increased auto use in the short term due to concerns about use of public transit due to the pandemic. We don’t want to speculate on any longer-term trends at this time, but will continue to monitor. If anything, COVID-19 is a reminder about the desirability of alternatives that have built-in flexibility to accommodate unforeseen circumstances.

9. Will all three alternatives allow for future light rail?
10. Will the three remaining alternatives allow for future light rail?

The Dedicated Transitway-Left (DTW-L) and Managed Lane alternatives are forward compatible with light rail. The Context Tailored Treatment with Transit Advantages is not forward compatible with light rail.

11. How many CTA buses travel this section of LSD a day/hour versus cars?

There are approximately 700 CTA buses that travel the corridor during a weekday. Vehicular volumes increase from 70,000 per day at Foster to nearly 155,000 between Fullerton and LaSalle. The segment between Fullerton and LaSalle has the highest overall utilization; within this area the AM peak hour has 190 buses and 13,000 vehicles while the PM peak hour has 110 buses and 12,500 vehicles.

12. What has been done to maintain/maximize lake views for pedestrians and drivers (potentially blocked by swales).

The proposed shoreline protection measures would construct higher revetment walls and backshore berms to protect NLSD and the Lakefront Trail bike path from wave overtopping. These features will be constructed further out into the lake in concert with the placement of fill to create more than 60 acres of new park space between Grand and Fullerton. The project team recognizes that maintaining views is important and efforts will be made to preserve views where possible. During the next level of screening more shoreline and park details that address lake views will be created and assessed.

13. Now that I’ve been home, I have heard and seen the motorcycles on the drive. They harm the environment with noise. They are dangerous. Can we look at limiting motorcycles on LSD?

Since the beginning of the NLSD Phase I study the number one complaint has been motorcycles racing during the summertime in off peak hours. Proposed clear zones along NLSD will provide locations for improved emergency pull-off bays that can be used for traffic safety and other law enforcement.

14. Why are we redesigning Lake Shore Drive to bus travel times and is there not a less heavy-handed and sensitive approach to maintaining the Boulevard characteristics of this most amazing roadway?

NLSD is a multi-modal corridor that is being redesigned to improve the safety and mobility of all modes of transportation. Task Force Meetings #10 and #11 were specifically structured to convey Level 2 screening differences between five Managed Lane Alternatives where the metrics were all related to
travel performance for both buses and autos. In the upcoming Level 3 screening we will assess additional design characteristics of the roadway and park facilities.

15. Can you give us some sense of the anticipated tree cut and tree loss along Lake Shore Drive and in Lincoln Park?

Tree impacts and proposed mitigation have not yet been fully evaluated but will be during the next level of screening.

16. What is our timeline on actually starting work on this project? What year?

A major milestone will be completing the Phase I study which is anticipated to occur at the end of 2022. This will allow the project to be eligible for many different funding sources; however, design and construction may occur in several stages over a number of years rather than as a single construction project. Upon completion of detailed design, the earliest that construction could begin is currently estimated to be 2025.

17. Has our current economic situation set back the start date? Funding needs will, obviously, be high.

To this point in time the pandemic and associated economic impacts have not set back the project timeline as funding for future phases has not yet been identified.

**Baseline Improvements Common to All Alternatives**

18. In addition to the 65 new acres of green space what additional landscaping will be provided, especially in the medians and along the edges of the boulevard?

At this stage of the design the landscaping details have not yet been determined, however, the project team will be working closely with the Chicago Park District and CDOT regarding the planning and design of boulevard and park treatments.

19. What, if any, remediation will be done to the lakefront trail this year to address the collapse of the trail (between North Ave & Fullerton) and the destruction of the trail surface?

The Chicago Park District is actively working with the City of Chicago on emergency repairs to mitigate damage to sections of the Lakefront Trail caused by recent high lake levels and storms.

20. Regarding pedestrians, would they have to be entering an underpass at certain locations or would there be a way to stay at street level

At-grade or street level pedestrian access would occur at the majority of the junction locations, with underpasses and overpasses provided in areas between junctions. In some cases the elevation of the Drive may be raised or lowered to keep park access paths closer to level as they cross.

21. Please remind me of the width of the pedestrian and bike paths. Can the team address how these dimensions will/will not support social distancing in the future?

The biking trail is designed to be 14 feet paved, 7 feet in each direction with 3 foot shoulders. The walking trail is designed to be 12 feet wide but widens up to 25 feet wide in some of the southern sections. Social distancing was not factored in when determining these widths, but they are sized to
comfortably accommodate the high usage that these facilities traditionally see. The project study team will continue to coordinate with the Chicago Park District regarding design criteria for the Lakefront Trail system.

22. Are you leaving parking for the golf course east of the drive; you previously spoke about it being west of the drive after dropping off clubs and this should be considered unworkable and causing an extra amount of congestion

Parking for the golf course is not being removed. All of the Alternatives involve the removal of Recreation Drive and relocation of its parking spaces that are used by both residents and park goers. The Alternatives propose a mix of relocated parking nearby west of Lake Shore Drive as well as additional parking at the Golf Course to mitigate the removal of Recreation Drive parking. Further design refinements to park space and amenities will be detailed as the planning and design process continues.

23. Where will the pedestrian access points be to the lakefront, every quarter mile?

Yes, all of the proposed Alternatives would provide lakefront access for pedestrians and bicyclists throughout the project corridor with the goal of providing access every ¼ mile.

24. How will any plans for the Drive be altered due to the current lake levels and estimated high levels in the coming years?
25. How will this plan respond to the expected future increases in the level of Lake Michigan.

Today, the drive is at risk of flooding again, and the lake front pedestrian paths are constantly being destroyed.

26. How much higher will the new LSD/parkland be than it is currently? In other words, how much lake level rise is addressed?

The project team is currently preparing recommendations for shoreline protection treatments between Grand Avenue and Fullerton Parkway. These proposed treatments take into account the current high water level and will be engineered to prevent waves from overtopping onto the Outer Drive and Lakefront Trail bike path. The proposed design would require adding fill into Lake Michigan, moving the exiting shoreline several hundred feet east of NLSD and the Lakefront Trail.

27. Of the 65 new acres of open space, how much is usable for recreation or even picnicking?

At this time the details associated with the layout and programming of the new park space have not yet been determined. The project team will continue to work with the Chicago Park District and project stakeholders to coordinate those details.

28. None of the alternatives appear to build in flexibility for bike commuting--all rely on a single bike path east of Lake Shore Drive. As we have seen in many weather conditions (particularly in winter) and during the pandemic, that area is susceptible to closure. Could a commuting bike trail be added west of Lake Shore Drive?

The proposed shoreline improvements include a backshore berm to protect both NLSD and the Lake Front Trail bike path from overtopping waves. In addition, in areas where wave overtopping currently affects the Lakefront Trail the shoreline is being moved several hundred feet east of the bike path. An additional bike trail is also proposed between LaSalle Drive and Belmont Avenue to the west of NLSD, the South Lagoon and Diversey Harbor.
29. In the slides, it said improved access to parkland. Are new access points being added? On the south end, it seems that access is actually reduced (even though parkland is increased) since the distance is increased substantially to get to the lakefront and there is limited drive or bus access to get there - most current access for this area is on foot or bike.

Yes, new access points to the park are being proposed as one of the project’s goals is to provide access every quarter mile. At the south end between Grand and Fullerton, new lakefront access facilities are currently proposed at Pearson, East Lake Shore Drive, Armitage Avenue and south of Fullerton Parkway. In addition, access at Pearson and Chicago Ave will be at the same level as the neighborhood streets, not in a tunnel like the existing conditions. Additional bus access and circulation is being planned throughout the project area in coordination with the CTA. In some cases, particularly between Grand and North Avenue, the shoreline will be moved further from the urban edge to provide improved protection from wave action; the space in-between will become new landscaped park space replacing the concrete and asphalt hardscape that is currently in this area.

Refinements to 4+1 Contraflow Bus Only Lane

30. Not sure of your decision regarding encroachment on golf course and need for a fence....it would have to be much higher than a normal fence to protect those not on the golf course.

The project has an overall goal to limit impacts to park space. As such, we have reviewed the footprints of each alternative to determine if there are any distinguishing footprint impacts at this stage of the evaluation. We found that the 3+2 RML and 4+1 CBOL alternatives had additional footprint impacts, which were located at the golf course. The Alternatives to be carried forward do not have these impacts. We also recognize that further coordination and analysis is necessary to refine the layout of the alternatives and identify details such as fencing requirements along the golf course.

NLSD and Climate Change

31. Is there a detailed table that compares current climate-related conditions such as emissions and energy use with the offered alternatives? Is there a base case that depicts desired climate-related goals?

Consistent with NEPA, our first evaluation step is to evaluate alternatives against the Purpose and Need. Now that we have completed that step, during the upcoming Level 3 screening process we will be adding detail to the remaining alternatives and expanding the evaluation criteria, including a host of environmental factors. Air quality and emissions will be analyzed in more detail during the Level 3 screening process.

Managed Lanes Management Strategies

32. Can access to managed lanes at Fullerton be added at a future time?

Limited access to the managed lanes is critical to maintaining free flow speeds for buses while allowing autos to use the excess capacity. Based on our analysis, providing more than one mid-stream access point for autos would cause the managed lane to become congested. There is not sufficient capacity remaining in the managed lane under the 3+1 ML alternative to accommodate the anticipated demand for ML access at Fullerton Parkway. The additional congestion in the managed lane would impact bus travel times, which is counter to the objective of prioritizing transit in the managed lane.
33. Can managed lane toll be based upon distance travelled?

Tolls in the managed lanes will indeed be based on the distance traveled as determined by a toll rate per mile that would vary by the time of day depending upon the overall demand. At this point, our models assumed a peak hour toll of $1.00 per mile to provide a consistent comparison between each of the managed lane alternatives. More analysis and coordination is needed before determining whether tolling is part of the preferred NLSD alternative, and the actual/final toll rates.

34. Could you explain the proposed Managed Lane access locations graphic? It looks like there are no exit points for managed lanes driving north after Michigan.

Buses traveling northbound in the Managed Lane, north of Michigan Avenue, have the opportunity to exit at Fullerton Parkway, Belmont Avenue, Irving Park Road, Foster Avenue, Bryn Mawr Avenue, and Hollywood Avenue.

Autos traveling northbound in the Managed Lane, north of Michigan Avenue, have the opportunity to exit at Addison Street, Bryn Mawr Avenue, and Hollywood Avenue.

35. Can vehicles from managed lanes exit at any location or only managed access locations as designated on the map?

Vehicles that enter the Managed Lane must exit at designated Managed Lane exits. They are not permitted to change lanes from the Managed Lane to a general purpose lane while on the Outer Drive.

36. How are the auto volumes on managed lanes calculated? Isn’t this just a function of price?

The volumes in the managed lanes are based upon output from the travel demand modeling, which accounts for current and forecasted travel demand, as well as the capacity available for each managed lane alternative. Tolling further influences the managed lane volumes. The toll rate for the managed lane was established to meter the auto demand to maintain free flow for buses. As the demand for auto use of the lane increases, the price will also increase to deter additional autos from utilizing the managed lane and causing delays.

37. Given the events of the last few weeks, how can we possibly be considering building more systemic economic unfairness into the city run services? If we add tolls we are immediately making people that are economically worse off not be able to get places as fast as people who have more money and can pay. We need to be considering more elimination of the tolls and / or real concrete plans for free / significantly reduced transit fairs for certain income levels in Chicago.

Studies have shown that managed lane users are not necessarily those of a higher income bracket, rather they are people in need of a time savings and are willing to pay for it, such as running late to child care pick-up where there is a potential hefty fee or wanting to ensure an early arrival to a job interview. It should also be noted that improvements to travel times on NLSD are not limited to those utilizing the managed lane. The proposed improvements will also provide substantial mobility benefits in the general purpose (non tolled) lanes (approximately 25% over the No Action alternative).
38. This may have been covered in a meeting I missed, but what does data from other metro areas utilizing tolling for peak times tell us about a tolling practice driving traffic into surrounding residential streets and causing congestion there?

Regarding the modeling of diversions or attractions the project study team has only been looking at travel demand data specific to the NLSD corridor. The managed lanes evaluation criteria has been developed to favor the least amount of diversion and attraction of additional traffic to or from the adjacent street networks.

39. Regarding cameras to enforce speed, can that be done now to help prevent so many accidents?

Current Illinois law prohibits the use of cameras to enforce speeds on NLSD.

40. Why not include LaSalle as an "Up or Down" entrance for express buses? This would provide a chance to expand bus services and flexibility designing new CTA routes that are needed.

The project team has been coordinating closely with the CTA and to date there has not been an interest in expanding or creating new express bus access at LaSalle Drive. Improvements at the North Avenue Beach, however, do feature “bus to beach” facilities that will include an exclusive bus lane, bus stop and bus turnaround. These facilities would be forward compatible with new express bus access at LaSalle Drive.

41. Wouldn't the managed lane configuration preclude the possibility of having rapid bus transit service with stations in the median of Lake Shore Drive to serve the Lakefront? Buses would not be able to stop. Would station construction fit into the scope of this project and would dedicating to ML's shut off options for accessing project funds?

The proposed design builds upon the existing bus routing on Lake Shore Drive which includes providing bus stops along the urban edge and then express service to and from downtown. Based on our coordination with CTA, stops on Lake Shore Drive do not improve operations as it would create longer walking distances for pedestrians to access the facility and would not be compatible with express bus operations.

**Transit Mode Share**

42. It seems that all the transit improvements make no significant different in mode share according to the model. Why is that?

There is a significant amount of transit usage in the corridor today (approaching 50% of trips), along with several high capacity transit facilities (NLSD express buses, Red Line, Metra) in the overall travel corridor. Given the extensive existing transit service and the extensive overlap between the CTA Red Line and NLSD Express bus catchment areas, the potential for additional shifts to transit due to physical and operational changes on NLSD is not likely to be large.

43. Is the assumption that there is always space available on the bus in all options? Is that reasonable?
44. Even doubling the number of buses over the existing does not make a difference. That only makes sense if the no action alternative also can double the number of buses. Is that a reasonable assumption?

Yes, the analysis assumes that there is always space available on buses. This assumption was made to ensure that the model did not inadvertently suppress demand for transit service by constraining capacity. For current day to day operations, CTA is responsible for ensuring that the level of transit service provided is adequate to meet the demand.

45. How many cars in 2+2 alternative go to city streets etc? Rather than people switching to buses or transit?

The segment with the highest daily diversion under the 2+2 alternative is between Irving Park Road and Addison Street, which has a modeled reduction in daily traffic of 10,200 vehicles per day, or 12,240 auto trips. The reduction in auto trips based on CMAP modeling was determined to be 2,425 trips per day, leaving 9,815 diverted auto trips, or about 8,180 vehicles per day diverted to city streets between Irving Park and Addison.

46. Where does your assumption for an 8% growth in car travel come from? That seems at odds with most of what is published regarding more people in cities like Chicago shifting to transit, biking, walking?

The project team used the region’s year 2040 Forecasts for projected growth in this corridor which also projects 20% growth in transit ridership.

47. Is it reasonable for seniors that the transit catchment area is one half a mile?

One half mile is the industry standard for this type of analysis, and takes a variety of users into account.

48. With the Outer Drive trip origin area, a majority of the trip are destined for downtown? Or for downtown and beyond (Southside, 290 West, etc.)?

From the modeling information that is available a summary for auto trip destinations is as follows:

- 85% of the trips are destined for downtown or areas just north of downtown
- 15% of the trips are destined for areas south of Congress Parkway

49. With the available capacity of the 3+1 Managed Lane (slide 52), wouldn't that be a disincentive to pay to use it, since it won't have the perception of free flow?

The managed lane associated with this alternative will operate at speeds that are faster than the general purpose lanes, even at 83% capacity. This additional capacity will be noticeable as compared to the adjacent general purpose lanes which will typically operate at 100% of capacity and relatively slower speeds during peak periods.

50. How much would bus transit share increase if further improvements were made in the downtown area expanding bus only lanes along Michigan Avenue or LaSalle?

The CMAP regional model considers all planned transit improvements in their 2040 and 2050 travel demand forecasts. Although the City of Chicago is studying potential bus improvements along Michigan Avenue or LaSalle...
Avenue, it is beyond the scope of this study to determine additional potential transit share increases due to improvements outside the NLSD corridor that may not be part of the regional model assumptions.

51. These transit share figures represent traffic only destined for downtown? What do the numbers look like for North Side to South Side traffic. Again, what would transit share become if CTA expanded its services by offering a North Side to South Side express bus service?

Correct, the existing and modeled express buses are destined for downtown. Based on input from CTA, expanded transit service beyond the regional modeling assumptions has not been considered.

**Managed Lanes Evaluation Criteria and Methodology**

52. How will equity factor into the cost of using managed lanes?

Equity will be considered as part of Level 3 for all alternatives. A detailed methodology will be developed for impact categories as part of Level 3. Potential impacts that are relevant to transportation equity include financial/economic, transportation service and environmental concerns.

53. What are actual figures for increased traffic on local streets and what is acceptable?

At this point in the analysis, we are making a relative comparison in order to broadly assess relative differences between the ML Alternatives, rather than focusing on specific arterial routes.

54. What studies are you looking at to predict future usage particularly bus but also auto. Will you add increased bus access on or in connection with bus turn arounds or in some other way?

The project team has been utilizing CMAP’s travel demand model projections for both transit and auto travel. The transit advantage features present in all Alternatives include increased bus access, turn arounds, and staging areas within the park.

55. Can the managed lane alternatives be modeled for public safety operations such as interruptions related to major incidents like crashes, protests, or police action? Then also based on a single or multi point action over a 30 to 60 min. time period.

Traffic modeling could be performed to model abrupt closures and related traffic impacts.

56. What happens if your analysis considers time efficiency per traveler rather than per vehicle?

The managed lanes were evaluated based on a range of criteria, including transit, vehicle and both transit/vehicle criteria. Based on the analysis, the managed lanes all have nearly equivalent transit performance, therefore the results for traveler versus vehicle would be very similar.

**Managed Lanes Evaluation Results**

57. Please clarify why the 2+2 option has reduced auto mobility. It is encouraging to see that it shows a 5% increase in transit ridership, which is beneficial for equity and the environment. Isn't the goal to shift travel to more sustainable modes?
Auto mobility is reduced with the 2+2 ML alternative due to reduction from four general purpose lanes to two general purpose lanes. In comparison to the 3+1 Managed Lane and 3+1 Bus Only Lane alternatives, there is also one less general purpose lane. Even though some autos will use the two Managed Lanes, traffic in those lanes will be limited in order to maintain free-flow conditions. With only two general-purpose lanes available, diversion to the adjacent street network will be high, which negatively impacts express and local bus routes along those routes. It should also be noted that the 5% increase in transit person trips is related to both an increase in transit mode share and a shift of transit person trips from other transit services (such as the CTA Red Line) to NLSD express bus service. The number of trips directly shifting from autos to buses is closer to 1.5% based on CMAP modeling output.

58. On the Transit Reliability slide, why is best travel time slower under ML than under No-Action (referring to slide #62)?

The intent of Slide #62 is to illustrate the absolute range in travel times (transit reliability), which is determined by selecting the best and worst travel times from multiple model runs, and therefore does not represent an average condition. The transit mobility metric is based upon an average travel time based upon multiple model runs. The key takeaway from slide #62 is that gap has been closed with all the Managed Lane Alternatives, which means that there is less variation between best and worst conditions and an overall improvement in transit reliability.

59. You mention measuring the 134. What was the result? How long does it take now and how long are you forecasting it will take? And doesn’t the 134 have the least amount of buses and the shortest trip?

The slide showing CTA Route #134 was an example what was measured in the NLSD study area, specifically from Stockton/Cannon to Grand Avenue (the 134 also extends beyond the NLSD study area, through downtown). Travel times for seven CTA express bus routes were measured in the NLSD study area, and a composite average was developed to allow for more effective comparison among alternatives.

60. Why is transit performance in 2+2 ML worse when there is increased space for buses to operate in a guaranteed high-speed environment?

Though bus travel on the Outer Drive is enhanced in the 2+2 ML alternative, traffic diversion from the Outer Drive onto the adjacent street grid negatively impacts the parts of bus trips that take place on Inner Lake Shore Drive.

61. What were the measurements for the before and after lane reconfiguration travel times for all other outer drive bus routes?

Bus travel time tables have been included as separate attachments.

62. The map depicting traffic impact on nearby roads showed 10% or greater increases on Clarendon Avenue, which is a key Uptown pedestrian street that people cross to access multiple grade schools and our main public park. The street also services Weiss Hospital's service and ER entrances. How much more traffic could "10% or more" and are there ways to mitigate increased traffic on Clarendon Avenue?
The volume changes show a relative comparison to existing conditions to highlight differences between the Managed Lane alternatives. Impacts will be investigated in greater detail as part of the Level 3 screening process.

63. Why are we dismissing 3+1 BOL. Every task force member strongly voiced support for them at the prior meeting AND the CTA strongly prefers that option.

It is important to note that there were a variety of viewpoints expressed by task force members, some of which supported the 3+1 ML Alternative. Although the CTA supported and concurred with the technical analysis, they preferred that 3+1 BOL option also be carried forward, from a policy perspective. The technical analysis has shown that there are better performing alternatives for comprehensively satisfying the Purpose and Need.

64. Can you go into more detail about how 3+1 versus 2+2 improves bus mobility so much? How does this compare to an exclusive bus lane?

The 2+2 Managed Lane alternative reduces general purpose capacity for autos and increases congestion on local roadways more than the 3+1 Managed Lane alternative. Because portions of the express bus routes on NLSD utilize the local roadway network, increased congestion on the local network increases overall travel times for those bus routes. In the case of the 2+2 Managed Lane and 3+1 BOL alternatives, the increased local congestion delays the local portions of the express routes more than in the 3+1 Managed Lane alternative.

65. It would be helpful to see similar charts showing how badly the traffic in the non-managed lanes would be impacted. It seems they could be blocked up for far longer than the four hour segment of high bus usage just to clear the backlog created by reducing capacity to 2 lanes.

We evaluated mobility during the peak hours, since this is the most congested period of the day. Volumes substantially drop outside of the peak periods. Based upon our modeling of peak period congestion, the 2+2 ML Alternative has substantially worse travel times during the AM peak as shown on the following graphics from TF #11, which describe non managed lane travel times for poor and average conditions:
AM Travel times in the General Purpose Lanes (non-managed lanes) for the 2+2 ML Alternative is substantially worse
66. The express bus catchment area does not appear to follow the entirety of the express bus routes that run on LSD. For instance, the 136 goes along Sheridan up to Devon Avenue and attracts riders throughout those high population density corridors. The 147 runs all the way up to Howard, but that does not appear to be the case on the model. Is there a reason for this?

That is correct. For the purpose of our project, only the portion of the bus routes that are located within the NLSD corridor were measured. However, if the TF #11 map was modified to show the NLSD catchment area to the north, it would further illustrate that the CTA Red Line and NLSD catchment areas overlap. North of Hollywood Avenue, the NLSD catchment area and the CTA Red Line catchment areas are essentially the same.

67. Forecast research has still not incorporated how transit share will affect general traffic patterns in the area. Has this been taken into account when calculating diversion and net traffic impact? For example if traffic on Sheridan will increase 10%, how much traffic would increase/decrease with the availability and improvements of Bus services in the corridor? What's the net effect at the geographic level?

The data presented at TF #10 and #11 incorporates the effects of transit mode share. Overall, the CMAP Travel Demand Model evaluates the entire transportation network, and accounts for multiple variables, including the origins and destinations of trips, travel costs, available transportation modes, and transportation routes.

Cost, Footprint, Roadway Width

68. Is there any difference in the pavement width from 3+1 to 2+2 or is it only striping and minor changes if we switch later?

The mainline roadway widths for the 3+1 Bus Only Lane, 3+1 Managed Lane, and 2+2 Managed Lane alternatives are the same, the only difference is the striping of one Managed Lane versus two Managed Lanes.