I recently saw your Chicago Union Station master plan through links from popular transit discussion forums. I happen to live in the western suburbs of Chicago, and occasionally use Metra to enter and exit Chicago. I maintain an interest in transit planning, which is why I perused your master plan. Although you had the comment period during December 2011, I assume that you are still accepting comments based on the medium and long term solutions.

1 Positive aspects of the plan

1.1 Restrooms

I had read that Amtrak will create a new restroom on the concourse level. This is absolutely needed. Unfortunately, I didn't see any details or drawings as to where the new restrooms would be. Perhaps the technical details are still under consideration. Update: this appears in Appendix C to be located near the north part of the headhouse, but is not labeled.

1.2 Canal St bus lanes

I like the idea of having dedicated bus and taxi lanes. The new bus lanes would remove the need for bidirectional traffic, thus converting the street into a one way street. This makes perfect sense.

2 Negative aspects of the plan

2.1 Canal Street vestibule stairway

One aspect that I did not like about the master plan was the medium term Canal Street Vestibule stairway. The plan in appendix C indicates that the stairway would be directly in front of the restrooms near the Metra ticketing booths. During weekend operations, a substantial number of passengers use the restrooms such that lines form outside the restrooms. The stairway placement would provide additional passenger traffic that may interfere with the restroom traffic. This would provide a very crowded situation.

2.2 Jackson Street escalators

The proposed medium term solution has escalator entrances on Jackson to go to the south side platforms. These escalators would be near the terminus of the trains, which is close to the concourse doorways to the platforms. These escalators would not direct people towards the middle or end of the platforms, where congestion relief is needed most for loading and unloading of trains. However, these escalators may possibly relieve concourse pedestrian traffic. The master plan did not seem to make note as to which is the intended effect.

3 Aspects unanswered

3.1 Great Hall

Currently the Great Hall is used for multiple events, such as formal dinners, proms, promotional events, etc. I presume that Amtrak is able to receive income for Great Hall rentals. The master plan will move the Amtrak ticketing and Metropolitan lounge into the Great Hall. Would this mean that the Great Hall would no longer be used as a rental facility?

3.2 North side concourse baggage platforms

The master plan mentions a plan to remove a couple of south side baggage platforms so that the Metra platforms could be widened. Do the north side platforms also have baggage platforms that could be removed? Does Metra have a scheduling problem with north bound trains in terms of concurrent loading and unloading of passengers?

4 Other considerations

4.1 Metra Ticketing

Metra could explore the possibility of having automated teller machines to dispense Metra fares.

4.2 CTA fare machines

The CTA could use an additional fare machine. Ideally, this machine should also dispense the all-day fare card, which would be perfect for visitors. This could be a moot point if true fare integration occurs. The CTA should also have interactive screens so that visitors would be able to request destination points, and the screens will show the visitors the appropriate buses and L's to take.

4.3 Parking Garage Redevelopment

This section has potential ideas for the property currently occupied by the parking garage. I wouldn't advocate the destruction of the parking garage and removal of vehicle parking. When looking at Google satellite imagery, the garage appears to be rather full. Also, this is the only parking garage in the nearby vicinity, and probably gathers all vehicular parking in a 5 block radius. Such a removal would eliminate parking, as well as any fees generated. Should any office tower be built, I'd be concerned that a tall tower would obstruct the natural light into the Great Hall.

I have the following ideas to help develop the parking garage property.

4.3.1 Underground station annex

Union station could extend to underneath the parking garage in order to expand Union Station's passenger facilities. This annex could connect into parking garage pedestrian tunnel and/or the Great Hall via tunnel. The south side taxi stand could be removed or reconfigured, and opened to connect directly to the south concourse at the headhouse. Passenger facilities could include seating areas, more restrooms, more restaurant options, etc. Restaurants placed in this area would also be able to cater to surrounding area businesses. Potential car rental facilities could move to this location, assuming that rental cars are housed in the parking garage.

4.3.2 Integrated station with Greyhound

Appendix H mentioned a couple of places where other transportation options were integrated into one station. Greyhound has a station that is about 5 blocks away. Amtrak could work with Greyhound to integrate both transit options into a single station. Perhaps some part of the Union Station Transportation Center concept near the parking garage could be used for Greyhound parking. This would allow connections between bus and rail. Passengers wouldn't have to worry about hauling luggage 5 blocks to connect to either option. Greyhound could sell their property and make quite a bit of money on the land sale. This could also tie into the station annex idea stated above. The northern most part of the parking garage (1st floor only) could be converted into a Greyhound station. The station could then connect into the annex, as mentioned above.

The following diagram shows the redevelopment possibilities.



Figure 1 – New underground annex under transit center

4.4 Canal St Viaduct replacement options

This heading considers options for the Canal Street viaduct replacement.

4.4.1 Move Track 2

The Canal Street viaduct can be designed in a way such that track 2 could be moved further west by 10-15 feet. This would enlarge the platform between tracks 2 and 4 to be 22 feet, to be standard with platforms with baggage platform removal. This in turn would allow direct escalator access to the track 2/4 platform near Van Buren from the Old Post Office property. See Figure 3 for a diagram showing this idea. Note that Figure 1 does not show this idea.

4.4.2 Widen Parking Garage pedestrian tunnel

The tunnel leading to the parking garage can be widened, in order to accommodate traffic from the Bus Transportation center, as well as a potential station annex under the bus transportation center (see 4.3.1). See Figure 1.

If additional traffic is funneled through this pedestrian walkway, a choke point would develop at the entrance to the concourse headhouse and the walkway. Engineers may need to consider moving the

walkway entrance towards the southern taxi stand entrance to divert traffic away from the track platforms. Another idea would be to move the Track 2/4 entrance south, and reconfiguring the stairs and ramp on the concourse level.

4.4.3 Taxi stand re-alignment

The taxi stands are no longer used for taxi traffic. These stands could be reconfigured for pedestrians, such as allow better pedestrian traffic flow from a potential underground station annex near the parking garage (4.3.1) to the parking garage tunnel (4.4.2). Another possibility is to add more rail platforms, which require connections to the headhouse.

The taxi stands provide a way to from the street level to the basement level of the station. From internet forum discussions, the roadway circulating to the basement level allows taxis to drop off passengers on the north stand, and pick up passengers from the south stand. However, after 9/11, apparently taxis are no longer able to use the taxi stands. Other vehicles such as garbage trucks and delivery trucks may still need access to the basement level. Assuming that this service is still required, the taxi stand cannot be completely replaced. Nonetheless, reconfiguration should be considered.

The taxi stands appear to have vertical beams in the middle of the stands, based on diagrams in the master plan. I assume that this is used for support of Canal Street. The vertical beams could be placed elsewhere, or entirely redesigned (such as archways) when Canal street is rebuilt.

4.4.4 Additional tracks

With the viaduct rebuild, Union Station can take the opportunity to evaluate whether or not additional platforms are needed by extending new tracks west under Canal Street. Such a possibility could include the O'Hare express on the northern rail segment. The BNSF line could require additional southern platforms. Access to the platforms would be tricky, since the taxi stands interfere with concourse traffic. See Figure 1 for possible new tracks.

4.5 South track improvements

4.5.1 Wider platforms need wider concourse doors

The master plan has a medium term proposal to remove a couple of baggage platforms on the southern concourse in order to widen passenger platforms. This would allow concurrent boarding and unloading of trains using the same platform. The designs in the master plan do not suggest that the doorways from the platforms into the southern concourse would be widened. This would be a choke point for passengers if you have concurrent loading and unloading trains. The master plan should consider that the doorways should also be enlarged to accommodate such traffic.

4.5.2 Van Buren escalator access to tracks 2 and 4 via tunnel

Appendix C of the master plan shows an escalator to reach tracks 2 and 4 via Jackson street. I have already discussed as to why this may not be too beneficial. The best option would be an escalator that can reach rail cars further south. An option to do this would be to have an escalator that goes down towards the 6/8 platform. This escalator would continue to go underground under the 6/8 platform. A tunnel can then be made to go to the 2/4 platform, to which another escalator would bring passengers to the 2/4 platform. Figure 1 shows a potential underground tunnel under the tracks that would serve tracks 2 and 4, and possibly new southern tracks. This tunnel could extend under all tracks, and meet up with the mail tunnel for future Amtrak rail departures.



Figure 2 – Track escalators from 6/8 to 2/4 via tunnel

4.5.3 Track 8 and 10 rail realignment

Appendix C of the master plan shows a new platform configuration of the south terminus rail lines. The diagram indicates that tracks 8 and 10 would have a maximum of 9 rail cars, excluding the engine. There appears to be enough room in order to possibly place an up to 10 car length train on tracks 8 and 10. This would require moving additional support pillars, as well as moving/reorienting the track switching on tracks 8 and 10. This would allow Metra to run longer trains, which would add passenger capacity. At some point in the future, this capacity will be needed.

JUU S RIVERSIDE BUILDING OUTLINE Tracks 8 and 10 to handle 10 cars OLD Track 2 moved west Beams to be ESCALATORS/STAIRS COL 10-15 feet PROPOSED 12° CURVE BUREI PLAZA/NEW BUILDING repositioned, Z EXISTING 9.5° CURVE track to be EMERGENCY EGRESS ONLY ACKSO realigned COLUMN CONFLICTS (3) CONNECTION TO CROSS TUNNEL STARS UP TO STREET LEVEL A (REQUIRED FOR EMERGENCY EGRESS) -EMERGENCY EGRESS ONLY X

The following diagram shows some of the suggested ideas above:

Figure 3 – Southern concourse track reconfigurations (track 2, tracks 8 and 10)

4.6 High Speed Rail at Union Station

Railroad aficionados have wanted high speed rail to come to Union Station for quite some time. Most enthusiasts suggest that dedicated through rails be used for high speed rail purposes.

Appendix D of the Master Plan study suggested converting the mail room at the Old Post office into Amtrak platform space. Additional diagrams in the master plan are provided to allow through tracks from the mail platforms to go past the headhouse and continue north. These platforms can be used for high speed rail, which also accomplishes the idea of having through tracks, as mentioned above.

The tunnel leading from the headhouse to the Old Post office can be remodeled with moving walkways, and colorful overhead lights, similar to the O'Hare passageway between concourse B and C.

This idea would need to consider a method to merge high speed rail baggage and conventional rail baggage systems, to allow for seamless transfers, similar to airports. Also, passengers should be required to enter high speed rail via Union Station at Canal/Jackson/Adams, in order to have access to amenities such as the ticketing offices (Amtrak, Metra, and CTA), car rental, retail, etc.

4.7 Better diesel emission airflow

Union station has a problem with diesel soot and emissions hovering over the track platforms. As a result, the passengers are breathing this air until they reach the headhouse. This is a health hazard for passengers. Better ventilation is needed to order to disperse the diesel fumes away from the passengers. Perhaps in the future, Metra will have hybrid engines in which the electrical battery capability will be used to guide trains to the platforms. In such cases, the diesel generators could be turned off, thus preventing fumes from building in the passenger areas.

4.8 Taller ceilings

Some passengers/rail enthusiasts have complained about the low ceilings in the concourse area. I'm not sure that this can be alleviated, but the master plan should take under consideration any possibility of raising the concourse ceiling.

4.9 O'Hare express

Chicago mayors have been advocating a dedicated quick rail connection to O'Hare airport. Union Station should keep this idea in mind for any kind of expansion. Most likely, this type of train would leave from the northern half of the concourse, and use some kind of existing track alignment to get to the Metra station at O'Hare. (Or, if FRA exceptions are granted, such a train could go from heavy rail to the Blue line light rail and use the existing underground O'Hare station.) From Union Station's perspective, an existing platform could be used or a new platform constructed for the O'Hare express train.

4.10 Pedestrian tunnel to downtown

An interesting idea would be to have a pedestrian tunnel which is able to connect into the downtown tunnel network. The closest tunnel is the Blue – Red connecting tunnel at Monroe. Such a tunnel would be quite popular for commuters during the winter. Perhaps usage fees could apply in order to self-fund such a tunnel.

4.11 Advocacy for CTA subway nearby

Union Station should advocate for a CTA subway nearby in order to provide easy access to the rest of the city. This would really make Union Station a great passenger destination, and increase the ease of tourism from suburbanites and travelers. Such a subway should have the function to distribute pedestrians away from the business district and connect into other transit lines.

4.12 Security area for Amtrak

Modern day airports have a secure area for screening passengers into the concourse area. Amtrak may not screen passengers, but may need to do so in the future. Given that the passengers in the Metropolitan lounge will be separated from other passengers, this could present an issue.

4.13 Other Union Station projects

The following link was found when attempting to find more in-depth architecture plans for Union Station. This thesis project would rebuild the concourse area into a more modern architecture. I really like the idea of a grand staircase from the mezzanine level to the concourse level, opposite the Great Hall. While not all ideas should be used, the thesis project could provide some additional possibilities to explore for reconstruction purposes.

http://www.coroflot.com/rikakooy/Thesis-Chicago-Union-Station