

Minutes of the MNAA Board Workshop



Date: May 15, 2024

Location: Metropolitan Nashville Airport Authority
Tennessee Boardroom

Time: 8:00 a.m.

Board Members Present: Joycelyn Stevenson, Chair; Jimmy Granbery, Vice Chair; Andrew Byrd, Secretary; Bobby Joslin, Nancy Sullivan; and Dr. Glenda Glover

Board Members Absent: None

MNAA Staff Present: Doug Kreulen, Lisa Lankford, Robert Ramsey, Trish Saxman, Marge Basrai, Neale Bedford, Andy Carpenter, Kristen Deuben, Adam Floyd, Eric Johnson, Rick Jones, Carrie Logan, Rachel Moore, Stacey Nickens, Josh Powell, Davita Taylor

Consultants Present: Clay Pasley, Paslay Group; Steve Martin, Paslay Group; Doug Goldberg, SPS; Celia Fremberg, SPS; Russell Black, SPS; Wesley Wong, Demattei Wong Architecture; Jeff Reilly, Kimley-Horn

I. CALL TO ORDER

Chair Stevenson called the MNAA Board of Commissioners Board Workshop to order at 9:00 a.m., pursuant to Public Notice dated May 10, 2024.

II. WORKSHOP GOALS

President Kreulen expressed his excitement for this workshop and stated Mr. Clay Paslay and Mr. Steve Martin with Paslay Group, will be presenting. We have consultants here with airport expertise and hope the Board will challenge us and ask questions. We may not have all the answers at this point, but we are moving at a good pace and expect there may be a lot of homework following this workshop. Staff plans to wrap up the Terminal II and Consolidated Rental Car Center (“CONRAC”) Siting Study later in the year, maybe November or December. The Board will not offend us by telling us about your experience at other airports, asking questions or asking for more data or analysis. This will be interactive and we are ready to answer any questions.

Today's Board Workshop has two primary goals:

- Goal #1 – Confirm Preferred Site for Terminal II
- Goal #2 – Confirm Final 2 Sites for CONRAC

President Kreulen presented the agenda and stated we will go into detail on each goal and try to make sure we are keeping the Board informed and also listening to the questions you ask and make educated decisions as we move forward with the process. President Kreulen stated there will be a short break between Terminal II and CONRAC.

III. TERMINAL II ANALYSIS

1. Board Update Summary

President Kreulen presented the Terminal II agenda - 1) Board Update Summary; 2) Passenger Demand Forecast –best professional estimate of the size Nashville will become and what the airport needs to do to handle that number of passengers; 3) Shortlist Sites 3 and 4; 4) Confirm preferred site for Terminal II and the next steps.

President Kreulen stated just because we discuss it here and think we are on the right track, somewhere down the road a fatal flaw could be identified and would be brought back to the Board. The Board will provide us the overall policy and guidance strategically on how to build this airport. Do not think we are locking in today for the next 25 years, we are trying to make educated decisions as we move forward. The Terminal II analysis has been ongoing and MNAA has had the opportunity to update the Board in January, February and April and with today's Board Workshop.

For the January Board update, MNAA had just awarded the siting study contract to Strategic Planning Services ("SPS"). Mr. Martin helped us formulate the Statement of Work and we agreed on objectives and began looking at different sites for Terminal II. For the February Board update, staff presented an Aviation Forecast & Planning Activity Levels ("PALs") and started by eliminating 5 of 8 sites and retained 3 sites for further study. The April Board update eliminated site 5 where the Dell property is located because it is probably too big of lift, and it was decided that we would look further evaluate sites 3 and 4. Today for the Board Workshop, MNAA wants to see if we get a thumbs up from the Board to continue researching the final site with more data and analysis.

2. Passenger Demand Forecast

President Kreulen stated in FY28 the New Horizon program will increase gate capacity to approximately 70 gates. The surge in Nashville started in 2013 and BNA has doubled in size in 10 years. BNA today has 23.8M passengers and by the end of the calendar year will be at 24M passengers. The Board has helped us build the airport from 30 gates to 40 gates to where we are at today at 54 gates. The Board approved the New Horizon Program which will get BNA to 70 gates with the extension of Concourse D and the new Concourse A. By July 2, 2028, the new Concourse A will open and the terminal will be at 70 gates. With those 70 gates, passenger activity will be at 30M, a 6M passenger increase from where activity is today. BNA will live with those 70 gates until some point in time where passengers get to 35M. The doors will not close on the airport at 35M passengers, but based on our best estimates, our customer service levels will still be good and passengers will flow through the checkpoint at 35M passenger and the Baggage Handling System (“BHS”), which the Board already has approved and we are working on, should be sufficient. We still do not have the final budget yet New Horizon.

President Kreulen stated the terminal behind us is built to comfortably handle 35M passengers, and yes, it could do more than that, but it will be crowded and people will start complaining. Talking with Paslay Group, SPS and the MNAA staff, to get out of it and have room to grow, we need to build Terminal II. If we build a new terminal with the assumption that it has 20 more gates, that takes BNA to 90 gates. The challenge from the MNAA engineers is if you want 90 gates in 2034, you have to start now and start turning on different switches to prepare everything to get to a place where 10 years from today, we do another ribbon cutting and open up Terminal II. Mr. Martin will explain why site 3 is not a good idea.

President Kreulen stated his charge to the MNAA staff is wherever we go, for the many years to come, we do not want to put a terminal where Nashville cannot continue to expand and handle the growth. Another challenge is that we do not want to just build a terminal with 20 gates and one where we cannot continue adding concourses and gates to the next location over the many years to come. The Board will help us focus and decide if we have the location right. This is our initial goal and to plan to leave enough land to go out and do these kinds of things. President Kreulen stated we are going to be at 35M passengers in FY34, assuming no

depression or problems that we do not anticipate. We have to figure out where this terminal goes and if the new terminal can open with 15 – 20 gates. The beauty today is for the most part, with the Airline Use and Lease Agreement (“AULA”) these 70 gates are pretty much spoken for, all the airlines are signed up. American Airlines, Delta and Southwest all want to grow and these gates will not stay empty. When we decide on the location, we do not have to decide on 90 gates, but as we are growing through this and turning those 70 gates, then the airlines will start begging for more space.

Commissioner Glover asked what happens if we get to 70 gates before FY28, we see the need, this is going to be a dynamic build that we will be changing as we go along. President Kreulen replied it will be hard to get to 70 gates before July 2, 2028 because we already scoped out everything, we need to do to make that happen. The 5 gates that will be added on Concourse D and closing Concourse A and rebuilding and adding 16 gates. MNAA is doing everything as fast as possible to get there. Commissioner Glover stated she is talking about the need, not the physical of getting there, and if there is a temporary plan. President Kreulen replied no, there is not a plan that will jump us up by 16 gates other than the plan right now. The airlines are aware and they are controlling the volume of additional flights until we can get to this point. Southwest plans for a crew base at BNA and there is no coincidence there that they will hit a new high once we open up those 70 gates. As an example, they are at 20 gates and when we open that up, they will be at 29; and if American Airlines moves off of Concourse C and over to Concourse A, they may get extra gates. The airlines are planning their future in Nashville based on hitting this date and this will get out in the media, so we have to go out and start talking to the airlines and rental car companies and let them know on what we plan to do, and it is required if they want to continue growing in Nashville.

Vice Chair Granbery asked if we can add more than 5 gates. President Kreulen replied yes, are we now at 69 gates and the design of Concourse D will allow you go to from 5 gates to 7 gates. But you have to move the Multipurpose Building out of the way so that the aircraft can come in and have room to park. This could be 69 gates or 71 gates, we settled on 70 gates.

Vice Chair Granbery stated British Airlines went from 787 to a 777 and they bumped their capacity by 60 passengers. President Kreulen replied yes, British Airways went from 216 to 227 seats and last Friday when it landed in Nashville, 270 of the 272 seats were full. Vice Chair Granbery stated his question is if the airlines pushing the manufacturers to take a 737 and go

to max 10 or max 11 to increase the capacity, because it is still one flight in, one gate, and one crew and they could incrementally add 30 or 40 more seats per airplane. President Kreulen stated you might have a limitation of 54 gates right now, but if you go from an Embraer Jet to a 737, and then from a 737 to a max, you are adding seats on that same slot, so we should be able to see continued growth this whole time and when we deliver this it will give us more room. That is what they will do is up gauge the jets to be able to bring more seats to Nashville.

3. Shortlist Sites 3 and 4

President Kreulen stated we eliminated site 5 which was the Dell and Amazon properties and MNAA plans to analyze site 3 and 4 and do a deeper dive to see whether either will work out. MNAA staff had 4 practice levels going through data and slides to make sure what we present to you today is as accurate and clear as possible. We have been looking at these sites in a lot of detail, but that is only at my level and the experts in the engineering and design departments have been much deeper. President Kreulen presented a diagram showing the terminal today and the 54 gates and sites 3 and 4. The National Guard site is leasing 88 acres from MNAA in Site 4 and that lease runs out in 2045. As Mr. Martin goes through this, we are not messing with that area as we go through it initially and that was factored into some of our analysis. These are the two sites we are talking about and the space that they occupy on our property.

Mr. Martin stated there are 6 sites that were eliminated to date for various reasons, either the site was not big enough or the site created a lot of runway crossings. The 700 or 800 aircraft movements per day if you put the terminal on site 3, the outboard side of the current terminal, you are crossing runways which is a safety and efficiency problem. This site has much more challenging problems than even the ones we eliminated. The SPS team really tried hard to see how can we avoid having to go to a new site with the new terminal and we came up with the best we could but it just does not work, and describe it as fatally flawed. Mr. Martin showed a drawing with what has already been committed to which is new Concourse A and extension of Concourse D. The question is what could possibly fit on the site for additional gates and what would that require. The only place to go is next to the entrance road to the airport today and you could only get to 86 gates maximum and that is stretching it. The walking distance from the checkpoint all the way to that gate is beyond what is described as reasonable or desirable. The relocation of the road into the airport, which a

specific solution has not been identified, is also incredibly disruptive to what is currently being built. The entrance road to airport would also have to be torn up and done over again. We have reviewed this and have tried a number of different ways of trying to make this work to avoid having to go to a new site and just cannot make it work. And there is no way to get around it, so we are proposing to remove site 3 from the expansion plan. Mr. Martin asked if there were any questions about how it might not be fatally flawed, but we have identified more than one fatal flaw and it just does not work. At the end of the day, you end up with the problem site 3 for Terminal II is not expandable.

President Kreulen reemphasized based on the charts that he received from the Board on strategic planning, that we can show in the future that we will need over 105+ gates and at best site 3 only gets us to 86 gates, so we do not have the space to continue. If we invest all this money to lower 216A and put in a tunnel that comes into the airport under this expansion, we are still stuck and somewhere down the road will have to make another decision and go somewhere else. We fill up everything on airport property and it is amazing how many holes are on the property that we have to be filled to be able to use. We cannot figure a way to build all of this in 10 years. To tunnel this road, which is a valley that people are coming in, and to lift up to put those structures in there, we do not even think we can make the 10 year, 35M passenger target, or even close to open this up in a fast enough time period where Nashville will not experience a lot of congestion and poor customer service. Mr. Martin stated we talk about gates a lot, however, the other constraint we have is the curb frontage. The curb frontage is already saturated, and it may be able to expand a little bit, but it cannot be expanded to the point that is proportional to the number of gates that would be added. Site 3 needs to be eliminated, which leaves us with site 4 as our current aerial target.

4. Confirm Preferred Site for Terminal II
 - a. Development Plan
 - b. Capacity for Relocation of Support Facilities

Mr. Martin stated we are quite pleased with site 4 as to availability and think it is developable. It certainly meets the number 1 criteria, which is it can be delivered in the time frame needed and it can be built in an expandable fashion. You can build an initial part of this that fits what is affordable and what the airlines need, and it is expandable. We cannot just build 80 gates on one day, or 40 gates on one day, we have to build something that says what is the most

efficient thing we can build and how can it be expandable. We have to see actual growth as opposed to forecast growth to start looking at beyond 10 or 15 years.

Mr. Martin stated we identified this site that has the National Guard constraint through 2045, and there is also an Air Traffic Control Tower ("ATCT") that is under study for relocation or replacement. Obviously there are leases today with aviation users, rental car companies and even MNAA facilities but those things are not major barriers to the fact that it will fit a future Terminal II. We can get to and from it with some work, we can meet the 10 year target to deliver the gates once Concourse A and Concourse D are saturated from a lease point of view. After all the work we have done, we have gone from 8 sites and reduced to the final site and recommend site 4.

Commissioner Glover asked how all of this ties in with our capital plan, liability and things we are doing. President Kreulen replied we are going to go through the challenges of site 4 and discuss what we may have to relocate as we go forward. Mr. Martin presented a drawing with site 4 divided into 4 quadrants, for illustration only. He stated since we have said that this is an expandable and phaseable site, we are probably going to start in quadrant 4A and likely get to something in the 20-gate range depending on what exactly can be afforded and which airlines might be moving. Basically, we can get our initial range of gates in this area and be expandable with the last quadrant being the National Guard site when the lease expires in 2045. It is a site that allows us to work around the wheel and keep expanding it in a way that is very organized.

Commissioner Byrd asked if 4A will have 20 gates. Mr. Martin replied we can get 20 gates into 4A, the exact shape of what 20 gates looks like may be a variety of things. If you look at airports around the country, you will get every shape imaginable, X, Y, Z, V, and Ks. The next stage is to decide what the exact shape is, how it fits and how it gets us to 20 gates. Commissioner Byrd asked if that would take us from 70 to 90 gates. Mr. Martin replied yes.

President Kreulen stated we want to do additional analysis and see what shape this future concourse takes, and whatever the basic shape is, to show how we can add to it in the future. These quadrants are on there for illustration only and it is really about relocations. We do not have to relocate everyone at once but we need to take a bite of the apple, and then another one. We need to get that basic concourse terminal going in 4A and then expand to 4B and then 4C and when the lease expires on the National Guard property expand in 4D.

Commissioner Byrd stated there is a status the National Guard property, it expires in 2045 and they are thinking about moving to Smyrna so they can address their drone issues. President Kreulen stated yes, there are two things that we will watch politically with the State and Federal Government - they want to move to Smyrna to fly predator drones in and out of that airfield versus trying to do it in Nashville. President Kreulen stated he has met with the last three generals and the current General Ross understands and wants to move and is advocating for the Federal Government to give them funds to start relocating. General Ross is also advocating from the State to do this. Because the lease is inside of 25 years, the National Guard no longer gets additional capital to keep building on this site and it is to their benefit that they decide where to go. We have shown the National Guard since 2019 that there is another terminal coming and now it is here and we will gain back this property. If the lease runs out and we take it over then they will not have a place to go. They do not want that and we do not want them to leave Nashville but they need to figure out what their long term plan is and what the Federal Government can afford to help relocate them.

President Kreulen stated the ATCT is 30 years old and it is the Federal Aviation Administration's ("FAA") money, which we do not control, and they want to build a new control tower. When they made the decision to move it to this location, we had the need to go into the terminal discussions where we are now. We are telling the FAA that they do not really want to be at this location because we would be trying to move all of these millions of passengers through this area. Twenty controllers would have to drive in with all that traffic, and the building is really blocking a lot of space. They can move it to another location on the airport and it would probably be better for their workers as well. We have not had those discussions with them, but they are aware that we are doing this.

Commissioner Byrd stated obviously those are 2 major federal issues. President Kreulen stated yes, 100%. We have been talking to the National Guard and their lease runs out in 2045 and they have 21 years to figure out what they are going to do as they transition. The ATCT is a more immediate need, they are seriously thinking about it and have funds to build a new tower. We just do not think based on our growth that this is the best place to put it. Commissioner Byrd asked if we build out incrementally in stages, the first major issue will not be the ATCT. President Kreulen replied correct and staff are engaged with the FAA now. The FAA will have to make decisions and in the end it is their decision. The ATCT normally likes their own space fenced off and do not want others to get close to the tracon and tower, which

we understand. We believe they will make a good business decision and relocate. Commissioner Byrd asked where we suggest they relocate. Mr. Robert Ramsey, CDO, stated that the tower siting study conducted several years ago in 2015 suggested 6 or 7 different sites, and pointed out several locations. Mr. Ramsey stated he believes the alternative to this area if he recalls the priorities, the northwest side of the field would have been in their preference priority. Commissioner Byrd asked if that would interfere with the extension of our runway. Mr. Ramsey stated it would not.

President Kreulen stated just like we looked at multiple sites for the terminal, when they were doing the study back in 2015, we were not contemplating this at that time, it was just a theory and they picked this location and now we are asking them to rethink their location. Some airports have 2 towers because of the way they want to be able to see everything. That is really their call, and we get to participate in their discussions. There is a lab in New Jersey that our staff has been to, where they can basically 3-D any airport and put you up at 300 feet to see if you can see the runways. Commissioner Byrd asked if this is out of Memphis. President Kreulen replied it is probably out of Washington DC that will make the decision. As we get into this and we know where they are, political help will help motivate them to make the right decision for us. This is a newer concern and we have time for them to make a decision. Eventually when we figure out how to move all this stuff, and if the FAA moves forward and makes a good business decision on relocating, our life just got easier with the planning. Mr. Ramsey stated if they choose not to move and we have to work around, there are some concepts that have already been preliminarily evaluated if we are not successful in getting them to move. President Kreulen stated we cannot allow them to block a lot of land.

Mr. Martin stated the plan is to say the concourses and gates in this site 4, can be almost any shape we want and there is more than one shape that will get us to 20 gates. If we know the tower is going to move, we may change the shape. We have enough time before we finalize the exact shape of what the terminal and concourses look like. Let us get the FAA decision behind us and then finalize the shape and in the meantime we have plenty to do that is independent of what the tower actually does.

Mr. Martin stated the entire site is 309 acres, 88 acres is the National Guard which will relocate somewhere else outside of the airport boundaries. All of the people that are within the site and need to get relocated and can get relocated within the airport boundaries. There

are 3 general categories – 1) MNAA facilities; 2) rental car secondary lots where they take deliveries from manufacturers and they send out expired cars and a lot of rental car stuff in the middle of the site; and 3) aviation users. Of the 309 acres, 124 acres is a footprint of people that need to be relocated on the airport boundaries. We have 455 acres available that we can move people to and they do not have to leave the airport boundaries. This is a relocation plan, not an eviction plan. Some of the sites that were candidates for either the CONRAC or Terminal II, might also come on the radar as additional available spaces. We need to come up with a detailed relocation plan as part of the next steps of the project, but we know we can get it done. That may take some time while the FAA makes their decision. That part is pretty straightforward. We have to come up with a plan and talk with the tenants. Commissioner Byrd stated there are quite a few local tenants. Mr. Martin replied yes, as well as several multi-national corporations.

President Kreulen stated all of these facilities will need to be relocated and that is why we came up with the quadrants. The MNAA staff had made capital decisions prior to jumping into this and decided that we are not spending money on things that we have to move in the future. MNAA stopped \$31.5M of projects and once we do more analysis we will return to the Commissioners. The aviation tenants only have 93 acres today, but that does not speak to future growth. We need to present to the Board what the campus for future facilities would be, and if we build, we do not want to tear it down for something else. We do not have the answer yet, but we need at least 31 acres for snow equipment, maintenance, our communications center and data center, all those critical things that are in this area now. If we are planning for future growth, we need a snow building and all these other things, that 31 acres will become 75 acres and if you are not in this office building today you will be located to that campus.

MNAA staff have been discussing that we need to take care of ourselves first because we need our own campus to make sure what we build does not have to move again. We have a lot of planning to do and we are going to take on this challenge, but the bigger point from the experts to us is we have 400 plus acres to choose where we are going to develop our home. Commissioner Byrd stated he thinks the 31 acres and the MNAA stuff are things that we control. We control our own destiny with respect to that and when we start moving aviation tenants we are getting into third parties that we cannot control. President Kreulen stated it adds up and this is our thought process right now, let's only worry about these folks initially

affected, but we will eventually have to have a plan for all the quadrants. We have not addressed it with anyone at the FAA, but it must be determined if runway 13/31 stays in operation. It is our longest runway and the problem with it is it is not in the wind. Commissioner Byrd asked how long that runway is. President Kreulen replied 11K feet, the others are approximately 7K and 8K, but they are going north and south into the wind. This is a contingency that we do not have to execute right now based on this kind of space availability.

Chair Stevenson stated she had a question regarding the relocation of tenants' issue, and she is assuming the final plan will include some kind of timeline and what is happening so people can understand in real time. President Kreulen stated MNAA will buy tenants out of their lease and facility and give them preferential space to build their next home. They may not want the inconvenience of having to move, but we have to build for the future. Commissioner Byrd asked how often this happens. Mr. Martin replied at almost every major airport, this is a common scenario to move aviation users around the airport as terminals develop. It is not like the FBO and others are not used to this, it is what happens and usually gets worked out on a pretty straight forward basis. President Kreulen stated we are not telling them you are not welcome in Nashville, we have more places to put you, we have to develop that site to be able to accept you in there, we want your business, we need to optimize this area to move millions of people in and out of here.

Commissioner Joslin stated you can always shorten runway 13/31, you can take 3-4K feet off and knock the 11K down 8K feet and still have a potential runway there if you wanted to connect and have 115 acres right there. President Kreulen stated there are possibilities that if this runway be closed altogether. You might have 8K feet here but you might want to close that somewhere down the road and repurpose it, and then you have 3 parallels with the ability to build a 4th parallel, north and south. When you look at the big airports they are all headed into the wind. Commissioner Joslin stated Atlanta does not have any crosswind runways. President Kreulen replied yes, they are coming to us if they cannot get in there.

President Kreulen stated challenges wise, we think we have the area and we think we can relocate the people that live in this area. We will come up with a timeline for the next 9 years. No one in this area can move for a while because it has valleys, creeks and trees that we have to mitigate that and bring to level ground before building on it. Once we start deciding on

these things, and we start with the first quadrant, and MNAA has to prepare the land to get ready to receive them and then once they build it we can get rid of their old home. So that is what is coming in the years ahead.

Vice Chair Granbery asked if MNAA does not do anything with runway 13/31 what the connectivity between the two terminals would be. President Kreulen stated we plan to present that when we get into CONRAC. We may have to explore people movers, or buses and we will need the Board's feedback on how high to set the goal. Vice Chair Granbery asked if we do block off 3-4K feet of runway 13/31, if it is really logical to keep 8K for safety zones. President Kreulen stated if you close this section and this is where the runway, all development in this area, and this is where the runway starts, an aircraft is not going to be able to land down there because of the glide slope, what looks like 8k feet may only be 6k, and if you close the other end you have a postage stamp to put it in. Mr. Paslay stated it also could be an obstruction. President Kreulen agreed and said due to safety zones, you may not be able to develop in that area.

Mr. Martin stated to summarize Workshop Goal 1, we started with 8 sites and eliminated several sites for different reasons. Site 3 we need to take off the table and we are really comfortable with site 4. It has a relocation plan we have to develop but it is feasible because we have places to send people. There are phases to all of this. The FAA will be a factor in this and we will come up with a plan that does not have a fatal flaw. People can get relocated, it can grow, and we can execute it in a way that is phased around that form. And it does track reasonably well as land becomes available around the National Guard and we can keep expanding just in time to deliver gates. We think we are in pretty good shape on site 4. We were worried about the relocation, but now that we have done enough research to look at the diversity of the tenants, they do not have to go to one site, they can go to various sites. There are 309 acres where they can go to various sites, we can come up with a plan and make it work.

President Kreulen asked the Board if they would like to take a short 10 minute break. Chair Stevenson responded yes. President Kreulen announced this is the first part of the workshop that we discussed terminal and if everyone returns at 9:10 we will start on the CONRAC.

BREAK: 9:00 a.m. to 9:13 a.m.

IV. RENTAL CAR FACILITY (CONRAC)

1. Board Update Summary

President Kreulen stated there are three areas for CONRAC: 1) Ready Return (“R/R”); 2) Quick Turn Around (“QTA”); and 3) Customer Service Building. The MNAA staff gave the Board updates in January with objectives, approach and evaluation criteria; in February, CONRAC candidate sites; and in April, elimination of 4 sites and retention of 3 sites for further analysis. Today we will update the Board with a shortlist refinement showing why site C will be eliminated and more work on sites B2 and B3.

2. Rental Car Space Demand Forecast

President Kreulen stated looking at passengers, years and spaces based on the historical models from all the different airports will show how many spaces we need available for CONRAC. The existing facility has 2,370 spaces and our current demand has already exceeded its lifetime. CONRAC is moving a lot of cars from Donelson to site 4 and back because the facility is not big enough and there is a lot more traffic for them to move stuff around. We are opening up 70 gates here and only have 2,370 spaces. By the 2031 time period, we will need 4,500 spaces. Even if we do not build another terminal, it will get really ugly once passengers get north of 35/40M in terms of everyone inside. If we do not build another CONRAC, it will not be a pleasant experience for people to rent cars here. We are showing that if you build a new facility that has those kind of spaces you would be able to get out to 42M passenger levels but we again we are putting the same priority of the CONRAC and the terminal, that you cannot come in here and tell the Board that we are building something that is just right and not be able to show that it is expandable in the future.

President Kreulen presented the rental car space demand forecast, with the historical averages for BNA and the FAA industry standard which is normally using 2.5 to 3%. If you take BNA’s 10-year average, and now 12 years, we are forecasting that we are going to continue adding 1.18M people a year. The theory for MNAA staff is let’s build. We have been doing

forecasts now for many years and we are always underestimating so we keep fine tuning every year. When you watch the news every day and see what is happening with Amazon coming, Oracle now bringing in their headquarters and Titans is getting a new stadium, growth is not expected to slow. Las Vegas built a new stadium for their football team, they only played 8 home games and they bet on when they financed their stadium, that they would do 50 events a year. Now they are doing 140 events this year alone with tractor pulls, concerts, etc. When the new stadium is built, more people are going to want in here to use the new facility. MNAA believes our forecast is a pretty good safe bet for the Board to continue using and tracking on. Commissioner Byrd asked what growth is compared to the 3% industry. Ms. Lisa Lankford, CSO, stated it is between 6-7%, the base is 1.18% so the percent will actually go down a bit by using a constant base. President Kreulen stated if we were going by the FAA forecast we would not have a program like Vision or New Horizon that will get us to 70 gates. We are leaning forward and doing the long range strategic planning.

Vice Chair Granbery asked where the future transit growth for Uber and Lyft was factored in our model. President Kreulen replied we have a traffic model that is being built and we will show the roads into and out of the airport property. Back in early part of Vision we had a model of what TARI was going to be. MNAA has a new estimate for TARI and you will be able to see that and we will be able to dial it up by 20M, 30M, and 40M and you will get to see that. For example, there is a really good article that Adam Sichko wrote on transit that was in the Nashville Business Journal. We are building for the future, we need Metro and the state to also build for the future. When you look at that transit plan, you know that the train track that Mayor Barry wanted to have is right outside and it is sad that did not happen because it would be getting here right now if that was approved in 2018.

President Kreulen stated the new transit plan is going to take us from 1 bus an hour to 4 buses an hour. One bus an hour, has 40 seats, so this will go from 40 seats to 160 seats per hour. The average last year coming to the airport was 150 people a day. Passengers are not riding the buses today, they are using rental cars, Ubers and Lyfts. Today the city brings 8,030 buses per year and multiple by 4, and it will be 24K buses and if the ridership does not increase, we have to build the road for people who are not waiting 15 minutes to get on a city bus to take you downtown or to your next destination. Vice Chair Granbery said he was really asking if we were to shift how we factor in how big you build the CONRAC. President Kreulen asked if he meant if less rental cars were taken. Vice Chair Granbery said yes, because the issue is the

passenger has a rental car and gets downtown and then where do they park because parking has become such a premium downtown. The rental cars did have electric vehicles, but now are getting out of electric vehicles because there are not places to charge when you are on a trip, so that dynamic will happen to some degree. The one thing that we have been doing in the garages is the ground floor will be dedicated to ground transportation, mostly for buses going in and out. Mr. Paslay stated you are going to build a CONRAC that meets what you know is going happen and also that is expandable and gives room for growth. President Kreulen stated if you built this CONRAC by 2034, you need 39 spaces and based on today, that is how far you are behind.

3. Limitations of Existing Rental Car Facility

Mr. Martin stated the original CONRAC out here today was designed to have a useful life and it is now functionally beyond its useful life. Even if you could expand it, which given its design is really impractical to do, the other problems that arise from its current location are things that are not good in the long run. If we have a Terminal II on site 4, getting a bus into that facility to bring those people in will be really difficult. The ready return area, also called the quick turnaround area, is where cars are fueled, washed and vacuumed. Mr. Martin stated you drop a car, someone picks it up and goes through the ready return and then brings it back for next rental. Commissioner Byrd asked how many floors today's facility has. Mr. Martin replied 3 levels. President Kreulen stated because we already said it is too small and when it was built they did not know Nashville was going to take off. It is 2,300 spaces and they have 3-4K cars in area 4. When the volume is high, it does not matter how fast you fuel, wash and vacuum, they have back up cars that are coming over as soon as you drive them out, the facility is not big enough to hold what our current demand is. Now in hindsight when we built these garages for example, the garage we demoed was 3 stories and we built back 6 stories, now we are looking at the next CONRAC and looking at multi stories and expandability because we do not want to be short.

Mr. Martin stated from the rental car's point of view, they do not have enough capacity in today's facility to get cars to passengers and the effect of that is you wait for a car for 30 minutes because the cars that came in that morning cannot get through the quick turnaround facility. They will resupply the cars with other cars that are already cleaned and then use the road which adds to traffic on the terminal roads. The CONRAC was designed for 15 years' use

of useful life and we expected this to happen. There are a lot better uses for this site as well, we can put another ground transportation center and expand parking as demand requires, it is not going to go valueless.

President Kreulen stated as an example, when you are looking at the facility, it was programmed in 2005, for 9.2M passengers. During that time period when Nashville lost American Airlines in 1992, it took until 2010 to catch back up and after that it took off. Commissioner Byrd stated it was built in 2005. Mr. Ramsey stated it opened in 2011. Commissioner Byrd asked if it had a 15 year estimated life. Mr. Ramsey replied yes.

4. Shortlist Sites B1, B3 and C

Mr. Martin stated we started with 7 potential sites, some of which were shared sites with our Terminal II analysis. In the last update meeting in April, we got it down to 3 sites. The other sites were more distant and that was their biggest problem, in terms of distance, passenger inconvenience and cost of busses. Today we are going to tell you why we are going to eliminate site C. It was the closest of the very remote sites and we have gone through the analysis of how this would actually work. It will fit on the site, but it is not walkable, and the bus routing of how you get to the two terminals are a problem. If you are building some kind of train in the future, you are going through a runway protection zone at the end of the runway which would be really challenging. There are a lot of reasons, mostly having to do with the movement of passengers, the cost of that movement and the customer service perception, that say we should eliminate site C.

Vice Chair Granbery asked what the optimum acreage is to satisfy the CONRAC for future growth. Mr. Martin replied because we can stack it, the acreage really is not an issue. There are two parts, 1) what we need for the ready return area and 2) they would like to have all those areas they have in area 4 today, which would take up 20/30 acres of land. We do not have an obligation or need to do that, and most airports do not provide that secondary function adjacent to the area. I think we are looking at a 30-acre facility footprint more or less. Vice Chair Granbery asked how high you can go. Mr. Martin replied you can probably go to 6 levels, generally speaking with rental cars, you have 3 big companies that have 90% of the market share, and then a lot of small companies. Each one of the big companies want their own deck, so they each tend to want a deck. The bigger companies will need 3 decks and

one for all the small companies. San Jose has 6 levels because they did not have a footprint to do 4 levels because it got so big. Commissioner Sullivan asked how many spaces. Mr. Martin replied that is the 5,800 spaces and that is the number that goes with the 2049 size of the airport. Commissioner Sullivan asked for a standard typical facility that has 3 or 4 levels, how many spaces it would have. Mr. Ramsey replied it is driven by the market. Mr. Martin replied if you are in Orlando it is 10K spaces.

Commissioner Sullivan stated if we are expanding to 5,800, if we could easily expand to 10,000. Mr. Martin replied one of the challenges of expanding is one of the key factors, the walking distance to the car from when you get to the lobby of the rental cars. You cannot expect passengers to walk 1K feet to their car so that tends to push to vertical, and we will have to make a decision about how vertical we will go versus horizontal. The better outcome is to go more vertical and expand horizontally but we have to make sure we are not overbuilding. We want to commit to meet the program and have the ability to expand.

Commissioner Sullivan asked if we would build vertically for 5,800 and expand for 7,000. Mr. Martin replied yes, there are a lot of subtleties in that but we are trying to prove that the sites we are looking at will get to 5,800. This site is not about size, it is about transportation, cost, and access to future proofing of the train if one is built. It is not the preferred site and it is not as fatally flawed as Terminal site 3, but it is not the best site by far.

5. Confirm Final 2 Sites for Rental Car Facility

Mr. Martin stated we are not trying to make a decision today on which of the 2 sites is preferred. We have more homework to do. We are briefing the Board on the 2 sites, what the differences are on the sites, and what that means from a value and the customer service point of view.

Mr. Martin presented Site B1 and said to think of these as blocked diagrams. If we build 5,800 spaces, can we build a quick turnaround area and can it fit in the site. It is not, within its own footprint, it is not as expandable as the other site we will look at. But we have a scenario where this can be expandable over time, so we worked out the expandability problem for this site. There are a lot of advantages to this site, it is what we call a walk assist distance or

walking distance, which is about 1200 feet, with moving sidewalks and golf carts at a reasonable distance to walk to a rental car facility. It is within the standards of all the benchmarks we have reviewed. This site has the benefit of a shared customer service building for the rental cars but would help these businesses as well. There is a secondary access over the building we are in today to get to the site.

Mr. Martin stated this site would lead to a 6-level rental car facility because the site is constrained, however that does not mean the expansion problem cannot be solved. While working on the expandability, we need to look at how this relates to the public parking program. When we demolish the existing rental car facility it most likely will become a parking garage. What has really happened in this study is we have untangled the rental car facility from Terminal II, and we now have a little bit of a tangle between the rental car facility and the public parking program which we are working on to resolve how those things work in harmony. That is the key aspect of it, the other is what does it mean to bring all the rental cars into this facility and as it grows we are bringing more traffic into that area. We have to do a traffic analysis on the cause of more roadway failure by putting the CONRAC in the closest position we can find. Generally, we know what will work, we will have to define what walk assist means and the affordability questions.

Chair Stevenson asked if the rental cars will have their own buses or use BNA passenger busses. Mr. Martin showed the bus route for dedicated busses from Terminal II on the drawing. Chair Stevenson stated she is asking because she just traveled from Detroit airport where they had that. Mr. Martin replied that it is a choice, for example Baltimore is run by the CONRAC and the service is terrible. Usually if you dedicate it to the CONRAC you will get a level of service that is below what you probably want and if you run it yourself, you will pass on the cost and then you will get the customer complaints. Most airports decide to run it themselves mostly because of the customer service issues. Chair Stevenson stated her experience was that the rental car was a mile away from where she was to be picked up and all the other rental car places had bigger buses and the one she chose had a smaller bus and the line to get on that bus took almost 45 minutes. She ended up taking Uber to the rental car facility and it was a terrible experience. Mr. Martin stated if we have all the rental cars in this facility, it will be a shared bus. Chair Stevenson stated she will have recommendations on that. President Kreulen replied yes, we will at some point. And that is why he asked the Chair

to please share her experience, as we have all had rental car stories. We think we have some options on that.

MNAA counts our available parking spaces every day, and as of now we have about 3,000 extra spaces and in the long run we will not have enough spaces, so we know we need more parking. We could build another garage behind it and connect the walk path, and we believe we could put moving sidewalks. What this is showing, is that is ok if you are parking today but if you have another garage back here, you will need to come upstairs and get on the moving sidewalk. If you build a CONRAC, you go get your bag, go up a couple levels on an elevator, and then a moving sidewalk that brings you to the customer support building where you do your transaction, get your car and then you get out of the airport. We could handle a lot more vehicles, about 4M vehicles a year are going on that first floor and when we get rid of this, after this is built, it will help us with valet and all the other things regarding transportation.

Vice Chair Granbery asked in this scenario, if it is walkable without the people mover. President Kreulen replied yes. Commissioner Glover asked how long the walk is. Mr. Ramsey replied 1,200 feet. President Kreulen stated today we have concourses that are 1,600, the new Concourse A is 2,100 feet and we will put 2 new moving sidewalks. Vice Chair Granbery stated in Miami you did not have an option to walk. President Kreulen replied right, you have to go up several levels to get on the walk path, but there were no moving sidewalks. Commissioner Byrd asked if there is no potential of using the existing garages as a CONRAC. President Kreulen replied it was not designed for it – there are no fueling stations, washing areas, and we are already critical in parking spaces. Mr. Martin stated even when you design a rental car facility, where the column grids are located for the movement of the cars are different for CONRACs than a public parking garage. For a garage, you would have more columns because it is cheaper to build that way and for CONRAC you need longer spans for the guys driving the cars. It is difficult to convert a public parking garage to a CONRAC.

Commissioner Byrd asked if there is any chance of tearing down our existing CONRAC facility and building it taller. Mr. Ramsey stated they would have to have something in the interim. President Kreulen stated yes, but they would have no home, to tear it down, you would have to stop operations for the years. President Kreulen stated this one gives us a walkable option and then you and future people movers. He showed the people mover future option from

the area to Terminal II on the diagram, but for right now in the interim you would have to bus them.

Mr. Martin stated the walk and walk assist transportation question are the central issues here. Commissioner Sullivan asked if it is like a 5 minute walk. Mr. Ramsey agreed and stated it is a quarter of a mile. Mr. Martin stated you would design this corridor with walk assist, golf carts, or moving sidewalks, and it could be designed in a way that even though it is a walkable distance, you would have alternatives.

Commissioner Glover stated right now we are getting really good marks and she does not see this keeping those good marks, people complain anyways and we should make it as easy as possible. Mr. Martin stated that is a key design question. President Kreulen stated when you go to Dallas Love Field, it takes you way out to get to their parking garages. In Miami eventually you will leave the building and you are outdoors. We can make this an enclosed space, we just have to decide what level, and how much money. Vice Chair Granbery asked if the distance from is C22 to baggage claim is approximately 1,600 feet. President Kreulen replied yes, it is about 1,600 feet, from end of C to check point is 1,600 feet. It is shorter than walking the whole Concourse C.

Mr. Martin then presented the other alternative – site B3. It consumes 3,200 - 3,600 parking spaces today so whoever is parking there will have to get relocated to make the space available for CONRAC. One advantage of this site is that it is bigger than the constraining site and it offers a lot more design flexibility about what layout the buildings might be, whether 4 or 6 levels, and probably more expandable on a dedicated facility point of view.. That may not be that material because the parking garage we are looking at in the other area is a pretty viable idea. Site B3 has a lot of advantages as a bigger site, and there are some power lines through here and it does intercept cars before they get into the central terminal area and that is a benefit of that site. The biggest shortfall is the distance, which is longer than walkable. It is 2,100 feet which may end of up with a shuttle tram, a cable pulled tram like in Detroit or Minneapolis within the terminal. We do not have the cost of that improvement yet. It would be 2 train cars that go back and forth of a certain size but it is pretty predictable, unlike a bus. The other disadvantage is it is noteworthy further away from Terminal II by bus to get there. As we said we are not here today to decide, these are going to be the key issues. The shuttle tram has a cost and we have to figure out what that is and if we can afford it, and if it is better

than walking or not. We do have a lot more design flexibility and we expect to come back in July with a recommendation among these 2 sites. He reminded the Commissioners that site C is going to be eliminated.

Commissioner Joslin asked why we would not run an aerial tram between the two. Mr. Martin showed on the diagram where it would be in the future. A campus-wide people mover that connects all of the terminals with a train that is affordable should always be a preserved, but it is probably more than 10 - 15 years out. Commissioner Joslin stated we (Sam) have been trying to do this for about 15 years. President Kreulen stated for context, can we build a train or flying car to get all the way to Terminal II, yes. The one chance we had, when we were doing it for the Mayor Barry train, you were coming up Donelson and going under the bridge where that taxiway over to that other runway, it would fit under our service road. You would not be able to go vertical the whole way because you will still have to duck under a taxiway. We can figure that out. This one when we said it is too far to walk, from the central checkpoint to Concourse A, is 2,100 feet and we have moving sidewalks going to assist passengers getting down there. When the new ticketing area and Concourse A opens, you go get your bag from the baggage claim level, go to the end, and escalator up or whatever you do and this could be an enclosed corridor with moving sidewalks or pulley tram or whatever we decide. It is called a customer service building because theoretically you could put a garage here and both people are using that same facility. We have not designed it yet, but we do not have all of those vehicles coming there. We would have to figure out how to get them out of here without having them on the loop road. President Kreulen stated that he really likes the idea that whatever we do, how to get them in and out of here must be a large factor in which one we end up picking.

Vice Chair Granbery stated he believes this point on separation of traffic is huge with the cloverleaf. President Kreulen stated yes, to keep them off the curb. The problem we have with rental cars today is that the CONRAC is not big enough, so they have 7,000 vehicles there and they are also servicing cars rented to the whole city of Nashville. We do not want them to do that in the future, and to only keep rental cars for those rented from airport. Commissioner Byrd asked if you would be able to go from the baggage claim area directly to the people mover. Mr. Martin stated on site B3 you have a better shot of being at the level of baggage claim, you will have to climb to get over this roadway but you are closer to the baggage claim level. The other one would have to get over the inbound roadway right away,

so you have to get up to level 4. President Kreulen stated the reason this is at the 3rd or 4th level, we have semi-trucks and other vehicles coming under and we do not want them to strike it. Commissioner Byrd asked if we anticipate having people movers down to the baggage claim level. President Kreulen replied yes, that is what he is trying to show here, imagine you are walking and you are at baggage claim there could be escalators that take you up and then you get on the people mover or do we build it where the people mover is at your level. You have to get over this interstate. President Kreulen stated when you are leaving at night, you are going this way to go back to Nashville. These are the 2 sites that we are going the farthest on and owe the Board a lot more answers. Vice Chair Granbery asked what is the highest grade we would have to get over. Mr. Martin stated we have not done that calculation. President Kreulen stated 18%, when Gresham did it for the Mayor Barry project, one of the things they told us is when they swoop under the taxiway bridge on Donelson and come up, they have to start right away because the train can only do 1.5% to get to level 5. We may have the same math issue here.

Mr. Martin stated just remember in this scenario there are approximately 3,600 spaces of public parking so it almost mandates that something like this must be done at a significant level. And the other one says this can be whatever demand it says it needs to be because we are not displacing anyone to go there and there is no material public parking in this zone today. We do have an enabling challenge that the spaces here have to go somewhere – which may be fine, but there is a distinction between the two. Vice Chair Granbery asked what the revenue would be because we do not have the buses to bring them in that area, plus the parking. President Kreulen stated we will have to pencil that out, but this is 3,600 public parking spaces we cannot live without. We cannot go and close this down and build what is on that drawing without having a replacement. The interesting thing about this whole area is because we are dynamiting this area, and it is new land that we acquired because Donelson Pike has moved over, so there is no one here now, we just need to get the dirt and rock out of the way and when that is finished it will be flat.

President Kreulen stated at this point we think that site C is not as customer friendly and we recommend we eliminate it and focus more on sites B1 and B3 for further analysis. Vice Chair Granbery stated great job, a lot of great information. Commissioner Sullivan stated one of the things she would like to see is the traffic flow for the entire airport. President Kreulen replied yes, the Board approved us to research parking plans so we are getting closer on that

and we are also trying to model our roads and we want to be able to turn that screen on and see it today at 24M and above. We had a model when we started Vision and the reason we got the roads on the original TARI, is when you were leaving the airport to go back to Nashville, and it got around 35M it started to back up getting onto I-40, so someday we will have to widen that bridge to handle 2 lanes to get back onto I-40.

Mr. Martin stated one thing that changes in that is the public parking garage creates a traffic movement every 2.5 days and the similar space in the rental car facility gets flipped 3 times a day so it is a more traffic intensive facility. We will have to have a difference because they are not the same, the velocity and use of space is different. President Kreulen stated we know we need a bigger rental car facility or more garage parking and if we have to build that cloverleaf to get them in and out, it would be cheaper not to do it, but it would be painful to live without.

President Kreulen stated this is our 4th Board Update and our first Board Workshop and we will come back with updates in July, August and September and we may be really close to moving forward. MNA and the airlines will be paying for most the Terminal II and the CFC ("Customer Facility Charge") would fund part of the CONRAC. Today everybody that rents a car pays \$4 and that comes to us to pay for the CONRAC. We will most likely raise that fee to be similar to other airports and that will allow us to finance and pay for the new rental car facility. We owe you a plan of financing and will keep you involved so you know where we are and will also deliver the roadway plan.

President Kreulen stated finance feels comfortable where we are at with New Horizon. We do not have all of the costs for New Horizon, the additional garage and the TARI road improvements that we want to make, and we guesstimate \$600M, but Terminal II and the new CONRAC is beyond New Horizon. Commissioner Joslin stated Metro and State need to be at the table to address these issues. President Kreulen stated we are planning for 50M plus passengers and I-40 has not changed, nor has Murfreesboro Road.

Vice Chair Granbery stated we spoke about the 10-year time span to build a new terminal, and the CONRAC was noted that it has outlived its useful life, and about the timeline for the CONRAC. President Kreulen stated we owe you that, but for right now, we have to figure out TARI for the Horizon program, we need that other parking garage, and need to figure out the

MNAA relocation plan for Terminal II. Once we pick a CONRAC site, we will get going. Mr. Paslay stated they are separate from the terminal, once we make a decision on CONRAC, you can start. Vice Chair Granbery stated the potential public parking on Donelson Pike is being leveled right now and you could come back some time next year and start building the garage. President Kreulen replied exactly.

Vice Chair Granbery stated the new garage has to be 3,500 spaces. Mr. Ramsey stated that is with no growth, and no other impact. President Kreulen replied it will probably be 6 levels. Mr. Ramsey stated we owe President Kreulen and the Board a parking plan and we will have a plan for what is impacted with road construction and upcoming demand, without overbuilding parking.

President Kreulen stated we are going to get both of these going and tweak next steps. President Kreulen concluded the Board Workshop.

V. ADJOURN

There being no further business brought before the Board, Chair Stevenson adjourned the meeting at 10:20 a.m.



Andrew Byrd, Board Secretary