

2017 SENATE APPROPRIATIONS

SB 2006

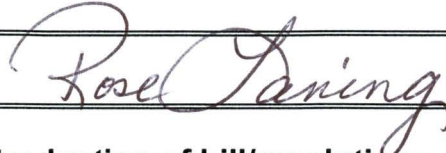
2017 SENATE STANDING COMMITTEE MINUTES

Appropriations Committee
Harvest Room, State Capitol

SB 2006/SB 2066
1/13/2017
Job # 26865

- Subcommittee
 Conference Committee

Committee Clerk Signature



Explanation or reason for introduction of bill/resolution:

To provide an appropriation for defraying the expenses of the North Dakota Aeronautics Commission.

Minutes:

Testimony Attached # 1 - 10

Legislative Council: Alex Cronquist
OMB: Stephanie Gullickson

Chairman Holmberg called the committee to order on SB 2006/SB 2066. Roll call was taken. All members were present.

Kyle C. Wanner, Executive Director, North Dakota Aeronautics Commission

Director's report - Testimony attached # 1.

Power point presentation – Testimony attached # 2.

2017-2019 CIP/NPIAS Planning Report – Testimony attached # 3.

Facts on the Economic Impact of Airports in North Dakota – Testimony attached # 4.

Agency Mission – Testimony attached # 5.

2015 Pavement Condition Index (PCI) Study Executive Summary – Testimony attached #6.

Statewide Economic Impact of Aviation in North Dakota – Testimony attached #7.

(11:30) **Chairman Holmberg:** part of Hillsboro issue has to do with UAV, is that not the case?

Mr. Kyle Wanner: Yes, the need for the runway rehabilitation. The pavement is old and need of repair. It's a high priority and need to get done earlier.

23:59 **Senator Bowman:** When you redo a runway, what's the longevity of that runway? How long is it supposed to last and how long are they lasting?

Mr. Kyle Wanner: Depends on the type of pavement. Asphalt is 22 years have to do a mill and overlay. Concrete can be 40-60 years. Over the summer, you may have to do crack sealing on asphalt. Concrete lasts longer and less maintenance, but cost expensive. Cost beneficial analysis is in favor of concrete. Across the state there are more concrete runways.

Hillsboro may be concrete, but may bid out both as concrete and asphalt. We need to maintain the analysis every three years. Then maintenance can be done for longevity.

Senator Kilzer: Out of 80 airports, 60 were qualified for federal funds and little under 20 that would qualify for federal funds. What's makes the difference as far as qualifying for federal funds. not. What's the difference?

Mr. Kyle Wanner: 89 public use airports, 53 of those 89, are federally funded or eligible to receive federal funding because they are in the (NPIAS) National Plan of Integrated Airport system which means the federal government has identified those airports to be significant for national air space systems. It is very difficult to get into that system, and if you're not in it currently— we are working on a couple airports to get into that system. But it depends upon your activity levels, how many base aircraft that you have, if you comply with federal standards as well as being a certain distance from other airports. It definitely becomes a challenge when 17 paved airports in our state are not a part of that, so it is reliant solely on state and local funding, but, the rest of those airports are your airports are grass strip that don't require maintenance. So there is some of those in the system as well, not all the airports are paved.

Sub – Committee is: Senators Sorvaag, Krebsbach & Grabinger

(28:10) **Matthew Remyse, President of Airport Association of North Dakota (AAND)**
Testified in favor of SB 2006. Testimony Attached # 8.

(34:20) **Senator Mathern:** I was interested in your comment regarding the medical use of these airports. Is there documentation of the amount of that and the reason I asked is I've heard the opposite that the medical people find that there is so much time to get on and off from their site, so how many people are doing this or how many airports?

Mr. Matthew Remyse: I am not sure of any actual documentation of doctors, where they are flying too, or just know that doctors are using it to provide medical service to rural communities, I don't know if there are any way to track that. I will do some follow-up on that, and if you like I can get the emergency numbers if you wish.

(35:51) **Senator Mathern:** I was thinking not the emergency part, but more of the regular commerce of health care.

(36:25) **Greg Haug, Director, Bismarck Airport, and City of Bismarck, Bismarck, ND;**
Testified in favor of SB 2006. Testimony Attached # 9.

(41:40) **Kelly Braun, Dickinson Airport, Dickinson, ND**
Testified in favor of SB 2006. No written testimony.
When other airports in the state do well, it allows others to do well.

(42:57) **Rodney Schaaf, Chairman, Bowman Regional Airport Board, Bowman, ND**
Testified in favor of SB 2006. Testimony Attached #10.

Chairman Holmberg: Closed the hearing on SB 2006.

2017 SENATE STANDING COMMITTEE MINUTES

Appropriations Committee
Harvest Room, State Capitol

SB 2006 sub-committee
2/7/2017
Job # 28004

- Subcommittee
 Conference Committee

Committee Clerk Signature

Sandy Baumgardner for Rose Janing

Explanation or reason for introduction of bill/resolution:

To provide an appropriation for defraying the expenses of the North Dakota Aeronautics Commission.

Minutes:

Testimony Attached # 1.

Legislative Council: Chris Kadrmas
OMB: Stephanie Gullickson

Senator Sorvaag called the sub-committee to order on SB 2006. Budget for the Aeronautics Commission. Roll taken: Senator Krebsbach and Senator Grabinger were also present.

Senator Sorvaag : Let's update the committee.

Kyle C. Wanner, Executive Director, North Dakota Aeronautics Commission
There have been no changes from when we met a month ago. Gov. Burgum made no changes. Except the removing the 1% employee contribution in the second year, which he did for all agencies. Happy to answer any questions.

Senator Sorvaag: It is \$900,000 general fund, but everything else is special fund.

Kyle Wanner: There was a request to Governor Dalrymple to consider an additional \$9M from general fun or funding to help with critical airport projects for the following biennium.

Senator Sorvaag: Neither governor's accepted that?

Kyle Wanner: That is correct. There was not a recommendation from those offices.

Senator Grabinger: With the health insurance and what we are doing with that, we are going to have a new spread sheet on that?

Chris Kadrmas handed out Base Level Funding – Testimony Attached # 1.

Senator Sorvaag: This is the same. We pay 100% health insurance and no raises for the biennium.

Chris Kadrmas: That is correct. The Senate version just reflects the health insurance increase, which is across the board for all agencies. It does not reflect an increase for salaries. I didn't bring over any other dollar amounts until committee approves.

Senator Sorvaag: I thank Kyle, unless there are any more questions. There is no general fund except \$900,000 and the rest is special funds. The only thing on the table is options. I'm comfortable with the budget we're looking at, excluding the \$9 million or any dollars. I recommend the base budget. I have a hard time with options at this time because we'll run out of money. This is a straight forward budget.

Senator Krebsbach: I understand the need for some extra flexible dollars that they would like to have in that \$9M request, but as you say, there isn't that kind of money laying around. I would say we don't have to close the door completely. Unless something turns around, we can take it up in the conference committee. We have to move the general fund of \$934,500 to the right hand portion of the structure here in this sheet and also the other funds of \$10,308,000.

Senator Sorvaag: There is a lot of things going on and not committing anything to airports. My feeling is that we go with the spreadsheet. These are a little tricky to read.

Chris Kadrmas: Last session we went with each line, and then brought them over to the Senate changes.

Senator Sorvaag: Let's just go down the list. We have payroll changes. We can just go down the items if there are not objections. The first is the payroll changes that shows a negative and actually it is a zero. Explain that please.

Chris Kadrmas: The base payroll changes are the cost to continue for the salary increases that were provided this current biennium. They will be continued. There could be some reclassification adjustments in there.

Senator Sorvaag: Then we are paying 100% of the health insurance and increases for those 7 employees. And the bold?

Chris Kadrmas: That is correct. The bold is the employee share which will not be considered.

Senator Sorvaag: The increase in operating expenses, that was built in?

Chris Kadrmas: Correct, that was approved or built into Governor Dalrymple's budget.

Senator Sorvaag: Then the \$34,000 in grants was just reduced to get it to an even \$900,000?

Chris Kadrmas: Correct, that was to drop it down to \$900,000. Dalrymple's budget actually reflected a reduction of a \$100,000, but they had taken a portion of it from their allotment. It

was to bring it down to the 10% budget, so we are right at \$900,000. Essentially we are reducing the education and planning grants and the increase of airport grants. That is just the agency shifting their funding around based on the anticipated funding for the biennium. That will be the federal dollars and other sources of income.

Senator Sorvaag: Your numbers show about \$35 million in federal grants.

Kyle Wanner: Our agency is expecting approximately \$1M of federal grants to be received by our agency. We are hopeful of getting approximately \$50 million per year from the federal government to airports within our state. That is why it is so critical to make sure that we can leverage the funding into our state and match those dollars with state or local funds.

Senator Sorvaag: What do you have to match, 1 for 1?

Kyle Wanner: We can match whatever we are able to. In the past, we try to match 50-50 with the local and in some cases, if the federal can provide 90% funding, then we will do 5% local. Now some projects aren't eligible for federal funding and some projects aren't receiving that 90%. They may receive only 60% from the federal government. Now we have 40% of the funding that needs to be covered either by the state or local sponsor. In those cases, we like to try and step-up as the commission and do a 60-20-20. In the case of where we don't have the funding, we can't do that. Then it will probably be 60 federal, 35 local and 5 state, if we have that funding. That is the gravity of the situation.

Senator Sorvaag: It is a tough situation without those dollars.

Senator Krebsbach: Just to clarify, I know the 8 regional airports are federally funded, but none of the others are. On the million-dollar grant money you get from federal, can that be used for both?

Kyle Wanner: We actually have 53 airports in our state that do receive federal funding. The 8 commercial service airports and along with 45 general aviation airports in the state do receive federal funding. But we do have 36 airports in the state that do not receive federal funding. So that \$1 million was grant funding that our agency will specifically asking the federal government for grants to our agency. The \$50 million is what we are trying to get for the 53 airports in the state in federal funding. We've only received 23-24M dollars annually from federal government for airport projects. We have been able to increase that up to \$50 million with addition state and local dollars, leveraging that money into our state which has been critical. Federal funding has not increased annually since 2001. Projects have gone up across the country. We have projects that we are competing against on the national scale, but because of our highly justified and critical projects that we have had and additional state funding you have provided in the pass, we can leverage that funding to a higher level. If the airport funding isn't at the level that we have seen the previous biennium's, I am not sure of the estimate of the federal funds that we may get. It may go back down to the \$24-\$25 million. Projects may have to get delayed or pushed off because we don't have the funding to match it.

Senator Sorvaag: Bismarck has a big one. What other big ones are out there excluding Dickinson and Williston?

Kyle Wanner: Devils Lake is looking at a \$3-4 million runway project. Jamestown is looking at a \$3-4 million project. Fargo is looking at a \$7-8 million-dollar project. Hillsboro is looking at a \$4-5 million project. There are quite a few projects that exist around the state. Watford needs an extension of a runway. Within this packet I provided a capital improvement plan that the state puts together. We've identified \$400M worth of projects identified and hope to accommodate as many projects as possible.

Senator Sorvaag: We could draft the amendments and move forward on this.

Senator Grabinger: Moved to draft amendments.

Senator Krebsbach: Second.

Senator Sorvaag: Discussion? Roll taken.

Senator Sorvaag: Y

Senator Krebsbach: Y

Senator Grabinger: Y

Senator Grabinger will carry to the committee.

Senator Sorvaag: Committee adjourned.

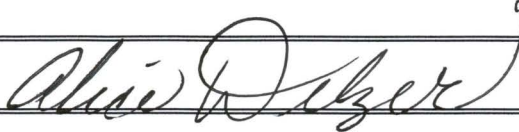
2017 SENATE STANDING COMMITTEE MINUTES

Appropriations Committee
Harvest Room, State Capitol

SB 2006
2/10/2017
JOB # 28185

- Subcommittee
 Conference Committee

Committee Clerk Signature



Explanation or reason for introduction of bill/resolution:

A DO PASS AS AMENDED on the Aeronautics Commission.

Minutes:

1. Proposed Amendment # 17.0514.01001

Chairman Holmberg: called the Committee to order on SB 2006 at 9:30 am in the Harvest Room. All committee members were present except Senator Wanzek. Becky Deichert, OMB and Adam Mathiak, Legislative Council were also present.

Senator Sorvaag stated there were no changes. **He moved the amendment #17.0514.01001. 2nd by Senator Dever.**

Chairman Holmberg: Any discussion. Call the roll on the Amendment. **A Roll Call vote was taken. Yea: 13; Nay: 0; Absent: 1.**

Senator Sorvaag Moved a Do Pass as Amended. 2nd by V. Chairman Bowman.

Chairman Holmberg: call the roll on a Do Pass as Amended.

A Roll Call vote was taken. Yea: 13; Nay: 0; Absent: 1. Senator Grabinger will carry the bill. The hearing was closed on SB 2006.

2/10/17 DA
 1 of 2

PROPOSED AMENDMENTS TO SENATE BILL NO. 2006

Page 1, replace lines 12 through 19 with:

"Salaries and wages	\$1,447,637	(\$14,963)	\$1,432,674
Operating expenses	2,060,380	143,810	2,204,190
Capital assets	300,000	(200,000)	100,000
Grants	<u>7,434,500</u>	<u>(434,500)</u>	<u>7,000,000</u>
Total all funds	\$11,242,517	(\$505,653)	\$10,736,864
Less estimated income	<u>10,308,017</u>	<u>(471,153)</u>	<u>9,836,864</u>
Total general fund	\$934,500	(\$34,500)	\$900,000
Full-time equivalent positions	7.00	0.00	7.00"

Renumber accordingly

STATEMENT OF PURPOSE OF AMENDMENT:

Senate Bill No. 2006 - Aeronautics Commission - Senate Action

	Base Budget	Senate Changes	Senate Version
Salaries and wages	\$1,447,637	(\$14,963)	\$1,432,674
Operating expenses	2,060,380	143,810	2,204,190
Capital assets	300,000	(200,000)	100,000
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General fund	\$934,500	(\$34,500)	\$900,000
FTE	7.00	0.00	7.00

Department No. 412 - Aeronautics Commission - Detail of Senate Changes

	Adjusts Funding for Base Payroll Changes ¹	Adds Funding for Health Insurance Increase ²	Adjusts Base Level Funding ³	Total Senate Changes
Salaries and wages	(\$34,998)	\$20,035		(\$14,963)
Operating expenses			143,810	143,810
Capital assets			(200,000)	(200,000)
Grants			<u>(434,500)</u>	<u>(434,500)</u>
Total all funds	(\$34,998)	\$20,035	(\$490,690)	(\$505,653)
Less estimated income	<u>(34,998)</u>	<u>20,035</u>	<u>(456,190)</u>	<u>(471,153)</u>
General fund	\$0	\$0	(\$34,500)	(\$34,500)
FTE	0.00	0.00	0.00	0.00

¹ Funding is adjusted for cost-to-continue 2015-17 biennium salaries and benefit increases and for other base payroll changes.

² Funding is added for increases in health insurance premiums from \$1,130 to \$1,249 per month.

³ Base level funding is adjusted as follows:

2/10/17 DOR

2 of 2

	General Fund	Other Funds	Total
Adds funding for operating expenses		\$143,810	\$143,810
Adjusts funding for airport grants	(34,500)	800,000	765,500
Reduces capital asset funding		(200,000)	(200,000)
Reduces education grants		(100,000)	(100,000)
Removes planning grants		(1,100,000)	(1,100,000)
Total	(\$34,500)	(\$456,190)	(\$490,690)

Date: 2-7-17

Roll Call Vote #: 1

**2017 SENATE STANDING COMMITTEE
ROLL CALL VOTES
BILL/RESOLUTION NO. 3006**

Senate Appropriations Committee

Subcommittee

Amendment LC# or Description: to draft amendment

- Recommendation: Adopt Amendment
 Do Pass Do Not Pass Without Committee Recommendation
 As Amended Rerefer to Appropriations
 Place on Consent Calendar
- Other Actions: Reconsider _____

Motion Made By Grabinger Seconded By Krebsbach

Senators	Yes	No	Senators	Yes	No
Chairman Holmberg			Senator Mathern		
Vice Chair Krebsbach	<u>Y</u>		Senator Grabinger	<u>Y</u>	
Vice Chair Bowman			Senator Robinson		
Senator Erbele					
Senator Wanzek					
Senator Kilzer					
Senator Lee					
Senator Dever					
Senator Sorvaag	<u>Y</u>				
Senator Oehlke					
Senator Hogue					

Total (Yes) 3 No 0

Absent 0

Floor Assignment _____

If the vote is on an amendment, briefly indicate intent:

Date: 2-10-17
 Roll Call Vote #: 1

**2017 SENATE STANDING COMMITTEE
 ROLL CALL VOTES
 BILL/RESOLUTION NO. 2006**

Senate Appropriations Committee

Subcommittee

Amendment LC# or Description: 17.0514.01001

Recommendation: Adopt Amendment
 Do Pass Do Not Pass Without Committee Recommendation
 As Amended Rerefer to Appropriations
 Place on Consent Calendar
 Other Actions: Reconsider _____

Motion Made By Sorvaag Seconded By Dever

Senators	Yes	No	Senators	Yes	No
Chairman Holmberg	✓		Senator Mathern	✓	
Vice Chair Krebsbach	✓		Senator Grabinger	✓	
Vice Chair Bowman	✓		Senator Robinson	✓	
Senator Erbele	✓				
Senator Wanzek	✓				
Senator Kilzer	✓				
Senator Lee	✓				
Senator Dever	✓				
Senator Sorvaag	✓				
Senator Oehlke	✓				
Senator Hogue	✓				

Total (Yes) 13 No 0

Absent 1

Floor Assignment _____

If the vote is on an amendment, briefly indicate intent:

Date: 2-10-17
 Roll Call Vote #: 2

**2017 SENATE STANDING COMMITTEE
 ROLL CALL VOTES
 BILL/RESOLUTION NO. 2006**

Senate Appropriations Committee

Subcommittee

Amendment LC# or Description: _____

Recommendation: Adopt Amendment
 Do Pass Do Not Pass Without Committee Recommendation
 As Amended Rerefer to Appropriations
 Place on Consent Calendar
 Other Actions: Reconsider _____

Motion Made By Sorvaag Seconded By Bowman

Senators	Yes	No	Senators	Yes	No
Chairman Holmberg	✓		Senator Mathern	✓	
Vice Chair Krebsbach	✓		Senator Grabinger	✓	
Vice Chair Bowman	✓		Senator Robinson	✓	
Senator Erbele	✓				
Senator Wanzek	A				
Senator Kilzer	✓				
Senator Lee	✓				
Senator Dever	✓				
Senator Sorvaag	✓				
Senator Oehlke	✓				
Senator Hogue	✓				

Total (Yes) 13 No 0

Absent 1

Floor Assignment Grabinger

If the vote is on an amendment, briefly indicate intent:

REPORT OF STANDING COMMITTEE

SB 2006: Appropriations Committee (Sen. Holmberg, Chairman) recommends **AMENDMENTS AS FOLLOWS** and when so amended, recommends **DO PASS** (13 YEAS, 0 NAYS, 1 ABSENT AND NOT VOTING). SB 2006 was placed on the Sixth order on the calendar.

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2017 HOUSE APPROPRIATIONS

SB 2006

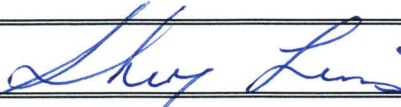
2017 HOUSE STANDING COMMITTEE MINUTES

Appropriations Committee - Government Operations Division
Medora Room, State Capitol

SB2006
3/3/2017
Recording Job# 28666

- Subcommittee
 Conference Committee

Committee Clerk Signature



Explanation or reason for introduction of bill/resolution:

A BILL for an Act to provide an appropriation for defraying the expenses of the North Dakota aeronautics commission.

Minutes:

Attachments A through F

Chairman Brandenburg: Opened the hearing on SB2006.

Kyle Wanner, Director, ND Aeronautics Commission: See attachments A and B.

Representative Kempenich: Does Williston get that money directly? How does the state track that?

Kyle Wanner: It gets very complex.

Kyle Wanner continued with his testimony.

Representative Kempenich: Does there need to be a commitment? What do we need to keep this moving forward?

Kyle Wanner: Governor Dalrymple put \$24.1 million in his budget for oil impact funds; \$20 million would go to Williston and \$4.1 million to Dickinson. His intention was to provide that \$20 million to Williston and then the next biennium commit an additional \$20 million. It's going to be very difficult if the full \$39 million isn't available for that airport in this biennium. If the decision is to delay funds going into 2019, the overall cost of the project could go up with the financing. There's no guarantee that that additional state funding is going to come next biennium and that could jeopardize federal funding for the project.

Representative Brabandt: What is the total price tag with everything on the Williston airport; land acquisition and everything?

Kyle Wanner: Our estimates are around \$240 million for the entire project. To completely reconstruct the current site to build up to what the new site could provide would be the current cost if not more. You would also need to close that airport for 3 summers if not more.

Vice Chairman Boehning: Who is putting all the infrastructure in to the airport? Is that being funded with this or is that a city/county partnership?

Kyle Wanner: The bypass that has been put out there is the road to connect to the new airport. New infrastructure was already being planned by the city to be placed out there. That is something that the city and county are working collaboratively on.

Vice Chairman Boehning: What is the passenger count compared to what it was?

Kyle Wanner: In 2008 and prior it was 8,000 to 10,000 passengers per year. At the peak, they reached about 120,000 to 125,000 passengers per year; these numbers just include the revenue passengers. This past year they were around 60,000 to 65,000 passengers.

Chairman Brandenburg: There's some concern about the funding coming from the city in Williston. We want to make sure the land is sold off so you get some money there and they don't make a bigger golf course out of it.

Kyle Wanner: Those conversations should continue. They are working very hard to find the best value out of that site.

Chairman Brandenburg: We know we need to help out but we need to make sure there's a balance to that also.

Representative Vigesaa: In a large project like this, what role does the commission play in this?

Kyle Wanner: There is a local component, state component and federal component. The federal money doesn't come free; there are specific grant assurances that you have to oblige by. Our role is to work with the airport and to advise them of the best route possible. We also provide the view from the state and we provide infrastructure grant funding. Most of our budget is comprised of airport infrastructure grant funding and that's about \$7 million for the upcoming biennium.

Representative Vigesaa: What percentage does the commission play and what percentage do the locals play?

Kyle Wanner: I would say the locals have the largest part. The city council decides whether or not to move on the airport.

Kyle Wanner continued with his testimony.

Representative Brabandt: Were bids open this week?

Kyle Wanner: If they have been, I haven't been made aware. Bids were open last fall for dirt work and phase 1 of their paving project. Costs came down last fall of \$10 million for those projects.

Representative Brabandt: The terminal itself has not been bid?

Kyle Wanner: Correct. The city has decided to go under construction management; CMAR (Construction Management at Risk) to help with the design work.

Representative Brabandt: Who is the construction manager?

Kyle Wanner: I'm not sure. I think that's something they're looking at right now.

Representative Nathe: Will the Williston airport be built to the same specifications as Bismarck? Will they be able to handle the same size planes or bigger planes? What kind of planes will be able to fly in and out of there?

Kyle Wanner: Williston will not be built to the same scale of Bismarck. It doesn't handle the same traffic as Bismarck. We will build the runway adequately to accommodate 50 and 70 seat jets.

Kyle Wanner continued with his testimony.

Representative Brabandt: Who were the top 4 boardings, as far as airports, in 2016?

Kyle Wanner: Fargo is always our top airport.

Representative Brabandt: How many boardings?

Kyle Wanner: It was about 340,000 annually. Bismarck is number 2 with 270,000 and then it would be Minot and Grand Forks.

Representative Brabandt: What were Minot's boardings in 2016?

Kyle Wanner: I think it was 150,000. In Minot 2008 and prior, were about 70,000 passengers annually per year. In 2014 they were 240,000 passengers.

Representative Nathe: Do you see any big projects for Fargo or Bismarck after Williston as we go forward?

Kyle Wanner: Yes. There are a lot of big projects happening at the same time. Bismarck has a \$70 million project over the next 3 years. The FAA is not providing 90% funding of that project; it would be 50% or \$35 million; there's a \$35 million gap that the local or the state has to come up with. We have 89 airports in the state.

Kyle Wanner continued with his testimony.

Representative Brabandt: Can you give us a percentage on the Williston airport of what will be provided by the federal, state and local?

Kyle Wanner: What the airport has been anticipating is a \$240 million project. We anticipate bringing in \$120 million federal, \$60 million state and local would make up the difference with the sale of their airport land and with whatever is remaining after that.

Representative Brabandt: So all the funding is federal or state?

Kyle Wanner: No. From federal and state would be \$180 million; you would still have a gap of \$60 million. The estimated sale of the land is about \$20 million and the local would be about \$40 million.

Vice Chairman Boehning: You were talking about the Bismarck airport. If we don't have the funding, what are their funding sources that are available?

Kyle Wanner: A large part of their revenue source is their parking. They do have some reserves that they have saved up for this large project; but it's not enough to cover the \$35 million. They're going to have to bond, take out loans, they can use passenger facility charges for every passenger; they can charge \$4.50. They have many projects coming up after this runway project.

Kyle Wanner continued with his testimony.

Vice Chairman Boehning: With all of those stations, is that information being used by entities besides aeronautics?

Kyle Wanner: This is very good information for the public in general not just the aviation community.

Kyle Wanner continued with his testimony.

Representative Nathe: Of the \$950 million for the 10 year projection, is Williston's \$250 million in that?

Kyle Wanner: Yes.

Representative Nathe: That's probably in the 1-5 year?

Kyle Wanner: Correct.

Kyle Wanner continued with his testimony.

Representative Nathe: You expressed your frustration with the federal involvement. Have you talked to the federal delegation as far as trying to help us?

Kyle Wanner: Both Senators Hoeven and Heitkamp have both been very involved with having meetings with different aviation communities. They're very aware of FAA re-authorization and the challenges our airports are having. They're very supportive of moving forward with legislation that increases airport improvement.

Kyle Wanner continued with his testimony.

Representative Nathe: Is that a federal cap?

Kyle Wanner: Yes.

Kyle Wanner continued with his testimony.

Vice Chairman Boehning: What's the aviation fuel tax? How much is it?

Kyle Wanner: We currently tax \$.08 per gallon.

Vice Chairman Boehning: Is that refundable?

Kyle Wanner: It is only refundable if the gallons are \$2.00 or less; then you can ask for a refund so you're only paying 4% of the purchase price. That is something that is potentially being changed and is being looked at in SB2049.

Representative Vigesaa: Looking at the engrossed bill and the reduction of \$200,000.00 in capital assets. Could you explain what that was?

Kyle Wanner: That was our recommendation from our agency. Each biennium we look at different projects that we could utilize with that line item. This biennium, we did not need the \$300,000.00; so we recommended the reduction.

Mathew Remyse, President, Airport Association of North Dakota: See testimony attachment C.

Vice Chairman Boehning: On the mil levies for the cities and counties, are you looking at doing an authority?

Mathew Remyse: That bill is SB2200. There are already capital and mil levies set up for cities and counties and it identifies the projects they can use that for; the airports are not a part of that. The language we are working to get included in century code would allow airports to have their projects funded through the capital mil levies.

Vice Chairman Boehning: In my home town they set up an ambulance districts which takes in jurisdiction over more than one city. If you're close to a county line, some people on the other side of the county line would probably use it more than the other part of the county. How are you setting that up?

Mathew Remyse: There are only 7 or 8 county airports; the rest are city airports or airport authorities. If they were to issue a capital mil levy, it would only be assessed to the city.

Vice Chairman Boehning: What is the cap on the mil levy for airports?

Mathew Remyse: The operational mil levy that's in the airport authorities act is 4 mils. SB2200 would allow an airport to work with a city or county governing body to access their

capital mils levy. The century code currently has 10 mils; before you'd have to go for a vote for counties; and for the city, currently 10 mils from the capital mil levy need to be voted on. There's language in SB2200 that would change that.

Greg Haug, Director, Bismarck Airport: See testimony attachments D and E.

Vice Chairman Boehning: Why is the federal government only giving 53% versus the 90%? Is there not enough money in that funding source?

Greg Haug: The Great Lakes Region, which we are a part of, get allocated a certain amount in a year's time or through their authorization appropriation from the federal government. They have high priority projects throughout the region and this is all that they could come up with at this time for Bismarck. We received over 81% funding in our terminal.

Representative Brabandt: Your airport is about 15 years old, how old is the runway that needs replacement?

Greg Haug: Some of the pavement dates back to the 1950's. We've done overlays on it because it's an asphalt runway. It's starting to deteriorate from underneath. We're planning on building a concrete runway this time.

Representative Vigesaa: What are your cash reserves? What current level is that at today?

Greg Haug: They are \$6 million.

Representative Vigesaa: Can you explain what the process is in going to the city?

Greg Haug: The airport has been able to run without any support from the city for years. The city of Bismarck has had a policy of not using mil levies for annual airport funding. We run the airport like a business. They've committed over \$10 million through their budget process.

Representative Brabandt: What is your current debt load?

Greg Haug: We don't have any.

Kelly Braun, Manager, Dickinson Airport: Testified in support of the Dickinson airport project.

Rodney Schaaf, Board Chairman, Bowman Regional Airport: See testimony attachment F.

Vice Chairman Boehning: With the new military flight area, has that impacted you a lot out there?

Rodney Schaaf: Yes, we've fought that for years; because Bowman and Baker, MT are under area 3. We had our federal delegation involved. We had the department of defense and the FAA out to our area.

Representative Nathe: How are those discussions going with working with the city and their cash reserves to make up some of the shortfall? What's the dollar amount you're looking at with them?

Greg Haug: The city commission made a commitment in their 2017 budget of \$10 million to \$11 million for the airport. We're still hoping for some pretty good support from the state.

Vice Chairman Boehning: On the Grand Forks airport planning they're looking at doing a major runway expansion or reconstruction?

Kyle Wanner: Their main runway is to the point where it needs to be completely reconstructed. They probably don't want to complete reconstruct what's there. They could build a new runway to the left and turn their current runway into a parallel taxi way. The air traffic control tower is really pushing for the FAA and the airport to consider expanding their crosswind runway. Grand Forks is always in the top 25 busiest airports in our country.

Kyle Wanner continued with his testimony.

Vice Chairman Boehning: Are there landing fees?

Kyle Wanner: There aren't landing fees associated with UND Aerospace; but they do have other related fees that they pay to the airport.

Vice Chairman Boehning: Closed the hearing.

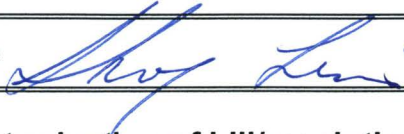
2017 HOUSE STANDING COMMITTEE MINUTES

Appropriations Committee - Government Operations Division
Medora Room, State Capitol

SB2006
3/16/2017
Recording Job# 29361

- Subcommittee
 Conference Committee

Committee Clerk Signature



Explanation or reason for introduction of bill/resolution:

A BILL for an Act to provide an appropriation for defraying the expenses of the North Dakota aeronautics commission.

Minutes:

Chairman Brandenburg: Opened the hearing on SB2006.

Representative Kempenich: Is there any general fund money in here?

Kyle Wanner, Director, ND Aeronautics Commission: There is \$900,000.00 of general fund.

Representative Kempenich: It goes to airports that aren't federally funded?

Kyle Wanner: The \$900,000.00 of general fund appropriation goes to the airport grant line item. It becomes a funding that airports can apply to around the state and receive funding for projects and leveraging federal funds.

Representative Kempenich: Can all airports access federal funds?

Kyle Wanner: Approximately 54 airports are eligible to receive federal funds. The state funds can also help projects that are ineligible to receive federal funds as well as airports that are completely ineligible to receive federal funds.

Representative Kempenich: It looks like the Senate took out \$34,000.00 of the general fund?

Kyle Wanner: Yes. That was the 10% reduction.

Chairman Brandenburg: The \$900,000.00 would bring in \$18 million of federal funds when you match it. Correct?

Kyle Wanner: Correct. We're anticipating \$100 million of federal grants.

Chairman Brandenburg: That funding is not in this budget.

Kyle Wanner: Some of that funding discretionary wise could still be granted to the Bismarck airport.

Representative Kempenich: Does the Bismarck airport kind of act like a clearing house for federal money? Does that go directly to the airports? Who gets the federal money? That doesn't run through your operation does it?

Kyle Wanner: We compete federally for dollars; so Congress has to appropriate and authorize funding. They've authorized about \$3.2 billion annually. We also compete regionally, we're in the Great Lakes Region. There's only so much money to go around. The 54 airports in our state apply on a yearly basis for those funds; they are granted those funds. They also apply to the state to match those grants.

Vice Chairman Boehning: In the new budget that Trump just proposed, was there any more money in his budget for aeronautics?

Kyle Wanner: I'm not certain if there is any federal aviation dollars in that budget. Congress does need to authorize funding beyond April to keep our airport program up and running.

Chairman Brandenburg: What's going on with the Williston situation? What kind of plan do we have for the \$32 million?

Kyle Wanner: We've been working on that project since 2011. We're faced with two options; either reconstruct in place and shut the airport down for three years for \$230 million to \$250 million, or relocate to a different site. The sale of the current site goes into the proceeds of the new site. The federal government has already contributed \$54 million to the project, land has already been purchased. They're beginning dirt work this spring. The state of North Dakota was looking at contributing \$59 million to \$60 million in total to the project.

Chairman Brandenburg: Is that \$54 million federal money?

Kyle Wanner: Correct.

Chairman Brandenburg: How much is committed for the total by the feds?

Kyle Wanner: We're hoping to receive \$20 million to \$25 million of federal funding this year and another \$20 million to \$25 million the following year. The year after that there may be an opportunity for some additional funds.

Chairman Brandenburg: So there's \$104 million to this point; not all the money is there but it's been committed.

Kyle Wanner: It's never guaranteed, it's the verbal commitment that it's in their funding.

Chairman Brandenburg: That leaves \$128 million left and \$60 million for the state; which leaves another \$68 million left by Williston.

Kyle Wanner: That's about right and then that leaves the sale of the land; we don't know how much those dollars are going to be. It could be around \$20 million.

Representative Kempenich: I think that's what the underlying questions is; how the land of the old airport is handled. In this biennium we had \$40 million and that didn't show up; I think we've spent about \$20 million already on the state side.

Kyle Wanner: \$60 million was appropriated in the 2011-2013 biennium for airports; \$20 million went to Williston and they haven't expended all those dollars. I believe there's about \$14 million that we specifically applied to the terminal. The current biennium that we're in there was \$48 million to airports; of that about \$3 million was granted before we were notified that that oil impact fund was not going to fill. To date there are \$45 million that the airport community has been requesting the legislature consider re-honoring that request; because those dollars were planned to be utilized.

Chairman Brandenburg: They were committed and based on triggers and the triggers never hit.

Kyle Wanner: That's correct.

Chairman Brandenburg: So you're somewhere in that \$40 million.

Kyle Wanner: For Williston.

Representative Brandenburg: How many acres does the existing Williston airport cover? Has the terminal building itself been bid yet?

Kyle Wanner: It's about 1,500 acres.

Representative Brabandt: The terminal building hasn't been bid yet?

Kyle Wanner: This morning I interviewed two different construction companies to do a construction management at risk for that building. As soon as one is selected, they will negotiate the final price.

Vice Chairman Boehning: Is the \$20 million sale included in the Williston share buildout of the new airport?

Kyle Wanner: That would be correct.

Vice Chairman Boehning: Out of their \$68 million, \$20 million will come from the sale?

Chairman Brandenburg: That 1,500 acres is going to take time to sell.

Representative Kempenich: I think by the end of the day there will be no profit.

Vice Chairman Boehning: One of the concerns I have is budgeting \$20 million on the sale. So basically all you have is a piece of land?

Kyle Wanner: You might have some value with the pavement. It really is the location that's key. They did hire a developer to look at the best way to develop this airport.

Vice Chairman Boehning: If they only make a profit of \$10 million, is the city of Williston going to make that up on their own? Are they going to come back here and want another \$10 million?

Kyle Wanner: To my knowledge they would not come back to the state if the state is able to provide what was committed to date. They would figure it out.

Vice Chairman Boehning: Can we get something in writing from them?

Kyle Wanner: If we need to get the mayor, the city administrator, the city council to come down and meet we can do that.

Vice Chairman Boehning: We don't need that; we just want something in writing.

Representative Brabandt: Wasn't the existing terminal building in Williston remodeled just recently?

Kyle Wanner: I believe it was about 10 years ago.

Representative Brabandt: Something tells me it was remodeled within the last year.

Kyle Wanner: It was in 2007.

Representative Vigesaa: I was looking back on the historic of the general fund and for three bienniums it was \$550,000.00 per biennium. In the last biennium it went to \$934,000.00. Was there any particular reason it jumped that much or was it because we had the money at that time that the increase was granted?

Kyle Wanner: There's never enough funding for airport grants. The request has always been to help increase some sort of funding to help with our airport projects.

Representative Nathe: In related major legislation HB1217 where the fees are increased; what's the status of the bill and where does that money go to when you collect that fee?

Kyle Wanner: That bill passed both houses. That bill removes a discount on aircraft owners when they apply for registration fees. That hasn't changed since 1987.

Representative Nathe: Where does that money go?

Kyle Wanner: It goes to the special fund for the aeronautics commission to utilize on airport infrastructure project.

Representative Nathe: How much does that generate?

Kyle Wanner: Currently it generates about \$90,000.00 per year and that would increase to about \$160,000.00 per year.

Representative Nathe: What about SB2049 that has to do with aircraft excise tax? Is that an increase in the fuel tax?

Kyle Wanner: There's no fiscal note on that bill so it doesn't affect our financial status. It improves the language in the bill. With the aeronautics commission special funds, we've established the aviation fuel tax and excise tax. There was different language that conflicts; we combined it all to establish a fund to be utilized for these purposes.

Representative Nathe: What does the aviation fuel tax generate for you per year for the special fund?

Kyle Wanner: We're estimating \$3.7 million for the biennium.

Representative Brabandt: Could you explain the increase in the operating expenses of \$143,000.00?

Kyle Wanner: The operating expenses went down from last biennium. The reason that line went up was to accommodate the ability bring in federal dollars for different studies.

Vice Chairman Boehning: Who owns the golf course at the end of the airport?

Kyle Wanner: Williston owns that.

Vice Chairman Boehning: Does the airport own that land then?

Kyle Wanner: Correct.

Chairman Brandenburg: Closed the hearing.

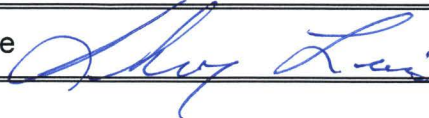
2017 HOUSE STANDING COMMITTEE MINUTES

Appropriations Committee – Government Operations Division
Medora Room, State Capitol

SB2006
3/28/2017
Recording Job# 29749

- Subcommittee
 Conference Committee

Committee Clerk Signature



Explanation or reason for introduction of bill/resolution:

A BILL for an Act to provide an appropriation for defraying the expenses of the North Dakota aeronautics commission.

Minutes:

Chairman Brandenburg: Opened the hearing on SB2006.

Representative Brabandt: Explained amendment 17.0514.02001.

Representative Brabandt: Made a motion to move amendment 17.0514.02001.

Vice Chairman Boehning: Seconded the motion.

Roll Call Vote: 7 Yeas 0 Nays 0 Absent.

Motion Carried.

Representative Brabandt: Made a motion for a "Do Pass as Amended".

Representative Vigesaa: Seconded the motion.

Representative Kempenich: The temporary vacant FTE, you're probably going to have to have an explanation as to why that didn't change.

Roll Call Vote: 7 Yeas 0 Nays 0 Absent.

Motion Carried.

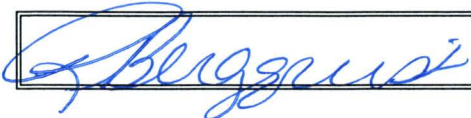
Chairman Brandenburg: Closed the hearing.

2017 HOUSE STANDING COMMITTEE MINUTES

Appropriations Committee
Roughrider Room, State Capitol

SB 2006
March 29th 2017
29815

- Subcommittee
 Conference Committee



Explanation or reason for introduction of bill/resolution:

A BILL for an Act to provide an appropriation for defraying the expenses of the North Dakota aeronautics commission.

Minutes:



1:30 Representative Brabandt: Reviewing budget and amendment 17.0514.02001 for SB 2006 which is the aeronautics commission. Pretty simple budget, total budget of \$10,735,412.

5:35 Chairman Delzer: Did they take into consideration bill that have passed earlier in the session?

Representative Kempenich: HB 1217, I don't think that put that into this budget.

Chairman Delzer: Did they need appropriation authority to cover that? Why are we still at 900 thousand on general fund, I see they reduced it by 34 thousand, that's only about 31/2%.

Representative Kempenich: There was actually more in the general fund budget, there was planning grants of 1.1 million and then we did reduce some of the others. That goes to a lot of the smaller airports.

Representative Brabandt: The general fund last biennium was 1 million dollars and then the governor reduced that to 934 thousand and now it's reduced to 912 thousand, that's used to leverage the possibility of 18 million dollars in federal funds.

Chairman Delzer: Any discussion on if that doesn't come, where are they going to use this 900 thousand? Representative Streytle did say that other bill was signed by Governor Burgum. I think that was 150 thousand.

Representative Kempenich: That they added in on the senate side, they added 143 thousand increase funding in operating expenses.

9:00 Representative Brabandt: There is one position that is open right now.

Representative Kempenich: It's secretarial and is filled by a temporary person right now.

Chairman Delzer: Are they going to continue as a temporary? I ask about the 900 thousand because, when we changed this from a general fund to a special funded agency it was said that there should not need to be any general fund. And as things are growing we keep giving them more.

Representative Streyle: The position that they are talking about has been vacant for 14 months, and a line item of 186 thousand dollars.

Representative Kempenich: But there is a note there that it's filled with a temporary.

Chairman Delzer: Further discussion? So if they bring in more money I am not sure if they can spend it or not. We did pass that other bill first.

Representative Brabandt: Motion to move Amendment 17.0514.02001

Representative Boehning: Was that a total increase or was that a total?

Chairman Delzer: Fiscal note shows that is an increase. We have a motion to amend with .02001 is there a second?

Representative Kempenich: Second

Voice vote, All in favor, Motion carries

Representative Streyle: We know it was signed so I think we should give them spending authority and then we should look at removing some general fund. And maybe go further, with some sort of study for the Williston Airport project, I don't think it's been run properly at this point.

Representative Kempenich: I don't know if this is the place to do that.

Representative Schmidt: When these agencies say they need these funds secure federal funds, are these flat rate funds or are they matching funds?

Representative Kempenich: It's a 90/10, we asked how solid they were on that federal funding and they think they are getting 18 million.

Chairman Delzer: Almost all of that 18 million could be matched?

Representative Kempenich: I think a good chunk of it goes to those airports that don't qualify for federal money.

Chairman Delzer: Further discussion?

Representative Monson: Make a motion to further amend to increase spending authority of 150 thousand based on HB 1217.

Representative Kempenich: Second

Brady Larson, Legislative Council: Would you like all that in the grants line item?

Chairman Delzer: I would think that should go to the grants line item. Further discussion?

Voice vote, all in favor, motion carries

Chairman Delzer: Further amendments?

Representative Streyle: Make a motion to remove 150 thousand from general fund.

Representative Schmidt: Second

Representative Boehning: I am afraid we will lose matching funds.

Representative J. Nelson: On the green sheets, what was the project at the Peace Garden?

Representative Kempenich: It was to upgrade the terminal a little bit, it's a shack with a toilet and a bench.

Voice vote, All in favor, Roll Call Vote was requested

A Roll Call vote was taken. Yea: 9 Nay: 9 Absent: 3

Motion Failed

Representative Brabandt: I will make a motion to Do Pass as Amended.

Representative Delmore: Second

Chairman Delzer: Further discussion?

A Roll Call vote was taken. Yea: 15 Nay: 3 Absent: 3

Motion Carries

Representative Brabandt will carry the bill

PROPOSED AMENDMENTS TO ENGROSSED SENATE BILL NO. 2006

Page 1, replace line 12 with:

"Salaries and wages \$1,447,637 (\$16,415) \$1,431,222"

Page 1, replace lines 16 and 17 with:

"Total all funds \$11,242,517 (\$507,105) \$10,735,412
Less estimated income 10,308,017 (472,605) 9,835,412"

Page 1, after line 19, insert:

"SECTION 2. HEALTH INSURANCE INCREASE. The salaries and wages line item in section 1 of this Act includes the sum of \$18,583 from other funds for increases in employee health insurance premiums from \$1,130 to \$1,241 per month."

Renumber accordingly

STATEMENT OF PURPOSE OF AMENDMENT:

Senate Bill No. 2006 - Aeronautics Commission - House Action

	Base Budget	Senate Version	House Changes	House Version
Salaries and wages	\$1,447,637	\$1,432,674	(\$1,452)	\$1,431,222
Operating expenses	2,060,380	2,204,190		2,204,190
Capital assets	300,000	100,000		100,000
Grants	<u>7,434,500</u>	<u>7,000,000</u>		<u>7,000,000</u>
Total all funds	\$11,242,517	\$10,736,864	(\$1,452)	\$10,735,412
Less estimated income	<u>10,308,017</u>	<u>9,836,864</u>	<u>(1,452)</u>	<u>9,835,412</u>
General fund	\$934,500	\$900,000	\$0	\$900,000
FTE	7.00	7.00	0.00	7.00

Department No. 412 - Aeronautics Commission - Detail of House Changes

	Adjusts Funding for Health Insurance Increases ¹	Total House Changes
Salaries and wages	(\$1,452)	(\$1,452)
Operating expenses		
Capital assets		
Grants		
Total all funds	(\$1,452)	(\$1,452)
Less estimated income	<u>(1,452)</u>	<u>(1,452)</u>
General fund	\$0	\$0
FTE	0.00	0.00

¹ Funding for employee health insurance is adjusted to reflect the updated premium amount of \$1,241 per month.

A section is added identifying the cost of the health insurance premium increase.

3/30/17 DP
 10/12

PROPOSED AMENDMENTS TO ENGROSSED SENATE BILL NO. 2006

Page 1, replace line 12 with:

"Salaries and wages \$1,447,637 (\$16,415) \$1,431,222"

Page 1, replace lines 15 through 17 with:

"Grants 7,434,500 (284,500) 7,150,000
 Total all funds \$11,242,517 (\$357,105) \$10,885,412
 Less estimated income 10,308,017 (322,605) 9,985,412"

Page 1, after line 19, insert:

"SECTION 2. HEALTH INSURANCE INCREASE. The salaries and wages line item in section 1 of this Act includes the sum of \$18,583 from other funds for increases in employee health insurance premiums from \$1,130 to \$1,241 per month."

Renumber accordingly

STATEMENT OF PURPOSE OF AMENDMENT:

Senate Bill No. 2006 - Aeronautics Commission - House Action

	Base Budget	Senate Version	House Changes	House Version
Salaries and wages	\$1,447,637	\$1,432,674	(\$1,452)	\$1,431,222
Operating expenses	2,060,380	2,204,190		2,204,190
Capital assets	300,000	100,000		100,000
Grants	<u>7,434,500</u>	<u>7,000,000</u>	150,000	<u>7,150,000</u>
Total all funds	\$11,242,517	\$10,736,864	\$148,548	\$10,885,412
Less estimated income	<u>10,308,017</u>	<u>9,836,864</u>	148,548	<u>9,985,412</u>
General fund	\$934,500	\$900,000	\$0	\$900,000
FTE	7.00	7.00	0.00	7.00

Department No. 412 - Aeronautics Commission - Detail of House Changes

	Adjusts Funding for Health Insurance Increases ¹	Adds Funding for Grants ²	Total House Changes
Salaries and wages	(\$1,452)		(\$1,452)
Operating expenses			
Capital assets			
Grants		150,000	150,000
Total all funds	(\$1,452)	\$150,000	\$148,548
Less estimated income	<u>(1,452)</u>	<u>150,000</u>	<u>148,548</u>
General fund	\$0	\$0	\$0
FTE	0.00	0.00	0.00

3/30/17 W+
2 of 2

¹ Funding for employee health insurance is adjusted to reflect the updated premium amount of \$1,241 per month.

² Special funds spending authority is increased by \$150,000 as a result of House Bill No. 1217. House Bill No. 1217 removes a discount of up to 50 percent on aircraft registration fees.

A section is added identifying the cost of the health insurance premium increase.

Date: 3/29/2017
Roll Call Vote #: 1

**2017 HOUSE STANDING COMMITTEE
ROLL CALL VOTES
BILL/RESOLUTION NO. SB 2006**

House Appropriations Committee

Subcommittee

Amendment LC# or Description: 17.0514.02001

Recommendation: Adopt Amendment
Do Pass Do Not Pass Without Committee Recommendation
 As Amended Rerefer to Appropriations
 Place on Consent Calendar
Other Actions: Reconsider _____

Motion Made By Representative Brabandt Seconded By Representative Kempenich

Representatives	Yes	No	Representatives	Yes	No
Chairman Delzer					
Representative Kempenich			Representative Streyle		
Representative: Boehning			Representative Vigesaa		
Representative: Brabandt					
Representative Brandenburg					
Representative Kading			Representative Boe		
Representative Kreidt			Representative Delmore		
Representative Martinson			Representative Holman		
Representative Meier					
Representative Monson					
Representative Nathe					
Representative J. Nelson					
Representative Pollert					
Representative Sanford					
Representative Schatz					
Representative Schmidt					

Total (Yes) _____ No _____

Absent _____

Floor Assignment _____

If the vote is on an amendment, briefly indicate intent:

Motion Carries

Date: 3/31/2017
 Roll Call Vote #: 2

**2017 HOUSE STANDING COMMITTEE
 ROLL CALL VOTES
 BILL/RESOLUTION NO. SB 2006**

House Appropriations Committee

Subcommittee

Amendment LC# or Description: Further amend, give spending authority of 150 thousand based on HB 1217

Recommendation: Adopt Amendment
 Do Pass Do Not Pass Without Committee Recommendation
 As Amended Rerefer to Appropriations
 Place on Consent Calendar

Other Actions: Reconsider _____

Motion Made By Representative Monson Seconded By Representative Kempenich

Representatives	Yes	No	Representatives	Yes	No
Chairman Delzer					
Representative Kempenich			Representative Streyle		
Representative: Boehning			Representative Vigesaa		
Representative: Brabandt					
Representative Brandenburg					
Representative Kading			Representative Boe		
Representative Kreidt			Representative Delmore		
Representative Martinson			Representative Holman		
Representative Meier					
Representative Monson					
Representative Nathe					
Representative J. Nelson					
Representative Pollert					
Representative Sanford					
Representative Schatz					
Representative Schmidt					

Total (Yes) _____ No _____

Absent _____

Floor Assignment _____

If the vote is on an amendment, briefly indicate intent:

MOTION CARRIES

Date: 3/29/2017
 Roll Call Vote #: 3

**2017 HOUSE STANDING COMMITTEE
 ROLL CALL VOTES
 BILL/RESOLUTION NO. SB 2006**

House Appropriations Committee

Subcommittee

Amendment LC# or Description: Remove 150 thousand dollars

Recommendation: Adopt Amendment
 Do Pass Do Not Pass Without Committee Recommendation
 As Amended Rerefer to Appropriations
 Place on Consent Calendar
 Other Actions: Reconsider _____

Motion Made By Representative Streyle Seconded By Representative Schmidt

Representatives	Yes	No	Representatives	Yes	No
Chairman Delzer	X				
Representative Kempenich		X	Representative Streyle	X	
Representative: Boehning		X	Representative Vigesaa	X	
Representative: Brabandt		X			
Representative Brandenburg	A				
Representative Kading	A		Representative Boe	X	
Representative Kreidt		X	Representative Delmore		X
Representative Martinson	X		Representative Holman		X
Representative Meier	A				
Representative Monson	X				
Representative Nathe		X			
Representative J. Nelson		X			
Representative Pollert	X				
Representative Sanford	X				
Representative Schatz		X			
Representative Schmidt	X				

Total (Yes) 9 No 9

Absent 3

Floor Assignment _____

If the vote is on an amendment, briefly indicate intent:

Motion Failed

Date: 3/29/2017
Roll Call Vote #: 4

**2017 HOUSE STANDING COMMITTEE
ROLL CALL VOTES
BILL/RESOLUTION NO. SB 2006**

House Appropriations Committee

Subcommittee

Amendment LC# or Description: _____

Recommendation: Adopt Amendment
 Do Pass Do Not Pass Without Committee Recommendation
 As Amended Rerefer to Appropriations
 Place on Consent Calendar
Other Actions: Reconsider _____

Motion Made By Representative Brabandt Seconded By Representative Delmore

Representatives	Yes	No	Representatives	Yes	No
Chairman Delzer		X			
Representative Kempenich	X		Representative Streyle		X
Representative: Boehning	X		Representative Vigesaa	X	
Representative: Brabandt	X				
Representative Brandenburg	A				
Representative Kading	A		Representative Boe	X	
Representative Kreidt	X		Representative Delmore	X	
Representative Martinson	X		Representative Holman	X	
Representative Meier	A				
Representative Monson	X				
Representative Nathe	X				
Representative J. Nelson	X				
Representative Pollert	X				
Representative Sanford	X				
Representative Schatz	X				
Representative Schmidt		X			

Total (Yes) 15 No 3

Absent 3

Floor Assignment Representative Brabandt

If the vote is on an amendment, briefly indicate intent:

Motion Carries

REPORT OF STANDING COMMITTEE

SB 2006, as engrossed: Appropriations Committee (Rep. Delzer, Chairman) recommends **AMENDMENTS AS FOLLOWS** and when so amended, recommends **DO PASS** (15 YEAS, 3 NAYS, 3 ABSENT AND NOT VOTING). Engrossed SB 2006 was placed on the Sixth order on the calendar.

Page 1, replace line 12 with:

"Salaries and wages	\$1,447,637	(\$16,415)	\$1,431,222"
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Page 1, replace lines 15 through 17 with:

"Grants	7,434,500	(284,500)	7,150,000
Total all funds	\$11,242,517	(\$357,105)	\$10,885,412
Less estimated income	10,308,017	(322,605)	9,985,412"

Page 1, after line 19, insert:

"SECTION 2. HEALTH INSURANCE INCREASE. The salaries and wages line item in section 1 of this Act includes the sum of \$18,583 from other funds for increases in employee health insurance premiums from \$1,130 to \$1,241 per month."

Re-number accordingly

STATEMENT OF PURPOSE OF AMENDMENT:

Senate Bill No. 2006 - Aeronautics Commission - House Action

	Base Budget	Senate Version	House Changes	House Version
Salaries and wages	\$1,447,637	\$1,432,674	(\$1,452)	\$1,431,222
Operating expenses	2,060,380	2,204,190		2,204,190
Capital assets	300,000	100,000		100,000
Grants	7,434,500	7,000,000	150,000	7,150,000
Total all funds	\$11,242,517	\$10,736,864	\$148,548	\$10,885,412
Less estimated income	10,308,017	9,836,864	148,548	9,985,412
General fund	\$934,500	\$900,000	\$0	\$900,000
FTE	7.00	7.00	0.00	7.00

Department No. 412 - Aeronautics Commission - Detail of House Changes

	Adjusts Funding for Health Insurance Increases ¹	Adds Funding for Grants ²	Total House Changes
Salaries and wages	(\$1,452)		(\$1,452)
Operating expenses			
Capital assets			
Grants		150,000	150,000
Total all funds	(\$1,452)	\$150,000	\$148,548
Less estimated income	(1,452)	150,000	148,548
General fund	\$0	\$0	\$0
FTE	0.00	0.00	0.00

¹ Funding for employee health insurance is adjusted to reflect the updated premium amount of \$1,241 per month.

² Special funds spending authority is increased by \$150,000 as a result of House Bill No. 1217. House Bill No. 1217 removes a discount of up to 50 percent on aircraft registration fees.

A section is added identifying the cost of the health insurance premium increase.

2017 TESTIMONY

SB 2006

Department 412 - Aeronautics Commission
Senate Bill Nos. 2006 and 2066

Executive Budget Comparison to Prior Biennium Appropriations

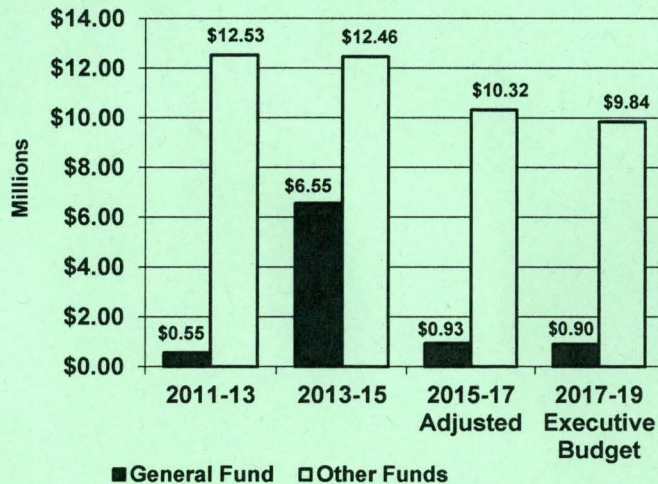
	FTE Positions	General Fund	Other Funds	Total
2017-19 Executive Budget	7.00	\$900,000	\$9,842,642	\$10,742,642
2015-17 Adjusted Legislative Appropriations ¹	7.00	934,500	10,322,827	11,257,327
Increase (Decrease)	0.00	(\$34,500)	(\$480,185)	(\$514,685)

¹The 2015-17 biennium agency appropriation amounts reflect general fund budget reductions made in August 2016.

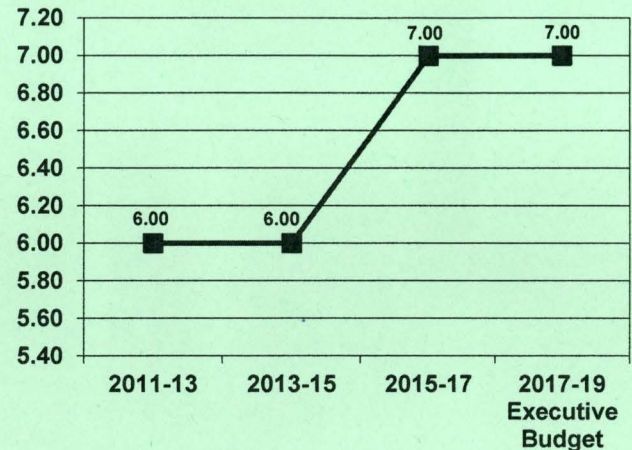
Ongoing and One-Time General Fund Appropriations

	Ongoing General Fund Appropriation	One-Time General Fund Appropriation	Total General Fund Appropriation
2017-19 Executive Budget	\$900,000	\$0	\$900,000
2015-17 Adjusted Legislative Appropriations	934,500	0	934,500
Increase (Decrease)	(\$34,500)	\$0	(\$34,500)

Agency Funding



FTE Positions



Executive Budget Comparison to Base Level

	General Fund	Other Funds	Total
2017-19 Executive Budget	\$900,000	\$9,842,642	\$10,742,642
2017-19 Base Level	934,500	10,308,017	11,242,517
Increase (Decrease)	(\$34,500)	(\$465,375)	(\$499,875)

Attached as an appendix is a detailed comparison of the executive budget to the agency's base level appropriations.

Executive Budget Highlights

	General Fund	Other Funds	Total
1. Adds funding for state employee salary and benefit increases, of which \$5,778 is for salary increases and \$20,035 is for health insurance increases	\$0	\$25,813	\$25,813
2. Increases funding for operating expenses to provide a total of \$2,204,190	\$0	\$143,810	\$143,810
3. Reduces ongoing general fund support for airport grants to provide a total of \$900,000	(\$34,500)		(\$34,500)
4. Increases funding from other funds for airport grants to provide a total of \$5,800,000 in airport infrastructure grants		\$800,000	\$800,000
5. Reduces funding for capital assets to provide a total of \$100,000	\$0	(\$200,000)	(\$200,000)

6. Reduces funding for education grants to provide a total of \$300,000	(\$100,000)	(\$100,000)
7. Removes funding for planning grants	(\$1,100,000)	(\$1,100,000)

Continuing Appropriations

No continuing appropriations for this agency.

Significant Audit Findings

The operational audit of the Aeronautics Commission conducted by the State Auditor's office for the biennium ended June 30, 2015, included significant audit findings related to the following:

- The commission has not properly segregated duties and has not adequately reviewed the potential risk of fraud surrounding the handling of revenue collections.
- The commission does not have adequate controls surrounding disposal of fixed assets.

Major Related Legislation

House Bill No. 2049 - Amends North Dakota Century Code Section 2-05-22 relating to interest received by the Aeronautics Commission special fund to identify how the fund is to be used. Amends Chapters 57-40.5 and 57-43.3 relating to aircraft excise tax and aviation fuel tax. Repeals Sections 57-43.3-04 and 57-43.3-06 relating to the aviation fuel tax.

Aeronautics Commission - Budget No. 412
Senate Bill Nos. 2006 and 2066
Base Level Funding Changes

	Executive Budget Recommendation			
	FTE Position	General Fund	Other Funds	Total
2017-19 Biennium Base Level	7.00	\$934,500	\$10,308,017	\$11,242,517
2017-19 Ongoing Funding Changes				
Base payroll changes			(\$34,998)	(\$34,998)
Salary increase			5,778	5,778
Health insurance increase			20,035	20,035
Increases funding for operating expenses			143,810	143,810
Reduces airport grants - general fund		(34,500)		(34,500)
Reduces capital asset funding			(200,000)	(200,000)
Reduces education grants			(100,000)	(100,000)
Removes planning grants			(1,100,000)	(1,100,000)
Increases airport grants			800,000	800,000
Total ongoing funding changes	0.00	(\$34,500)	(\$465,375)	(\$499,875)
One-time funding items				
No one-time funding items				\$0
Total one-time funding changes	0.00	\$0	\$0	\$0
Total Changes to Base Level Funding	0.00	(\$34,500)	(\$465,375)	(\$499,875)
2017-19 Total Funding	7.00	\$900,000	\$9,842,642	\$10,742,642

Other Sections in Aeronautics Commission - Budget No. 412

Executive Budget Recommendation

No other sections included in the executive budget recommendation.

Department 412 - Aeronautics Commission**Reductions to 2015-17 Biennium General Fund Appropriations
(As a result of the August 2016 General Fund Budget Reductions)**

	Ongoing	One-Time	Total
2015-17 original general fund appropriations	\$1,000,000	\$0	\$1,000,000
General fund reductions	(65,500)		(65,500)
Adjusted 2015-17 appropriations	\$934,500	\$0	\$934,500
Executive Budget changes	(34,500)	0	(34,500)
2017-19 Executive Budget	\$900,000	\$0	\$900,000

Summary of August 2016 General Fund Budget Reductions

	Ongoing	One-Time	Total
Reduced funding for airport grants	(\$65,500)	\$0	(\$65,500)
Total reductions	(\$65,500)	\$0	(\$65,500)
Percentage reduction to ongoing and one-time general fund appropriations	6.55%	0.00%	6.55%

2017-19 Executive Budget Changes to the Original and Adjusted Base Budgets

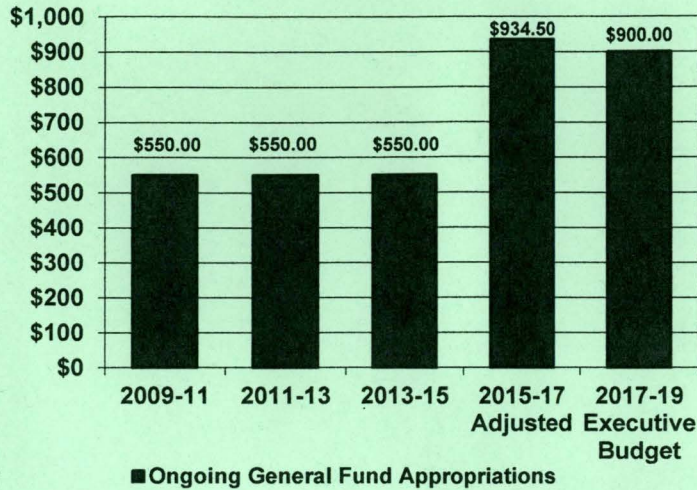
	Changes to Original Budget	Budget Reduction Adjustments	Changes to Adjusted Budget
Reduces funding for airport grants	(\$100,000)	\$65,500	(\$34,500)
Total	(\$100,000)	\$65,500	(\$34,500)

Department 412 - Aeronautics Commission

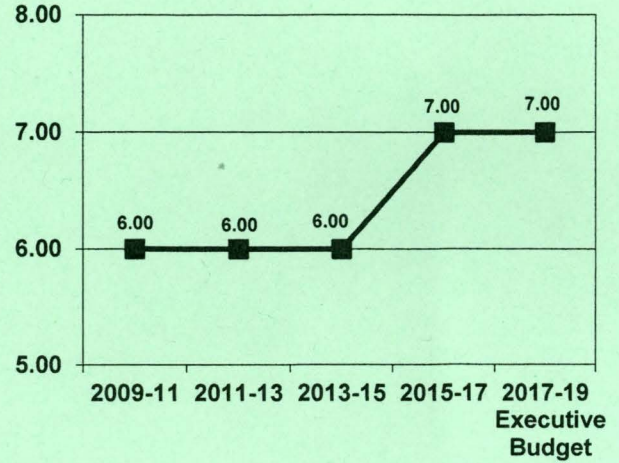
Historical Appropriations Information

Total Other Funds Appropriations Since 2009-11

Agency Funding (in Thousands)



FTE Positions



Ongoing General Fund Appropriations					
	2009-11	2011-13	2013-15	2015-17 Adjusted	2017-19 Executive Budget
Ongoing general fund appropriations	\$550,000	\$550,000	\$550,000	\$934,500	\$900,000
Increase (decrease) from previous biennium	N/A	\$0	\$0	\$384,500	(\$34,500)
Percentage increase (decrease) from previous biennium	N/A	0%	0%	69.9%	(3.7%)
Cumulative percentage increase (decrease) from 2009-11 biennium	N/A	0%	0%	69.9%	63.6%

Major Increases (Decreases) in Ongoing General Fund Appropriations

2011-13 Biennium

1. No major increases or decreases

2013-15 Biennium

1. No major increases or decreases

2015-17 Biennium

1. Increased funding for airport grants to provide \$1,000,000 \$384,500

2017-19 Biennium

1. Reduces funding for airport grants to provide \$900,000 (\$34,500)



1A
NORTH DAKOTA
AERONAUTICS COMMISSION

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"A Statewide Voice for Aviation"

SB 2006/SB 2066
1-13-17
1

TESTIMONY OF
KYLE C. WANNER
EXECUTIVE DIRECTOR, NORTH DAKOTA AERONAUTICS COMMISSION
BEFORE THE
SENATE APPROPRIATIONS COMMITTEE
JANUARY 13th, 2017
SENATE BILL 2006

Chairman Holmberg and members of the committee,

My name is Kyle Wanner and I am the Director of the North Dakota Aeronautics Commission and will be providing testimony today regarding Senate Bill 2006.

(Slide 2) The Aeronautics Commission agency was created by the Legislature in 1947 to support the aviation community in North Dakota. The agency's mission is "to serve the public by providing economic and technical assistance for the aviation community while ensuring the cost effective advancement of aviation in North Dakota."

The agency is overseen by a Governor appointed board of 5 members who appoint a director who in turn; hires and supervises the staff required to operate the agency.

(Slide 3) To introduce our commissioners: Cindy Schreiber-Beck of Wahpeton is currently the commission chairperson. Jay B. Lindquist of Hettinger, Maurice Cook of Bismarck, Kim Kenville of Grand Forks, and Warren Pietsch of Minot cumulatively comprise the full commission board. The board is geographically represented well and each commission member brings a different set of aviation expertise for the agency's utilization.

The Aeronautics Commission is also currently allowed up to 7 full time equivalent staff members which is seen as adequate for the upcoming biennium.

(Slide 4) The North Dakota Aeronautics Commission serves multiple functions. One of those functions includes providing airport infrastructure grant funding to the 89 public service airports throughout the state. The commission also offers aviation education funding and works with the Aviation Museums to encourage and promote aviation in North Dakota. The aeronautics staff visits at least 1/3 of all of the public airports in the state annually which is a great opportunity to develop a positive relationship with the airports, learn about their needs and priorities, and make recommendations on safety enhancing

projects. The staff also updates the airport information after each inspection so that pilots have the most up to date information to use as they utilize the North Dakota airport system. Additionally, the commission updates and provides aviation publications on statewide aviation studies, airport directories, and aeronautical charts.

The commission also has regulatory functions which includes the collection of aviation taxes and fees through aircraft registrations, aerial applicator registrations, aircraft dealers, aircraft excise tax, and aviation fuel taxes

Additionally, the commission and its staff represent the state in aeronautical matters before other state and federal agencies.

(Slide 5) Aviation is important to North Dakota and serves a variety of important functions from emergency transportation to aerial crop spraying. Our airports become especially critical during a time when our state is looking for ways to diversify and grow the economy. Not only is aviation a safe and efficient way to transport goods and people, but our airports act as key economic engines for their communities as documented by a recent statewide economic impact study that I will discuss with you later in this presentation.

(Slide 6) Last year, the Aeronautics Commission unveiled a new and improved website that has become a one-stop shop for aviation needs and information within North Dakota. The new website has information on the agency's programs, allows for online credit card payments of aircraft registrations, provides information from statewide aviation studies, and gives valuable information for our airport managers. The website also provides a go-to place for finding updated information regarding the unmanned aircraft industry. Since launching the new website, we have seen an incredible increase in the amount of traffic that has visited the site and we hope that continues as we work to make information easily accessible to the public.

(Slide 7) Our commercial service airports provide incredible value to our state and the graphic on this slide shows all of the routes and destinations that are currently available to the general public. Nine different direct flight destinations are available to connect North Dakota to the rest of the world. All eight commercial service airports continue to boast jet service and the state is also currently averaging approximately 70 airline flight departures per day with an estimated 4,100 available daily seats.

(Slide 8) This slide highlights the amount of airline passengers that are boarding commercial service flights in North Dakota and tells a very interesting story. Back in 2008, the state boarded 683,000 airline passengers and as shown by the yellow line - it was forecasted at that time that we would reach 1 million annual airline passenger enplanements sometime around the year 2030. In all actuality we surpassed the 1 million mark only 5 years later in 2012 and that growth continued until the state grew to over 1.2 million passengers in 2014. This resulted in a 76% growth in passenger numbers over a 6 year time period.

In 2014, and prior to the collapse in both oil and agricultural prices occurring, our state system plan forecasters had presented us with an updated forecast in the green line as shown on the slide. Now after the price collapse, here in 2017 and as shown by the red line - we expect a leveling off of passenger numbers and steady growth to pick up once again after those industries begin their recovery. This new forecast does not consider a large spike in commodity prices, but a gradual recovery.

As you can see in the graphic - the actual passenger numbers are currently not at the peak that we saw in 2014, but are still being maintained at much higher levels than what was expected prior to the oil boom taking place in the state. In fact, the 2016 passenger numbers are still over 50% higher than they were in 2008. This story helps to give a good perspective of the current condition and outlook of the state's air service.

(Slide 9) To provide some highlights from this past biennium I will start by discussing some key Infrastructure projects have been completed at our 8 commercial service airports.

- Fargo received the funding required to complete the first and second phase of its major taxiway rehabilitation project. The final phase of this project is planned to take place in 2017 at an estimated \$7 million dollars.
- Grand Forks recently began work on redeveloping a general aviation area on the east side of the airport and is also currently working through a master plan update. The airport is planning some major runway lighting improvements in the upcoming biennium.
- Devils Lake recently completed a runway safety area improvement project and is beginning the design work to rehabilitation the crosswind runway in the upcoming biennium.
- Jamestown completed a key wetland mitigation project to improve safety at the airport and is also working toward the rehabilitation of its crosswind runway.

(Slide 10)

- Minot completed the multi-year construction of its new terminal building that opened in February 2016. The airport is also working to complete a master plan process and is working towards major storm water improvements and an expansion to its aircraft rescue and firefighting building.
- Bismarck recently opened bids for Phase 1 of its Runway Reconstruction project. This project is the beginning of a multiple-year estimated \$70 million dollar project to replace 60 year old pavements on the main runway. The final phases are planned to be bid and constructed in the upcoming biennium.
- Dickinson improved their runway safety area and finalized work on their master plan and environmental study to move forward with land acquisition and construction of a new parallel taxiway and main runway. These major projects are expected to begin within the upcoming biennium and finish in the 2019-2021 biennium. Project costs for this critical project are approximately \$60 million.

- Ground breaking on the new Williston airport project took place this last fall and land acquisition has been completed. The airport has received approximately \$54 million dollars to date from the Federal Aviation Administration and is moving forward in the upcoming biennium with the major construction elements. The targeted opening for the new airport is currently fall of 2019.

(Slide 11) Multiple high priority projects were also able to become completed for the general aviation airports this last biennium. To mention a few:

- The new Bowman airport opened in May of 2015.
- Garrison, Hettinger, Linton, Edgeley, and Langdon all underwent major runway rehabilitation projects.
- Mohall, Stanley, and Tioga underwent major taxiway and apron construction projects.
- Kenmare, Ellendale, and Harvey received major runway lighting rehabilitations.

The state has also identified multiple high priority projects at the general aviation airports that will be a focus this next biennium which includes runway rehabilitations at Northwood, Ashley, Hillsboro, and the beginning stages of a runway shift and extension at Watford City.

(Slide 12) This last biennium, the aeronautics commission has been working to complete two statewide studies which all have a benefit to the aviation community and decision makers. The economic impact of aviation update along with a new inventory of our airport pavement condition were both completed in early 2016.

(Slide 13) To provide you with some information from our economic impact study, I need to first describe how we went about the study to ensure that the data we collected is consistent with industry standards and is reliable. It is first important to acknowledge that our state is comprised of 8 commercial service airports, 81 public-use airports, and over 150 private-use air strips that are not shown on this graphic. For the purposes of our study, we analyzed the benefits that each of our 89 public-use airports have on the state's economy.

(Slide 14) Airports essentially provide 5 sources of economic impacts. We carefully analyzed all 5 areas which are comprised of airport management jobs, airport tenant jobs and business income, capital improvement projects, and spending as it related to visitors that arrive into North Dakota either on a commercial airline or via general aviation.

(Slide 15) This slide depicts the breakdown of each of the categories that I previously mentioned. The study had concluded that airports support over 12,200 jobs with a payroll over \$500 million and a total economic output of \$1.56 billion dollars.

(Slide 16) The \$1.56 billion in economic activity is a 47% increase from the same impacts that were studied in 2010. Airport supported jobs, state and local sales tax revenues, and air visitors throughout the state have increased substantially over the same 5 year time period.

(Slide 17) This graphic shows the route of every flight plan that was filed by business or general aviation aircraft over a 1 year period. This shows how useful our airports are to our state outside of the benefits of our commercial airlines. Please feel free to review the executive summary of this study that has been provided in your packet and visit our website to view a full presentation of the results.

(Slide 18) Every three years, the aeronautics commission contracts with an experienced pavement consultant firm to inspect and take inventory of all of the airport pavements throughout the state. The recent update was finalized in 2015 and the results can be found on our interactive website. This website shows the condition of each pavement section at our airports throughout the state, along with deterioration details, photos, projected future conditions, and a recommended funding plans to ensure that the pavements are maintained in the most cost beneficial way. This study has really been a revolutionary way for our state to manage its airport pavements and has served us very well.

(Slide 19) The recent pavement study shows that there exists approximately 55 million square feet of pavement at our airports that needs to be maintained.

The graphic on this slide shows a summary of the condition of all of the airport pavement. Approximately 83% of the pavement was identified to be in fair to good condition which leaves 17% of the pavement in fair or poor condition which would require a major rehabilitation project.

(Slide 20) 72 out of the 89 public use airports in the state are paved. The breakdown includes 8 commercial service airports and 64 general aviation airports. Of those 64 general aviation airports, 45 are eligible to receive federal aid, and 19 general aviation airports rely solely upon state and local funds to stay open.

The two pie charts on the bottom of the slide show how much pavement is being utilized by function (runway, taxiway ect.) and how much pavement exists between our 8 commercial service airports and the 64 paved general aviation airports. As you can see from the graphics, most of our pavement that we need to maintain is for the function of a runway and the 8 commercials service airports actually have more pavement to maintain than the 64 general aviation airports combined.

(Slide 21) There currently exists 33 Automated Weather Observation Systems at airports across the state which greatly help to provide weather to pilots, businesses, and medical providers as they fly into and around our communities. The aeronautics commission currently covers the costs of the scheduled tri-annual inspections at these airports to help reduce the overall cost of maintenance to each community. Each local airport however, is responsible for the costs of any repair parts that will be needed as breakdowns occur, but the Aeronautics Commission grant program may be used to help with those costs as well. This program has been a great success as the state continues to support the maintenance of these weather reporting facilities.

(Slide 22) For your reference, this slide shows a map of the AWOS coverage within the state. Each of the blue shaded areas depicted on this map represents a 30 nautical mile radius of on-site weather reporting. The challenge that our state currently faces is that their currently exists approximately a half of a million dollars in deferred maintenance and technology update costs at these sites. Our agency is working with the airports throughout the state to phase these updates and ensure that the network continues to be maintained.

(Slide 23) During the fall of each year, the North Dakota Aeronautics Commission staff meets with over 50 of the public use airports in the state to review their capital improvement plan for the next 10 years. Throughout this process, projects are identified and cost estimates are submitted so that the agency can calculate the total amount of projects requests that exist within the system. The agency can then work

with the federal government and each local airport to identify and prioritize the projects. There is always the understanding that we will not be able to accommodate all identified projects as shown on this graph, but this process ensures that we find the best and most justified projects. In our most recent statewide capital improvement plan update, we have found that over \$600 million dollars of identified projects exist at our airports that could take place in the next 5 years and an additional \$350 million that exist in the following 5 years. The statewide capital improvement plan included in your packet provides a detailed breakdown of the identified projects.

(Slide 24) As we work to maintain our airport infrastructure, federal funding has and will continue to be a key part of solving the infrastructure funding challenges that our state is currently facing. 54 of our 89 airports are eligible to receive federal dollars and they compete for these funds nationally and may receive up to 90% funding if funds are available. It is very important to understand that federal funding is not guaranteed and that there have been many cases where federal grants have been provided at less than 90% due to this being the case. A recent example of funding being provided at less than 90% is the Bismarck runway project. This past year, phase 1 of the Bismarck runway reconstruction project came in at \$23 million dollars. The federal government provided approximately \$13 million in grant funding which left \$10 million in remaining funds for the state or local governments to pick up.

Nationally, the federal dollars that are made available for airport infrastructure projects has remained very similar to the levels provided since 2001, however costs for maintaining and growing airports across the country has continued to increase resulting in higher competition for those federal dollars. Federal funding is currently authorized through April of 2017 and Congress will need to pass a reauthorization bill sometime this year to ensure continued funding for airport infrastructure projects.

Knowing how important it is to leverage federal funding for much needed infrastructure projects in North Dakota, I have met multiple times with upper level FAA personnel at their national and regional offices. It is important for us to continually engage the federal government to educate on the needs of the state. By presenting high priority projects that are justified and shovel ready, we increase the chances of our ability to receive federal funds. Also, having the flexibility to access state and local funds to partner with the federal government on key projects is critical to leveraging every federal dollar.

(Slide 25) This chart shows the historical FAA funding that has been brought into North Dakota. The state's normal 10 year average of annual funding for airport infrastructure projects has been approximately 23 million dollars. You can see that over the last 5 years that we have been successful in bringing in significantly higher than average federal funding for airport infrastructure projects. Even at a time when federal dollars are continually harder to bring into the state, we have been successful due to the justified infrastructure needs and the ability to leverage federal dollars with additional state and local dollars. We are hopeful that as we continue to educate the FAA on the needs within the state, that their level of funding and commitment to help with our infrastructure challenges continues into the future.

(Slide 26) This graphic represents the state dollars that have historically been made available for airport infrastructure grants. You may notice that the increase in state funding has occurred in the years that we also saw an increase in federal funds being brought into the state which was shown on the previous slide. The additional state dollars that have been made available for airport projects has been and will continue to be critical to leverage and maintain federal funding at a high level.

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The increase in state funding from the Aeronautics Commission in previous years has been made from one-time general fund allocations and an increase in special fund revenue from aircraft fuel sales and excise tax revenue. The state also allocated \$60 million dollars in oil impact funding in the 2013-2015 biennium. In the 2015-2017 biennium, an additional \$48 million in oil impact dollars had been allocated through the oil impact fund, however the lack of revenue's to that fund has only allowed \$3 million to be allocated to airports to date, which remains to be a problem.

Due to this lack of revenue in the oil impact fund, there currently exists a remaining \$45 million dollar obligation from the state to help fund the Williston airport relocation project and critical infrastructure improvements at the Dickinson airport. The executive budget currently recommends \$20 million to the Williston airport relocation project and 4.1 million to the Dickinson airport from funds transfers from the strategic investment and improvement fund within Senate Bill 2073. Under this recommendation, there would still exist an approximately \$20 million dollar obligation to the Williston airport that would need to be made in some other form either in this biennium or the next. Failure to provide those state dollars could compromise future federal funds and the Williston airport relocation project itself.

(Slide 27) The Aeronautics Commission budget is comprised of both special fund and general fund dollars. The special fund dollars are received from multiple revenue streams such as fuel taxes, aircraft excise, and registrations taxes. We also receive funding from the federal government for conducting airport inspections.

The Aeronautics Commission is currently budgeted to receive 900,000 in general fund allocation for airport improvements in the next biennium which is a \$100,000 or 10% reduction from last biennium to meet the Governor's budget request guideline. The reduction of funds occurs in the airport grant line item.

(Slide 28) This slide provides a graphical view of the executive budget recommendations. The airport grants line item is currently the largest expenditure of our agency which is appropriate as the commission feels that it is important that the aviation tax dollars being collected goes back out to the communities for infrastructure related projects. The executive budget currently plans for a total of 7 million dollars to be made available for airport grants in the upcoming biennium.

ND Aeronautics Commission Budget

Proposed budget reductions to meet Governor's 90% budget request guidelines:

Description	2015-2017 General Fund	2017-2019 General Fund	Total Reduction
Airport Infrastructure Grants	\$1,000,000	\$900,000	\$100,000

Comparison of Optional Adjustment Requests made by Aeronautics Commission that was not included in the Governor's Budget:

Description	2017-2019 General Fund	Governor's Recommendation
Request - One time Airport Infrastructure Funding	\$9,000,000	\$0

One-time general fund appropriation of \$9 million dollars in grant funding was requested by the agency to aid the needs of the public airport infrastructure throughout the state. This funding would particularly help to fund a critically identified project need in the capital city - the Bismarck Airport primary runway reconstruction project which is currently estimated at \$70 million.

Multiple needs are present in the airport infrastructure throughout the state during the next biennium timeframe. These airport needs have been identified through multiple statewide studies and the state's current statewide airport capital improvement plan. All studies can be found at the Aeronautics Commission website at <https://aero.nd.gov>. The statewide capital improvement plan has identified over \$600 million in airport projects over the next 5 years.

The state also conducted a pavement condition index study in 2015 where an inventory of the condition of all pavements at the public use airports were identified. This study shows that there currently exists approximately \$152 million in pavement rehabilitation and repair needs throughout the state. The Aeronautics Commission understands that not all needs can be accommodated under the current financial situation of federal, state, and local governments and that certain projects need to be prioritized. This prioritization process is exactly what the commission is able to accomplish through its annual airport grant program.

The Aeronautics Commission's base funding level currently allows for \$7 million dollars to be made available for grant funding over the next biennium. This \$7 million dollar amount includes the only general fund dollars that the agency receives at a projected \$900,000 base level. All additional grant funding, staff salaries, and agency operations are funded with special funds. The \$7 million dollar level of funding over the 2017-2019 timeframe is insufficient to match the projected federal funds that the state is expected to receive and to maintain the infrastructure of the 89 public use airports. It is also important to note that 36 of the public airports that exist in the system are ineligible to receive federal funding and rely solely upon state and local funding to be maintained.

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SB 2006/SB 2066


1-13-17

#2




North Dakota Aeronautics Commission Budget Hearing
Senate Appropriations Committee – January 13th, 2017
Kyle Wanner, Executive Director

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Agency Mission

- To serve the public by providing economic and technical assistance for the aviation community while ensuring the safe and cost effective advancement of aviation in North Dakota.



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1



Aeronautics Commission Members

5 Member Board Appointed by the Governor



Cindy Schreiber-Beck,
Wahpeton



Jay B. Lindquist,
Hettinger



Dr. Kim Kenville,
Grand Forks



Maurice Cook,
Bismarck



Warren Pietsch,
Minot

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North Dakota Aeronautics Commission Functions

- Airport Infrastructure Grant Funding
- Aviation Education Promotion and Funding
- Airport Safety Inspections
- Update Aviation Publications and Planning Documents
- Regulatory Functions to include:
 - Aircraft Registrations
 - Aerial Applicator Licensing
 - Aircraft Dealers
 - Aircraft Excise and Fuel Tax
- Represent the state in aeronautical matters before state and federal agencies



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Importance of Aviation to North Dakota

- A critical method of transportation for goods and people
- Supports local and state economies
- Serves important operations:
 - Emergency transportation
 - Traveling Medical Doctors
 - Aerial Application
 - Flight training
 - Just in time delivery of parts and materials used for oil drilling and agricultural operations
 - Weather research and modification
 - US border protection
 - Testing of Unmanned Aerial Vehicles (UAVs)
 - ...and many others



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Updated Website

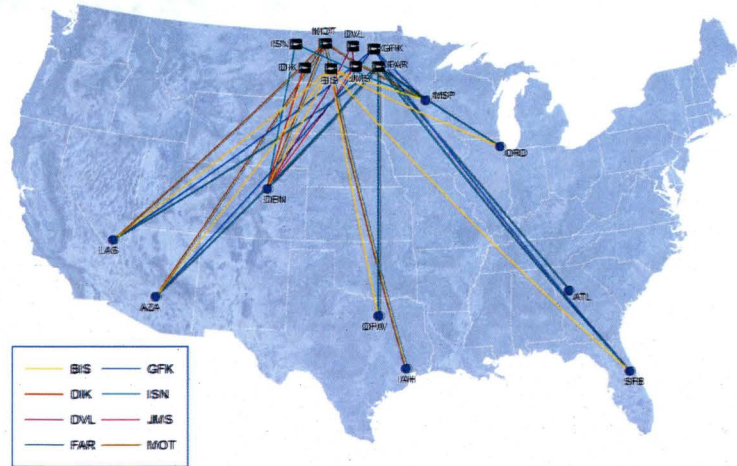
www.aero.nd.gov



www.aero.nd.gov



Commercial Air Service Update

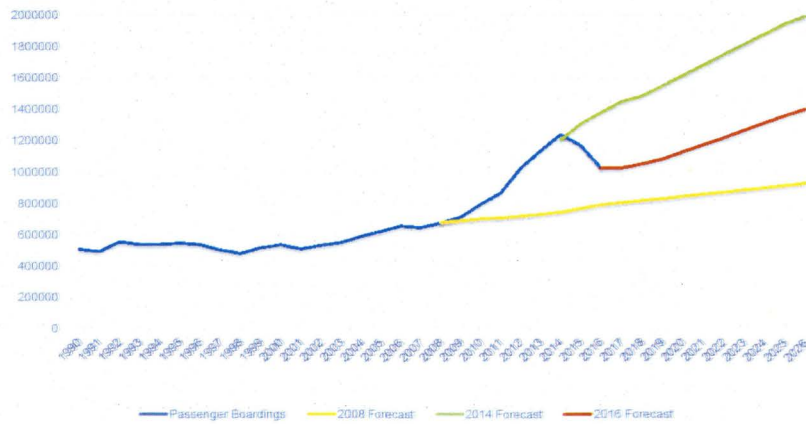


* January 2017

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North Dakota Airline Passenger Boardings



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Project Highlights

Key Airport Infrastructure Projects

Commercial Service Airports

- Fargo
 - Parallel Taxiway Rehabilitation Phase 1 and 2
Final Phase to be completed in 2017
- Grand Forks
 - Eastside General Aviation Area Redevelopment
 - Master Plan Update
Runway Lighting Improvements planned in 2017
- Devils Lake
 - Runway Safety Area Improvements
 - Crosswind Runway Rehabilitation planned in 2017
- Jamestown
 - Completion of Key Wetland Mitigation Project
 - Jet bridge and terminal improvements
 - Crosswind Runway Rehabilitation planned in 2018

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Project Highlights

Key Airport Infrastructure Projects

Commercial Service Airports

- Minot
 - Terminal Building, Parking Lot, Access Roads, Commercial Terminal Apron completed in February 2016 and is now open for the public
 - Completing Airport Master Plan Process
 - Planning major storm water improvements and ARFF building expansion
- Bismarck
 - Runway Reconstruction Phase 1 was Bid in 2016
 - Phase 2 and 3 are planned in 2017 and 2018
- Dickinson
 - Runway Safety Area Improvements, environmental/planning work
 - Land Acquisition and Taxiway improvements planned for 2017/2018
 - Primary Runway Reconstruction planned for 2019/2020
- Williston
 - Acquired Land for new airport development and ground breaking held Fall of 2016.
 - Targeted opening for new airport is Fall 2019
 - FAA Funding to date on new airport – \$54.5 million

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Project Highlights

- Key Airport Infrastructure Projects

- General Aviation Airports

- New Bowman airport opened in May of 2015
- Garrison, Hettinger, Linton, Edgeley, Langdon – Runway Rehabilitation
- Mohall, Stanley, and Tioga - Taxiway and apron construction
- Kenmare, Ellendale and Harvey – New runway lighting

- Upcoming Runway Rehabilitations

- Northwood
- Ashley
- Hillsboro
- Watford City
 - Includes proposed Runway Extension

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Statewide Aviation Studies

Economic Impact of Aviation Update

- Deliverables were made available Spring 2016

Statewide Pavement Condition Index Study

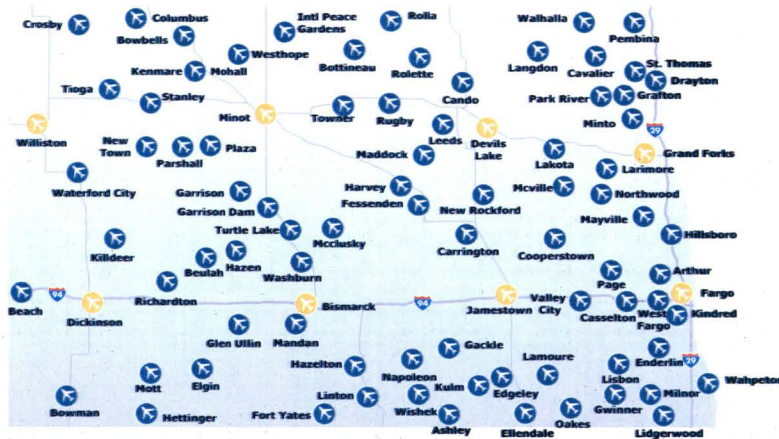
- Online website is now available and final paper deliverables were made available Spring 2016

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Economic Impact of Aviation Update



81 General Aviation Airports 8 Commercial Service Airports



5 Sources of Airport Economic Impacts



On-Airport Related Activities

- 1 Airport Management** - operational, administrative, and maintenance functions
- 2 Airport Tenants** - businesses providing aviation or customer support services
- 3 Capital Investment** - federal, state, local, and private investment for improvement/expansion projects



Off-Airport Related Activities

- 4 Commercial Visitors** - spending for hotels, food, ground transportation, retail, entertainment
- 5 General Aviation Visitors** - spending for hotels, food, ground transportation, retail, entertainment



Total Economic Impacts

	Total Employment	Total Payroll	Total Output
Total Airport Management	232	\$13.4 million	\$85.5 million
Total Airport Tenants	4,207	\$223.9 million	\$626.7 million
Total Capital Investments	1,156	\$63.5 million	\$173.0 million
Total General Aviation Visitors	854	\$26.9 million	\$101.1 million
Total Commercial Visitors	5,768	\$177.6 million	\$578.1 million
Total Statewide Annual Impacts	12,217	\$505.2 million	\$1.56 billion



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Economic Impact of Aviation

Key Findings

- Airports support \$1.56 billion in annual economic activity
- Annual economic impacts for public-use airports up 47% since 2010
- Airport supported jobs have grown from 8,872 to 12,217, an increase of 3,345 jobs
- State and local aviation sales tax revenues have increased from \$31.1 million to over \$60 million
- Air visitors to North Dakota have grown from 545,300 to 915,290

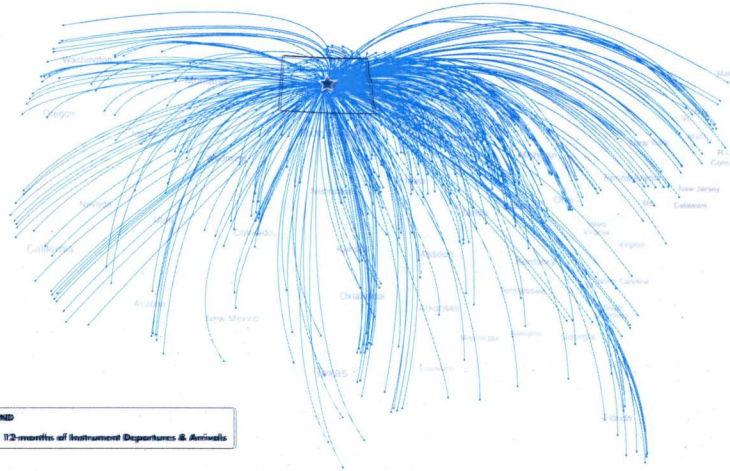


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Moving People and Goods



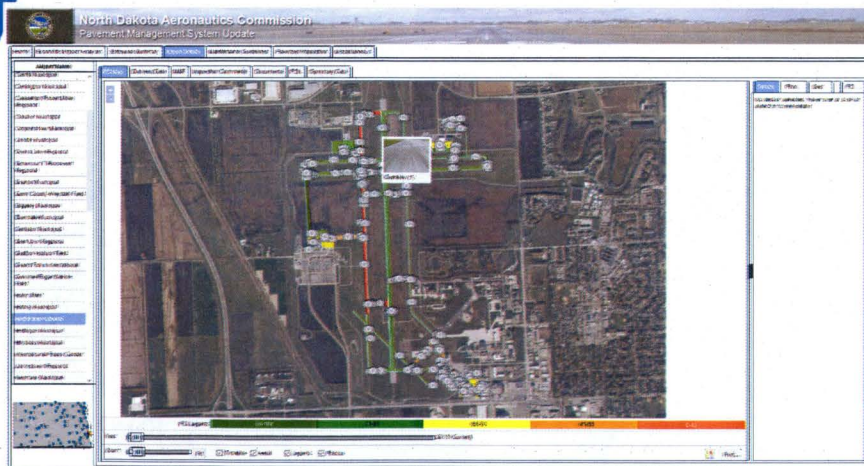
LEGEND
12-months of Instrument Departures & Arrivals

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2015 Pavement Condition Study

Found at: <https://aero.nd.gov/studies/pavement-condition-index/>



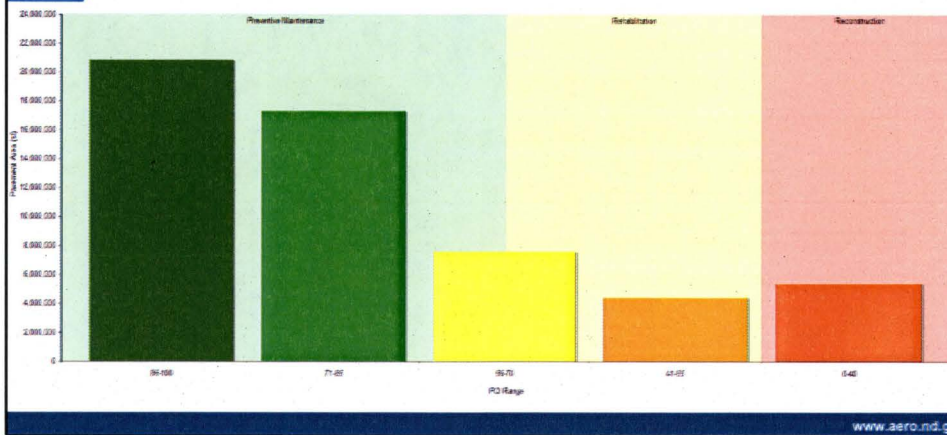
www.aero.nd.gov

9



Summary of Total Airport Pavement

Approximately 55 million square feet of pavement exists on our airports



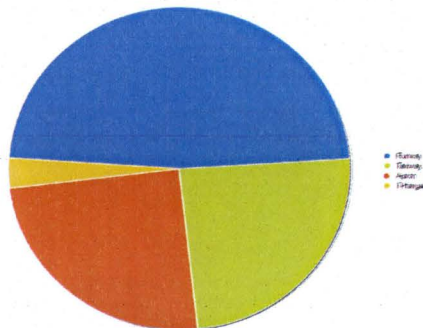
www.aero.nd.gov



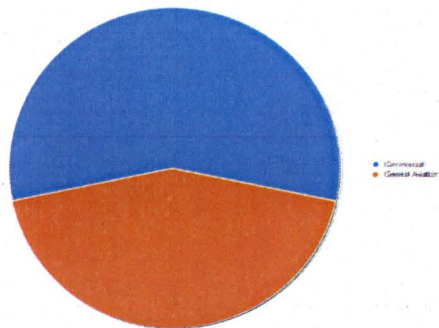
Pavement Statistics

- 72 Public-Use Airports are paved
- 8 Commercial Service Airports
 - 64 General Aviation Airports
 - 45 eligible for federal aid
 - 19 ineligible for federal aid

Summary of Total Statewide Pavement Area by Use (All Airports)



Summary of Total Statewide Pavement Area by Airport Classification



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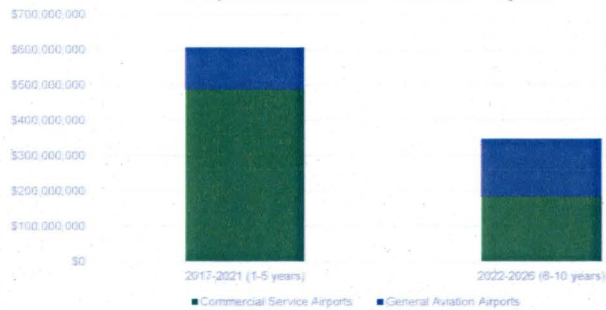
10



Statewide Airport Infrastructure Needs

- Statewide Capital Improvement Plan is updated on an annual basis.
 - 1-5 year project costs: \$600 million
 - 6-10 year project costs: \$350 million
 - Total 10 year project costs: \$950 million

Airport Infrastructure - Identified Projects



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Federal Funding Outlook

North Dakota airports compete nationally for federal dollars

FAA may provide funding of up to 90% for high priority projects if funding is available.

Many projects receive less than 90% in federal aid.

Federal dollars available nationally for airport infrastructure projects has remained at similar levels provided since 2001.

Funding is currently authorized through April 2017.

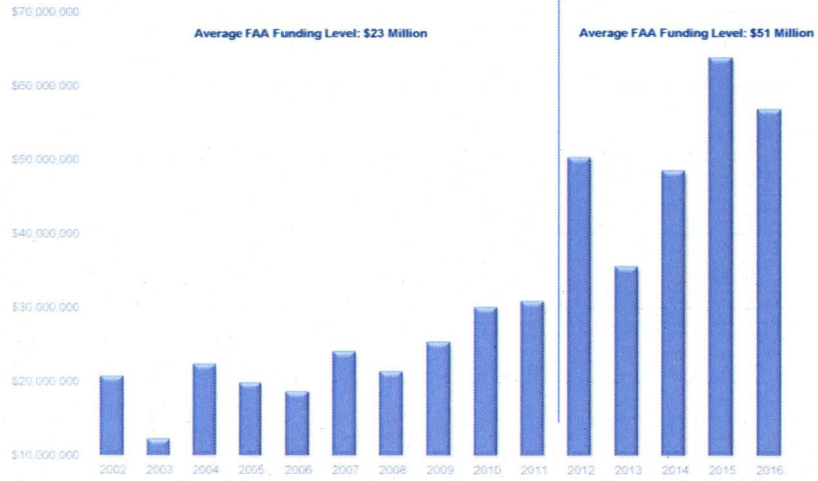
Recommendations to increase Federal funding

- Continually educate the FAA on the needs of the state
- Present high priority projects that are justified
- Ability to have shovel ready projects
- Ability to partner on funding projects through state and local funds

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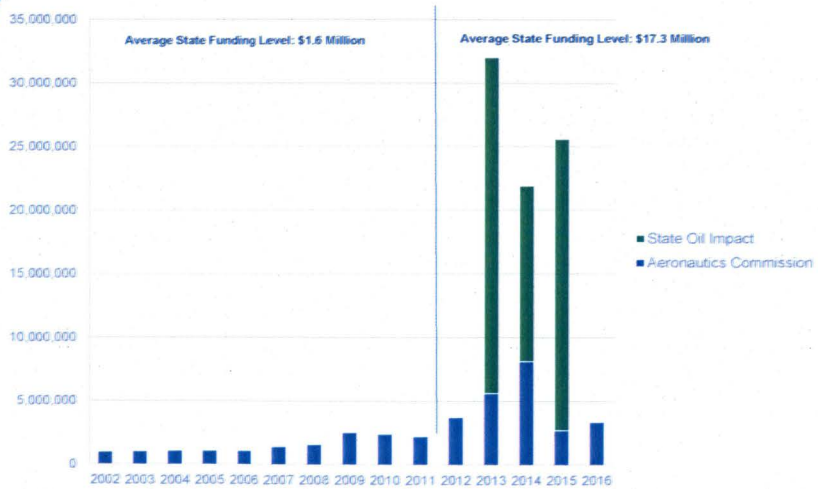
Historical Federal Funding for Airports in North Dakota



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Historical State Funding for Airports in North Dakota



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Aeronautics Commission Funding

- Main Sources of Revenue

- Special Fund

- Aviation Fuel Tax
 - Aircraft Excise Tax
 - Aircraft Registrations
 - Airport Inspections
 - Aerial Applicator Licensing
 - Aircraft Dealer Registrations

- General Fund

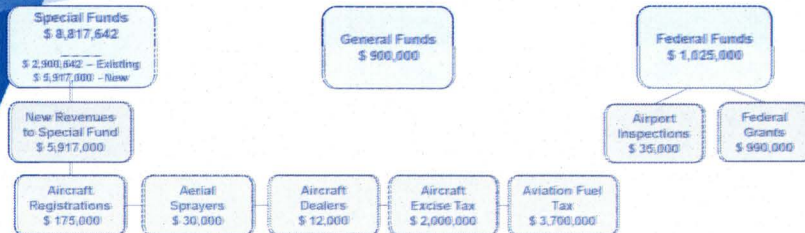
- The upcoming biennium budget currently calls for \$900,000 in general fund dollars.

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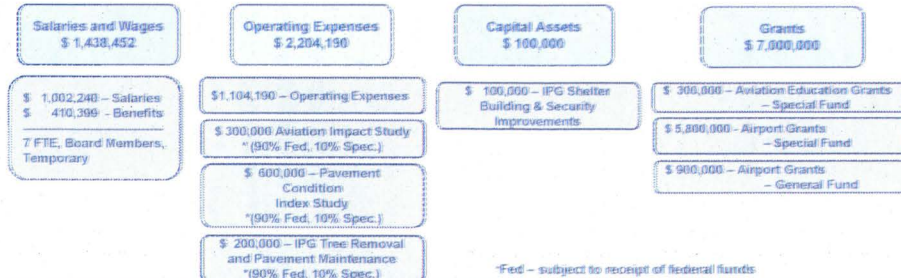


North Dakota Aeronautics Commission PROPOSED Executive 2017 – 2019 Budget \$ 10,742,642

REVENUES



EXPENDITURES



*Fed - subject to receipt of federal funds

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QUESTIONS?

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SB 2006 / SB 2066
1-13-17
#3

2017 - 2019 CIP / NPIAS PLANNING REPORT

FAA / State National Plan of Integrated Airport System (NPIAS) General Aviation and Commercial Service Program

This report reflects a snapshot of the State Wide Capital Improvement Program (CIP) for Public Airports in North Dakota as of January 3rd, 2017. The actual CIP data changes continually as projects come under contract, change scope, or are abandoned.

NDAC Priority - The higher the number, the higher the priority on a scale of: 10 - 57

FAA Priority - The higher the number, the higher the priority on a scale of: 0 - 97

	AIRPORT	PROJECT	NDAC Priority	FAA Priority	Identified Infrastructure Projects (Thousands)	
					1 to 5 Yrs.	6 to 10 Yrs.
1	Fargo FAR	Taxiway A Reconstruction (Twy C to Rwy 18)	45	64	7150	
		SRE Building Expansion ('18) / SRE Equipment	32	36	1450	750
		Rwy 18/36 CL/TDZ Lighting	56	45	1350	
		Cargo Apron Expansion	44	38	2250	
		Pavement Rehabilitation	56	66	450	1000
		Terminal Building Expan. (Gate 6)	31	93	4500	
		Terminal Apron Reconstruction	54	47		8000
		Rwy 18L/36R EA, Design, Construction	26	49		8350
		Rwy 9/27 Ext./Widening / Par. Txy EA, Design, Construc.	46	51		21350
		North GA Taxiway Extensions / East GA Expansion	45	38		3000
		Parking Lot Expansion	23	27		2000
		Twy D Reconstruction	45	38		3500
2	Bismarck BIS	Wetland Mitigation - Phase 5- 6 / Drainage Improv.	31	59	3000	
		GA Apron Expansion	44	64	2000	2000
		Rehabilitate Rwy 13/31 / Phase II Grant App - '17	56	70	60000	
		Rehabilitate Rwy 03/21	56	66	5000	
		Rehabilitate Taxiway D	56	64	4000	
		Relocate Yegen Road	32	50		5000
		EA / RPZ Land Purchase	41	44	2000	
		Expand SRE & ARFF Building	31	46	3000	
		Commercial Terminal Building Update/Expansion	31	93	1500	4000
		Snow Removal / ARFF Equipment	32	70	2000	1000
3	Grand Forks GFK	Rwy 17R/35L, Txy A Light, Rehab. (Design '17, Const. '18)	56	45	3200	
		Master Plan/ALP Update, Exhibit A, Reimburse. 2015 Grant	31	42	60	
		Twy U Reconstruction (Design and Construct. '17)	45	64	1400	
		Rwy 17R/35L Reconstruct (EA '19, Design '20, Const. '21)	56	54	38550	
		West GA Taxiway/Taxilane Construction	45	38	1300	
		Terminal Apron Expan. Design and Construct.	44	38		8750
		ARFF Truck	32	36		850
		Taxiway/Taxilanes Old Terminal Area, Design	45	38		150
		Rwy 9L/27R Exten. Design and Construct	46	56		41100
4	Minot MOT	ARFF Station Rehab (Design '17)	12	36	2800	
		Wildlife Hazard Mitigation (EA '18)	31	66	300	
		Storm Water Pond - (EA '17)	31	66	3700	
		GA Apron Rehab (North - '18, South '19 & '20)	54	55	3000	
		Purchase SRE Equipment	32	36	3300	500
		Purchase ARFF Truck	52	36	850	300
		Taxiway B Rehab	45	38	5200	
		Replace/Upgrade Airfield Security Fence	31	83	3000	
		Pavement Maintenance (RTA, RCF, Seal), Remarking	56	68	500	1000
		Runway 8/26 Reconstruction (Design '21)	56	66		20000

1

2017 - 2019 CIP / NPIAS PLANNING REPORT

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	AIRPORT	PROJECT	NDAC Priority	FAA Priority	Identified Infrastructure Projects (Thousands)	
					1 to 5 Yrs.	6 to 10 Yrs.
5	Jamestown JMS	Pavement Maintenance (RTA,RCF, Seal), Remarkings	56	66	350	400
		Rwy 4/22 Rehabilitation (Design '17, Const. '18)	56	66	3550	
		West Taxiway Reconstruction	45	64	250	
		Purchase SRE Plow Truck	32	36	375	
		Parking Lot Expansion	23	27	125	
		Taxiway A, B, C, D, E Rehabilita. (Design '20, Const. '21)	45	64	3200	
		Terminal Apron Rehabilitation	44	55		1000
		W. Industrial Park Infrastr. Improv. (D. '23, C. '24-'25)	11			3025
6	Williston ISN / XWA	Design Airport Infrastructure	41	52	15000	
		Construct Terminal Building	33	40	60000	
		Construct SRE/ARFF/Parking Lot/Access Rd	32	48	30000	
		WHA / Navaid Reimbursable	41	64	3000	
		Construct Security Fence	31	57	2000	
		Construct Airport Pavement, Lighting	56	65	90000	5000
		Construct Roadway/Infrastructure to Airport	31	23	10000	
		Construct Airport Security System	31	31	1000	
		SRE	32	45	1200	800
		FBO & Hangars/Fuel Facilities	33	21	1000	2000
7	Devils Lake DVL	Rwy 3/21, Taxiway A1/A2 Rehabilitation, Apron Reconfig	56	66	1500	
		SRE Equipment	32	36	150	300
		Land Acquisition (Relocate Building)	41	42	500	
		Apron Reconstruction ('21 Design, '22 Construction)	44	55	100	1500
		Rwy 13/31 Rehabilitation	56	66		2000
		Security Upgrades/Access Control System	42			300
		Emergency Generator	32			200
		GA Apron Lighting	31			100
		GA Hangar	12	29		500
Deicing Containment Facility	22			200		
8	Dickinson DIK	Terminal Design and Construction	33	45	30000	
		Land Acq./Design/Reconstruct Runway 14/32	56	68	45000	
		Construct Parallel Taxiway/Taxiway B Improvements	45	64	17000	
		EA & Runway Maintenance	56	68	4000	300
		Terminal Access and Parking Lot	31	40		9000
		Install Wildlife Fence	31	57	600	
		ARFF Truck / ARFF Building Expansion	32	41		2500
		Construct Commercial Service Apron	44	47		9000
		Construct txy for hangars / Access Road	55	66		5000
		Crosswind Parallel Taxiway	45	61		3000
		Onsite Water Tank and Sanitary System	31	-		3000
		SRE/SRE Building Expansion	32	45	1000	3000
		TOTAL COMMERCIAL SERVICE AIRPORT NEEDS				

2017 - 2019 CIP / NPIAS PLANNING REPORT

FAA / State National Plan of Integrated Airport System (NPIAS) General Aviation and Commercial Service Program

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	AIRPORT	PROJECT	NDAC Priority	FAA Priority	Identified Infrastructure Projects (Thousands)	
					1 to 5 Yrs.	6 to 10 Yrs.
9	Ashley ASY	Rwy 14/32, Txwy, Apron Rehab/Overlay Construction	56	66	1400	
		RSA, Land Acquisition	41	42	25	
		Install LED MRL's, PAPI, Beacon, Windcone	56	45	500	
		Instrument Approach Procedure	37	50	150	
		AWOS III	32	38		250
		SRE	32	36		200
		SRE Building	32	36		150
		Pavement Maintenance (RTA, RCF, Seal)	56	66	50	200
10	Beach 2OU	Pave SRE/Terminal Access Rd, Apron, CS (Phase II)	33	50	500	
		ALP/MP Update with AGIS and Exhibit A	31	42	250	
		Construct Hangar (Design '20)	12	29	550	
		Pavement Maintenance (RTA, RCF, Seal)	56	66	40	100
		Rehab Rwy 12-30, Txwy and Apron (Design '24)	46	66		3100
		Construct X-Wind Runway	46	59		1500
		Construct Fence and Signage	31	38		2000
		Construct Parallel Txwy	45	64		700
		Construct Apron Expansion	54	38		400
11	Bottineau DO9	Construct Fuel System	22	17	300	
		Pavement Maintenance (RTA, RCF, Seal)	56	66	100	200
		Construct Taxiway	56	68	300	
		Construct X-Wind Runway	45	46	500	
		Hangar Demo / Construct New Hangar	12	29	800	
		Rehab Rwy 13-31, Txwy and Apron (Design '21)	56	66		2100
		Construct Fence and Signage	31	38		2500
		ALP/MP Update with AGIS and Exhibit A	31	42		250
12	Bowman BWW	Construct Parallel Txwy Extension Phase II (Design '17)	45	48	3400	
		Purchase SRE Equipment	32	45	250	
		Construct Crosswind Runway	46	59	300	8000
		Construct Taxiway	45	47		1000
		Construct Hangar (Design '19)	12	36	1200	
		Pavement Maintenance	56	66	100	200
13	Cando 9D7	Rwy 16/34, Taxiway, Apron Rehabilitat. ('18 Design, '19 Constr.)	56	66	1,100	
		Pavement Maintenance (RTA, RCF, Seal)	56	66	50	200
		Fuel System	22	17		250
		Wildlife Assessment/WHMP	31	55		50
		Wildlife Fence and Signage	31	38		1500
14	Carrington 46D	Rwy 13/31, Taxiway, Apron Rehab. ('18 Design, '19-'20 Constr.)	56	66	1500	
		Pavement Maintenance (RTA, RCF, Seal)	56	66	50	200
		Airfield Lighting Improvements Design and Construction	56	45		500
		New Hangar '26 Design and '27 Construction	12	29		830
		Wildlife Assessment/WHMP	31	55		100
		Wildlife Fence and Signage	31	38		1500

2017 - 2019 CIP / NPIAS PLANNING REPORT

FAA / State National Plan of Integrated Airport System (NPIAS) General Aviation and Commercial Service Program

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					1 to 5 Yrs.	6 to 10 Yrs.
15	Casselton 5N8	NW and SE Apron Rehabilitation ('17 Design, '18 Construc.)	44	55	300	
		Taxiway A Rehabilitation ('20 Design, '21 Construction)	45	64	300	
		Rwy 13/31 and MRL Reconstruction ('22 Design, '23 Constr.)	56	66		5700
		NW and SE Apron Reconstruction	44	55	2900	
		T-Hangar ('30 Design, '31 Construction)	12	29		675
		Pavement Maintenance (RTA, RCF, Seal)	56	66	200	200
16	Cavalier 2C8	Parallel Taxiway Construction	45	64	800	
		SRE Equipment	32	36		200
		Pavement Maintenance (RTA, RCF, Microsurface)	56	66	150	300
		PAPI and Flight Check	56	45	150	
		New Hangar Taxilane	45	38		550
		Rwy 16/34 Rehabilitation, Overlay	46	66		550
		New Hangar	12	29		650
		Wildlife Assessment/WHMP	31	55	100	
		Wildlife Fence and Signage	31	38	1500	
17	Cooperstown S32	Land Acquisition RPZ/Transitional Surfaces (70 Acres)	41	42	350	
		ALP/MP Update with AGIS and Exhibit A	31	42		100
		Pavement Maintenance (RTA, RCF, Seal)	56	66		200
		Rwy 13/31, Taxiway, Apron Rehabilitation	56	66	1000	
		Pave Access Road	33	20		250
		Parallel Taxiway Construction	45	64		500
		Apron Expansion	44	38		500
		Crosswind Rwy Construction	26	49		900
18	Crosby D50	Extend TxIn and Rehab, Demo Building, Construct Txwy	45	52	430	
		EA for Rwy Extension	46	48	130	
		Rwy Extension Land Acquisition and Wetland Delineation	46	51	300	
		Construct Hangar (Design '24)	12	29		700
		ALP/MP Update with AGIS and Exhibit A	31	42		150
		Rwy and Txwy Rehab (Design '21)	56	66	2200	
		SRE Building Construction / SRE	32	36		500
		Construct Jet A Fuel System	12	17	150	
		Pavement Maintenance (RTA, RCF, Seal)	56	66	100	200
19	Dunseith - IPG S28	Obstacle Removal	57	50	100	
		ALP/MP Update with AGIS and Exhibit A	51	42	250	
		Instrument Approach Development (3rd Party - Hughes)	57	42	50	
		Pavement Maintenance (RTA, RCF, Seal)	56	66	100	
		Construct Terminal Shelter and Security Upgrades	21	-	50	
		Land Acquisition - Rwy 28 RPZ	56	42	500	
		Rehabilitation of Pavement Surfaces (Design '23)	56	66		1100
		Wildlife Fence and Signage	51	38		2000
20	Edgeley 51D	Fuel System (Jet - A)	22	17	250	
		ALP/MP Update with AGIS and Exhibit A	31	42	150	
		Snow Removal Equipment (SRE)	32	36	200	
		Wildlife Hazard Assessment/WHMP	31	55	200	
		Upgrade Windcone and Beacon	42	44		100
		Wildlife Fence and Signage	31	38	800	800
				Pavement Maintenance (RTA, RCF, Seal)	56	66

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	AIRPORT	PROJECT	NDAC Priority	FAA Priority	Identified Infrastructure Projects (Thousands)	
					1 to 5 Yrs.	6 to 10 Yrs.
21	Ellendale 4E7	New 100LL Fuel System	22	17	225	
		Access Road Improvements	33	20	325	
		Pavement Maintenance (RTA, RCF, Seal)	56	66	50	50
		Rwy 17/35 Rehabilitation	56	66	200	
		Rwy 13/31 Rehabilitation	56	66		600
		Wildlife Assessment/WHMP	31	55	100	
		Wildlife Fence and Signage	31	38	1500	
		Apron Rehabilitation	44	38		500
22	Ft. Yates Y27	Construct New Terminal Building & Misc Improvements	32	36	600	
		Aeronautical Survey / IAP Development	37	50	100	
		New PAPIs and Threshold Lights	56	45	200	
		Pavement Maintenance (RTA, RCF, Seal)	56	66	100	200
		Construct Hangar	12	29		600
		Construct SRE Building	32	36		700
		Access Road Improvements	33	20		600
		Install AWOS	32	38		200
23	Garrison D05	Construct NE Taxiway (Design '19)	45	38	600	
		Construct New Terminal Building (Design '21)	21	29	500	
		Rehab Taxiway (Design '24)	45	38		600
		Pavement Maintenance (RTA, RCF, Seal)	56	66	200	300
		Install AWOS	32	48		300
		Land Acquisition (EA '29) / RPZ	41	41		600
		SRE Equipment	32	36		300
		Construct Fence and Signage	31	38		2000
24	Glen Ullin D57	Update ALP/MIP with AGIS and Exhibit A	31	42		200
		Pavement Maintenance (RTA, RCF, Seal)	56	66	300	300
		Rehab Runway, MRL and Taxiway (Design '19)	56	66	100	1500
		Rehab Apron (Design '26)	54	56		2000
		Taxiway Extension	45	38	500	
		Construct Hangar	12	29		400
		Construct X-wind Rwy, EA, RPZ Land Acquisition	46	59		700
25	Grafton GAF	TRANSFER TO UNKNOWN	46	59		
		Pavement Maintenance (RTA, RCF, Seal)	56	66	50	300
		Rwy 17/35 Lighting Rehabilitation/ PAPI Replacement	56	45	270	
		Hangar Taxiway/ Apron Rehabilita. (Phase 1-'18, Phas. 2-'19)	45	38	250	
		New Hangar ('19 Design, '20 Construction)	12	29	750	
		Rwy 17/35 Rehabilitation/Rejuvenator	56	66		1000
		Road Relocation/Obstruction Removal	47	57		250
Wildlife Assessment/WHMP	31	55		100		
	Wildlife Fence and Signage	31	38		1000	

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					1 to 5 Yrs.	6 to 10 Yrs.
26	Gwinner GWR	Snow Removal Equipment (SRE)	32	36	275	
		New Hangar ('17 Design, '19 Construction)	12	29	650	
		East Access Road Improvements	33	20	450	
		Land Acquisition, 17 Acres (Wildlife Fence)	41	42		275
		Wildlife Hazard Assessment (WHA), WHMP	31	55	100	100
		Wildlife Fence and Signage	31	38	1500	
		SRE Building	32	36		800
		Pavement Maintenance (RTA, RCF, Seal)	56	66	50	100
27	Harvey 5H4	Pavement Maintenance (RTA, RCF, Slurry Seal)	56	66	300	
		Land Acquisition and EA	41	42	500	
		Rwy 11/29, Taxiway, Apron Rehabilitation, Mill and Overlay	46	66		1500
		New Crosswind Rwy	46	59		800
		Update ALP/MP with AGIS and Exhibit A	31	42		150
		Parallel Taxiway	45	64		500
		Apron Expansion	44	38		300
		Wildlife Fence and Signage	31	38	1000	
28	Hazen HZE	Pavement Maintenance (RTA, RCF, Seal)	56	66	200	200
		Rehabilitate Runway 14-32	56	66		2100
		Wildlife Hazard Site Visit / Signage / Fence	31	62		2500
		Construct Hangar	12	29	600	
		ALP/MP Update with AGIS and Exhibit A	31	62		200
		Construct Crosswind Runway	46	49		500
		Construct Fueling System	12	17		150
		Windcone Replacement and New Taxilane Widening	45	39	300	
		Install MIRLS and Signage	56	45		500
Construct Parallel Taxiway	45	46		600		
29	Hettinger HEI	Rehab Txy A South (Phase I) / Txy C and A North (Phase II)	55	58	2200	
		Construct New Taxilane	45	38		500
		Rehab Apron	54	55		1100
		Install MITL System	54	44		300
		Pavement Maintenance (RTA, RCF, Seal)	56	66	100	100
30	Hillsboro 3H4	Rwy 16/34 Reconstruction	56	66	4500	
		Partial Parallel Taxiway and Hangar Taxilane	45	64	2300	
		Full Parallel Taxiway	45	38	3000	
		Land Acquisition / EA (Rwy Extension)	41	42	450	
		Rwy 16/34 Extension	46	51		6500
		New Hangar	12	29		1000
		AWOS	32	38		150
		Reconstruct Service Road	33	20		500
		Wildlife Fence and Signage	31	38		1000
		Pavement Maintenance (RTA, RCF, Slurry Seal)	56	66	25	100

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					1 to 5 Yrs.	6 to 10 Yrs.
31	Kenmare 7K5	Reconstruct Airport Access Road / Expansion (Design '17)	33	20	300	
		East Hangar Area Expansion (EA '19)	45	47	800	1100
		Relocate Fuel System	22	17		80
		Runway 16-34 Expansion (EA '26)	46	42		300
		Construct GA Terminal Building	21	35		500
		Pavement Maintenance (RTA, RCF, Seal)	56	68	100	300
		Install AWOS	32	47		200
32	Kindred K74	Drainage Improv./Turf Rwy/Wdcon./Seg. Cir. ('17 D, '19 C)	56	56	1250	
		Pavement Maintenance (RTA, RCF, Seal)	56	66	50	400
		Land Acquisition/Survey (Hangar Area, 4.9 Acres)	41	42	175	
		Wetland Mitigation (6 Acres)	36	54	150	
		Taxiway Rehabilitation	45	64		500
		EA Fuel Facility Concrete Pads (30' X 20')	12	46		75
		Rwy 11/29 Extension, Parallel Taxiway Construction, EA	46	51		1800
		Wildlife Assessment (WHA), WHMP	31	55		100
		New Hangar	12	29		600
		Wildlife Fence and Signage	31	38		1000
33	Lakota 5LO	Hangar, Taxilane, Park Lot, Fuel Acc. Road ('17 D, '18 C)	45	64	500	
		Rwy 11/29 and Turnaround Rehab. ('20 Design, '21 Constr.)	56	66	1650	
		Parking Lot Design and Construct	23	27		150
		Pavement Maintenance (RTA, RCF, Seal)	56	66	50	100
		Wildlife Assessment (WHA), WHMP	31	55		100
		Wildlife Fence and Signage	31	38		1000
34	LaMoure 4F9	Pavement Maintenance (RTA, RCF, Seal)	56	66	50	150
		Replace Rwy 16/34 Lights	56	45	250	
		Twy Reconstruction	45	64	200	
		Apron Reconstruction	44	38	500	
		Acquire Land (Protective Surfaces)	41	42		300
		Wetland Mitigation	36	38		200
		Wildlife Assessment (WHA), WHMP	31	55		150
		GA Terminal	21	29	200	
		New Hangar	12	29		500
		Fuel System	22	17		200
35	Langdon D55	Rwy 14/32 Lighting and Signage Rehabilitation	56	45	250	
		ALP/MP Update with AGIS and Exhibit A	31	42	250	
		SRE Equipment	32	36	350	
		Hangar, Taxilane Reconstruction	45	64	600	
		Parallel Taxiway ('21 Design, '22 Construction)	45	64	150	850
		New Hangar	12	29		1000
		GA Terminal Rehabilitation	21	29		150
		Rwy 8/26 Rehabilitation (Crosswind)	56	66		600
		Pavement Maintenance (RTA, RCF, Seal)	56	66	50	100

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	AIRPORT	PROJECT	NDAC Priority	FAA Priority	Identified Infrastructure Projects (Thousands)	
					1 to 5 Yrs.	6 to 10 Yrs.
36	Linton 7L2	Install MIRLS, Windcone, Beacon and Vault	56	51	500	
		Runway 9/27 Extension (EA '20)	46	51	200	1000
		ALP/MP Update & AGIS and Exhibit A	31	42		200
		Construct Parallel Taxiway	45	64		1500
		Construct Hangar / SRE Building	12	36		400
		Access Road Improvements	33	20	500	
		Pavement Maintenance (RTA, RCF, Seal)	56	66	100	
37	Lisbon 6L3	Helipad Apron Expansion	44	38	120	
		Apron Expansion	44	38	400	1200
		Update ALP/MP with AGIS and Exhibit A	31	42	150	
		Parallel Taxiway	45	64		400
		Rwy 14/32, Taxiway Rehabilitation	56	66		600
		Rwy 3/21 Expansion	46	51		200
		Rwy 14/32 Light Rehabilitation (LED)	56	45		250
		SRE/Terminal Building	32	36		200
		Wildlife Fence and Signage	31	38		1000
Pavement Maintenance (RTA, RCF, Seal)	56	66	100	100		
38	Mandan Y19	Wildlife Fence (Design '17) / Wetland Mitigation/ Drainage	31	38	3200	
		Reconstruct Hangar Taxilane	45	46	2000	
		Construct Taxilane	45	46	400	400
		Pavement Maintenance (RTA, RCF, Seal)	56	70	160	400
		Construct Runway Expansion (EA '18)	46	48		4200
		AGIS Update / Aeronautical Survey and Exhibit A	31	42	120	
		Construct Corporate Apron	31	41		600
		Construct Terminal Building Expansion	21	29	500	
		Relocate County Road and Powerlines	46	48	2000	
		Construct Hangar	12	29	1000	
Reconstruct Apron	45	46		600		
39	Mohall HBC	Construct Runway 13 Extension and Widening (EA '17)	46	51	2200	
		Land Acquisition for Runway 13 Extension (45 acres)	46	48	250	
		Wetland Mitigation	31	55	200	
		Pavement Maintenance (RTA, RCF, Seal)	56	66	100	300
		Wildlife Assessment Study	31	55		50
		Construct Wildlife Fence	31	38		2500
		Taxiway Widening and Realignment	45	46		650
		Instrument Approach Development - Rwy 13	37	50		250
Construct SRE Building	32	44		450		
40	Mott 3P3	ALP/MP Update / AGIS/Exhibit A for Instrument Procedure	51	62	180	
		Pavement Maintenance (RTA, RCF, Seal)	56	66	200	300
		Construct Partial Parallel Taxiway	41	42	200	
		Construct Wildlife Fence / WHSV	31	64	50	2000
		Construct Hangar Taxilane	45	46		300
		Install AWOS	32	42		200
		Construct Hangar	12	29	400	
		Construct Runway Extension	46	56		1000

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	AIRPORT	PROJECT	NDAC Priority	FAA Priority	Identified Infrastructure Projects (Thousands)	
					1 to 5 Yrs.	6 to 10 Yrs.
41	Northwood 4V4	Rwy 8/26, Taxiway, Apron Reconstruction (Overlay)	56	66	2050	
		Taxilane and Apron Expansion ('19 EA, '20 D, '21 C)	45	46	550	
		Fueling System	22	17		350
		GA Terminal	21	29		600
		Pavement Maintenance (RTA, RCF, Seal)	56	66	50	400
		New Rwy (14/32)	46	59		5200
42	Oakes 2D5	SRE/Terminal Building	32	36	450	
		Wildlife Hazard Assessment / WHMP	31	55	60	
		Wildlife Fence and Signage ('19 Design, '20 Construct)	31	38	1000	
		Parallel Taxiway	45	64	100	1000
		Pavement Maintenance (RTA, RCF, Seal)	56	66	50	100
43	Park River Y37	Update ALP/MP with AGIS and Exhibit A	31	42	225	
		Terminal Parking Lot	23	27	100	
		Environmental Assessment (EA)	46	48	125	
		Land Acquisition Rwy 13/31 Shift/Extension	46	52	250	
		Rwy 13/31 Shift Extension and Update Lighting	46	51		1000
		AWOS	32	42		280
		Wildlife Assessment/WHMP	31	55	50	
		Wildlife Fence and Signage	31	38	1000	
		Pavement Maintenance (RTA, RCF, Seal)	56	66	50	100
44	Parshall Y74	Construct Hangar	12	29	520	
		Pavement Maintenance (RTA, RCF, Seal)	56	66	200	200
		ALP/MP Update / AGIS/Exhibit A with WHSV	31	62	300	
		Construct Runway Extension (EA '23)	46	56		1300
		Land Acquisition for Rwy Extension	46	52		600
		Install AWOS	32	42		300
		Construct Apron	44	38		300
		Construct Fence and Signage	31	38	2000	
		Construct Fuel System	22	17	200	
45	Pembina PMB	Apron / Access Road Reconst. / Taxilane Const. ('17 D / '18 C)	45	64	1000	
		Flood Protection (Design '18, Construction '21)	54	-	300	
		SRE Building Construction (Design '21, Construction '23)	32	36	1500	
		Parking Area with Security Fence	23	27		150
		Rwy 15/33 and Taxiway Rehabilitate	56	66		1250
		Pavement Maintenance (RTA, RCF, Seal)	56	66	50	100
		Wildlife Assessment/WHMP	31	55		50
Wildlife Fence and Signage	31	38		1000		
46	Rolla 06D	Airfield Electrical Project and CS	56	66	450	
		Pavement Maintenance (RTA, RCF, Seal)	56	66	200	300
		ALP Update / AGIS and Exhibit A	32	55	250	
		Land Acquisition (RPZ)	41	44	300	
		Construct Fence and Signage	31	64		2000
		Construct Hangar	12	29		600

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					1 to 5 Yrs.	6 to 10 Yrs.
47	Rugby RUG	Airfield Electrical Project, CS and Sfc Treatment	56	66	550	
		Pavement Maintenance (RTA, RCF, Seal)	56	66	50	100
		Construct SRE Building	32	36	500	
		Runway 12-30, Taxiway and Taxilane Rehabilitation	56	66		3000
		ALP Update / AGIS and Exhibit A	32	55		250
		WHA, Construct Fence and Signage	31	64		2200
48	Stanley 08D	Pavement Maintenance (RTA, RCF, Seal)	56	66	50	150
		Construct Jet Fuel System	22	17	100	
		Land Acquisition (16.7 Acres)	41	42	300	
		Hangar/Parking Lot Improvements	12	27	800	800
		Construct SRE Building	32	36		400
		AGIS Survey	31	42		100
		Construct Hangar	12	27		800
49	Tioga D60	Pavement Maintenance (RTA, RCF, Seal)	56	68	300	
		WHSV and WHMP Study	45	62	50	
		Construct Fence and Signage	31	64	1500	
		Runway 12-30 Rehabilitation	56	66		1300
		Construct Full Length Parallel Taxiway (EA '27)	41	42		2400
		Construct Terminal Building	21	40	500	
		Fuel System Relocation - Design and Construction	22	17	400	
50	Valley City BAC	Wildlife Fence, Hangar Park., Cultur. Inv. (D'17, C'18 / '20)	31	38	1000	
		Rwy 13/31 Rehabilitation and Marking	56	66		450
		Rwy 5/23 Construction (EA '23, Design '26, Construc. '27)	46	59		1300
		Apron Reconstruction (Design '25, Construction '26)	44	38		1100
		Land Acquisition (95 Acres)	41	42	475	475
		Update ALP/MP with AGIS and Exhibit A	31	42		250
		Pavement Maintenance (RTA, RCF, Seal)	56	66	100	100
51	Wahpeton BWP	Main Taxiway Reconstruction (Rwy 15 End)	41	64	410	
		Apron Rehabilitation (Design '19, Phase 1-'21, Phase2-'22)	44	38	2600	2500
		Land Acquisition (Rwy 33 End+House)	56			200
		Rwy 3/21 Paving (Crosswind)	46	59		1000
		Wildlife Fence and Signage	31	38		1000
		Pavement Maintenance (RTA, RCF, Seal)	56	66	50	100
52	Walhalla 96D	New Hangar	12	29	650	
		Update Lighting (MIRL)	56	45	50	300
		Parallel Taxiway Rejuvenate	45	64	250	
		Update ALP/MP with AGIS and Exhibit A	31	42		150
		Need \$ Transfer Out to Another Airport 2017	-	-		
		Pavement Maintenance (RTA, RCF, Seal)	56	66	50	100
		Rwy 15/33 Rehabilitation (Seal Coat)	56	66		250
		Wildlife Fence and Signage	31	38	1000	

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					1 to 5 Yrs.	6 to 10 Yrs.
53	Washburn 5C8	ALP/MP Update, AGIS/Exhibit A, Environmental and WHSV	32	55	300	
		Construct Apron Expansion (Phase II - EA 18)	47	50	100	
		Construct Fueling System (Design '20)	22	59	600	
		Pavement Maintenance (RTA, RCF, Seal)	56	66		800
		Construct Hangar Taxiway	45	46		500
		Construct Fence and Signage	31	64		1400
		Construct Access Road	33	20		150
54	Watford City S25	Land Acquisition	41	42	700	
		Runway Realignment (Design '18)	46	48	18200	
		Construct Fence and Signage	31	64		3200
		New Airport Beacon	41	42	50	
		Pave Access Road / Parking	33	21		400
		Pavement Maintenance (RTA, RCF, Seal)	56	68	100	100
55	State PCI		51	56	1000	1000
56	State Av-Impact		51	64		600
57	State System Plan Update		51	64		600
	Total Based AC:		GA Totals:		121,865	163,190
			CA Totals:		487,710	184,725
			CA & GA Totals:		606,775	347,915

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In addition the availability of State and Federal funding varies. Although listing a project in the CIP is the first step toward funding, that funding is not guaranteed for the projects listed.

Facts on the Economic Impact of Airports in North Dakota

Airport Economic Impacts

North Dakota's 8 commercial and 81 general aviation airports provide and support significant annual economic impacts. Airport related benefits come from activities associated with airport management, airport tenants, capital investment, and spending by visitors to North Dakota who arrive on commercial airlines and general aviation aircraft. Economic impacts for the 89 airports are measured using employment, annual payroll and annual economic output.

A 2015 study completed by the North Dakota Aeronautics Commission shows there are significant positive economic impacts associated with the state's public-use airports. As shown below, there has been a notable increase in impacts between 2010 and 2015:

Annual economic impacts from public-use airports have increased from **\$1.06 billion** to **\$1.56 billion**, a **47%** increase.

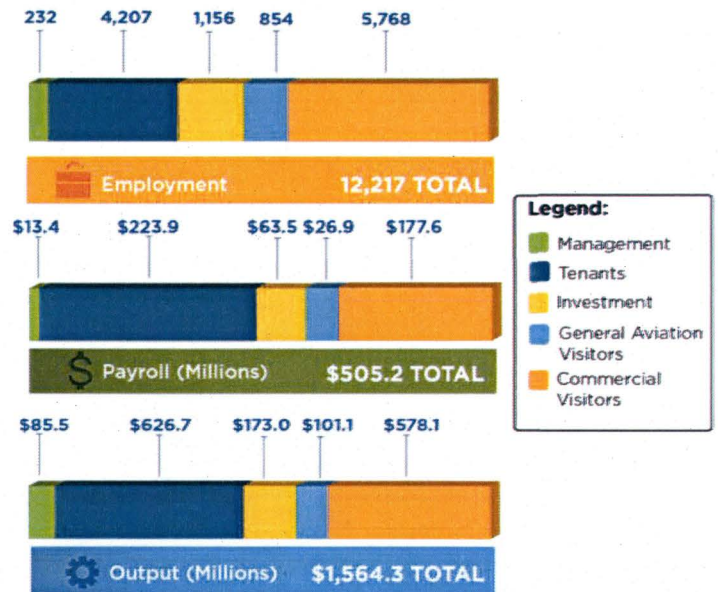
Jobs supported by North Dakota airports have grown from **8,872** to **12,217**, a **38%** increase.

Annual state and local sales tax revenues from airport supported activities have increased from **\$31.1 million** to over **\$60 million**, a **93%** increase.

The significant annual economic impact from North Dakota's 8 commercial and 81 general aviation airports comes from **five** centers of economic activity.

- Airport Management**
- Activities undertaken by airport employees to operate the airport on a daily basis.
- Airport Tenants**
- Aviation related businesses that provide airport, aircraft, or customer services.
- Capital Improvement Spending**
- Average annual investment made to maintain, improve, or expand an airport.
- General Aviation Visitors**
- Spending by general aviation visitors to North Dakota that support hotels, restaurants, and other visitor related activities.
- Commercial Visitors**
- Spending by commercial visitors to North Dakota that support hotels, restaurants, and other visitor related activities.

Economic impacts for North Dakota airports are measured using three indicators: employment, annual payroll, and annual economic output. For airport management and airport tenants, output is equal to their cost for purchasing goods and services to run the airport or their business. For capital investment, commercial visitors, and general aviation visitors, output is equal to average annual spending for airport improvements or annual spending by air visitors while they are in North Dakota.



2015 Total Annual Economic Impacts from Public-Use Airports

Jobs: 12,217

Payroll: \$505.2 million

Output: \$1.56 billion

Air Visitors to North Dakota

Since 2010, all air visitors to North Dakota have increased from **543,300** to **915,290**, an increase of 68%. Business travel to North Dakota has increased exponentially, leading to significant increases in visitor spending for both visitors arriving on general aviation aircraft and on commercial airline flights. Study surveys show business travelers are staying longer and spending more.

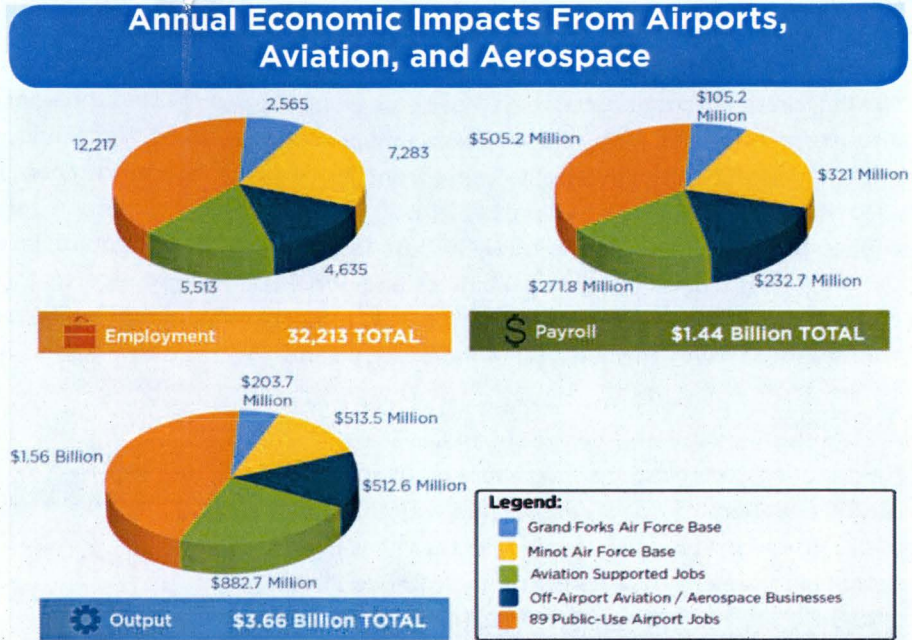


Other Economic Benefits from Aviation and Aerospace

Aside from economic benefits from North Dakota's public-use airports, there are other off-airport aviation and aerospace activities in North Dakota that provide additional economic benefits. These include benefits from:

- Grand Forks Air Force Base
- Minot Air Force Base
- Off-Airport Aviation and Aerospace Businesses (including aerial applicators)
- Jobs with Improved Efficiency from Aviation

When airport, military, and off-airport aerospace and aviation activities in North Dakota are combined, they provide the annual economic impact shown to the right. Included in the aviation supported jobs are over 100 aviation and aerospace related jobs at the University of North Dakota; these jobs are in addition to University jobs located at Grand Forks International Airport.



TOTAL FOR ALL AIRPORT / AVIATION / AEROSPACE IMPACTS



Increasing Economic Benefits

Economic impacts for North Dakota's airports were previously estimated in 2010. Information presented here shows how economic impacts from the commercial and general aviation airports in North Dakota have increased over the past five years.

The North Dakota Statewide Economic Impact Study shows that when all airport, aviation, military, and aerospace activities in North Dakota are considered:

- **32,200** jobs for all airport/aviation/aerospace related activities account for an estimated **8%** of North Dakota's total employment which is estimated at **413,000**.
- The **\$3.7 billion** in total annual output for all airport/aviation/aerospace related activities accounts for an estimated **7%** of North Dakota's Real Gross State Product estimated at **\$48.2 billion**.



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ND Aeronautics Commission Members



Cindy Schreiber-Beck, Chair, Wahpeton

Currently Cindy serves as the Executive Director of the North Dakota Agricultural Aviation Association (NDAAA), is the owner of Tri-State Aviation, an FBO with a concentration on WWII aircraft restoration, and manages the Wahpeton Harry Stern Airport. She is active in the local business community and has served on the Commission since 1997.



Dr. Kim Kenville, Vice-Chair, Grand Forks

Kim began teaching for the University of North Dakota's John D. Odegard School of Aerospace Sciences in the fall of 1999 where she currently teaches airport management. Since 2008, Kim has been the director of the graduate program for the Department of Aviation and holds the rank of full professor. Dr. Kenville received her Ph.D. in 2005 from Capella University in Organization and Management. Prior to returning to UND, Kim worked in airport operations for Detroit Metropolitan and Milwaukee County airports. She is a certified member (C.M.) of the American Association of Airport Executives and holds a private pilot's license. Kim was appointed to the Aeronautics Commission in September of 2011.



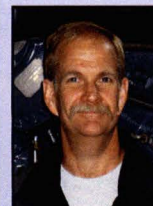
Maurice E. Cook, Member, Bismarck

Maurice retired from active legal practice at the end of 2010. During his legal career he served as a State's Attorney, City Attorney, Airport Authority Attorney, Assistant Attorney General as General Counsel for the Bank of North Dakota, as a member and Chairman of the Board of Directors of Prairie Public Broadcasting, ND Civil Air Patrol Wing Commander and ten years as Civil Air Patrol's National Legal Officer. He served as Bond Counsel to numerous ND political subdivisions and various agencies of the State of North Dakota in the issuance of municipal bonds for thirty years. He holds a multi engine instrument pilot's license and started flying in Hettinger, ND, in 1952. He has been a member of the ND Aeronautics Commission since 1999.



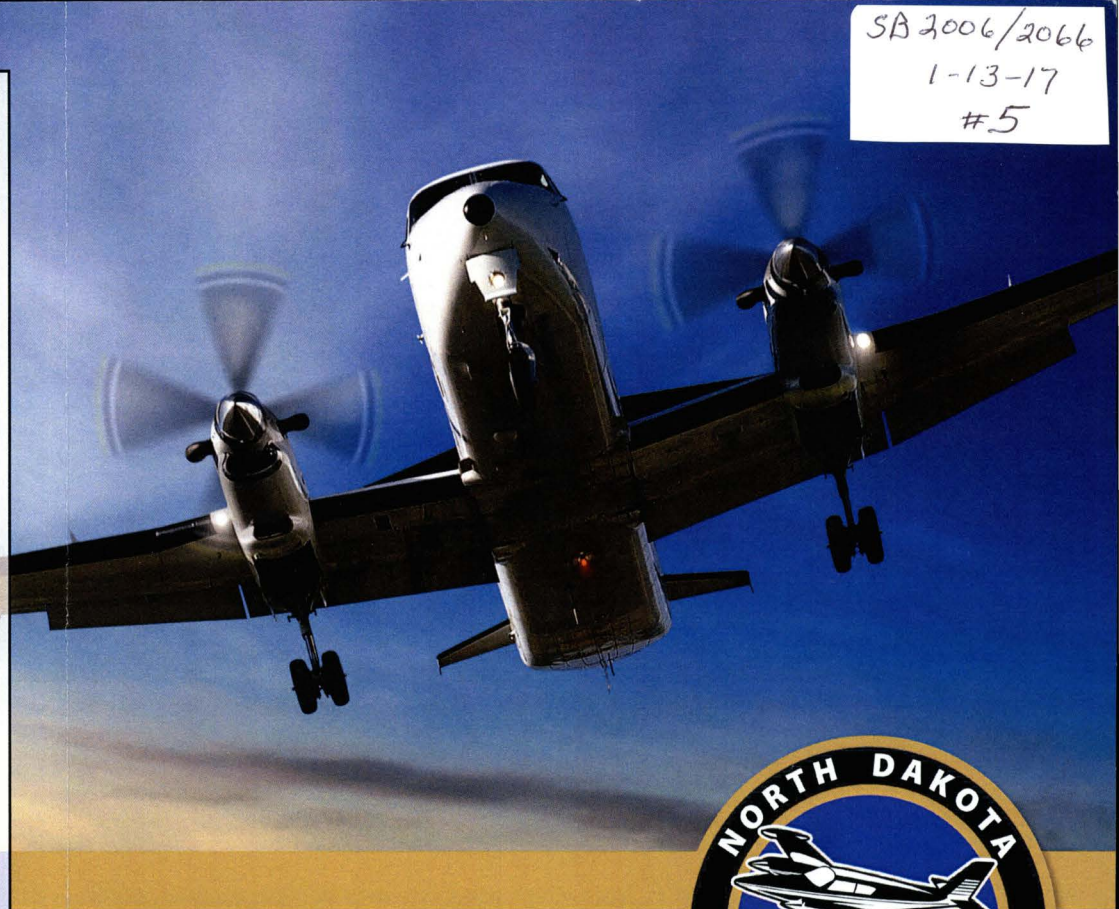
Jay B. Lindquist, Member, Hettinger

Jay is president of Air Dakota Flite, a full service, fixed base operator (FBO). J.B. has a strong aerial applicator background and has been crop spraying for 50 years. He has been a Certified Flight Instructor and has served as the Manager of the Adams County Municipal Airport, Hettinger, ND for 40 years. His other interests are in retail and farming. J.B. was inducted into the North Dakota Aviation Hall of Fame in 2012. He has been a member of the Commission since 1993.



Warren A. Pietsch, Member, Minot

Warren is president of Pietsch Aircraft Restoration & Repair and Minot Aero Center at the Minot International Airport. Warren soloed at the age of 16 and has continued in aviation. He began chartering for the family business, ventured into airshows in 1981, and worked for ATA Airlines 1989-2008 serving as a captain for L-1011, B-727, B-737. Warren is a current and founding board member of the Dakota Territory Air Museum and the Chief pilot for the Texas Flying Legends Museum, Houston TX. Holding a single & multi-engine ATP, SeaPlane rating, Commercial glider CFGI & CFIs and is an Aerobatic Evaluator for ICAS, Warren was appointed to the Commission in May of 2012.



A Statewide
Voice for
Aviation

Agency Mission

To serve the public by providing economic and technical assistance for the aviation community while ensuring the safe and cost effective advancement of aviation in North Dakota.



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Agency History

The North Dakota Aeronautics Commission was established in 1947 by the State Legislature assigning responsibility for the state aviation functions. The Governor appoints the five members of the Aeronautics Commission to the board, for five year terms. The Commission staff is composed of the Director and four support staff. The office location is at the general aviation pilot terminal on the Bismarck Municipal Airport, Bismarck, ND.

Agency Purpose

The North Dakota Aeronautics Commission supports aviation activities in the state through communication with state and local organizations, Federal Aviation Administration (FAA), congressional offices, local airports and national aviation groups. The commission is largely funded through aviation fuel taxes, aircraft excise taxes, and aircraft registrations. This small and efficient state agency is able to leverage its financial efforts by teaming with the FAA, and staying involved with aviation activities across the state through a strong network of communication. The North Dakota Aeronautics Commission appreciates those that assist with airport operations, promote the aviation industry and utilize the airport system that the state has developed.

Public Airports in North Dakota



Agency Activities

ND Passport Program: a booklet stamping program that rewards pilots who fly to North Dakota's publicly-owned airports, visits North Dakota's aviation museums and attend FAA safety seminars.

Flight Training Assistance Program: a program that helps defray additional student pilot costs as a result of direct transportation costs incurred by commuting flight instructors.

Agricultural Operator Alert Map: a map of alert areas (towers, organic farms, ect.) can be found on the aeronautics commission website.

The International Aviation Art Contest: an annual event encouraging students ages six through 17 to express their creativity while celebrating aviation.

North Dakota Aviation Publications and Planning Documents: Aviation Economic Impact Studies, Aeronautical Charts, Airport Directories, State Aviation System Plan, Pavement Condition Index Study for ND Airports.

Regulatory Function: the office is responsible for administering North Dakota's laws in regards to registration of aircraft, aircraft dealers, aerial applicators, and the collection of aircraft excise tax.

Airport Intern Program: Encourages commercial service airports in ND to hire a management intern by providing a stipend to help defray the labor costs.

Aviation Education Grant Funding: The aeronautics commission provides grant funding for aviation education programs. Applications are accepted at any time from aviation enthusiasts, airports, or aviation organizations.

Airport Grant Funding: The aeronautics commission disperses approximately \$2.5 million annually to airports across the state for airport improvement projects. These funds are derived from aviation fuel taxes, aircraft excise taxes, and aircraft registrations.

Airport Inspections & Chart Supplement Updates: Each public airport is inspected at least once every three years and safety recommendations are made at the time of each inspection. North Dakota airport information that is used in the FAA Chart Supplement is also updated by the aeronautics commission staff.

Aviation Facts about North Dakota

- On and off-airport aviation related activity in North Dakota creates 32,200 jobs.
- \$1.6 billion in economic output activity is created each year by North Dakota Airports.
- Approximately 4.5 million acres of crops are sprayed annually by aerial applicators.
- More than 2.4 million airline passengers traveled through North Dakota's commercial airports in 2015.
- Approximately 3,600 people hold FAA pilot certificates in North Dakota
- Approximately 2,000 aircraft are registered with the state of North Dakota.

North Dakota Aeronautics Commission Staff

Kyle Wanner – Director
 Gaye Niemiller – Administrative Officer
 Sheila Doll – Licensing Specialist
 Jared Wingo – Airport Planner
 Benjamin West – Airport Planner
 Mike McHugh – Aviation Education Coordinator

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2015 PAVEMENT CONDITION INDEX (PCI) STUDY EXECUTIVE SUMMARY

www.aero.nd.gov



NORTH DAKOTA
AERONAUTICS COMMISSION
A STATEWIDE VOICE FOR AVIATION

FEDERAL AVIATION ADMINISTRATION
A.I.P. NO. 3-38-0000-013-2015



NORTH DAKOTA
AERONAUTICS COMMISSION
A STATEWIDE VOICE FOR AVIATION

This document was prepared under the guidance of

North Dakota Aeronautics Commission
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**2015 PAVEMENT
CONDITION INDEX (PCI)
STUDY EXECUTIVE
SUMMARY**
www.aero.nd.gov

Overview



The Airport Pavement Management System (APMS) was developed by the Federal Aviation Administration (FAA) and is intended to provide a consistent and systematic approach to identifying pavement that is in need of maintenance or rehabilitation. The North Dakota Aeronautics Commission (NDAC) developed a customized APMS in accordance with FAA requirements.

An APMS evaluates both the current condition of the pavement as well as predicts a future condition based on the Pavement Condition Index (PCI). This in turn allows the individual airports, the NDAC and the FAA to monitor the condition of the airport pavements and budget for required maintenance to avoid excessive deterioration. The timing of this maintenance or rehabilitation is vital as airport pavement conditions play a crucial role in ensuring the safety of all airport users.

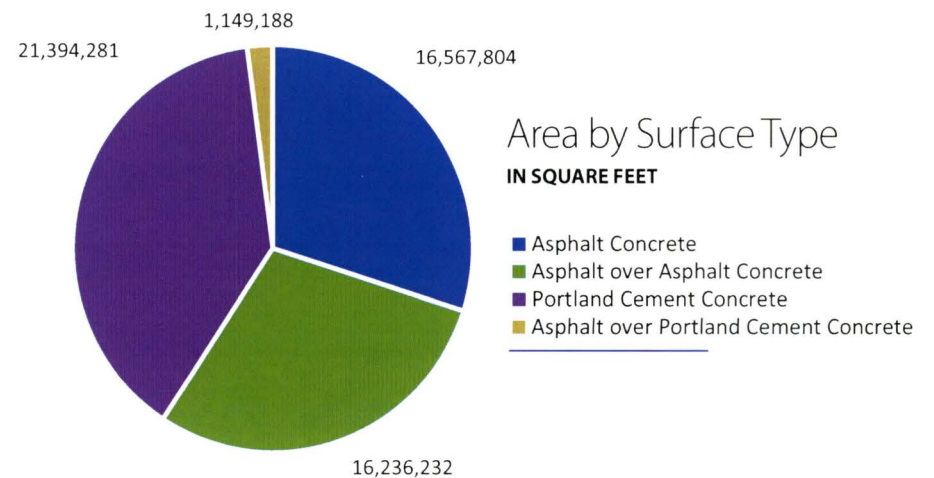
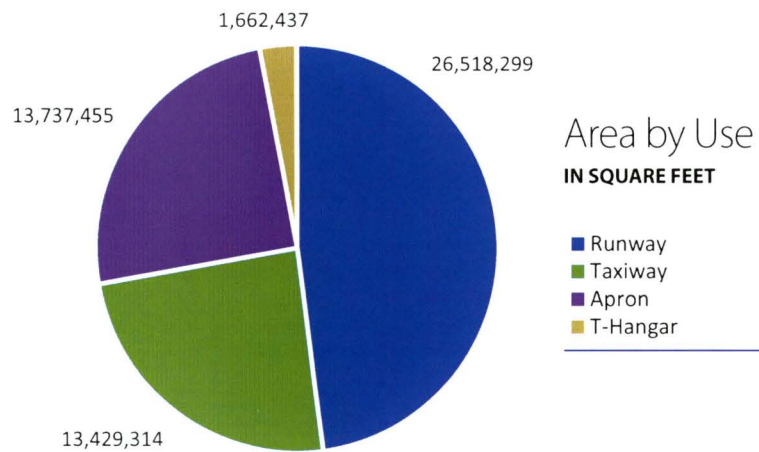
This system is updated every three years to accurately reflect current pavement conditions across the state's airports. In 2012, the APMS was updated to an electronic format to allow the data to be readily available to the airports, the FAA and the NDAC.

In 2015, Mead & Hunt along with Applied Pavement Technology and EVS conducted the update to the APMS. During the 2015 update, record information collected in the previous three-year cycle has been added to the database. Pavement inspections have been completed, and additional airports have been added that were not part of the previous study. Functionality changes also have been made to the website itself. The findings and recommendations of the APMS update are included in this report. Full results can be found online on the NDAC website, www.aero.nd.gov.

Pavement Inventory

In 2015, a total of 71 airports were assessed for the current project. Of these, 52 were part of the National Plan of Integrated Airport Systems (NPIAS) and 19 were non-NPIAS. NPIAS airports qualify for federal funding. Non-NPIAS airports do not qualify for federal funding and must be funded solely by state and local contributions. Therefore, the FAA only provided funding for pavement inspections and reports for the NPIAS airports as part of this study. NPIAS airports inspected included 7 commercial service airports and 45 general aviation airports. Williston was not inspected as part of the 2015 study due to future relocation of the existing airport. However, Williston’s 2012 pavement inventory data was used in the 2015 data analysis and is included as part of the 2015 results. Pavement inventory data includes area, age and condition. Projected costs for Williston were excluded from the funding assessment needs. A PCI of 100 was assumed for all newly constructed pavement or pavement programmed to be reconstructed in the next year. The map on page 5 identifies all of the airports in North Dakota that were included as part of the 2015 APMS update.

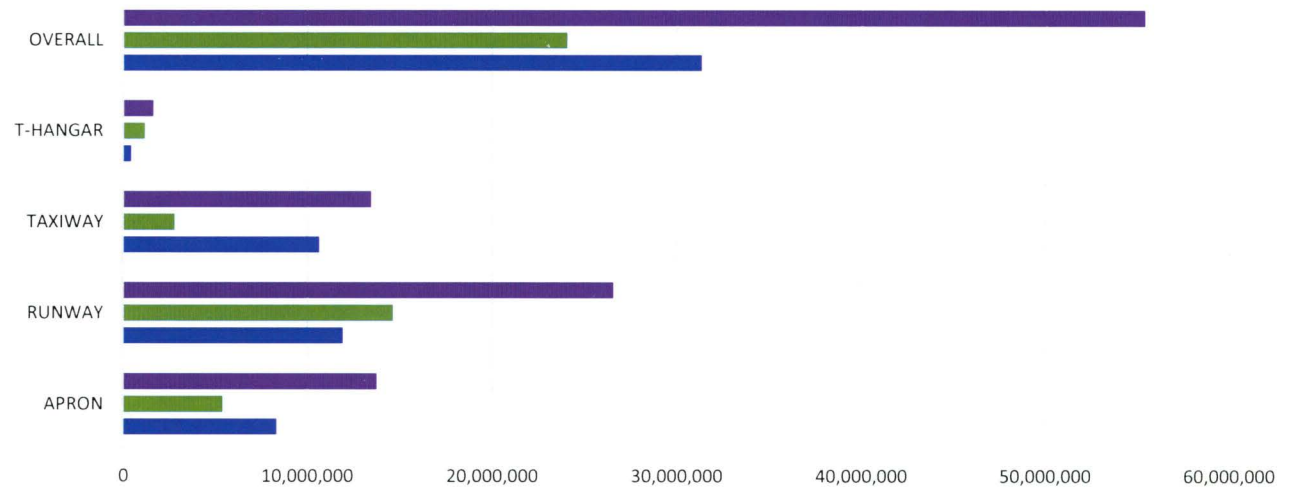
These airports represent 55.3 million square feet of pavement – 26.5 million square feet of runway pavement, 13.4 million square feet of taxiway pavement, 13.7 million square feet of apron pavement, and 1.7 million square feet of T-hangar pavement, comprised of both concrete and asphalt, as shown in the *Area by Use* and *Area by Surface Type* pie charts below. Pavement at the airports in the state have an average age of 17 years for commercial service airports and 10 years for general aviation airports. Throughout the years, the airports have performed preventive maintenance and carried out a series of rehabilitation/reconstruction projects to sustain and extend the pavement life. The charts shown on the next page, *Pavement Area by Use* and *Area-Weighted Average Age by Use*, summarize the total square footage of pavements found in the state and the average age of those pavements based on use.



Pavement Area by Use

IN SQUARE FEET

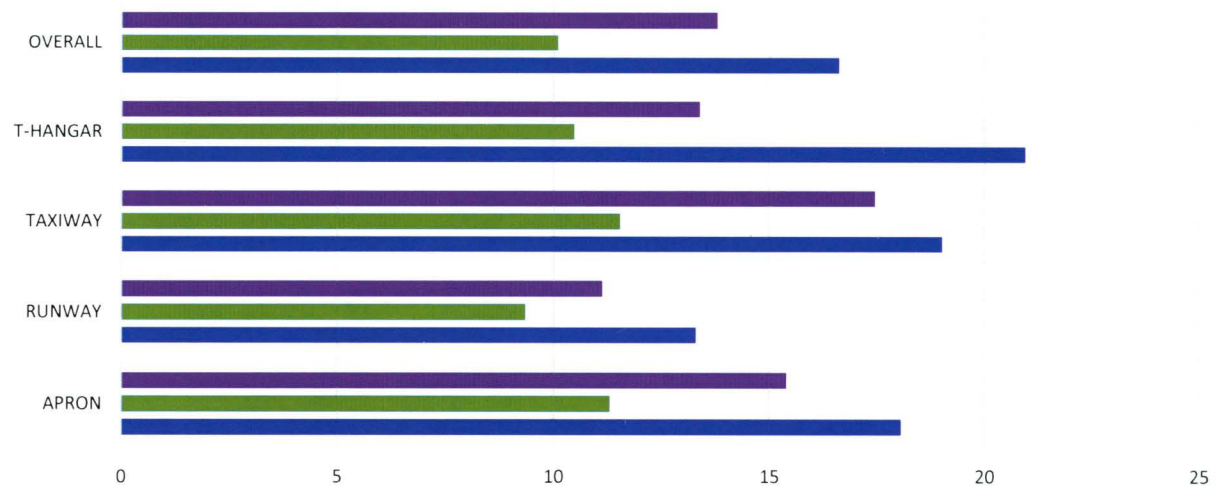
- Overall State System
- General Aviation
- Commercial Service



Area-Weighted Average Age by Use

IN YEARS

- Overall State System
- General Aviation
- Commercial Service



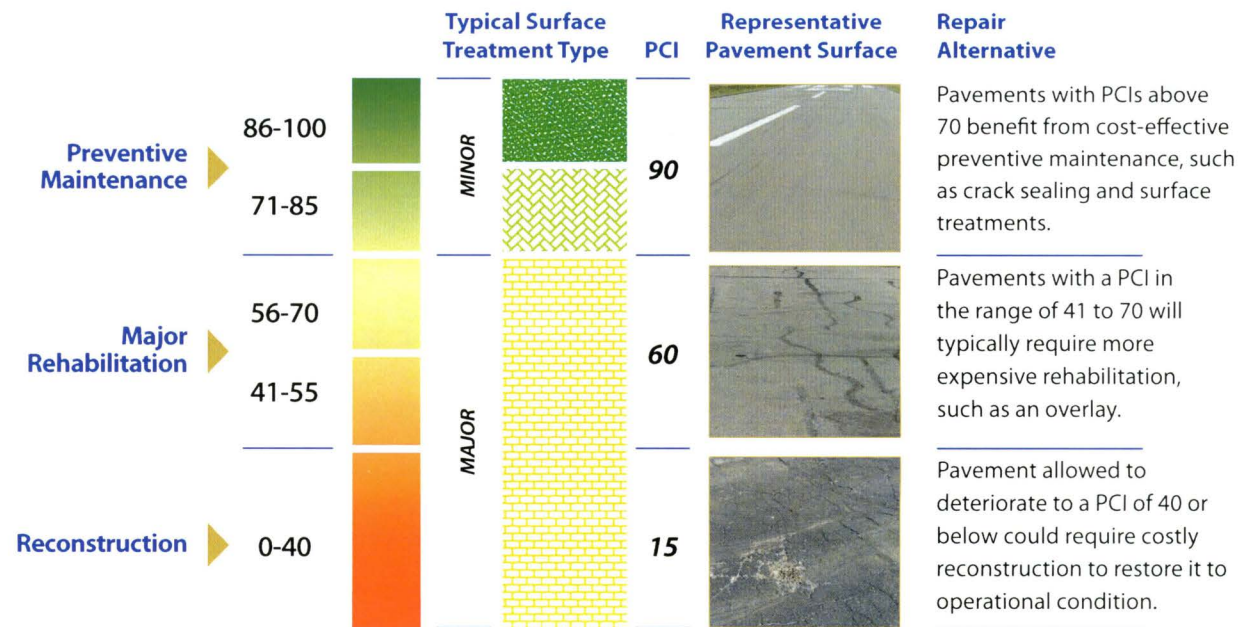
Pavement Evaluation

Pavement Evaluation Procedure

A PCI survey was conducted in accordance with the procedures outlined in American Society for Testing and Materials (ASTM) Standard D5340, *Standard Test Method for Airport Pavement Condition Index Surveys* and the FAA's Advisory Circular 150/5380-6B, *Guidelines and Procedures for Maintenance of Airport Pavements*. A PCI survey consists of dividing pavement into a series of sections, selecting random sections for sampling, and inspecting a given portion of each sample section to determine overall pavement deterioration. Pavement deterioration is based on the quantification of the different types, the severity and the number of distresses present in the sample section. This information is then used to formulate a composite index numerical value that represents the overall pavement condition. This value will range from 0 (failed) to 100 (excellent).

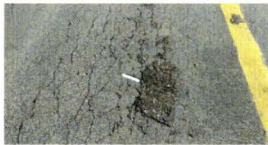
As part of the APMS, the PCI will be used to determine current pavement conditions, predict future conditions, develop a maintenance program and identify the most cost-effective time frame to perform major rehabilitation.

The PCI will also aid in tracking and determining causes of deterioration on a pavement. The correlation between a PCI number and a recommended repair is shown in the illustration to the right. Preventive maintenance consists of patching, crack sealing and joint sealing. Pavement rehabilitation includes surface treatments and thin overlays. Pavement reconstruction refers to full-depth reconstruction and thick overlays. Minor surface treatments are used to address weathering and low-severity raveling. Major surface treatments are used to address medium- and high-severity raveling.

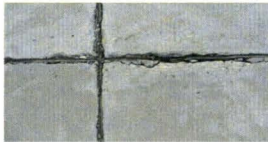


Typical Distress Types

The FAA Advisory Circular provides a list of specific distresses to be analyzed and recorded when inspecting pavement. Airports in North Dakota are a combination of asphalt concrete (AC) pavement and Portland cement concrete (PCC) pavement with there being slightly more AC pavement than PCC pavement. These two pavement types have unique pavement distresses and repairs. The following is a brief description of commonly observed pavement distresses at North Dakota airports.



ALLIGATOR (FATIGUE) CRACKING. Alligator (fatigue) cracking is a load-related distress. Alligator cracking is caused by excessive tensile strains at the bottom of the AC layer or stabilized asphalt base layer from repeated aircraft loadings. Alligator cracking typically shows up on the surface as a series of parallel cracks, which eventually interconnect to form a pattern resembling the skin of an alligator.



JOINT SEAL DAMAGE. Joint sealant damage is any condition that enables soil or rocks to accumulate in the joints or allows significant infiltration of water. Accumulation of incompressible materials prevents the slabs from expanding and may result in buckling, shattering, or spalling. A pliable joint filler bonded to the edges of the slabs protects the joints from accumulation of materials and also prevents water from seeping down and softening the foundation supporting the slab. Typical types of joint seal damage are: (1) stripping of joint sealant, (2) extrusion of joint sealant, (3) weed growth, (4) hardening of the filler (oxidation), (5) loss of bond to the slab edges, and (6) absence of sealant in the joint.



LONGITUDINAL AND TRANSVERSE CRACKING. The predominant distress type found on asphalt pavements at North Dakota airports is longitudinal and transverse (L&T) cracking. This distress can be caused by any of the following: (1) separation of pavement at paving lane joints, (2) shrinkage of AC pavement due to temperature differentials in older or brittle pavements, or (3) reflection cracking from underlying faults in supportive layers of pavement or subgrade. Cracking is also a common distress type for PCC pavement. This distress is caused by a combination of load repetition, curling stresses, and shrinkage stresses.



RAVELING. As pavements age and are exposed to oxidation and other environmental stresses, they may experience a loss in the material making up the pavement matrix. Raveling is the dislodging and loss of coarse aggregate in the surface of a pavement. The pavement may be showing signs of aging and hardening and may result in the production of FOD.



SPALLING. Spalling, in PCC pavement, is the breakdown of the slab edges in close proximity to the slab joint. Spalling is identified as occurring in the corner or along the joint of a PCC slab. Spalling is typically caused by the introduction of incompressible material in the joint, weaker pavement at the joint caused by overworking of the pavement during construction, traffic loading or a combination of these.



WEATHERING. As pavements age and are exposed to oxidation and other environmental stresses, they may experience a loss in the material making up the pavement matrix. Weathering is the loss of asphalt binder and fine aggregate in the surface of the pavement. The loss of fine matrix material in the surface may eventually lead to the exposure and dislodging of coarse aggregate, leading to raveling and FOD.

Pavement Classification Number (PCN)

A PCN is a value that indicates the strength of a pavement as it relates to aircraft classification numbers, which are assigned to each type of aircraft. Aircraft traffic information as well as subgrade and pavement strengths are critical inputs in determining this value. Pavements at the commercial service airports were analyzed in 2012 to provide a PCN value as detailed in FAA Advisory Circular 150/5335-5B, *Standardized Methods of Reporting Airport Pavement Strength – PCN*. The PCN is expressed as a five-part code. The first part of the PCN is a numerical value indicating the load-carrying capacity of the pavement. This numerical value is followed by four codes representing the following categories:

■ PAVEMENT TYPE

R = Rigid

F = Flexible

■ SUBGRADE STRENGTH

A = High (k-value \geq 442 psi/in or CBR \geq 13)

B = Medium (221 psi/in < k-value < 442 psi/in or 8 < CBR < 13)

C = Low (92 psi/in < k-value \leq 221 psi/in or 4 < CBR \leq 8)

D = Ultra Low (k-value \leq 92 psi/in or CBR \leq 4)

■ MAXIMUM ALLOWABLE TIRE PRESSURE

W = High (no pressure limit)

X = Medium (146 to 218 psi)

Y = Low (74 to 145 psi)

Z = Ultra Low (pressure limited to 73 psi)

■ PAVEMENT EVALUATION METHOD

T = Technical Evaluation

U = Using Aircraft Evaluation

PCN results were not calculated as part of the 2015 study. The 2012 PCN results for the state are listed in the table below. A detailed PCN report for each airport can be found online on the NDAC website, www.aero.nd.gov.

2012 PCN Results

AIRPORT	BRANCH ID	PCN
Bismarck Municipal	Runway 13-31	42 F/A/W/T
	Runway 3-21	26 F/A/W/T
Devils Lake Regional	Runway 13-31	27 F/D/W/T
	Runway 3-21	26 F/D/W/T
Dickinson Theodore Roosevelt Regional	Runway 14-32	20 F/D/W/T
	Runway 7-25	6 F/D/W/T
Fargo - Hector International	Runway 18-36	95 R/C/W/T
	Runway 9-27	25 R/C/W/T
	Runway 13-31	17 R/D/W/T
Grand Forks International	Runway 17L-35R	9 R/C/W/T
	Runway 17R-35L	35 R/C/W/T
	Runway 9L-27R	24 R/B/W/T
	Runway 9R-27L	10 R/C/W/T
Jamestown Regional	Runway 13-31	79 F/C/W/T
	Runway 4-22	25 F/D/W/T
Minot International	Runway 13-31	43 R/C/W/T
	Runway 8-26	34 F/D/W/T

Analysis of Results

Critical PCI Values

For each year of the analysis, the future condition of each of the pavements was estimated and a determination was made as to whether preventive maintenance or major rehabilitation/reconstruction was the appropriate and most cost-effective method of maintaining pavement life. If a pavement was projected to be above the critical PCI values listed below, the pavement was recommended for preventive maintenance. Major rehabilitation/reconstruction was recommended for any PCI value below the PCI critical thresholds. Surface treatments were identified for viable candidates that exhibited weathering and/or raveling. These were identified separate from the critical value analysis.

- 60 for general aviation taxiways and aprons
- 65 for commercial service taxiways and aprons
- 70 for general aviation runways
- 75 for commercial service runways

Interested in a Particular Airport's Pavement Condition & History?



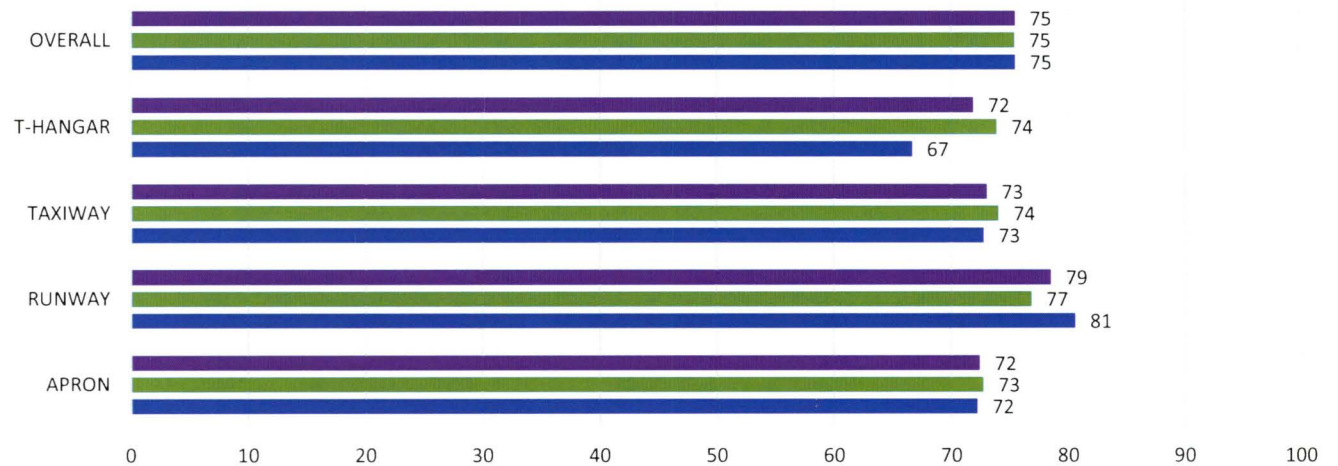
*For information on **pavement distresses for a specific airport**, visit the Interactive Data Exchange Application (IDEA) website by going to www.aero.nd.gov and navigating to "**Studies**" then "**Pavement Condition Index**" then "**Click Here.**" Once there, you can view a list of the distresses that were identified as well as a maintenance and rehabilitation plan for each airport. The IDEA site also contains photos of each airport along with an interactive version of the airport's PCI map.*

Overall Pavement Condition

Each airport was inspected and an overall area-weighted pavement condition is assigned to each. The information collected at each airport is used to provide greater detail on the uses of pavements and the correlating PCI value associated with each use. The overall area-weighted PCI of all the airports included in this study is 75. The chart below, *Area-Weighted Average PCI Value by Use*, shows the 2015 condition of the pavement broken out by use and airport classification. The *Overall Area-Weighted PCI* table on the next page provides the overall area-weighted PCI for each airport.

Area-Weighted Average PCI Value by Use

- Overall State System
- General Aviation
- Commercial Service



Overall Area-Weighted PCI

AIRPORT NAME	AREA-WEIGHTED PCI
Ashley Municipal	59
Beach	79
Beulah Municipal	84
Bismarck Municipal	69
Bottineau Municipal	82
Bowman Regional	100
Cando Municipal	63
Carrington Municipal	72
Casselton Robert Miller Regional	70
Cavalier Municipal	81
Cooperstown Municipal	53
Crosby Municipal	78
Devils Lake Regional	76
Dickinson Theodore Roosevelt Regional	72
Drayton Municipal	67
Dunseith - International Peace Garden	79
Edgeley Municipal	43
Ellendale Municipal	91
Enderlin - Sky Haven	80
Fargo - Hector International	77
Fort Yates - Standing Rock	82
Garrison Municipal	71
Glen Ullin Regional	80
Grafton - Hutson Field	76
Grand Forks International	80
Gwinner - Roger Melroe Field	96
Harvey Municipal	79

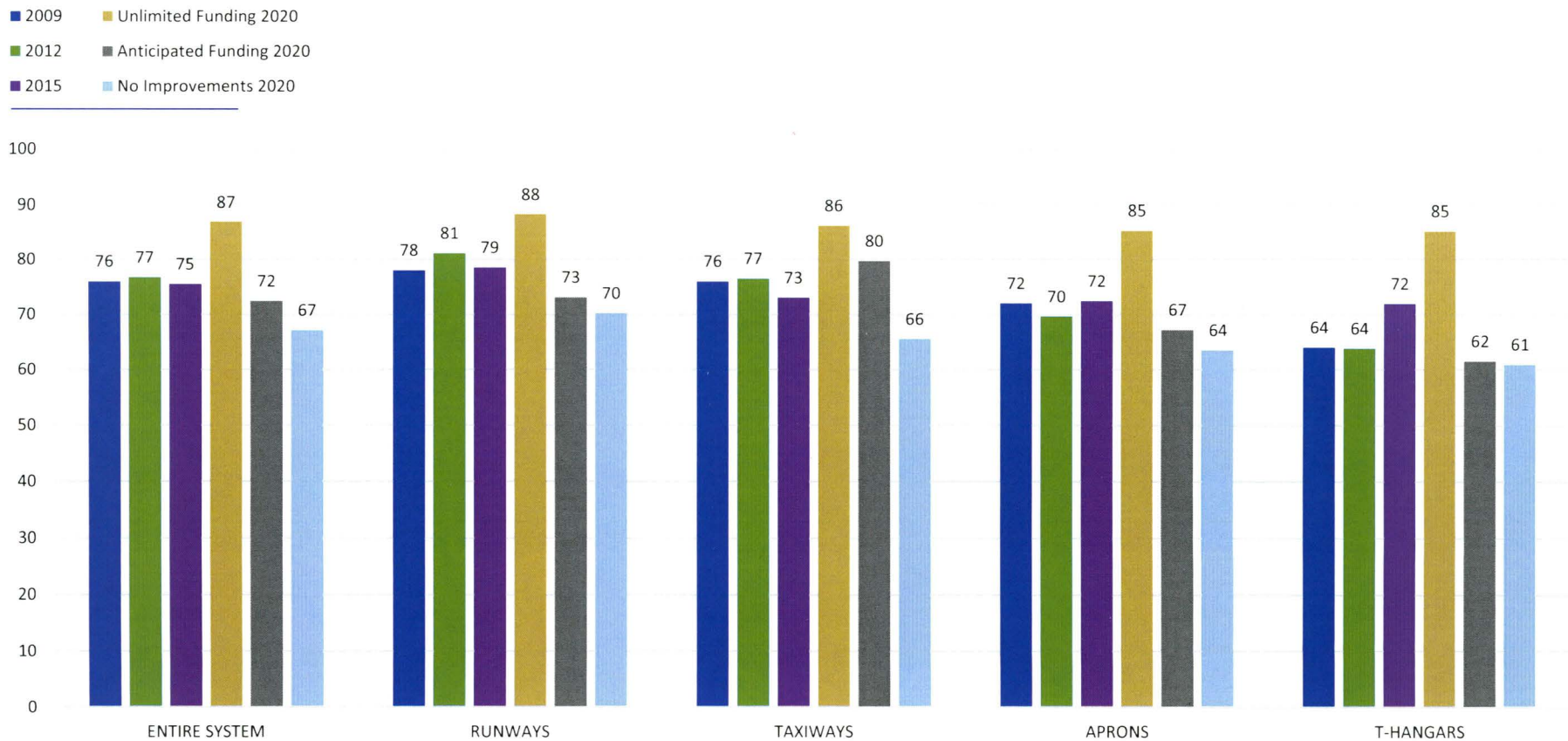
AIRPORT NAME	AREA-WEIGHTED PCI
Hazen - Mercer County Regional	77
Hettinger Municipal	58
Hillsboro Regional	55
Jamestown Regional	62
Kenmare Municipal	93
Killdeer - Dunn County	93
Kindred - Robert Odegaard Field	71
Lakota Municipal	71
LaMoure Rott Municipal	29
Langdon - Robertson Field	46
Larimore Municipal	77
Leeds Municipal	44
Linton Municipal	41
Lisbon Municipal	47
Maddock Municipal	100
Mandan Municipal	85
Mayville Municipal	91
Minot International	82
Minto Municipal	71
Mohall Municipal	85
Mott Municipal	71
Napoleon Municipal	69
New Rockford - Tomlinson Field	63
New Town Municipal	100
Northwood Municipal - Vince Field	43
Oakes Municipal	91
Page Regional	18

AIRPORT NAME	AREA-WEIGHTED PCI
Park River - W C Skjerven Field	83
Parshall-Hankins	93
Pembina Municipal - Thomas Nord Field	65
Rolette	82
Rolla Municipal	93
Rugby Municipal	76
St. Thomas Municipal	69
Stanley Municipal	80
Tioga Municipal	71
Valley City - Barnes County Municipal	91
Wahpeton - Harry Stern	81
Walhalla Municipal	88
Washburn Municipal	99
Watford City Municipal	77
West Fargo Municipal	83
Westhope Municipal	78
Wishek Municipal	40

Historic Pavement Condition

The APMS is updated every three years and it is important to show how the system as a whole is performing from update to update. The *Area-Weighted Average PCI by Use* chart below provides a summary of the 2009 and 2012 historic PCI values; current 2015 PCI values; projected PCI values in 2020 if unlimited funding were available; projected PCI values in 2020 if only the anticipated state budget funding were available; and the projected PCI values in 2020 if no improvements were completed on the existing system.

Area-Weighted Average PCI by Use

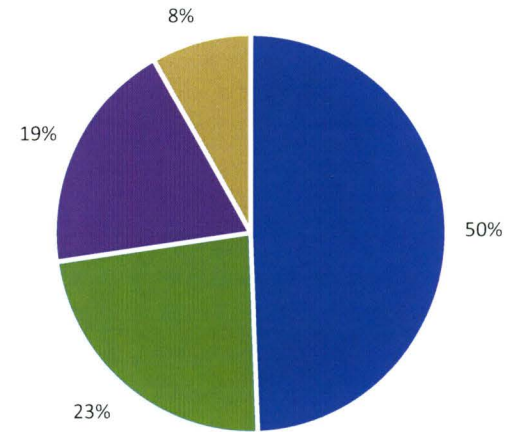


Pavement Condition Distribution

Approximately 50 percent of the airports included in the 2015 APMS are at the condition level where they will benefit from preventative maintenance actions, such as crack sealing, joint sealing, and patching. Roughly 23 percent would benefit from applying a surface treatment. Approximately 19 percent of the pavement infrastructure is in need of more extensive rehabilitation, while 8 percent is in need of reconstruction to restore the pavement. The following pie charts show the level of work that is needed in the system.

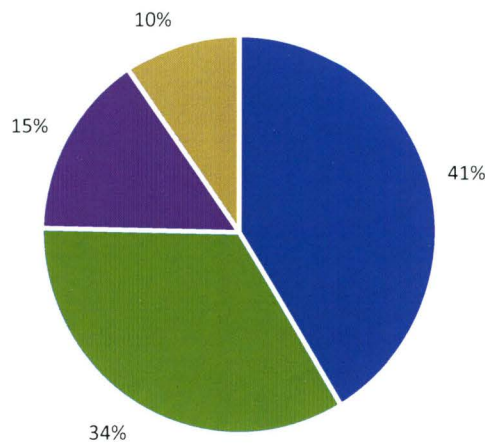
Overall State

- Preventative Maintenance
- Surface Treatments
- Major Rehabilitation
- Major Reconstruction



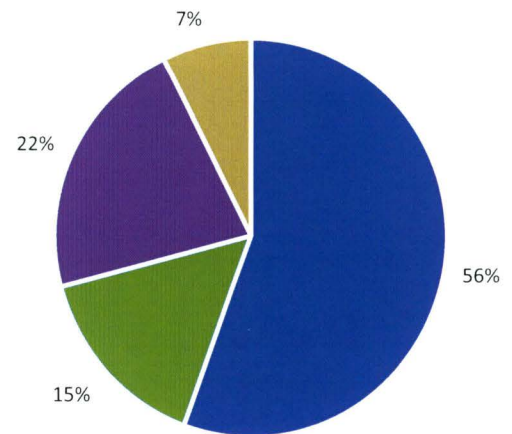
General Aviation

- Preventative Maintenance
- Surface Treatments
- Major Rehabilitation
- Major Reconstruction



Commercial Service

- Preventative Maintenance
- Surface Treatments
- Major Rehabilitation
- Major Reconstruction



Pavement Funding Assessment

Funding for aviation projects within the state is crucial in order to maintain a steady pavement condition and ensure safety of all aviation users. If no funding is provided for pavement maintenance and repair, North Dakota's pavement system will experience a slow and steady decline in condition. This decline would result in a need for more major rehabilitation or reconstruction projects, which in turn significantly increases future cost.

Using the information collected during the pavement inspection, a rehabilitation program for 2016 through 2020 was developed for every airport in the state. A five-year program was prepared with the goal of maintaining the pavement above the established critical PCI values listed earlier in this report. This program generates a major rehabilitation recommendation for pavement in the year they drop below their critical PCI.

If all projects identified in the PCI study were funded, an approximate total of \$181 million would be needed during the next five years – \$105.1 million for commercial service airports and \$75.9 million for general aviation airports. The unlimited budget funding for individual airport needs through 2020 are summarized in the table shown to the right, *Five-Year Funding Plan*. This analysis is for 2016 through 2020 with an inflation factor of four percent when calculating future cost of work. The unit costs used to estimate overall project costs are based on averages of recent projects completed throughout the state. These costs are averages and are not intended to be used for specific project planning purposes. Money identified in an unlimited budget scenario is to maintain or rehabilitate existing infrastructure and does not include any additional needs or improvements made.

Five-Year Funding Plan

CLASSIFICATION	AIRPORT NAME	5-YEAR TOTAL FUNDING NEEDS
Commercial Service	Bismarck Municipal	\$20,141,319
	Devils Lake Regional	\$5,168,798
	Dickinson Theodore Roosevelt Regional	\$8,443,856
	Fargo - Hector International	\$26,825,163
	Grand Forks International	\$16,429,217
	Jamestown Regional	\$13,353,434
	Minot International	\$14,764,949
	Five-Year Commercial Service Funding Total	\$105,126,736
General Aviation (NPIAS)	Beach	\$833,072
	Bottineau Municipal	\$384,900
	Bowman Regional*	\$0
	Cando Municipal	\$1,866,699
	Carrington Municipal	\$1,741,238
	Casselton Robert Miller Regional	\$4,275,086
	Cavalier Municipal	\$1,114,929
	Cooperstown Municipal	\$1,933,878
	Crosby Municipal	\$1,320,059
	Dunseith - International Peace Garden	\$95,764
	Edgeley Municipal	\$2,599,711
	Ellendale Municipal	\$350,709
	Fort Yates - Standing Rock	\$232,100
	Garrison Municipal	\$1,643,969
	Glen Ullin Regional	\$1,361,368
	Grafton - Hutson Field	\$1,153,065
Gwinner - Roger Melroe Field	\$127,003	
Harvey Municipal	\$383,986	
Hazen - Mercer County Regional	\$2,085,064	

* No or minimal five-year funding needed because airport was recently constructed or reconstructed.

CLASSIFICATION	AIRPORT NAME	5-YEAR TOTAL FUNDING NEEDS
General Aviation (NPIAS)	Hettinger Municipal	\$4,236,058
	Hillsboro Regional	\$2,900,094
	Kenmare Municipal	\$187,004
	Kindred - Robert Odegaard Field	\$2,548,473
	Lakota Municipal	\$1,755,477
	LaMoure Rott Municipal	\$2,495,926
	Langdon - Robertson Field	\$2,780,281
	Linton Municipal	\$2,788,554
	Lisbon Municipal	\$2,362,470
	Mandan Municipal	\$1,692,069
	Mohall Municipal	\$372,430
	Mott Municipal	\$284,808
	Northwood Municipal - Vince Field	\$2,831,781
	Oakes Municipal	\$327,941
	Park River - W C Skjerven Field	\$234,257
	Parshall-Hankins	\$203,261
	Pembina Municipal - Thomas Nord Field	\$1,943,878
	Rolla Municipal	\$404,465
	Rugby Municipal	\$461,607
	Stanley Municipal	\$1,080,600
	Tioga Municipal	\$2,033,820
	Valley City - Barnes County Municipal	\$196,511
	Wahpeton - Harry Stern	\$1,921,626
	Walhalla Municipal	\$288,251
	Washburn Municipal	\$10,096
	Watford City Municipal	\$1,517,867
	Five-Year General Aviation NPIAS Funding Total	\$61,362,205

CLASSIFICATION	AIRPORT NAME	5-YEAR TOTAL FUNDING NEEDS
General Aviation (Non-NPIAS)	Ashley Municipal	\$2,403,220
	Beulah Municipal	\$297,012
	Drayton Municipal	\$459,907
	Enderlin - Sky Haven	\$379,776
	Killdeer - Dunn County*	\$35
	Larimore Municipal	\$594,863
	Leeds Municipal	\$1,872,596
	Maddock Municipal*	\$0
	Mayville Municipal	\$574,093
	Minto Municipal	\$327,389
	Napoleon Municipal	\$231,099
	New Rockford - Tomlinson Field	\$1,685,344
	New Town Municipal*	\$0
	Page Regional	\$1,097,942
	Rolette	\$412,820
	St. Thomas Municipal	\$862,280
	West Fargo Municipal	\$725,030
	Westhope Municipal	\$77,601
	Wishek Municipal	\$2,534,289
	Five-Year General Aviation Non-NPIAS Funding Total	\$14,535,296
Five-Year Statewide Funding Total	\$181,024,237	

* No or minimal five-year funding needed because airport was recently constructed or reconstructed.

Summary



This report summarizes the results of the pavement evaluation conducted in North Dakota as part of the state APMS database update for airports. This includes **7* NPIAS commercial service airports, 45 NPIAS general aviation airports** and **19 non-NPIAS general aviation airports.** The system currently has 55.3 million square feet of pavement – 31.3 million square feet at commercial service airports and 24 million square feet at general aviation airports. In 2012, the PCI value for the state was 77. During a visual inspection of the pavements in 2015, it was found that the current weighted PCI of the pavement network is 75. If no funding is provided, this PCI value will steadily fall to 67 by the end of 2020. If the state budget anticipated funding is provided, the 2020 overall PCI value of the system is anticipated to be 72. If all work identified were to be completed, the 2020 overall PCI of the system is anticipated to increase to a value of 87.

Approximately \$181 million in funding would be needed over the next five years to complete all work that has been identified in the unlimited budget scenario. This includes approximately \$105.1 million for commercial service airports and \$75.9 million for general aviation airports. **Additional information can be found by visiting the NDAC website, www.aero.nd.gov.**

** Williston was not inspected as part of the 2015 study. The 2012 Williston pavement inventory data used as part of the analysis includes area, age and condition but does not include the cost.*



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NORTH DAKOTA _____
AERONAUTICS COMMISSION
A STATEWIDE VOICE FOR AVIATION

SB 2006/2066
1-13-17
#7



STATEWIDE ECONOMIC IMPACT OF AVIATION IN NORTH DAKOTA



2015
Executive Summary

INTRODUCTION

North Dakota's economy has recently undergone significant growth, driven primarily by energy exploration, production, and transportation. Airports in North Dakota are essential to supporting the state's economy. The state's economic growth has resulted in increased activity at many North Dakota airports. This increased activity has resulted in the growth of economic benefits that airports provide to the communities they serve.

North Dakota airports have responded to increased aviation activity generated by recent economic growth. More visitors flying for business are using commercial airports and are flying to the state on general aviation planes. Visitors to North Dakota are staying longer and spending more. Flights by larger and more demanding general aviation business jets have increased at many airports. General aviation planes connect North Dakota to business centers throughout the country.

Since statewide economic impacts were last measured in 2010:

- Annual economic benefits from public-use airports in North Dakota and the activities they support have increased 47%.
- Jobs supported by North Dakota airports have grown from 8,872 to 12,217, an increase of 3,345 jobs.
- Annual state and local sales tax revenues for airports and airport supported activities have increased from \$31.1 million to over \$60 million.
- Visitors coming to North Dakota each year on general aviation aircraft or commercial airline flights have grown from 545,300 to 915,290.



Airports Have Expanded Existing Facilities

Minot International is constructing a new passenger terminal. Passenger boardings have increased from 90,820 (2010) to 222,144 (2014), a 145% increase.

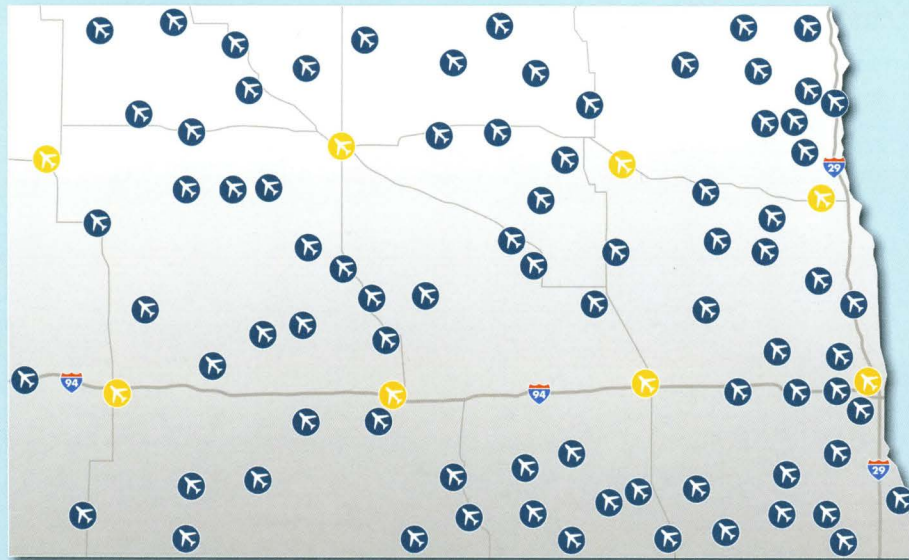
Airports Have Built New Facilities

Bowman recently constructed a new airport with a runway of 5,700 feet. This length enables larger business jets to reach the community.

Additional Aviation Businesses Have Been Attracted

Increased activity at the Tiago Municipal Airport attracted Tiago Aero Center in 2014. This aircraft service provider offers fuel, storage, maintenance, and ground transportation.

North Dakota Public-Use Airports

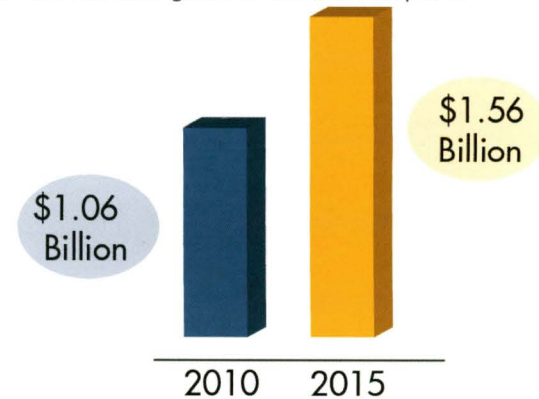


81 General Aviation Airports 8 Commercial Service Airports

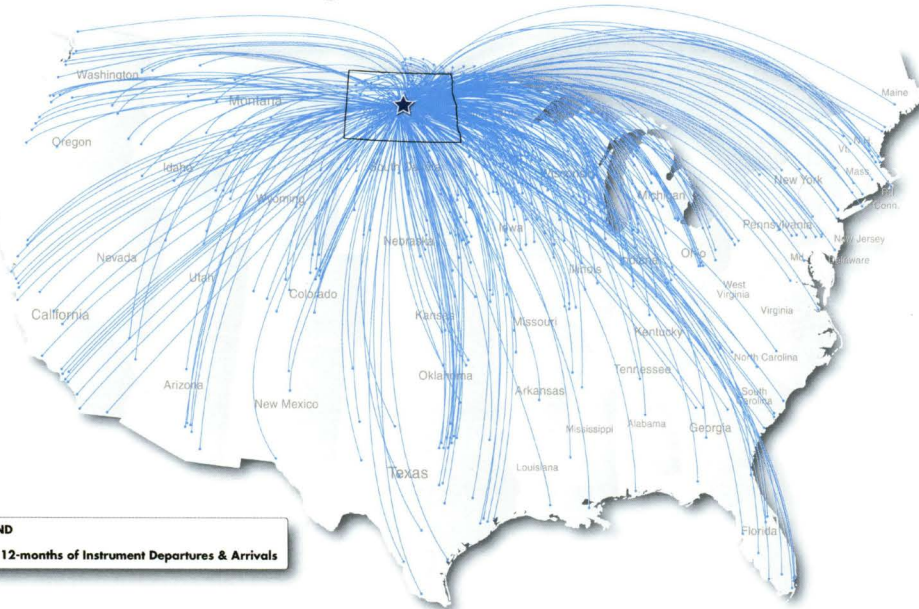
This report, authorized by the North Dakota Aeronautics Commission (NDAC), summarizes how growth at North Dakota's eight commercial service and 81 general aviation airports translates into higher annual economic impacts for the communities these airports serve and for the state. More detailed information on the study is available from the NDAC.

Change in Annual Airport Related Economic Impacts

When the economic impact of North Dakota's airport system was last measured in a study released in 2010, the total annual economic impact of commercial and general aviation airports was measured at \$1.06 billion. Just five years later, the total annual economic impact for the commercial and general aviation airports has increased to \$1.56 billion—a **47% increase.**



Business Connections Direct Flights To and From North Dakota

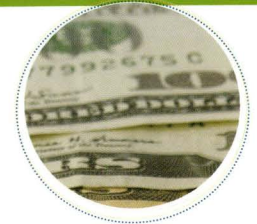


LEGEND
 12-months of Instrument Departures & Arrivals

North Dakota airports connect the state to business centers throughout the U.S. This map shows recorded instrument flight rule (IFR) arrivals and departures to the state over the last 12 months—most of these flights were on general aviation aircraft. According to FAA data, non-stop flights represent only 3% of all aircraft arrivals and departures to North Dakota airports over the past 12 months. This map clearly shows the important role that airports play in providing the transportation infrastructure that has supported the state's recent economic growth.

SOURCES OF AIRPORT ECONOMIC IMPACTS

For NDAC's statewide study for commercial service and general aviation airports, annual economic impacts were measured for **five** economic activity centers.



Economic Activity Centers

Airport Management	Activities undertaken by airport employees to operate the airport on a daily basis.
Airport Tenants	Aviation-related businesses that provide airport, aircraft, or customer services.
Capital Improvement Spending	Average annual investment made to maintain, improve, or expand an airport.
Commercial Visitor Spending	Spending by visitors to North Dakota who arrive by air that supports hotels, restaurants, and other visitor-related activities.
General Aviation Visitor Spending	Spending by visitors to North Dakota who arrive by air that supports hotels, restaurants, and other visitor-related activities.

5 Sources of Economic Impacts

On-Airport

- 1 Airport Management
- 2 Aviation-Related Tenants / Businesses
- 3 Investment for Capital Improvements

Off-Airport

- 4 Visitors Arriving on Commercial Airlines
- 5 Visitors Arriving on General Aviation Aircraft



Measurements of Economic Impacts



For each of these five categories, annual economic impacts were measured for jobs, payroll, and output. While employment and payroll measures are easy to understand, output is more complex. Output for airport management and airport tenants is generally equal to the purchase of goods and services needed by these two groups to support their operations or to run their businesses.

Output for capital improvement investment is equal to the average annual amount actually spent by federal, state, local, and private contributors to maintain and improve the airports. The annual spending of visitors in North Dakota is equal to direct output in the visitor category.

2015 TOTAL STATEWIDE ECONOMIC IMPACTS

NDAC's statewide economic impact study estimated annual economic impacts for each of the five activity centers. It is important to understand that impacts shown in this report represent a "snapshot in time," reflecting conditions at North Dakota airports when the study was prepared in the 2014/2015 time frame. While economic impacts from airport management, airport tenants, and visitor spending can change year-to-year, economic impacts from capital investment have a higher propensity to change between reporting periods.

Remaining portions of the summary provide more detail on economic impacts for each category and a general overview of the methodology used to complete the economic impact analysis. Other economic benefits associated with aviation and aerospace in North Dakota are also presented.

	TOTAL EMPLOYMENT	TOTAL PAYROLL	TOTAL OUTPUT
Total Airport Management	232	\$13.4 million	\$85.5 million
Total Airport Tenants	4,207	\$223.9 million	\$626.7 million
Total Capital Investments	1,156	\$63.5 million	\$173.0 million
Total General Aviation Visitors	854	\$26.9 million	\$101.1 million
Total Commercial Visitors	5,768	\$177.6 million	\$578.1 million
Total Statewide Annual Impacts	12,217	\$505.2 million	\$1.56 billion

Estimates Include Total Statewide Direct and Indirect Impacts

Total Annual Statewide Economic Impacts



Employment

Jobs related to airport management, airport tenants, capital investment at airports, and visitor spending

12,217 jobs



Payroll

Annual payroll associated with these jobs

\$505.2 million



Output

Annual economic output for five activity centers

\$1.56 billion



ECONOMIC IMPACT METHODOLOGY

Airport-related economic impacts measured in this study came from five sources: airport management, airport tenants, capital improvement spending, spending from visitors arriving on commercial airlines, and spending from visitors arriving on general aviation aircraft. For each of these five categories, economic impacts are estimated for jobs, annual payroll, and annual output.

For each impact category and each measurement, the process to estimate total economic impacts starts with estimating “direct” impacts. Once direct impacts for jobs, payroll, or output enter the North Dakota economy, other successive waves of economic impact occur. These additional impacts are “indirect impacts” but are sometimes more commonly referred to as “multiplier” impacts. Together, direct and indirect impacts equal total annual economic impact for individual airports and the state. The following pages discuss economic impacts for the five activity centers.



Indirect Impact Example

Sam is employed by the airport. This week when Sam receives his pay from the airport, he takes his “direct” salary and pays a baby sitter, takes the family dog to the vet and pays for their services, and pays a teacher for his daughter’s piano lesson. Direct payroll that started at the airport has now entered the economy of the community where Sam lives. As this example shows, Sam’s “direct” airport job and pay help to support other “indirect” jobs, payroll, and output for the babysitter, the vet, and the piano teacher. In this study, the IMPLAN model*, with data sets specific to North Dakota, was used to estimate all indirect economic impacts in the employment, payroll, and output categories.

* Information on the IMPLAN model is available in the study’s technical report

Impact Measures

For this report, economic impacts are expressed in terms of jobs, payroll, and total annual economic output. Each of these measures include the direct, indirect, and total impacts.

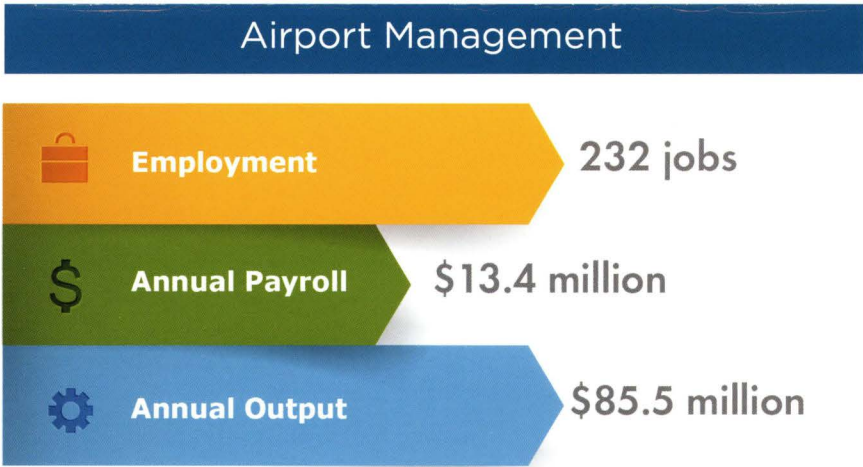


ANNUAL ECONOMIC IMPACTS FROM AIRPORT MANAGEMENT

Throughout North Dakota people are employed to manage, operate, and maintain the eight large commercial service airports and the 81 general aviation airports. These employees can be full-time, part-time, or seasonal. Interviews conducted for this study show that most often employees in the airport management function are located at the airport, but sometimes the airport management employees work in off-airport locations.

To translate part-time and seasonal jobs into full-time positions, each airport furnished information on the number of hours part-time employees work specifically to support the airport. This information provides a more accurate means to estimate how the part-time and seasonal workforce contributes to the full-time employment at each airport.

As part of this study, extensive outreach with airport managers throughout North Dakota was completed to gather information on direct employment, payroll, and annual purchases for goods and services (output) needed to run each airport. Many times, airport managers were interviewed in person, especially at the commercial service airports and larger general aviation airports. Airport managers also played an important role in this study, verifying direct economic impacts for their airport for all five impact categories. Airport Management statewide annual economic impacts, which include the direct and indirect impacts for all study airports, are shown in the accompanying table.



Total Annual Statewide Economic Impact Airport Management

EMPLOYMENT

• Direct	154
• Indirect	78
• Total	232

PAYROLL

• Direct	\$9.6 million
• Indirect	\$3.8 million
• Total	\$13.4 million

OUTPUT

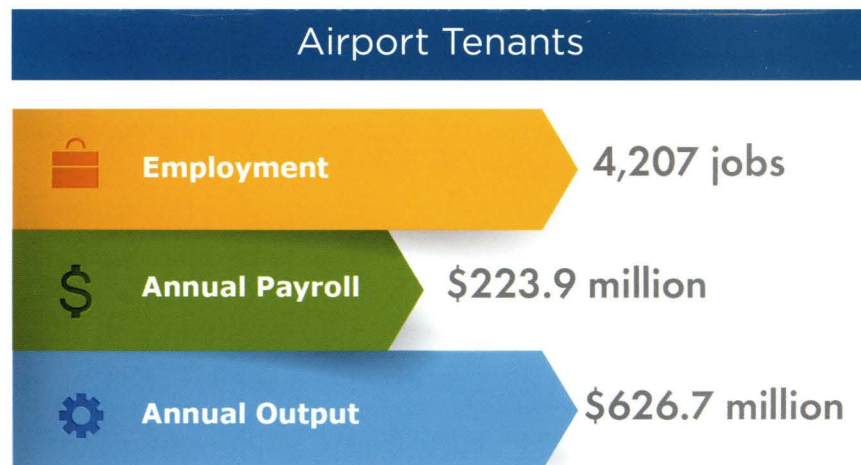
• Direct	\$56.2 million
• Indirect	\$29.3 million
• Total	\$85.5 million

Source: North Dakota Airport Managers

ANNUAL ECONOMIC IMPACTS FROM AIRPORT TENANTS

There are many types of aviation-related businesses that operate at study airports. These businesses provide various types of aviation-related services to support aircraft and airport customers. Examples of airport tenants include, but are not limited to: Fixed Based Operators (FBOs); aircraft maintenance providers; aircraft charter, rental, and sales companies; air ambulance operators; aerial applicators; military units located at civilian airports; air cargo companies; ground transportation providers; flight schools; airlines; and corporate flight departments. Airport tenants who are not aviation-related are not included in this analysis.

For this study, all airport managers provided contact information for their aviation-related tenants. All tenants were contacted directly to obtain information on their full-time, part-time, and seasonal employment; annual payroll; and annual operating expenses (output). Tenants at North Dakota's airports were the primary source of direct impacts reported in this category. Indirect impacts (multiplier) for all airport tenant employment, payroll, and output were estimated using the IMPLAN model. Total statewide annual economic impacts for airport tenants are shown below.



Total Annual Statewide Economic Impact Airport Tenants

EMPLOYMENT

• Direct	2,738
• Indirect	1,469
• Total	4,207

PAYROLL

• Direct	\$150.5 million
• Indirect	\$73.4 million
• Total	\$223.9 million

OUTPUT

• Direct	\$408.3 million
• Indirect	\$218.4 million
• Total	\$626.7 million

Source: North Dakota Airport Tenants



ANNUAL ECONOMIC IMPACTS FROM CAPITAL INVESTMENT

Each year, federal, state, local, and private funds are invested to maintain, improve, and expand public-use airports in North Dakota. For each of the last three years, this combined investment has reach almost \$100 million per year. Recently, the North Dakota Legislature, FAA, and some local communities responded to growing airport infrastructure needs by allocating additional funds to help North Dakota’s airports keep pace with the state’s surging economy. Direct output in the capital investment category supports additional jobs and the payroll associated with those jobs, which were estimated with IMPLAN.

Economic impacts related to capital investment only exist when actual spending is taking place. Once a project is finished, employment, payroll, and output impacts in this category cease. When capital investment at an airport changes significantly, economic impacts stemming from this activity center also change.

To estimate economic impacts related to capital investment, a three-year average for annual capital investment at each study airport was developed. Information for airport-specific capital investment was provided by NDAC, FAA, study airports, and tenants at various airports. For this economic activity center, annual capital investment for each study airport is equal to its direct annual output. Based on estimated average annual investment, IMPLAN provides ratios which are used to estimate “direct” jobs and payroll supported by direct output, in this case average annual capital investment. IMPLAN also estimates “indirect” impacts associated with each capital investment impact measure: employment, payroll, and output provided by NDAC, FAA, airports, and tenants.

Average Annual Capital Investment



Employment

1,156 jobs



Annual Payroll

\$63.5 million



Annual Output

\$173.0 million



Total Annual Statewide Economic Impact Capital Investments

EMPLOYMENT

- Direct 534
- Indirect 622
- Total 1,156

PAYROLL

- Direct \$39.8 million
- Indirect \$23.7 million
- Total \$63.5 million

OUTPUT

- Direct \$99.4 million
- Indirect \$73.6 million
- Total \$173.0 million

Source: Airport Managers, Tenants, NDAC, FAA, IMPLAN

ANNUAL ECONOMIC IMPACTS FROM COMMERCIAL AND GENERAL AVIATION VISITOR SPENDING

North Dakota’s economic growth has resulted in more visitors, particularly business-related visitors, arriving to the state by air. These visitors are staying longer and spending more. Estimates of visitors arriving in North Dakota on a commercial airline were developed using each airport’s annual enplaned passengers and information from USDOT on the portion of these enplanements that are residents versus visitors.

The process to develop estimates of visitors arriving on general aviation aircraft was much more complex and involved several rounds of input from study airports and NDAC staff. Estimates developed in this study of visitors arriving on general aviation aircraft were individualized for each commercial and general aviation airport.

According to airport and USDOT information, an estimated 533,112 visitors arrive annually in North Dakota on commercial airline flights, and 382,177 visitors arrive on general aviation aircraft. Once in North Dakota, visitors have expenditures for items such as lodging, food, entertainment, retail, and ground transportation services. To capture specific visitor spending patterns on a per trip basis, visitors completed more than 4,000 surveys. These surveys were completed with assistance from airports throughout North Dakota. Using survey information, airport-specific estimates for spending per visitor trip were developed. It is important to note that a high percentage of visitors who come to North Dakota on general aviation aircraft do not spend the night. Some business visitors specifically use general aviation aircraft for travel so that they can shorten the length of their trip.

Similar to capital investment, annual “direct output” for the visitor category is equal to annual visitor spending. Once direct visitor spending was estimated, IMPLAN was used to estimate the number of direct jobs and payroll that direct visitor spending supports. The following table shows estimated annual economic impacts for the general aviation visitor category. It is important to note that visitors traveling to North Dakota on general aviation aircraft arrive at both commercial and general aviation airports.

General Aviation Visitor Spending					
EMPLOYMENT		PAYROLL		OUTPUT	
• Direct	619	• Direct	\$16.3 million	• Direct	\$64.0 million
• Indirect	235	• Indirect	\$10.5 million	• Indirect	\$37.1 million
• Total	854	• Total	\$26.9 million	• Total	\$101.1 million

Source: Airport Managers, Surveys, and IMPLAN



General Aviation Visitor Spending

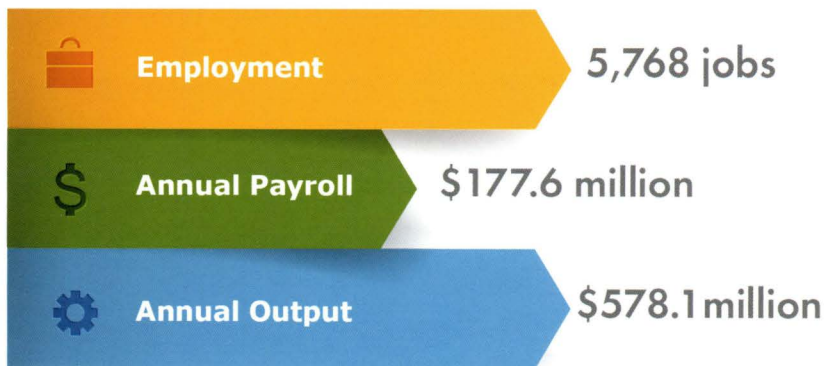


North Dakota's economic growth has attracted a growing number of visitors. These visitors arrive on commercial airline flights and on general aviation aircraft.

Not only are more visitors coming to North Dakota—these visitors are staying longer and spending more. The Annual and Average Spending Per Trip graphic shows, on a per trip basis, the average spending of visitors arriving on general aviation aircraft and on commercial airlines. It also shows how spending on a per trip basis for both types of visitors has increased since 2010.



Commercial Visitor Spending



Commercial Visitor Spending

EMPLOYMENT		PAYROLL		OUTPUT	
• Direct	4,151	• Direct	\$105.4 million	• Direct	\$360.9 million
• Indirect	1,617	• Indirect	\$72.2 million	• Indirect	\$217.2 million
• Total	5,768	• Total	\$177.6 million	• Total	\$578.1 million

Source: Surveys and IMPLAN

Spending per Commercial Visitor Trip

	ANNUAL COMMERCIAL VISITORS	TOTAL VISITOR SPENDING	SPENDING PER TRIP
Bismarck	110,342	\$68.8 million	\$624
Devils Lake	1,890	\$0.70 million	\$374
Dickinson	25,891	\$15.80 million	\$612
Fargo	179,539	\$96.10 million	\$535
Grand Forks	62,824	\$35.10 million	\$558
Jamestown	3,542	\$1.40 million	\$400
Minot	95,669	\$80.90 million	\$846
Williston	53,415	\$61.90 million	\$1,160

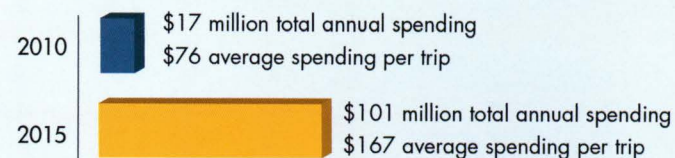
Residents and visitors comprise the annual passenger boardings; this table shows only visitor related boardings for each commercial airport.

Increase in North Dakota Air Visitors

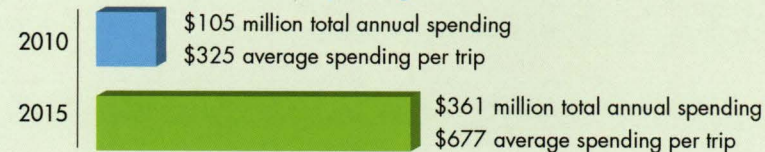
	2010	2015	Increase
General Aviation Visitors	222,318	382,177	72%
Commercial Visitors	322,983	533,112	65%

Annual and Average Spending Per Trip

General Aviation Visitors Spending



Commercial Aviation Visitors Spending



INDIVIDUAL AIRPORT ECONOMIC IMPACTS

This table presents current total annual economic impacts for each study airport. These estimates reflect total impacts, both direct and indirect, for airport management, airport tenants, capital investment, and all visitor-related spending. More information on impacts for individual airports is available in the study's technical report.

For the employment category, the table also shows how direct and indirect jobs contribute to total employment for each airport. **It is important to remember that direct jobs presented here come from as many as five activity centers. Indirect employment shown for each airport was estimated using the IMPLAN model.** Together, direct and indirect impacts represent the total employment impacts reported for each airport.

CITY	AIRPORT NAME	EMPLOYMENT			TOTAL PAYROLL	TOTAL OUTPUT
		Direct	Indirect	Total		
Bismarck	Bismarck Municipal	1,301	825	2,126	\$86,510,312	\$279,744,887
Devils Lake	Devils Lake Regional	59	30	89	\$4,013,851	\$11,811,488
Dickinson	Dickinson-Theodore Roosevelt Regional	314	161	475	\$20,322,935	\$76,618,095
Fargo	Hector International	2,391	962	3,353	\$142,166,337	\$387,465,584
Grand Forks	Grand Forks International	1,147	522	1,669	\$73,622,396	\$199,368,171
Jamestown	Jamestown Regional	65	55	120	\$4,797,458	\$24,425,703
Minot	Minot International	1,357	628	1,985	\$74,678,827	\$254,598,258
Williston	Sloulin Field International	1,004	470	1,474	\$57,256,315	\$209,047,988
Total Commercial Airports Impacts		7,638	3,653	11,291	\$463,368,431	\$1,443,080,174
Arthur	Arthur	0	0	0	\$0	\$23,250
Ashley	Ashley Municipal	13	4	17	\$806,986	\$2,382,031
Beach	Beach	6	7	13	\$283,851	\$656,324
Beulah	Beulah	10	3	13	\$625,781	\$1,708,123
Bottineau	Bottineau Municipal	7	3	10	\$522,677	\$1,546,789
Bowbells	Bowbells Municipal	0	0	0	\$0	\$8,200
Bowman	Bowman Regional	40	44	84	\$4,546,230	\$11,879,439
Cando	Cando Municipal	6	8	14	\$448,730	\$1,821,461
Carrington	Carrington Municipal	9	5	14	\$471,458	\$1,586,478
Casselton	Casselton Robert Miller Regional	32	23	55	\$2,192,020	\$5,610,341
Cavalier	Cavalier Municipal	10	4	14	\$573,265	\$1,933,077
Columbus	Columbus Municipal	0	0	0	\$0	\$3,000
Cooperstown	Cooperstown Municipal	2	1	3	\$129,618	\$431,535

CITY	AIRPORT NAME	EMPLOYMENT			TOTAL PAYROLL	TOTAL OUTPUT
		Direct	Indirect	Total		
Crosby	Crosby Municipal	6	7	13	\$452,141	\$1,473,286
Drayton	Drayton Municipal	1	0	1	\$64,809	\$185,378
Dunseith	International Peace Garden	<1	0	<1	\$0	\$69,753
Edgeley	Edgeley Municipal	5	4	9	\$408,353	\$1,261,884
Elgin	Elgin Municipal	0	0	0	\$0	\$3,625
Ellendale	Ellendale Municipal	4	5	9	\$246,800	\$1,031,194
Enderlin	Sky Haven	0	0	0	\$0	\$72,892
Fessenden	Fessenden-Streibel Municipal	5	2	7	\$336,038	\$874,424
Fort Yates	Standing Rock	<1	0	<1	\$0	\$7,133
Gackle	Gackle Municipal	<1	0	<1	\$0	\$7,686
Garrison	Garrison Municipal	4	2	6	\$302,006	\$819,976
Glen Ullin	Glen Ullin Regional	1	1	2	\$123,212	\$353,985
Grafton	Hutson Field	12	7	19	\$846,433	\$2,337,041
Gwinner	Gwinner-Roger Melroe Field	13	14	27	\$1,168,122	\$3,701,214
Harvey	Harvey Municipal	4	1	5	\$236,927	\$702,922
Hazleton	Hazleton Municipal	0	0	0	\$0	\$23,250
Hazen	Mercer County Regional	3	1	4	\$145,456	\$557,298
Hettinger	Hettinger Municipal	13	7	20	\$955,530	\$2,693,237
Hillsboro	Hillsboro Regional	18	6	24	\$887,146	\$2,922,895
Kenmare	Kenmare Municipal	17	9	26	\$1,301,723	\$3,034,219
Killdeer	Dunn County Airport - Weydahl Field	11	13	24	\$1,564,863	\$3,065,201
Kindred	Robert Odegaard Field	7	2	9	\$340,767	\$3,626,376
Kulm	Kulm Municipal	2	1	3	\$150,192	\$270,422

CITY	AIRPORT NAME	EMPLOYMENT			TOTAL PAYROLL	TOTAL OUTPUT
		Direct	Indirect	Total		
Lakota	Lakota Municipal	0	0	0	\$0	\$131,082
LaMoure	LaMoure Rott Municipal	2	1	3	\$129,618	\$361,906
Langdon	Robertson Field	5	4	9	\$289,506	\$1,053,010
Larimore	Larimore Municipal	9	3	12	\$507,389	\$1,886,989
Leeds	Leeds Municipal	1	1	2	\$70,700	\$225,343
Lidgerwood	Lidgerwood Municipal	0	0	0	\$0	\$9,443
Linton	Linton Municipal	9	3	12	\$508,504	\$1,589,613
Lisbon	Lisbon Municipal	3	2	5	\$311,872	\$699,239
Maddock	Maddock Municipal	7	5	12	\$1,230,638	\$2,012,105
Mandan	Mandan Municipal	38	29	67	\$3,149,158	\$8,950,629
Mayville	Mayville Municipal	11	9	20	\$778,094	\$2,436,563
McClusky	McClusky Municipal	<1	0	<1	\$0	\$7,117
McVille	McVille Municipal	0	0	0	\$0	\$23,450
Milnor	Milnor Municipal	0	0	0	\$0	\$38,448
Minto	Minto Municipal	5	1	6	\$301,736	\$806,069
Mohall	Mohall Municipal	12	7	19	\$631,793	\$2,180,976
Mott	Mott Municipal	3	1	4	\$195,633	\$493,806
Napoleon	Napoleon Municipal	2	1	3	\$129,618	\$372,540
New Rockford	Tomlinson Field	1	0	1	\$64,809	\$217,776
New Town	New Town Municipal	10	12	22	\$1,315,808	\$3,217,102
Northwood	Northwood Municipal-Vince Field	5	1	6	\$254,467	\$877,356
Oakes	Oakes Municipal	9	10	19	\$637,092	\$2,337,630
Page	Page Regional	9	4	13	\$498,619	\$2,085,675
Park River	Park River-WC Skjerven Field	6	2	8	\$388,854	\$1,108,549
Parshall	Parshall-Hankins	4	3	7	\$440,805	\$1,106,385
Pembina	Pembina Municipal	7	3	10	\$405,928	\$1,400,955
Plaza	Trulson Field	0	0	0	\$0	\$3,000
Richardton	Richardton	0	0	0	\$0	\$6,033
Riverdale	Garrison Dam Recreational	<1	0	<1	\$1,800	\$17,369
Rolette	Rolette	2	3	5	\$213,471	\$649,140

CITY	AIRPORT NAME	EMPLOYMENT			TOTAL PAYROLL	TOTAL OUTPUT
		Direct	Indirect	Total		
Rolla	Rolla Municipal	12	9	21	\$866,159	\$2,680,203
Rugby	Rugby Municipal	5	4	9	\$380,677	\$1,040,119
St. Thomas	St. Thomas Municipal	2	1	3	\$129,618	\$357,925
Stanley	Stanley Municipal	11	9	20	\$928,496	\$2,442,100
Tioga	Tioga Municipal	23	11	34	\$1,492,413	\$3,878,182
Towner	Towner Municipal	0	0	0	\$0	\$24,050
Turtle Lake	Turtle Lake Municipal	0	0	0	\$0	\$51,241
Valley City	Barnes County Municipal	14	8	22	\$901,786	\$2,803,132
Wahpeton	Harry Stern	25	11	36	\$1,446,088	\$4,397,025
Walhalla	Walhalla Municipal	7	5	12	\$580,058	\$1,559,947
Washburn	Washburn Municipal	0	0	0	\$0	\$138,429
Watford City	Watford City Municipal	28	16	44	\$2,063,056	\$5,205,805
West Fargo	West Fargo Municipal	8	4	12	\$374,063	\$1,262,928
Westhope	Westhope Municipal	2	1	3	\$129,618	\$355,215
Wishek	Wishek Municipal	0	0	0	\$0	\$85,259
Total General Aviation Airports Impacts		558	368	926	\$41,879,078	\$121,272,197
Total All Airports Impacts		8,196	4,021	12,217	\$505,247,509	\$1,564,352,371

Source: Airport Managers, Tenants, Surveys, NDAC, USDOT, IMPLAN, Dun & Bradstreet, and Manta



OTHER AVIATION / AEROSPACE ECONOMIC AND BENEFITS OF NORTH DAKOTA AIRPORTS

Aside from the 12,217 jobs, the \$505.2 million in annual payroll, and the \$1.56 billion in annual output, there are many, yet sometimes less visible activities that airports in North Dakota support. These activities include healthcare, emergency services, energy inspections, environmental patrols, research, and other vital services that help to improve the health, welfare, and safety of residents and business throughout the state. Having a general understanding of these additional benefits helps provide a better understanding of all of the different ways North Dakota airports support the communities they serve.



- Healthcare** - This study identified approximately 40 clinics and/or hospitals in North Dakota that rely on public-use airports. Several have doctors using general aviation aircraft to reach patients in small communities throughout the state. Small hospitals and clinics do not have a local patient base sufficient to support specialty doctors—flying doctors in North Dakota fill this void. Airports in North Dakota play an important role in providing both routine and advanced healthcare services.
- Emergency Services** - Fixed-wing aircraft and helicopters use North Dakota airports to transport North Dakota residents requiring time-sensitive care to larger medical facilities, both within and beyond the state. These lifesaving services cannot be assigned a dollar value, and essentially any airport in the state is a candidate for supporting emergency medical services.
- Education** - The University of North Dakota (UND) is home to one of the nation's leading aviation and aerospace programs, the John D. Odegard School of Aerospace Sciences. UND is educating tomorrow's airport managers, pilots, and air traffic controllers. Other colleges and universities in North Dakota also report that airports are essential to their ability to expand their market areas for attracting students, both domestic and international. Air access is important to helping North Dakota's centers of higher learning attract and retain the most qualified teaching and research staff.
- Research** - North Dakota was successful in being one of six states selected by the FAA as a test site for Unmanned Aerial Systems (UAS) research. There are many potential practical private and public applications for UAS technology. Grand Sky, located in Grand Forks, is a multi-faceted center for advancing UAS applications and technology. Companies in North Dakota are leading the way in exploring uses for this emerging technology. Some estimates indicate that as many as 3,000 new jobs could be supported by UAS in North Dakota by 2025.
- Taxes** - Activities at airports and activities supported by airports make significant contributions to state and local tax revenues. A significant portion of these tax revenues are collected as a result of spending by visitors who come to North Dakota on general aviation aircraft and scheduled commercial aircraft. The NDAC study estimates that, on an annual basis, approximately \$64 million in local and state tax revenues are generated by the 89 study airports and the activities they support.

There are other non-airport-specific aviation and aerospace activities in North Dakota that make direct contributions to the state's economy. A listing of these additional activities is provided below, and more information on each these additional economic contributors is provided in the study's technical report:

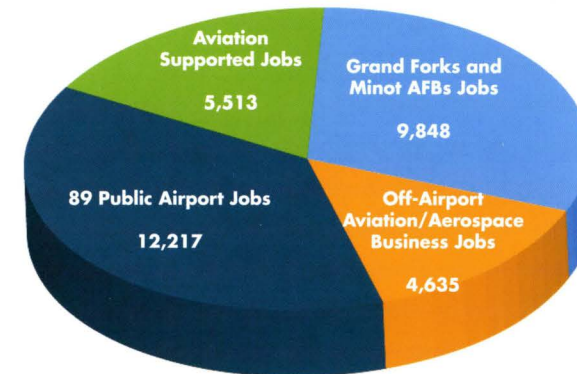
- Activities associated with the mission of the 319th Air Wing Base in Grand Forks.
- Jobs, payroll, and output associated with the operation and mission of Minot Air Force Base.
- Aviation and aerospace companies, including aerial applicators, doing business in North Dakota, but not located at a study airport.
- North Dakota companies with employees whose jobs have improved efficiency from using commercial and general aviation and air cargo services.

The statewide total annual economic impacts of these activities, as identified or estimated in this NDAC study, are shown in the table below. It is important to re-state that these benefits are in addition to those estimated for the 89 study airports.

Economic Impacts from Airports, Aviation, and Aerospace in North Dakota

	TOTAL EMPLOYMENT	TOTAL PAYROLL	TOTAL OUTPUT
Grand Forks AFB	2,565	\$105.2 million	\$203.7 million
Minot AFB	7,283	\$321 million	\$513.5 million
Off-Airport Aviation / Aerospace Businesses	4,635	\$232.7 million	\$512.6 million
Aviation Supported Jobs	5,513	\$271.8 million	\$882.7 million
Sub-Total	19,996	\$930.7 million	\$2.1 billion
Total for 89 Study Airports	12,217	\$505.2 million	\$1.56 billion
Total for All Airport / Aviation / Aerospace Impacts	32,213	\$1.44 billion	\$3.66 billion

North Dakota Jobs Supported by or Benefiting from Aviation, Airports, or Aerospace



Aviation-Related Jobs in North Dakota: 32,213

The statewide economic impact study estimated economic impacts for 89 public airports, Grand Forks and Minot AFBs, off-airport aviation/aerospace businesses in the state, and other businesses in the state with employees who gain efficiency by using aviation. **When combined, all sources support approximately 32,200 direct and indirect jobs in North Dakota.** These jobs account for almost **8%** of North Dakota's total employment which was estimated at 413,000 in 2014.

As this report clearly shows, aviation, aerospace, and North Dakota's system of public-use airports are essential underpinnings to the present and future success of North Dakota's economy.

When combined, all aviation- and aerospace-related contributors discussed in this study (airports, the military, aviation/aerospace companies, and aviation-reliant businesses) provide annual economic benefits to North Dakota that approach **\$3.7 billion**. The 2014 Real Gross State Product of North Dakota is estimated at \$48.2 billion. All airport, aviation, and aerospace activities in North Dakota account for **7.6%** of the state's total annual economic activity.



North Dakota Aeronautics Commission | 701.328.9650
 P.O. Box 5020 | <http://www.aero.nd.gov>
 Bismarck, ND 58502

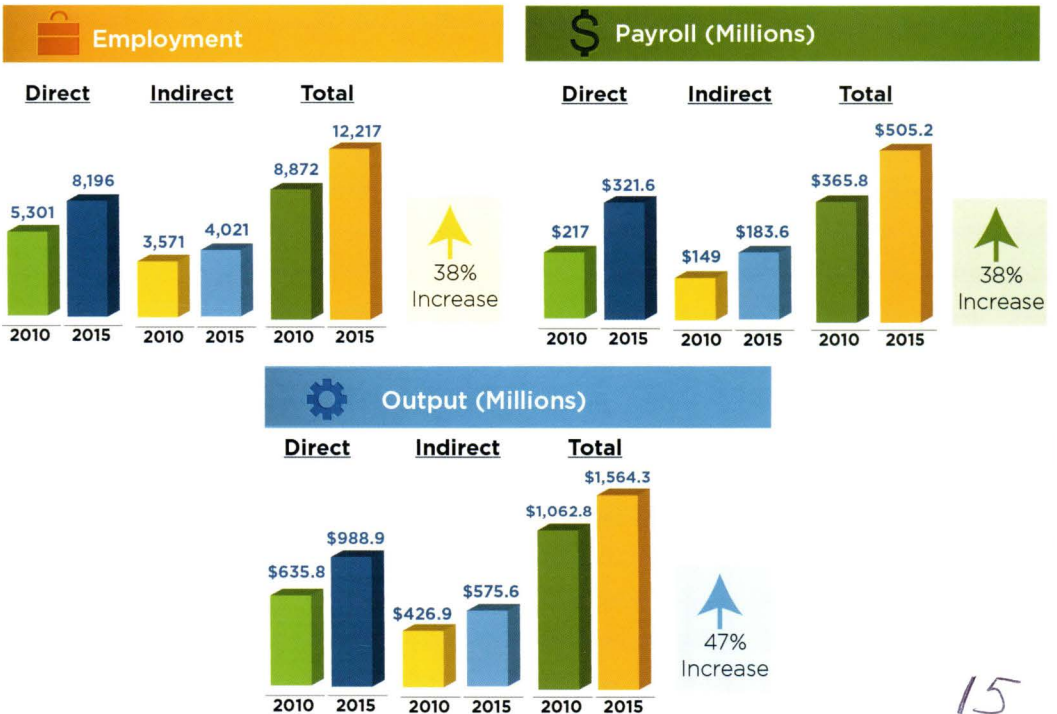
Input for this study was obtained from: airlines, passengers, North Dakota businesses, airport representatives, the North Dakota Aeronautics Commission (NDAC), the Federal Aviation Administration (FAA), and other private and government sources. Analysis completed in the study was based on data collected in 2014 and 2015, with the final report released November 2015. Preparation of this report was financed in part through a planning grant from the FAA as approved under the Airport and Airway Improvement Act of 1982. The contents of this report reflect the views of the Consultant, which is responsible for the facts and the accuracy of the data depicted herein, and do not necessarily reflect the official views or policy of the FAA. Acceptance of this report by the FAA does not in any way constitute a commitment on the part of the United States to participate in any development depicted therein, nor does it indicate that the proposed development is environmentally acceptable in accordance with applicable public laws.

AVIATION

Increasing Economic Impacts for North Dakota Airports

One objective the NDAC had for the 2015 update to their Statewide Aviation Economic Impact Study was to determine how economic contributions from the 89 public-use airports have changed since it was measured in 2010. The graphic below provides a comparison of findings from the 2010 and 2015 studies. The comparison shows direct, indirect, and total statewide economic impacts for employment, payroll, and output. The 2015 study took a conservative approach to estimate indirect impacts; as a result, 2015 indirect impacts represent a smaller percentage of total impacts than they did in the 2010 study.

As shown, direct statewide economic impacts for the 89 public-use airports increased between 2010 and 2015 for employment, payroll, and output. Increases in direct impacts contributed to the overall increase for total impacts for all three categories as shown here.





Airport Association of North Dakota

SB 2006/SB 2066

1-13-17

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Matthew Remyse - President Anthony Dudas - Vice President
Samuel Seefeldt - Sec. / Treasurer
PO Box 1560 Jamestown, North Dakota 58402-1560
(701) 355-1808

January 13, 2017

RE: Testimony to Senate Appropriations Committee on SB 2006 (Aeronautics Budget)

Chairman Holmberg and members of the committee,

I am Matthew Remyse, the President of the Airport Association of North Dakota (AAND). I want to thank you for the opportunity to speak here today and thank you for the past support of airports. I'm here today to speak in support of SB 2006 and would respectfully request the Committee consider an additional one-time appropriation of \$9 million in grants for the North Dakota Aeronautics Commission (NDAC). AAND is the professional organization for North Dakota Airports and it serves to promote airports, aviation, and safety across North Dakota. Among its members are all eight commercial service airports, 70 of 81 general aviation airports and aviation engineering and planning firms.

Airports are a valuable asset for North Dakota's economy. North Dakota's 89 airports generate an economic impact of \$1.56 billion annually. This is an impressive 47% increase from 2010 when airports generated \$1.06 billion annually. Airports play a vital role in the state and touch all major industries, including agriculture, manufacturing, healthcare, tourism, energy, and technology. A great example I like to share is that many rural communities receive the same type of healthcare that is in the major cities because doctors fly to the rural communities. Driving is not economically feasible for the doctors, but flying is because of the time savings. This eases the burden for rural North Dakota to get great health care in their communities, and it's because of aviation and airports.

North Dakota's airports grew at an unprecedented rate in the first part of this decade surpassing many of the forecasted estimates. Unfortunately, airports were affected by the economic downturn just as many North Dakota industries were, but I see this as a positive. Airports have leveled off to an extent, and are now growing at a rate more manageable than the rate seen during the boom years. Although airports are growing at a gentler rate, the needs are still there and higher than ever because the activity never returned to pre boom levels. Many of the western ND airports are still not built for the traffic that the boom brought, and that traffic continues. Regional jets at the Dickinson and Williston airports are a great example.

Currently the North Dakota Aeronautic Commission's ability to meet the needs of airports is underfunded. Without additional funding airport infrastructure projects will be delayed. Delaying vital projects will hinder a vital driver of the state's economic development, and quality of life. Additional funding is needed not only to support anticipated growth but also to repair facilities that deteriorated at a much faster rate than expected due to the economic surge.

The Aeronautics Commission works hand in hand with the Federal Aviation Administration (FAA), and airports regarding grant funding. Federal funding normally covers 90% of eligible projects, but with such a high demand of large projects in the state the FAA is not always able to fulfill those requirements. With the lack of both state and federal funding, airports are making the difficult decision of going into debt to complete their projects. Additional state funding for airport grants would assure that crucial projects are being completed on time and would reduce the amount of debt airports would have to take on. Also, when additional state funding is appropriated it typically generates more federal dollars.

In the upcoming biennium there are several airports with large projects that would benefit greatly if additional funding was approved. Bismarck Airport has a main runway reconstruction project that will total \$70 million when complete. The City of Bismarck is funding \$30 million of this project because of the lack of Federal funding. Williston's new airport broke ground last fall and is scheduled to be completed in 2018. Dickinson Airport is starting to develop their

runway project, as is the Grand Forks Airport. Several general aviation airports are preparing large projects too. Northwood, Ashely, Hillsboro, and Watford City will have major runway projects this biennium. In addition to these major projects, airports must maintain their capital investments, and there are several projects that are not included on the capital improvement plan because they are ineligible for grant funding and must be funded solely by the airport.

I want to point out that AAND and airports are also working to create other funding resources for airports this session to allow for more flexibility when developing budgets for capital projects. AAND is working with Legislators to insert new language into the Century Code that would allow the eight commercial service airports to utilize the Bank of North Dakota Infrastructure Loan Program. AAND is working with another Legislator to create language that would allow airports and airport authorities to be eligible to receive mills from a city or county's capital projects levy.

I have focused mainly on the NDAC's grant funding program and how that is vital to airports but I would also like to highlight the other services the NDAC provides to support airports and the aviation community. The NDAC has a fantastic education program that is drawing young adults into aviation. The NDAC helps general aviation airports with developing their capital improvement plans and conducting safety inspections. The studies that the NDAC completes are an extremely useful tools for airports. A Pavement Condition Index Study is a federal requirement for each airport to receive federal funding. The NDAC puts this study together for all airports. This a is large undertaking and Kyle and his staff do an amazing job managing that study and assuring that there is a useful end product for airports. Overall, the NDAC provide an enormous amount of support to airports and aviation and that should not be overlooked when considering their budget.

In, conclusion, AAND fully understands that the priority of the Legislature and Governor is to reduce spending and that there will be several industries vying for the funding available. I

ask that you please do not look at airport infrastructure as spending but rather a sound investment in a vital driver of the State's economy. As you work through the State's budget AAND would greatly appreciate your consideration for an additional one-time funding of \$9 million for airport grants. Thank you for allowing me the opportunity to testify on SB 2006 and want to thank you for your service to the State. I will take any questions at this time.

Respectfully,

Matthew Remyse
President, AAND

SB 2006/2066
1-13-17
9

Testimony of Gregory B. Haug
Airport Director, Bismarck Airport
Senate Bill 2006, Senate Appropriations Committee
65th North Dakota Legislative Assembly
January 13, 2017

Chairman Holmberg and Members of the committee,

My Name is Greg Haug and I am the director of the Bismarck Airport and I will be providing testimony regarding Senate Bill 2006 on behalf of the Bismarck Airport and the City of Bismarck.

First I would like to say a few words about the Bismarck Airport and provide the committee a brief update on some recent activities and milestones.

Bismarck works hard to make improvements to the air service offered and our newest and 5th airline to enter the market was American Airlines in October of 2014. American provides daily service to Dallas/Fort Worth and Chicago and has done well in their first two years of service. We have also been fortunate to retain Frontier Airlines and are

now the only location in ND that Frontier still provides their ultra-low cost service to. Bismarck Airports passenger traffic has set a new record every year for the last eight (8) years, including 2016. Yes, even with the downturn in the oil activity the Bismarck Airport is still booming with passenger traffic! No doubt the oil activity out west impacted the Bismarck Airport over the last several years but Bismarck's economy is continuing to do well which continues to add more passenger demand at the airport.

The Airport has had to make some incremental improvements over the last several years in order to accommodate the needs of our passengers and the increase in demand. A few of these improvements include parking lot expansions, an additional passenger boarding bridge, a car rental wash facility and expansion of the security checkpoint, not only once, but twice, and we now have three (3) x-ray lanes to speed up passenger throughput. These have all been good projects, they have helped us keep pace with the passenger demand and they have been financially doable. But now we have an 800 Lb. gorilla on our back, it's called **the runway 13/31 reconstruction project**. This is by far the most expensive and complex project I have been involved with in my 30 year career in airport management. When it's done we will get a nice smooth strip of concrete nearly two (2) miles long that people forget about. It's not as sexy as building a shiny new terminal that people can admire. It's just expected that every airport will have a safe runway for aircraft to use. In Bismarck's case, it just happens to be the primary runway, the longest, widest and strongest one and the most expensive one.

Here's a quick update on Bismarck's main runway reconstruction project:

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- Our runway pavement dates back to the 1950's, 60's, & 70's.
- The pavement is rapidly deteriorating according to the state sponsored pavement condition study.
- We have spent the last 3 years preparing for the start of this project.
- Our engineer's current estimated construction costs are 70 million dollars.
- Construction is planned over the next 3 years.
- We have awarded \$24 million dollars in bids for phase one.
- Construction starts in May 2017.

On the funding side FAA has the ability to fund up to 90% of the cost but has only committed 53% or 37 million. That leaves 33 million to the state and local levels. The NDAC generally funds up to 5% of regular airport projects so that would leave approximately 30 million to the City & Airport.

The airport plans to use all its cash reserves plus issue a 10 to 15-million-dollar bond and then lean on the City of Bismarck's cash reserves for the remainder.

We have no choice the work must be done!

On behalf of the City of Bismarck and the Bismarck Airport, we support Senate Bill 2006 and the Aeronautics Commission and all their programs.

On behalf of the City of Bismarck, the Bismarck Airport, and the hundreds of thousands of North Dakota Passengers, Business folks, & Visitors that use the Airport annually, we also request that this committee review the Aeronautics Commission's original Budget Request and reconsider the 9 million dollars of the one-time funding that was originally requested by the Aeronautics Commission. If allocated by the legislature, a portion of

those funds could be used by the Aeronautics Commission to help Bismarck fund this enormous and very important project at the capital city airport.

Thank you for allowing me to address the committee, I would be happy to answer any questions.

BISMARCK AIRPORT (BIS)

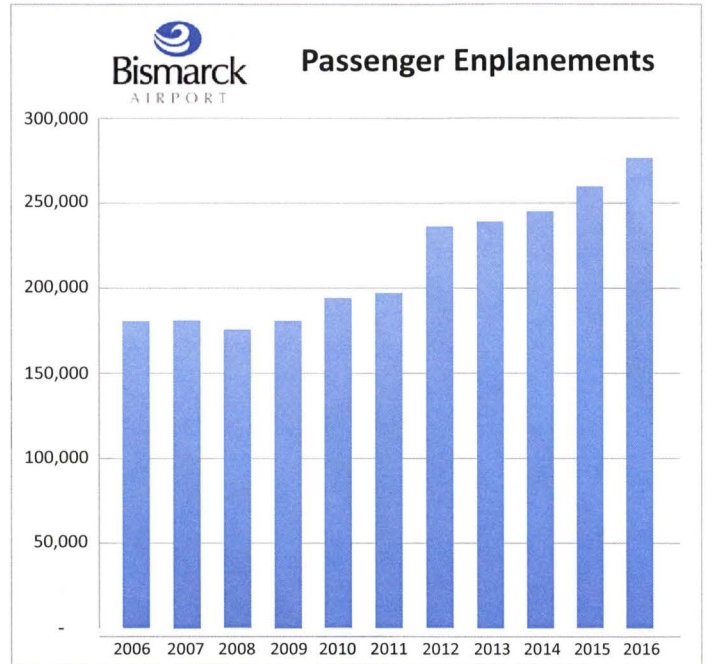
BISMARCK, ND



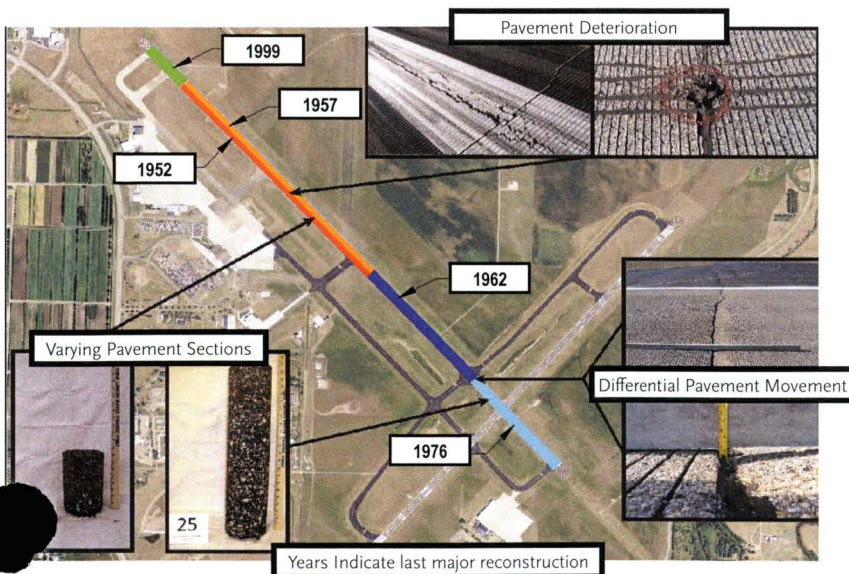
BISMARCK AIRPORT (BIS)

The Bismarck Airport plays a vital economic role for the City of Bismarck and the surrounding region. The 2015 Economic Impact Study for North Dakota Airports, conducted by the North Dakota Aeronautics Commission, indicates the Bismarck Airport brings 110,342 visitors to North Dakota annually, which contributes an estimated \$68,838,160 each year to the city of Bismarck and surrounding region on items such as food, local ground transportation, hotels, shopping and entertainment. In addition to contributing to local economy, the Bismarck Airport supports 2,216 jobs and contributes more than \$10 million in annual state and local tax revenues.

The economic impact of the Bismarck Airport continues to grow as existing airlines have expanded service and new airlines have been added in recent years. Expansions include new service from Frontier Airlines in May 2012 and Allegiant adding a new route to Orlando, FL in November 2013. American Airlines became the newest airline to serve the Bismarck area when they began offering service to Dallas/Fort Worth and Chicago in October 2014. The Bismarck Airport recorded a 4.4 percent increase in enplanements in 2016.



The Bismarck Airport has experienced steady growth in enplanements over the last 8 years. Despite oil market volatility, Bismarck Airport experienced 4.4 percent growth in enplanements in 2016.



AIRPORT NEEDS

Due to the age and increased utilization, primary Runway 13-31 pavement has been deteriorating at an increased rate over the past several years. Runway 13-31 pavement is showing significant distress and in many areas the pavement is popping out causing foreign object debris (FOD) and maintenance issues. Runway 13-31 does not meet current design standards and preliminary work shows the runway profile elevation needs to be raised by more than four feet in areas to meet Federal Aviation Administration (FAA) standards. The existing runway areas drain poorly and are highly susceptible to frost heaves. Airfield drainage improvements are necessary to improve both surface flow and eliminate subsurface moisture under the pavement. Bismarck Airport's primary runway was constructed and reconstructed over a number of years ranging from 1952 to 1999. Sections of the existing runway have been in existence for more than 64 years with the support of rehabilitation projects. The map to the left highlights key issues.

Key Issues:

- Portions of the runway are more than 60 years old
- Varying pavement sections
- Differential pavement movements
- Declining pavement condition index ratings (2016 NDAC PCI Study)

FUNDING NEEDS

To sustain air carrier operations, it is necessary to reconstruct Runway 13-31 at an estimated cost of \$70 million. Due to the significant cost to complete the project, financial assistance from the FAA and state of North Dakota is critical to complete improvements.

ANTICIPATED FUNDING NEEDS:

TOTAL PROJECT COST: \$70M

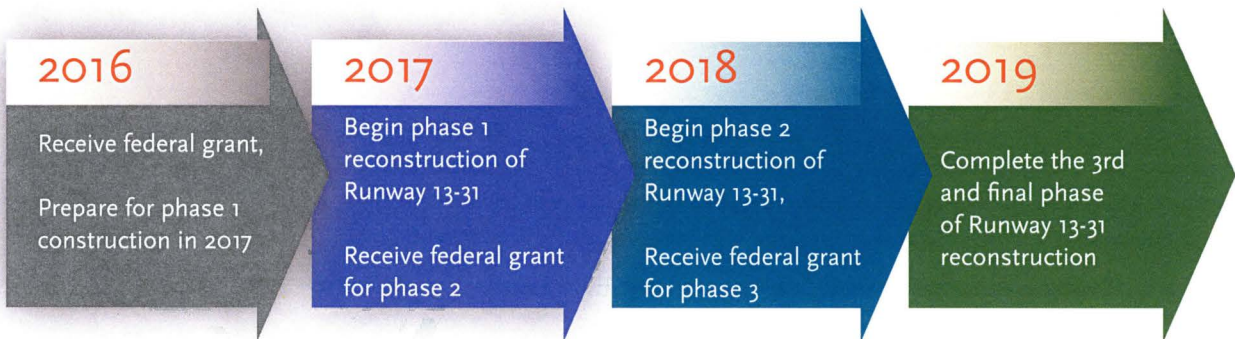
FEDERAL*
\$37M

STATE/LOCAL**
\$33M

* Estimated federal participation

** Local participation contingent on state participation

ESTIMATED RECONSTRUCTION PROJECT TIMELINE



FORTHCOMING AIRPORT NEEDS

In addition to reconstruction of the primary runway, the Bismarck Airport has two additional critical projects to complete immediately after the primary runway reconstruction project. The projects include rehabilitating Runway 3-21 and removing known wildlife attractants at the airport. Total costs are estimated to be in excess of \$41 million.

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SB 2006/2086
13 January 2017
#10

Subject: SB 2006

To: Appropriation Committee Members

From: Rodney Schaaf, Bowman Regional Airport Board Chairman

Subject: Proposed North Dakota Aeronautics Commission Budget

Representation: North Dakota General Aviation airports

You will hear a lot about the "Willistons, Bismarcks, Dickinsons, Minots" concerning their airport projects. Rightfully so, but I am here today to represent the small general aviation airports, (the little guys), and to show our support for the Aeronautics Commission's proposed budget.

1- Bowman Regional is 1 of 81 small airports in North Dakota. Our new airport opened in May, 2015. It was a 10 year project from scratch to dedication.

The last totally new constructed airport was in 1985 at West Fargo.

2- Primary services provided include MediVac ops, visiting Doctors to satellite clinics, Eye in the Sky for rural firefighter ops, Game and Fish Department aerial surveys, Weather Modification ops, oil and gas company ops, predator control, and weather radar ops. Similar services, as with other small airports, include fuel and maintenance, flight instruction, seasonal bird and big game hunting ops, crop spraying, corporate, transient and local flight operations.

3- In the "perfect world" of airport construction projects, upgrades, and funding resources, the FAA cost shares 90%- the State 5%- and local 5%.

4- The Bowman Regional Airport project costs= see attached Costs page

17.7 m total, FAA 68%- 12 m, State 18%- 3.1 m, Local 14%- 2.5m

5- In conclusion, our project, along with other small airports, could NOT be completed without the State Aeronautics Commissions assistance (above and beyond). We urge you to consider and support the Aeronautics Commission proposed budget and if additional funds may be available, please consider the aviation project needs for the 89 North Dakota airports

THANK YOU

Costs - New Airport 8-15-16

	<u>Total</u>	<u>Federal</u>	<u>State</u>	<u>Local</u>
2012/2013 Improvements (Grading & dirt work)	\$ 4,443,794.00	\$ 3,998,627.00	\$ 221,839.00	\$ 223,327.00
2013/2014 Improvements (Surfacing & Electrical)	\$ 8,904,289.00	\$ 5,749,226.00	\$ 2,589,523.00	\$ 565,540.00
2014/2015 Improvements (Terminal/SRE & Fencing)	\$ 2,777,036.00	\$ 2,294,368.00	\$ 124,709.00	\$ 357,959.00
2014/2015 Improvements (Fueling Facility)	\$ 425,144.00	\$ -	\$ 212,141.00	\$ 213,003.00
2014/2015 Improvements (T-Hangars)	\$ 755,033.00	\$ -	\$ -	\$ 755,033.00
2015 Improvements	\$ 437,299.00	\$ -	\$ -	\$ 437,299.00
Totals	\$17,742,595.00	\$12,042,221.00	\$3,148,212.00	\$2,552,161.00

$100\% = 68\% \quad 18\% \quad 14\%$

2

Aeronautics Commission - Budget No. 412
Senate Bill No. 2006
Base Level Funding Changes

SB 2006
 2-7-17
 #1

	Burgum Executive Budget Recommendation (Changes to Dalrymple Budget in Bold)				Senate Version				Senate Changes to Revised Executive Budget Increase (Decrease) - Executive Budget			
	FTE Position	General Fund	Other Funds	Total	FTE Position	General Fund	Other Funds	Total	FTE Positions	General Fund	Other Funds	Total
2017-19 Biennium Base Level	7.00	\$934,500	\$10,308,017	\$11,242,517	7.00	\$934,500	\$10,308,017	\$11,242,517	0.00	\$0	\$0	\$0
2017-19 Ongoing Funding Changes												
Base payroll changes			(\$34,998)	(\$34,998)				\$0			\$34,998	\$34,998
Salary increase				0				0				0
Health insurance increase			20,035	20,035			20,035	20,035				0
Employee portion of health insurance			(10,495)	(10,495)				0			10,495	10,495
Increases funding for operating expenses			143,810	143,810				0			(143,810)	(143,810)
Reduces airport grants - general fund		(34,500)		(34,500)				0		34,500		34,500
Reduces capital asset funding			(200,000)	(200,000)				0			200,000	200,000
Reduces education grants			(100,000)	(100,000)				0			100,000	100,000
Removes planning grants			(1,100,000)	(1,100,000)				0			1,100,000	1,100,000
Increases airport grants			800,000	800,000				0			(800,000)	(800,000)
Total ongoing funding changes	0.00	(\$34,500)	(\$481,648)	(\$516,148)	0.00	\$0	\$20,035	\$20,035	0.00	\$34,500	\$501,683	\$536,183
One-time funding items												
No one-time funding items				\$0				\$0				\$0
Total one-time funding changes	0.00	\$0	\$0	\$0	0.00	\$0	\$0	\$0	0.00	\$0	\$0	\$0
Total Changes to Base Level Funding	0.00	(\$34,500)	(\$481,648)	(\$516,148)	0.00	\$0	\$20,035	\$20,035	0.00	\$34,500	\$501,683	\$536,183
2017-19 Total Funding	7.00	\$900,000	\$9,826,369	\$10,726,369	7.00	\$934,500	\$10,328,052	\$11,262,552	0.00	\$34,500	\$501,683	\$536,183
										3.8%	5.1%	5.0%

Other Sections in Aeronautics Commission - Budget No. 412

**Burgum Executive Budget Recommendation
(Changes to Dalrymple Budget in Bold)**

No other sections included in the executive budget recommendation.

Senate Version

No other sections included in the Senate version.

SB 2006
 #1

PROPOSED AMENDMENTS TO SENATE BILL NO. 2006

Page 1, replace lines 12 through 19 with:

"Salaries and wages	\$1,447,637	(\$14,963)	\$1,432,674
Operating expenses	2,060,380	143,810	2,204,190
Capital assets	300,000	(200,000)	100,000
Grants	<u>7,434,500</u>	<u>(434,500)</u>	<u>7,000,000</u>
Total all funds	\$11,242,517	(\$505,653)	\$10,736,864
Less estimated income	<u>10,308,017</u>	<u>(471,153)</u>	<u>9,836,864</u>
Total general fund	\$934,500	(\$34,500)	\$900,000
Full-time equivalent positions	7.00	0.00	7.00"

Re-number accordingly

STATEMENT OF PURPOSE OF AMENDMENT:

Senate Bill No. 2006 - Aeronautics Commission - Senate Action

	Base Budget	Senate Changes	Senate Version
Salaries and wages	\$1,447,637	(\$14,963)	\$1,432,674
Operating expenses	2,060,380	143,810	2,204,190
Capital assets	300,000	(200,000)	100,000
Grants	<u>7,434,500</u>	<u>(434,500)</u>	<u>7,000,000</u>
Total all funds	\$11,242,517	(\$505,653)	\$10,736,864
Less estimated income	<u>10,308,017</u>	<u>(471,153)</u>	<u>9,836,864</u>
General fund	\$934,500	(\$34,500)	\$900,000
FTE	7.00	0.00	7.00

Department No. 412 - Aeronautics Commission - Detail of Senate Changes

	Adjusts Funding for Base Payroll Changes ¹	Adds Funding for Health Insurance Increase ²	Adjusts Base Level Funding ³	Total Senate Changes
Salaries and wages	(\$34,998)	\$20,035		(\$14,963)
Operating expenses			143,810	143,810
Capital assets			(200,000)	(200,000)
Grants			<u>(434,500)</u>	<u>(434,500)</u>
Total all funds	(\$34,998)	\$20,035	(\$490,690)	(\$505,653)
Less estimated income	<u>(34,998)</u>	<u>20,035</u>	<u>(456,190)</u>	<u>(471,153)</u>
General fund	\$0	\$0	(\$34,500)	(\$34,500)
FTE	0.00	0.00	0.00	0.00

¹ Funding is adjusted for cost-to-continue 2015-17 biennium salaries and benefit increases and for other base payroll changes.

² Funding is added for increases in health insurance premiums from \$1,130 to \$1,249 per month.

³ Base level funding is adjusted as follows:

	General Fund	Other Funds	Total
Adds funding for operating expenses		\$143,810	\$143,810
Adjusts funding for airport grants	(34,500)	800,000	765,500
Reduces capital asset funding		(200,000)	(200,000)
Reduces education grants		(100,000)	(100,000)
Removes planning grants		(1,100,000)	(1,100,000)
Total	(\$34,500)	(\$456,190)	(\$490,690)

Department 412 - Aeronautics Commission
Senate Bill No. 2006

Dalrymple Executive Budget Comparison to Prior Biennium Appropriations

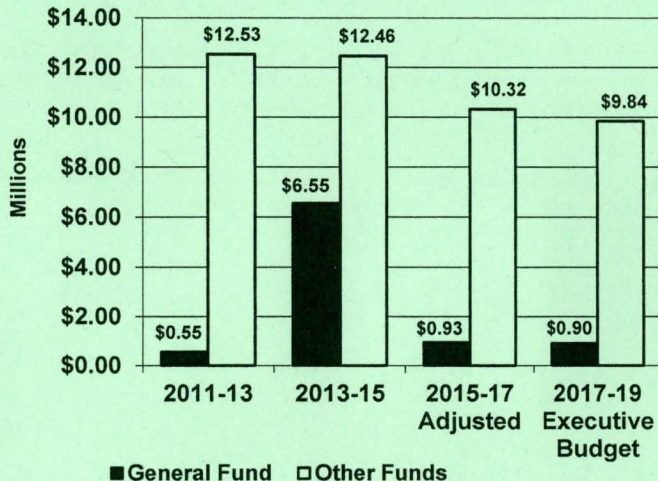
	FTE Positions	General Fund	Other Funds	Total
2017-19 Dalrymple Executive Budget	7.00	\$900,000	\$9,842,642	\$10,742,642
2015-17 Adjusted Legislative Appropriations ¹	7.00	934,500	10,322,827	11,257,327
Increase (Decrease)	0.00	(\$34,500)	(\$480,185)	(\$514,685)

¹The 2015-17 biennium agency appropriation amounts reflect general fund budget reductions made in August 2016.

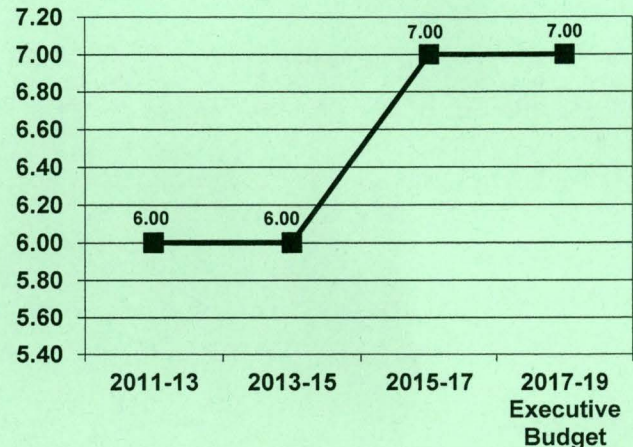
Ongoing and One-Time General Fund Appropriations

	Ongoing General Fund Appropriation	One-Time General Fund Appropriation	Total General Fund Appropriation
2017-19 Dalrymple Executive Budget	\$900,000	\$0	\$900,000
2015-17 Adjusted Legislative Appropriations	934,500	0	934,500
Increase (Decrease)	(\$34,500)	\$0	(\$34,500)

Agency Funding



FTE Positions



Dalrymple Executive Budget Comparison to Base Level

	General Fund	Other Funds	Total
2017-19 Executive Budget	\$900,000	\$9,842,642	\$10,742,642
2017-19 Base Level	934,500	10,308,017	11,242,517
Increase (Decrease)	(\$34,500)	(\$465,375)	(\$499,875)

First House Action

Attached is a comparison worksheet detailing first house changes to base level funding and the executive budget.

**Dalrymple and Burgum Executive Budget Highlights
(With First House Changes in Bold)**

	General Fund	Other Funds	Total
1. Adds funding for state employee salary and benefit increases, of which \$5,778 is for salary increases and \$20,035 is for health insurance increases. (The Burgum budget removed funding for salary increases and provided for employees to pay for a portion of health insurance.) The Senate removed funding for the salary increases.	\$0	\$25,813	\$25,813
2. Increases funding for operating expenses to provide a total of \$2,204,190	\$0	\$143,810	\$143,810
3. Reduces ongoing general fund support for airport grants to provide a total of \$900,000	(\$34,500)		(\$34,500)

4. Increases funding from other funds for airport grants to provide a total of \$5,800,000 in airport infrastructure grants	\$0	\$800,000	\$800,000
5. Reduces funding for capital assets to provide a total of \$100,000	\$0	(\$200,000)	(\$200,000)
6. Reduces funding for education grants to provide a total of \$300,000	\$0	(\$100,000)	(\$100,000)
7. Removes funding for planning grants	\$0	(\$1,100,000)	(\$1,100,000)

Continuing Appropriations

No continuing appropriations for this agency.

Significant Audit Findings

The operational audit of the Aeronautics Commission conducted by the State Auditor's office for the biennium ended June 30, 2015, included significant audit findings related to the following:

- The commission has not properly segregated duties and has not adequately reviewed the potential risk of fraud surrounding the handling of revenue collections.
- The commission does not have adequate controls surrounding disposal of fixed assets.

Major Related Legislation

House Bill No. 1217 - Amends North Dakota Century Code Section 2-05-11 relating to aircraft registration. This bill removes the reduction in aircraft registration fees for aircraft 1 year old or older and increases the permanent registration fee from \$85 to \$125.

Senate Bill No. 2049 - Amends Section 2-05-22 relating to interest received by the Aeronautics Commission special fund to identify how the fund is to be used. Amends Chapters 57-40.5 and 57-43.3 relating to aircraft excise tax and aviation fuel tax. Repeals Sections 57-43.3-04 and 57-43.3-06 relating to the aviation fuel tax, to be effective for taxable purchases made after June 30, 2017.

Senate Bill No. 2200 - Amends Sections 57-15-06.6 and 57-15-38 relating to capital project levies. This bill authorizes counties and cities to levy taxes for the purpose of financing projects for county and city airports or airport authorities.

Aeronautics Commission - Budget No. 412
Senate Bill No. 2006
Base Level Funding Changes

	Burgum Executive Budget Recommendation (Changes to Dalrymple Budget in Bold)				Senate Version			
	FTE Position	General Fund	Other Funds	Total	FTE Position	General Fund	Other Funds	Total
2017-19 Biennium Base Level	7.00	\$934,500	\$10,308,017	\$11,242,517	7.00	\$934,500	\$10,308,017	\$11,242,517
2017-19 Ongoing Funding Changes								
Base payroll changes			(\$34,998)	(\$34,998)			(\$34,998)	(\$34,998)
Salary increase				0				0
Health insurance increase			20,035	20,035			20,035	20,035
Employee portion of health insurance			(10,495)	(10,495)				0
Increases funding for operating expenses			143,810	143,810			143,810	143,810
Reduces airport grants - general fund		(34,500)		(34,500)		(34,500)		(34,500)
Reduces capital asset funding			(200,000)	(200,000)			(200,000)	(200,000)
Reduces education grants			(100,000)	(100,000)			(100,000)	(100,000)
Removes planning grants			(1,100,000)	(1,100,000)			(1,100,000)	(1,100,000)
Increases airport grants			800,000	800,000			800,000	800,000
Total ongoing funding changes	0.00	(\$34,500)	(\$481,648)	(\$516,148)	0.00	(\$34,500)	(\$471,153)	(\$505,653)
One-time funding items								
No one-time funding items				\$0				\$0
Total one-time funding changes	0.00	\$0	\$0	\$0	0.00	\$0	\$0	\$0
Total Changes to Base Level Funding	0.00	(\$34,500)	(\$481,648)	(\$516,148)	0.00	(\$34,500)	(\$471,153)	(\$505,653)
2017-19 Total Funding	7.00	\$900,000	\$9,826,369	\$10,726,369	7.00	\$900,000	\$9,836,864	\$10,736,864

Other Sections in Aeronautics Commission - Budget No. 412

Burgum Executive Budget Recommendation
(Changes to Dalrymple Budget in Bold)

No other sections included in the executive budget recommendation.

Senate Version

No other sections included in the Senate version.

Department 412 - Aeronautics Commission

Appropriations Comparisons to the Original and Adjusted Base Budgets

General Fund Appropriations Adjustments (As a result of the August 2016 General Fund Budget Reductions)

	Ongoing	One-Time	Total
2015-17 original general fund appropriations	\$1,000,000	\$0	\$1,000,000
General fund reductions	(65,500)		(65,500)
Adjusted 2015-17 appropriations	\$934,500	\$0	\$934,500
Dalrymple Executive Budget changes	(34,500)	0	(34,500)
2017-19 Dalrymple Executive Budget	\$900,000	\$0	\$900,000

Summary of August 2016 General Fund Budget Reductions

	Ongoing	One-Time	Total
Reduced funding for airport grants	(\$65,500)	\$0	(\$65,500)
Total reductions	(\$65,500)	\$0	(\$65,500)
Percentage reduction to ongoing and one-time general fund appropriations	6.55%	0.00%	6.55%

2017-19 Dalrymple Executive Budget Changes to the Original and Adjusted Base Budgets

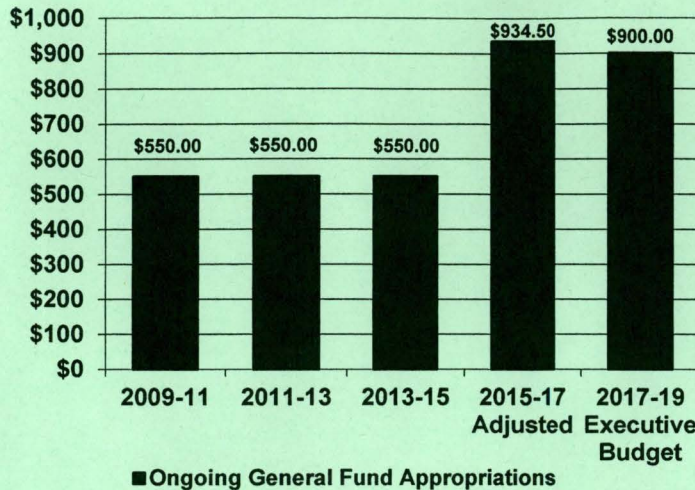
	Changes to Original Budget	Budget Reduction Adjustments	Changes to Adjusted Budget
Reduces funding for airport grants	(\$100,000)	\$65,500	(\$34,500)
Total	(\$100,000)	\$65,500	(\$34,500)

Department 412 - Aeronautics Commission

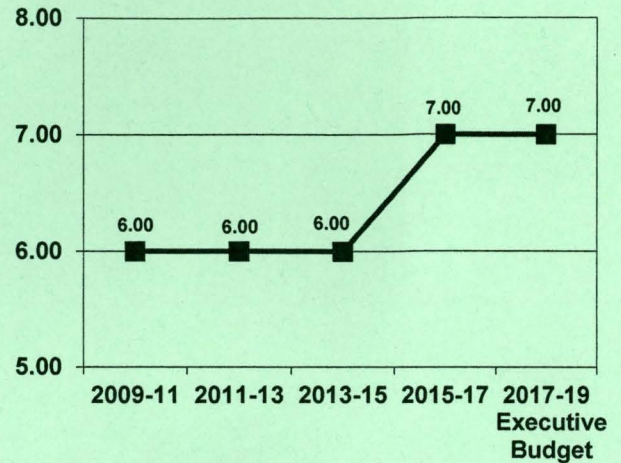
Historical Appropriations Information

Total Other Funds Appropriations Since 2009-11

Agency Funding (in Thousands)



FTE Positions



Ongoing General Fund Appropriations					
	2009-11	2011-13	2013-15	2015-17 Adjusted	2017-19 Dalrymple Executive Budget
Ongoing general fund appropriations	\$550,000	\$550,000	\$550,000	\$934,500	\$900,000
Increase (decrease) from previous biennium	N/A	\$0	\$0	\$384,500	(\$34,500)
Percentage increase (decrease) from previous biennium	N/A	0%	0%	69.9%	(3.7%)
Cumulative percentage increase (decrease) from 2009-11 biennium	N/A	0%	0%	69.9%	63.6%

Major Increases (Decreases) in Ongoing General Fund Appropriations

2011-13 Biennium

1. No major increases or decreases

2013-15 Biennium

1. No major increases or decreases

2015-17 Biennium

1. Increased funding for airport grants to provide \$1,000,000 \$384,500

2017-19 Biennium (Dalrymple and Burgum Executive Budget Recommendations)

1. Reduces funding for airport grants to provide \$900,000 (\$34,500)



ND Aeronautics Commission

March 3, 2017 SB2006 Attachment A



**NORTH DAKOTA
AERONAUTICS COMMISSION**

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"A Statewide Voice for Aviation"

1-A

TESTIMONY OF
KYLE C. WANNER
EXECUTIVE DIRECTOR, NORTH DAKOTA AERONAUTICS COMMISSION
BEFORE THE
HOUSE APPROPRIATIONS – GOVERNMENT OPERATIONS DIVISION, COMMITTEE
March 3rd, 2017
SENATE BILL 2006

Chairman Brandenburg and members of the committee,

My name is Kyle Wanner and I am the Director of the North Dakota Aeronautics Commission and will be providing testimony today regarding Senate Bill 2006.

(Slide 2) The Aeronautics Commission agency was created by the Legislature in 1947 to support the aviation community in North Dakota. The agency's mission is "to serve the public by providing economic and technical assistance for the aviation community while ensuring the cost effective advancement of aviation in North Dakota."

The agency is overseen by a Governor appointed board of 5 members who appoint a director who in turn; hires and supervises the staff required to operate the agency.

(Slide 3) To introduce our commissioners: Cindy Schreiber-Beck of Wahpeton is currently the commission chairperson. Jay B. Lindquist of Hettinger, Maurice Cook of Bismarck, Kim Kenville of Grand Forks, and Warren Pietsch of Minot cumulatively comprise the full commission board. The board is geographically represented well and each commission member brings a different set of aviation expertise for the agency's utilization.

The Aeronautics Commission is also currently allowed up to 7 full time equivalent staff members which is seen as adequate for the upcoming biennium.

(Slide 4) The North Dakota Aeronautics Commission serves multiple functions. One of those functions includes providing airport infrastructure grant funding to the 89 public service airports throughout the state. The commission also offers aviation education funding and works with the Aviation Museums to encourage and promote aviation in North Dakota. The aeronautics staff visits at least 1/3 of all of the public airports in the state annually which is a great opportunity to develop a positive relationship with the airports, learn about their needs and priorities, and make recommendations on safety enhancing projects. The staff also updates the airport information after each inspection so that pilots have the

most up to date information to use as they utilize the North Dakota airport system. Additionally, the commission updates and provides aviation publications on statewide aviation studies, airport directories, and aeronautical charts.

The commission also has regulatory functions which includes the collection of aviation taxes and fees through aircraft registrations, aerial applicator registrations, aircraft dealers, aircraft excise tax, and aviation fuel taxes

Additionally, the commission and its staff represent the state in aeronautical matters before other state and federal agencies.

(Slide 5) Aviation is important to North Dakota and serves a variety of critical functions from emergency transportation to aerial crop spraying. Our airports become especially important during a time when our state is looking for ways to diversify and grow the economy. Not only is aviation a safe and efficient way to transport goods and people, but our airports act as key economic engines for their communities as documented by a recent statewide economic impact study that I will discuss with you later in this presentation.

(Slide 6) Last year, the Aeronautics Commission unveiled a new and improved website that has become a one-stop shop for aviation needs and information within North Dakota. The new website has information on the agency's programs, allows for online credit card payments of aircraft registrations, provides information from statewide aviation studies, and gives valuable information for our airport managers. The website also provides a go-to place for finding updated information regarding the unmanned aircraft industry. Since launching the new website, we have seen an incredible increase in the amount of traffic that has visited the site and we hope that continues as we work to make information easily accessible to the public.

(Slide 7) Our commercial service airports provide incredible value to our state and the graphic on this slide shows all of the routes and destinations that are currently available to the general public. Nine different direct flight destinations are available to connect North Dakota to the rest of the world. All eight commercial service airports continue to boast jet service and the state is also currently averaging approximately 70 airline flight departures per day with an estimated 4,100 available daily seats.

(Slide 8) This slide highlights the amount of airline passengers that are boarding commercial service flights in North Dakota and tells a very interesting story. Back in 2008, the state boarded 683,000 airline passengers and as shown by the yellow line - it was forecasted at that time that we would reach 1 million annual airline passenger enplanements sometime around the year 2030. In all actuality we surpassed the 1 million mark only 5 years later in 2012 and that growth continued until the state grew to over 1.2 million passengers in 2014. This resulted in a 76% growth in passenger numbers over a 6 year time period.

In 2014, and prior to the collapse in both oil and agricultural prices occurring, our state system plan forecasters had presented us with an updated forecast in the green line as shown on the slide. Now after the price collapse, here in 2017 and as shown by the red line - we expect a leveling off of passenger numbers and steady growth to pick up once again after those industries begin their recovery. This new forecast does not consider a large spike in commodity prices, but a gradual recovery.

As you can see in the graphic - the actual passenger numbers are currently not at the peak that we saw in 2014, but are still being maintained at much higher levels than what was expected prior to the oil boom taking place in the state. In fact, the 2016 passenger numbers are still over 50% higher than they were in 2008. This story helps to give a good perspective of the current condition and outlook of the state's air service.

(Slide 9) To provide some highlights from this past biennium I will start by discussing some key Infrastructure projects have been completed at our 8 commercial service airports.

- Fargo received the funding required to complete the first and second phase of its major taxiway rehabilitation project. The final phase of this project is planned to take place in 2017 at an estimated \$7 million dollars.
- Grand Forks recently began work on redeveloping a general aviation area on the east side of the airport and is also currently working through a master plan update. The airport is planning some major runway lighting improvements in the upcoming biennium.
- Devils Lake recently completed a runway safety area improvement project and is beginning the design work to rehabilitation the crosswind runway in the upcoming biennium.
- Jamestown completed a key wetland mitigation project to improve safety at the airport and is also working toward the rehabilitation of its crosswind runway.

(Slide 10)

- Minot completed the multi-year construction of its new terminal building that opened in February 2016. The airport is also working to complete a master plan process and is working towards major storm water improvements and an expansion to its aircraft rescue and firefighting building.
- Bismarck recently opened bids for Phase 1 of its Runway Reconstruction project. This project is the beginning of a multiple-year estimated \$70 million dollar project to replace 60 year old pavements on the main runway. The final phases are planned to be bid and constructed in the upcoming biennium.
- Dickinson improved their runway safety area and finalized work on their master plan and environmental study to move forward with land acquisition and construction of a new parallel taxiway and main runway. These major projects are expected to begin within the upcoming biennium and finish in the 2019-2021 biennium. Project costs for this critical project are approximately \$60 million.

- Ground breaking on the new Williston airport project took place this last fall and land acquisition has been completed. The airport has received approximately \$54 million dollars to date from the Federal Aviation Administration and is moving forward in the upcoming biennium with the major construction elements. The targeted opening for the new airport is currently fall of 2019.

(Slide 11) Multiple high priority projects were also able to become completed for the general aviation airports this last biennium. To mention a few:

- The new Bowman airport opened in May of 2015.
- Garrison, Hettinger, Linton, Edgeley, and Langdon all underwent major runway rehabilitation projects.
- Mohall, Stanley, and Tioga underwent major taxiway and apron construction projects.
- Kenmare, Ellendale, and Harvey received major runway lighting rehabilitations.

The state has also identified multiple high priority projects at the general aviation airports that will be a focus this next biennium which includes runway rehabilitations at Northwood, Ashley, Hillsboro, and the beginning stages of a runway shift and extension at Watford City.

(Slide 12) This last biennium, the aeronautics commission has been working to complete two statewide studies which all have a benefit to the aviation community and decision makers. The economic impact of aviation update along with a new inventory of our airport pavement condition were both completed in early 2016.

(Slide 13) To provide you with some information from our economic impact study, I need to first describe how we went about the study to ensure that the data we collected is consistent with industry standards and is reliable. It is first important to acknowledge that our state is comprised of 8 commercial service airports, 81 public-use airports, and over 150 private-use air strips that are not shown on this graphic. For the purposes of our study, we analyzed the benefits that each of our 89 public-use airports have on the state's economy.

(Slide 14) Airports essentially provide 5 sources of economic impacts. We carefully analyzed all 5 areas which are comprised of airport management jobs, airport tenant jobs and business income, capital improvement projects, and spending as it related to visitors that arrive into North Dakota either on a commercial airline or via general aviation.

(Slide 15) This slide depicts the breakdown of each of the categories that I previously mentioned. The study had concluded that airports support over 12,200 jobs with a payroll over \$500 million and a total economic output of \$1.56 billion dollars.

(Slide 16) The \$1.56 billion in economic activity is a 47% increase from the same impacts that were studied in 2010. Airport supported jobs, state and local sales tax revenues, and air visitors throughout the state have increased substantially over the same 5 year time period.

(Slide 17) This graphic shows the route of every flight plan that was filed by business or general aviation aircraft over a 1 year period. This shows how useful our airports are to our state outside of the benefits of our commercial airlines. Please feel free to review the executive summary of this study that has been provided in your packet and visit our website to view a full presentation of the results.

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(Slide 18) Every three years, the aeronautics commission contracts with an experienced pavement consultant firm to inspect and take inventory of all of the airport pavements throughout the state. The recent update was finalized in 2015 and the results can be found on our interactive website. This website shows the condition of each pavement section at our airports throughout the state, along with deterioration details, photos, projected future conditions, and a recommended funding plans to ensure that the pavements are maintained in the most cost beneficial way. This study has really been a revolutionary way for our state to manage its airport pavements and has served us very well.

(Slide 19) The recent pavement study shows that there exists approximately 55 million square feet of pavement at our airports that needs to be maintained.

The graphic on this slide shows a summary of the condition of all of the airport pavement. Approximately 83% of the pavement was identified to be in fair to good condition which leaves 17% of the pavement in fair or poor condition which would require a major rehabilitation project.

(Slide 20) 72 out of the 89 public use airports in the state are paved. The breakdown includes 8 commercial service airports and 64 general aviation airports. Of those 64 general aviation airports, 45 are eligible to receive federal aid, and 19 general aviation airports rely solely upon state and local funds to stay open.

The two pie charts on the bottom of the slide show how much pavement is being utilized by function (runway, taxiway ect.) and how much pavement exists between our 8 commercial service airports and the 64 paved general aviation airports. As you can see from the graphics, most of our pavement that we need to maintain is for the function of a runway and the 8 commercials service airports actually have more pavement to maintain than the 64 general aviation airports combined.

(Slide 21) There currently exists 33 Automated Weather Observation Systems at airports across the state which greatly help to provide weather to pilots, businesses, and medical providers as they fly into and around our communities. The aeronautics commission currently covers the costs of the scheduled tri-annual inspections at these airports to help reduce the overall cost of maintenance to each community. Each local airport however, is responsible for the costs of any repair parts that will be needed as breakdowns occur, but the Aeronautics Commission grant program may be used to help with those costs as well. This program has been a great success as the state continues to support the maintenance of these weather reporting facilities.

(Slide 22) For your reference, this slide shows a map of the AWOS coverage within the state. Each of the blue shaded areas depicted on this map represents a 30 nautical mile radius of on-site weather reporting. The challenge that our state currently faces is that their currently exists approximately a half of a million dollars in deferred maintenance and technology update costs at these sites. Our agency is working with the airports throughout the state to phase these updates and ensure that the network continues to be maintained.

(Slide 23) During the fall of each year, the North Dakota Aeronautics Commission staff meets with over 50 of the public use airports in the state to review their capital improvement plan for the next 10 years. Throughout this process, projects are identified and cost estimates are submitted so that the agency can calculate the total amount of projects requests that exist within the system. The agency can then work

with the federal government and each local airport to identify and prioritize the projects. There is always the understanding that we will not be able to accommodate all identified projects as shown on this graph, but this process ensures that we find the best and most justified projects. In our most recent statewide capital improvement plan update, we have found that over \$600 million dollars of identified projects exist at our airports that could take place in the next 5 years and an additional \$350 million that exist in the following 5 years. The statewide capital improvement plan included in your packet provides a detailed breakdown of the identified projects.

(Slide 24) As we work to maintain our airport infrastructure, federal funding has and will continue to be a key part of solving the infrastructure funding challenges that our state is currently facing. 54 of our 89 airports are eligible to receive federal dollars and they compete for these funds nationally and may receive up to 90% funding if funds are available. It is very important to understand that federal funding is not guaranteed and that there have been many cases where federal grants have been provided at less than 90% due to this being the case. A recent example of funding being provided at less than 90% is the Bismarck runway project. This past year, phase 1 of the Bismarck runway reconstruction project came in at \$23 million dollars. The federal government provided approximately \$13 million in grant funding which left \$10 million in remaining funds for the state or local governments to pick up.

Nationally, the federal dollars that are made available for airport infrastructure projects has remained very similar to the levels provided since 2001, however costs for maintaining and growing airports across the country has continued to increase resulting in higher competition for those federal dollars. Federal funding is currently authorized through April of 2017 and Congress will need to pass a reauthorization bill sometime this year to ensure continued funding for airport infrastructure projects.

Knowing how important it is to leverage federal funding for much needed infrastructure projects in North Dakota, I have met multiple times with upper level FAA personnel at their national and regional offices. It is important for us to continually engage the federal government to educate on the needs of the state. By presenting high priority projects that are justified and shovel ready, we increase the chances of our ability to receive federal funds. Also, having the flexibility to access state and local funds to partner with the federal government on key projects is critical to leveraging every federal dollar.

(Slide 25) This chart shows the historical FAA funding that has been brought into North Dakota. The state's normal 10 year average of annual funding for airport infrastructure projects has been approximately 23 million dollars. You can see that over the last 5 years that we have been successful in bringing in significantly higher than average federal funding for airport infrastructure projects. Even at a time when federal dollars are continually harder to bring into the state, we have been successful due to the justified infrastructure needs and the ability to leverage federal dollars with additional state and local dollars. We are hopeful that as we continue to educate the FAA on the needs within the state, that their level of funding and commitment to help with our infrastructure challenges continues into the future.

(Slide 26) This graphic represents the state dollars that have historically been made available for airport infrastructure grants. You may notice that the increase in state funding has occurred in the years that we also saw an increase in federal funds being brought into the state which was shown on the previous slide. The additional state dollars that have been made available for airport projects has been and will continue to be critical to leverage and maintain federal funding at a high level.

The increase in state funding from the Aeronautics Commission in previous years has been made from one-time general fund allocations and an increase in special fund revenue from aircraft fuel sales and excise tax revenue. The state also allocated \$60 million dollars in oil impact funding in the 2013-2015 biennium. In the 2015-2017 biennium, an additional \$48 million in oil impact dollars had been allocated through the oil impact fund, however the lack of revenue's to that fund has only allowed \$3 million to be allocated to airports to date, which remains to be a problem.

Due to this lack of revenue in the oil impact fund, there currently exists a remaining \$45 million dollar obligation from the state to help fund the Williston airport relocation project and critical infrastructure improvements at the Dickinson airport. Failure to provide those state dollars could compromise current and future federal grant funds and the projects themselves.

(Slide 27) The Aeronautics Commission budget is comprised of both special fund and general fund dollars. The special fund dollars are received from multiple revenue streams such as fuel taxes, aircraft excise, and registrations taxes. We also receive funding from the federal government for conducting airport inspections.

The Aeronautics Commission is currently budgeted to receive 900,000 in general fund allocation for airport improvements in the next biennium which is a \$100,000 or 10% reduction from last biennium to meet the Governor's budget request guideline. The reduction of funds occurs in the airport grant line item.

(Slide 28) This slide provides a graphical view of the current budget status. The airport grants line item is currently the largest expenditure of our agency which is appropriate as the commission feels that it is important that the aviation tax dollars being collected goes back out to the communities for infrastructure related projects. The proposed budget currently plans for a total of 7 million dollars to be made available for airport grants in the upcoming biennium. I also want to note that Senate Bill 2006 in its current form does not deviate from the "base level" of the Governor's budget recommendations.

ND Aeronautics Commission Budget

Proposed budget reductions to meet Governor's 90% budget request guidelines:

Description	2015-2017 General Fund	2017-2019 General Fund	Total Reduction
Airport Infrastructure Grants	\$1,000,000	\$900,000	\$100,000

Comparison of Optional Adjustment Requests made by Aeronautics Commission that was not included in the Governor's Budget:

Description	2017-2019 General Fund	Senate Bill 2006
Request - One time Airport Infrastructure Funding	\$9,000,000	\$0

One-time general fund appropriation of \$9 million dollars in grant funding was requested by the agency to aid the needs of the public airport infrastructure throughout the state. This funding would particularly help to fund a critically identified project need in the capital city - the Bismarck Airport primary runway reconstruction project which is currently estimated at \$70 million.

Multiple needs are present in the airport infrastructure throughout the state during the next biennium timeframe. These airport needs have been identified through multiple statewide studies and the state's current statewide airport capital improvement plan. All studies can be found at the Aeronautics Commission website at <https://aero.nd.gov>. The statewide capital improvement plan has identified over \$600 million in airport projects over the next 5 years.

The state also conducted a pavement condition index study in 2015 where an inventory of the condition of all pavements at the public use airports were identified. This study shows that there currently exists approximately \$152 million in pavement rehabilitation and repair needs throughout the state. The Aeronautics Commission understands that not all needs can be accommodated under the current financial situation of federal, state, and local governments and that certain projects need to be prioritized. This prioritization process is exactly what the commission is able to accomplish through its annual airport grant program.

The Aeronautics Commission's base funding level currently allows for \$7 million dollars to be made available for grant funding over the next biennium. This \$7 million dollar amount includes the only general fund dollars that the agency receives at a projected \$900,000 base level. All additional grant funding, staff salaries, and agency operations are funded with special funds. The \$7 million dollar level of funding over the 2017-2019 timeframe is insufficient to match the projected federal funds that the state is expected to receive and to maintain the infrastructure of the 89 public use airports. It is also important to note that 36 of the public airports that exist in the system are ineligible to receive federal funding and rely solely upon state and local funding to be maintained.

1-B




North Dakota Aeronautics Commission Budget Hearing
House Appropriations Committee – March 3rd, 2017
Kyle Wanner, Executive Director

www.aero.nd.gov



Agency Mission

To serve the public by providing economic and technical assistance for the aviation community while ensuring the safe and cost effective advancement of aviation in North Dakota.



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1



Aeronautics Commission Members

5 Member Board Appointed by the Governor



Cindy Schreiber-Beck,
Wahpeton



Jay B. Lindquist,
Hettinger



Dr. Kim Kenville,
Grand Forks



Maurice Cook,
Bismarck



Warren Pietsch,
Minot

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North Dakota Aeronautics Commission Functions

Airport Infrastructure Grant Funding

Aviation Education Promotion and Funding

Airport Safety Inspections

Update Aviation Publications and Planning Documents

Regulatory Functions to include:

- Aircraft Registrations
- Aerial Applicator Licensing
- Aircraft Dealers
- Aircraft Excise and Fuel Tax

Represent the state in aeronautical matters before
state and federal agencies



www.aero.nd.gov



Importance of Aviation to North Dakota

A critical method of transportation for goods and people

Supports local and state economies

Serves important operations:

- Emergency transportation
- Traveling Medical Doctors
- Aerial Application
- Flight training
- Just in time delivery of parts and materials used for oil drilling and agricultural operations
- Weather research and modification
- US border protection
- Testing of Unmanned Aerial Vehicles (UAVs)
- ...and many others



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Updated Website

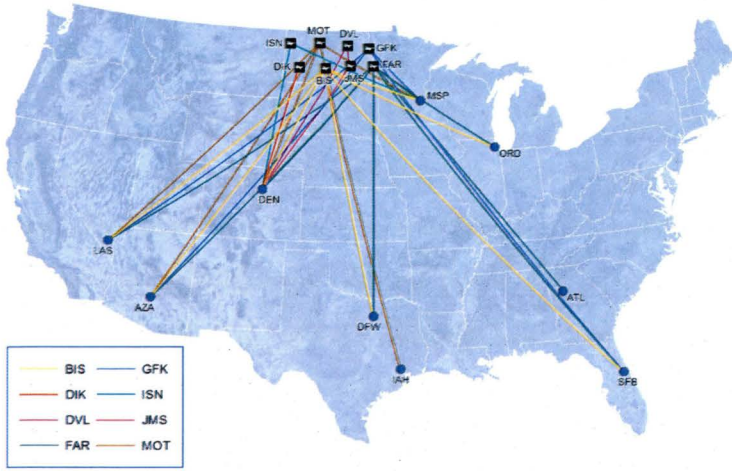
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Commercial Air Service Update

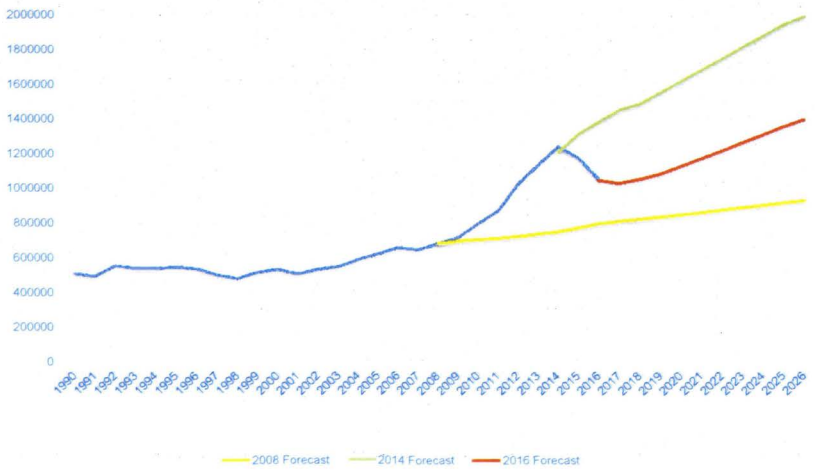


* January 2017

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North Dakota Airline Passenger Boardings



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4



Project Highlights

Key Airport Infrastructure Projects

Commercial Service Airports

Fargo

- Parallel Taxiway Rehabilitation Phase 1 and 2
- Final Phase to be completed in 2017

Grand Forks

- Eastside General Aviation Area Redevelopment
- Master Plan Update
- Runway Lighting Improvements planned in 2017

Devils Lake

- Runway Safety Area Improvements
- Crosswind Runway Rehabilitation planned in 2017

Jamestown

- Completion of Key Wetland Mitigation Project
- Jet bridge and terminal improvements
- Crosswind Runway Rehabilitation planned in 2018

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Project Highlights

Key Airport Infrastructure Projects

Commercial Service Airports

Minot

- Terminal Building, Parking Lot, Access Roads, Commercial Terminal Apron completed in February 2016 and is now open for the public
- Completing Airport Master Plan Process
- Planning major storm water improvements and ARFF building expansion

Bismarck

- Runway Reconstruction Phase 1 was Bid in 2016
- Phase 2 and 3 are planned in 2017 and 2018

Dickinson

- Runway Safety Area Improvements, environmental/planning work
- Land Acquisition and Taxiway improvements planned for 2017/2018
- Primary Runway Reconstruction planned for 2019/2020

Williston

- Acquired Land for new airport development and ground breaking held Fall of 2016.
- Targeted opening for new airport is Fall 2019
- FAA Funding to date on new airport – \$54.5 million

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Project Highlights

Key Airport Infrastructure Projects

General Aviation Airports

- New Bowman airport opened in May of 2015
- Garrison, Hettinger, Linton, Edgeley, Langdon – Runway Rehabilitation
- Mohall, Stanley, and Tioga - Taxiway and apron construction
- Kenmare, Ellendale and Harvey – New runway lighting

Upcoming Runway Rehabilitations

- Northwood
- Ashley
- Hillsboro
- Watford City

Includes proposed Runway Extension

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Statewide Aviation Studies

Economic Impact of Aviation Update

Deliverables were made available Spring 2016

Statewide Pavement Condition Index Study

Online website is now available and final paper deliverables were made available Spring 2016

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Total Economic Impacts

	Total Employment	Total Payroll	Total Output
Total Airport Management	232	\$13.4 million	\$85.5 million
Total Airport Tenants	4,207	\$223.9 million	\$626.7 million
Total Capital Investments	1,156	\$63.5 million	\$173.0 million
Total General Aviation Visitors	854	\$26.9 million	\$101.1 million
Total Commercial Visitors	5,768	\$177.6 million	\$578.1 million
Total Statewide Annual Impacts	12,217	\$505.2 million	\$1.56 billion



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Economic Impact of Aviation

Key Findings

Airports support \$1.56 billion in annual economic activity

Annual economic impacts for public-use airports up 47% since 2010

Airport supported jobs have grown from 8,872 to 12,217, an increase of 3,345 jobs

State and local aviation sales tax revenues have increased from \$31.1 million to over \$60 million

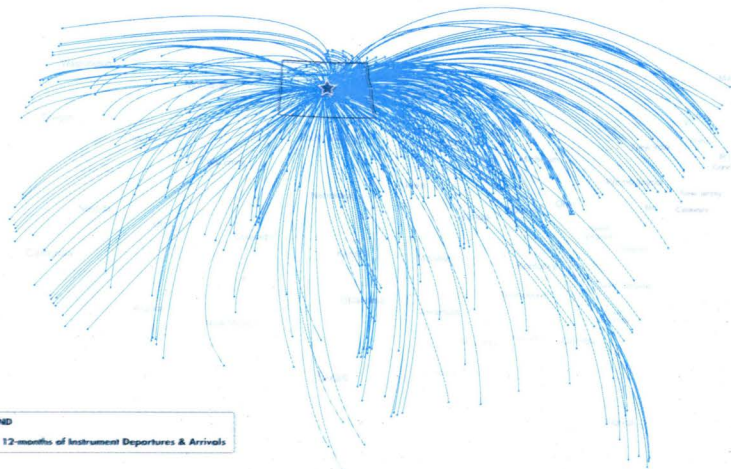
Air visitors to North Dakota have grown from 545,300 to 915,290



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Moving People and Goods



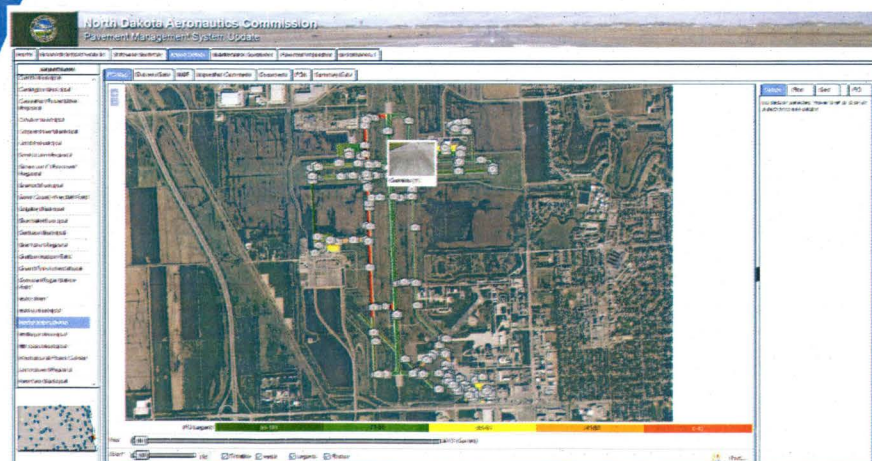
LEGEND
12-months of Instrument Departures & Arrivals

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2015 Pavement Condition Study

Found at: <https://aero.nd.gov/studies/pavement-condition-index/>

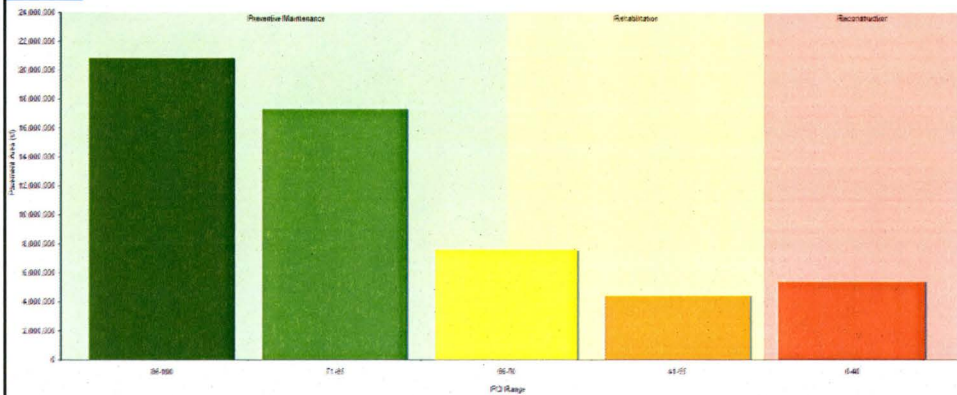


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Summary of Total Airport Pavement

Approximately 55 million square feet of pavement exists on our airports



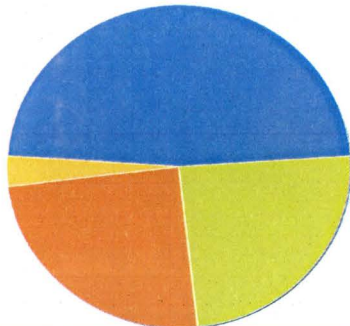
www.aero.nd.gov



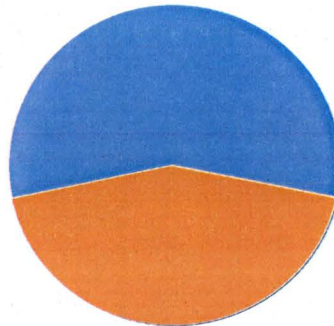
Pavement Statistics

- 72 Public-Use Airports are paved
 - 8 Commercial Service Airports
 - 64 General Aviation Airports
 - 45 eligible for federal aid
 - 19 ineligible for federal aid

Summary of Total Statewide Pavement Area by Use (All Airports)



Summary of Total Statewide Pavement Area by Airport Classification



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Statewide AWOS Maintenance Program - Update



AWOS Units detect:

- Thunderstorms
- Visibility and ceiling
- Wind speed
- Altimeter setting
- Precipitation
- Temperatures

www.aero.nd.gov



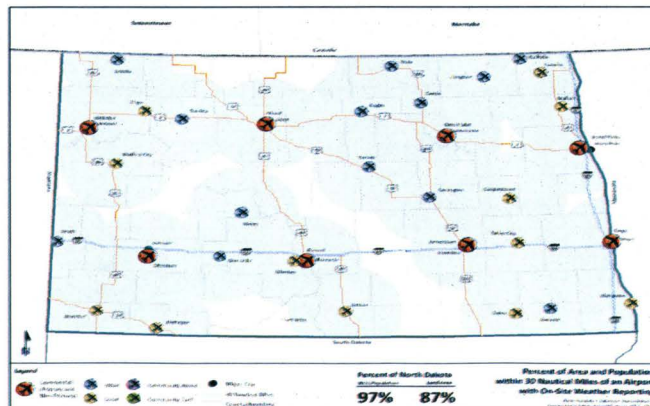
Statewide AWOS Maintenance Program

AWOS coverage currently being provided by 33 airports.

Program has successfully reduced maintenance costs through economies of scale

Aging systems require replacements

Estimated current Deferred Maintenance of \$500,000



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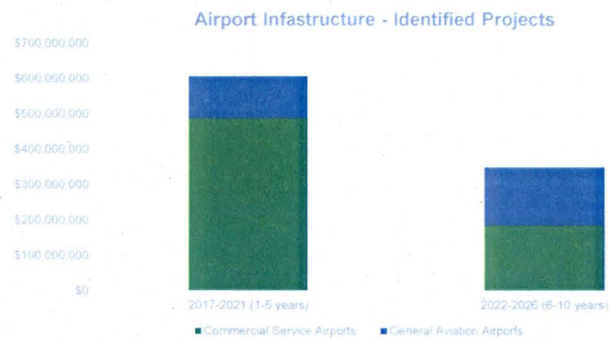
Statewide Airport Infrastructure Needs

- Statewide Capital Improvement Plan is updated on an annual basis.

- 1-5 year project costs: \$600 million

- 6-10 year project costs: \$350 million

- Total 10 year project costs: \$950 million



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Federal Funding Outlook

North Dakota airports compete nationally for federal dollars

FAA may provide funding of up to 90% for high priority projects if funding is available.

Many projects receive less than 90% in federal aid.

Federal dollars available nationally for airport infrastructure projects has remained at similar levels provided since 2001.

Funding is currently authorized through April 2017.

Recommendations to increase Federal funding

- Continually educate the FAA on the needs of the state

- Present high priority projects that are justified

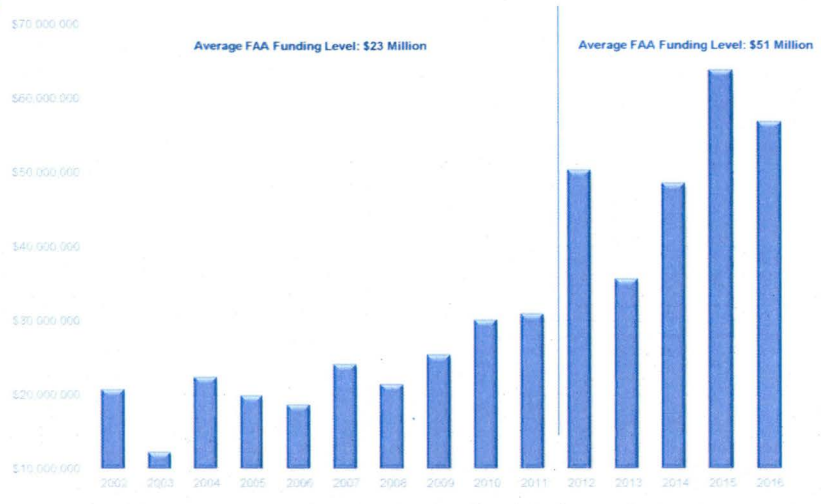
- Ability to have shovel ready projects

- Ability to partner on funding projects through state and local funds

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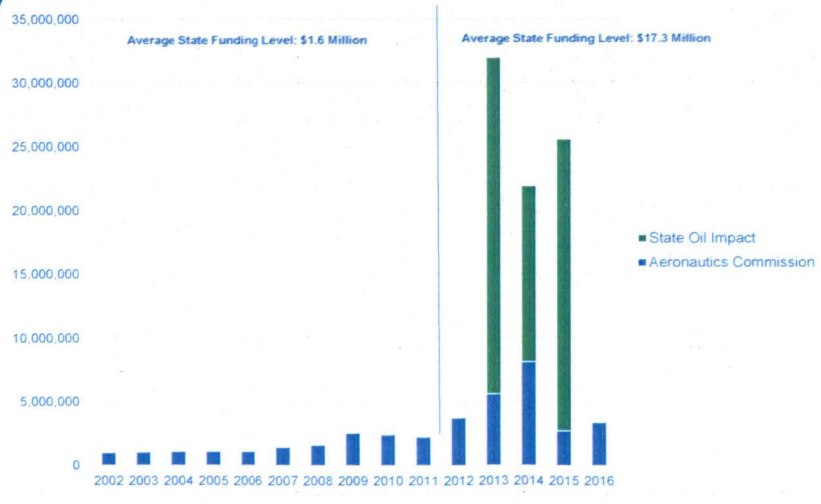
Historical Federal Funding for Airports in North Dakota



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Historical State Funding for Airports in North Dakota



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Aeronautics Commission Funding

Main Sources of Revenue

Special Fund

- Aviation Fuel Tax
- Aircraft Excise Tax
- Aircraft Registrations
- Airport Inspections
- Aerial Applicator Licensing
- Aircraft Dealer Registrations

General Fund

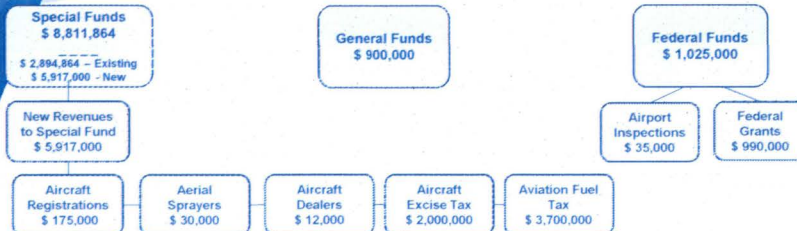
- The upcoming biennium budget currently calls for \$900,000 in general fund dollars.

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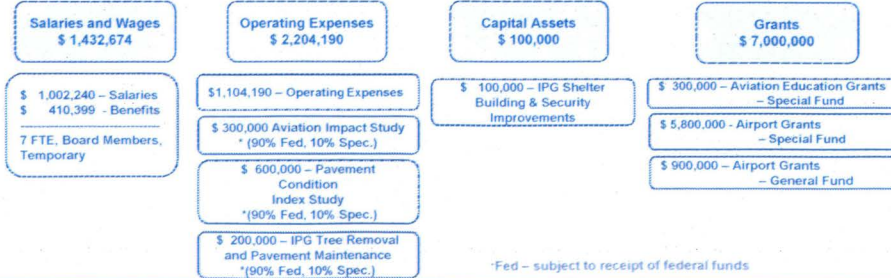


North Dakota Aeronautics Commission PROPOSED 2017 – 2019 Budget \$ 10,736,864

REVENUES



EXPENDITURES



*Fed - subject to receipt of federal funds

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QUESTIONS?

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1-c

2017 - 2019 CIP / NPIAS PLANNING REPORT

FAA / State National Plan of Integrated Airport System (NPIAS) General Aviation and Commercial Service Program

This report reflects a snapshot of the State Wide Capital Improvement Program (CIP) for Public Airports in North Dakota as of January 3rd, 2017. The actual CIP data changes continually as projects come under contract, change scope, or are abandoned.

NDAC Priority - The higher the number, the higher the priority on a scale of: 10 - 57

FAA Priority - The higher the number, the higher the priority on a scale of: 0 - 97

	AIRPORT	PROJECT	NDAC Priority	FAA Priority	Identified Infrastructure Projects (Thousands)	
					1 to 5 Yrs.	6 to 10 Yrs.
1	Fargo FAR	Taxiway A Reconstruction (Twy C to Rwy 18)	45	64	7150	
		SRE Building Expansion ('18) / SRE Equipment	32	36	1450	750
		Rwy 18/36 CL/TDZ Lighting	56	45	1350	
		Cargo Apron Expansion	44	38	2250	
		Pavement Rehabilitation	56	66	450	1000
		Terminal Building Expan. (Gate 6)	31	93	4500	
		Terminal Apron Reconstruction	54	47		8000
		Rwy 18L/36R EA, Design, Construction	26	49		8350
		Rwy 9/27 Ext./Widening / Par. Txy EA, Design, Construc.	46	51		21350
		North GA Taxiway Extensions / East GA Expansion	45	38		3000
2	Bismarck BIS	Parking Lot Expansion	23	27		2000
		Twy D Reconstruction	45	38		3500
		Wetland Mitigation - Phase 5- 6 / Drainage Improv.	31	59	3000	
		GA Apron Expansion	44	64	2000	2000
		Rehabilitate Rwy 13/31 / Phase II Grant App - '17	56	70	60000	
		Rehabilitate Rwy 03/21	56	66	5000	
		Rehabilitate Taxiway D	56	64	4000	
		Relocate Yegen Road	32	50		5000
		EA / RPZ Land Purchase	41	44	2000	
		Expand SRE & ARFF Building	31	46	3000	
3	Grand Forks GFK	Commercial Terminal Building Update/Expansion	31	93	1500	4000
		Snow Removal / ARFF Equipment	32	70	2000	1000
		Rwy 17R/35L, Txy A Light. Rehab.(Design '17, Const. '18)	56	45	3200	
		Master Plan/ALP Update, Exhibit A, Reimburse. 2015 Grant	31	42	60	
		Twy U Reconstruction (Design and Construct. '17)	45	64	1400	
		Rwy 17R/35L Reconstruct (EA '19, Design '20, Const. '21)	56	54	38550	
		West GA Taxiway/Taxiway Construction	45	38	1300	
		Terminal Apron Expan. Design and Construct.	44	38		8750
		ARFF Truck	32	36		850
		Taxiway/Taxiway Old Terminal Area, Design	45	38		150
4	Minot MOT	Rwy 9L/27R Exten. Design and Construct	46	56		41100
		ARFF Station Rehab (Design '17)	12	36	2800	
		Wildlife Hazard Mitigation (EA '18)	31	66	300	
		Storm Water Pond - (EA '17)	31	66	3700	
		GA Apron Rehap (North - '18, South '19 & '20)	54	55	3000	
		Purchase SRE Equipment	32	36	3300	500
		Purchase ARFF Truck	52	36	850	300
		Taxiway B Rehab	45	38	5200	
		Replace/Upgrade Airfield Security Fence	31	83	3000	
		Pavement Maintenance (RTA,RCF, Seal), Marking	56	68	500	1000
					20000	

2017 - 2019 CIP / NPIAS PLANNING REPORT

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	AIRPORT	PROJECT	NDAC Priority	FAA Priority	Identified Infrastructure Projects (Thousands)	
					1 to 5 Yrs.	6 to 10 Yrs.
5	Jamestown JMS	Pavement Maintenance (RTA,RCF, Seal), Remarking	56	66	350	400
		Rwy 4/22 Rehabilitation (Design '17, Const. '18)	56	66	3550	
		West Taxiway Reconstruction	45	64	250	
		Purchase SRE Plow Truck	32	36	375	
		Parking Lot Expansion	23	27	125	
		Taxiway A, B, C, D, E Rehabilita. (Design '20, Const. '21)	45	64	3200	
		Terminal Apron Rehabilitation	44	55		1000
		W. Industrial Park Infrastr. Improv. (D. '23, C. '24-'25)	11			3025
6	Williston ISN / XWA	Design Airport Infrastructure	41	52	15000	
		Construct Terminal Building	33	40	60000	
		Construct SRE/ARFF/Parking Lot/Access Rd	32	48	30000	
		WHA / Navaid Reimbursable	41	64	3000	
		Construct Security Fence	31	57	2000	
		Construct Airport Pavement, Lighting	56	65	90000	5000
		Construct Roadway/Infrastructure to Airport	31	23	10000	
		Construct Airport Security System	31	31	1000	
		SRE	32	45	1200	800
				FBO & Hangars/Fuel Facilities	33	21
7	Devils Lake DVL	Rwy 3/21, Taxiway A1/A2 Rehabilitation, Apron Reconfig.	56	66	1500	
		SRE Equipment	32	36	150	300
		Land Acquisition (Relocate Building)	41	42	500	
		Apron Reconstruction ('21 Design, '22 Construction)	44	55	100	1500
		Rwy 13/31 Rehabilitation	56	66		2000
		Security Upgrades/Access Control System	42			300
		Emergency Generator	32			200
		GA Apron Lighting	31			100
		GA Hangar	12	29		500
		Deicing Containment Facility	22			200
8	Dickinson DIK	Terminal Design and Construction	33	45	30000	
		Land Acq./Design/Reconstruct Runway 14/32	56	68	45000	
		Construct Parallel Taxiway/Taxiway B Improvements	45	64	17000	
		EA & Runway Maintenance	56	68	4000	300
		Terminal Access and Parking Lot	31	40		9000
		Install Wildlife Fence	31	57	600	
		ARFF Truck / ARFF Building Expansion	32	41		2500
		Construct Commercial Service Apron	44	47		9000
		Construct ty for hangars / Access Road	55	66		5000
		Crosswind Parallel Taxiway	45	61		3000
		Onsite Water Tank and Sanitary System	31	-		3000
		SRE/SRE Building Expansion	32	45	1000	3000
TOTAL COMMERCIAL SERVICE AIRPORT NEEDS					487,710	184,725

2017 - 2019 CIP / NPIAS PLANNING REPORT

FAA / State National Plan of Integrated Airport System (NPIAS) General Aviation and Commercial Service Program

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FAA Priority - The higher the number, the higher the priority on a scale of: 0 - 97

	AIRPORT	PROJECT	NDAC Priority	FAA Priority	Identified Infrastructure Projects (Thousands)	
					1 to 5 Yrs.	6 to 10 Yrs.
9	Ashley ASY	Rwy 14/32, Txwy, Apron Rehab/Overlay Construction	56	66	1400	
		RSA , Land Acquisition	41	42	25	
		Install LED MIRL's,PAPI, Beacon, Windcone	56	45	500	
		Instrument Approach Procedure	37	50	150	
		AWOS III	32	38		250
		SRE	32	36		200
		SRE Building	32	36		150
		Pavement Maintenance (RTA, RCF, Seal)	56	66	50	200
10	Beach 2OU	Pave SRE/Terminal Access Rd, Apron, CS (Phase II)	33	50	500	
		ALP/MP Update with AGIS and Exhibit A	31	42	250	
		Construct Hangar (Design '20)	12	29	550	
		Pavement Maintenance (RTA,RCF, Seal)	56	66	40	100
		Rehab Rwy 12-30, Txwy and Apron (Design '24)	46	66		3100
		Construct X-Wind Runway	46	59		1500
		Construct Fence and Signage	31	38		2000
		Construct Parallel Txwy	45	64		700
		Construct Apron Expansion	54	38		400
11	Bottineau DO9	Construct Fuel System	22	17	300	
		Pavement Maintenance (RTA, RCF, Seal)	56	66	100	200
		Construct Taxiway	56	68	300	
		Construct X-Wind Runway	45	46	500	
		Hangar Demo / Construct New Hangar	12	29	800	
		Rehab Rwy 13-31, Txwy and Apron (Design '21)	56	66		2100
		Construct Fence and Signage	31	38		2500
		ALP/MP Update with AGIS and Exhibit A	31	42		250
12	Bowman BWW	Construct Parallel Txwy Extension Phase I (Design '17)	45	48	3400	
		Purchase SRE Equipment	32	45	250	
		Construct Crosswind Runway	46	59	300	8000
		Construct Taxilane	45	47		1000
		Construct Hangar (Design '19)	12	36	1200	
		Pavement Maintenance	56	66	100	200
13	Cando 9D7	Rwy16/34, Taxiway, Apron Rehabilitat. ('18 Design, '19 Constr.)	56	66	1,100	
		Pavement Maintenance (RTA, RCF, Seal)	56	66	50	200
		Fuel System	22	17		250
		Wildlife Assessment/WHMP	31	55		50
		Wildlife Fence and Signage	31	38		1500
14	Carrington 46D	Rwy 13/31, Taxiway, Apron Rehab. ('18 Design, '19-'20 Constr.)	56	66	1500	
		Pavement Maintenance (RTA, RCF, Seal)	56	66	50	200
		Airfield Lighting Improvements Design and Construction	56	45		500
		New Hangar '26 Design and '27 Construction	12	29		830
		Wildlife Assessment/WHMP	31	55		100
		Wildlife Fence and Signage	31	38		1500

2017 - 2019 CIP / NPIAS PLANNING REPORT

FAA / State National Plan of Integrated Airport System (NPIAS) General Aviation and Commercial Service Program

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	AIRPORT	PROJECT	NDAC Priority	FAA Priority	Identified Infrastructure Projects (Thousands)	
					1 to 5 Yrs.	6 to 10 Yrs.
15	Casselton 5N8	NW and SE Apron Rehabilitation ('17 Design, '18 Constr.)	44	55	300	
		Taxiway A Rehabilitation ('20 Design, '21 Construction)	45	64	300	
		Rwy 13/31 and MRL Reconstruction ('22 Design, '23 Constr.)	56	66		5700
		NW and SE Apron Reconstruction	44	55	2900	
		T-Hangar ('30 Design, '31 Construction)	12	29		675
		Pavement Maintenance (RTA, RCF, Seal)	56	66	200	200
16	Cavaller 2C8	Parallel Taxiway Construction	45	64	800	
		SRE Equipment	32	36		200
		Pavement Maintenance (RTA, RCF, Microsurface)	56	66	150	300
		PAPI and Flight Check	56	45	150	
		New Hangar Taxiway	45	38		550
		Rwy 16/34 Rehabilitation, Overlay	46	66		550
		New Hangar	12	29		650
		Wildlife Assessment/WHMP	31	55	100	
		Wildlife Fence and Signage	31	38	1500	
17	Cooperstown S32	Land Acquisition RPZ/Transitional Surfaces (70 Acres)	41	42	350	
		ALP/MP Update with AGIS and Exhibit A	31	42		100
		Pavement Maintenance (RTA, RCF, Seal)	56	66		200
		Rwy 13/31, Taxiway, Apron Rehabilitation	56	66	1000	
		Pave Access Road	33	20		250
		Parallel Taxiway Construction	45	64		500
		Apron Expansion	44	38		500
		Crosswind Rwy Construction	26	49		900
18	Crosby D50	Extend Txln and Rehab, Demo Building, Construct Txwy	45	52	430	
		EA for Rwy Extension	46	48	130	
		Rwy Extension Land Acquisition and Wetland Delineation	46	51	300	
		Construct Hangar (Design '24)	12	29		700
		ALP/MP Update with AGIS and Exhibit A	31	42		150
		Rwy and Txwy Rehab (Design '21)	56	66	2200	
		SRE Building Construction / SRE	32	36		500
		Construct Jet A Fuel System	12	17	150	
		Pavement Maintenance (RTA, RCF, Seal)	56	66	100	200
19	Dunseith - IPG S28	Obstacle Removal	57	50	100	
		ALP/MP Update with AGIS and Exhibit A	51	42	250	
		Instrument Approach Development (3rd Party - Hughes)	57	42	50	
		Pavement Maintenance (RTA, RCF, Seal)	56	66	100	
		Construct Terminal Shelter and Security Upgrades	21	-	50	
		Land Acquisition - Rwy 28 RPZ	56	42	500	
		Rehabilitation of Pavement Surfaces (Design '23)	56	66		1100
		Wildlife Fence and Signage	51	38		2000
20	Edgeley 51D	Fuel System (Jet - A)	22	17	250	
		ALP/MP Update with AGIS and Exhibit A	31	42	150	
		Snow Removal Equipment (SRE)	32	36	200	
		Wildlife Hazard Assessment/WHMP	31	55	200	
		Upgrade Windcone and Beacon	42	44		100
		Wildlife Fence and Signage	31	38	800	800
		Pavement Maintenance (RTA, RCF, Seal)	56	66	50	100

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	AIRPORT	PROJECT	NDAC Priority	FAA Priority	Identified Infrastructure Projects (Thousands)	
					1 to 5 Yrs.	6 to 10 Yrs.
21	Ellendale 4E7	New 100LL Fuel System	22	17	225	
		Access Road Improvements	33	20	325	
		Pavement Maintenance (RTA, RCF, Seal)	56	66	50	50
		Rwy 17/35 Rehabilitation	56	66	200	
		Rwy 13/31 Rehabilitation	56	66		600
		Wildlife Assessment/WHMP	31	55	100	
		Wildlife Fence and Signage	31	38	1500	
		Apron Rehabilitation	44	38		500
22	Ft. Yates Y27	Construct New Terminal Building & Misc Improvements	32	36	600	
		Aeronautical Survey / IAP Development	37	50	100	
		New PAPIs and Threshold Lights	56	45	200	
		Pavement Maintenance (RTA, RCF, Seal)	56	66	100	200
		Construct Hangar	12	29		600
		Construct SRE Building	32	36		700
		Access Road Improvements	33	20		600
		Install AWOS	32	38		200
23	Garrison D05	Construct NE Taxilane (Design '19)	45	38	600	
		Construct New Terminal Building (Design '21)	21	29	500	
		Rehab Taxilane (Design '24)	45	38		600
		Pavement Maintenance (RTA, RCF, Seal)	56	66	200	300
		Install AWOS	32	48		300
		Land Acquisition (EA '29) / RPZ	41	41		600
		SRE Equipment	32	36		300
		Construct Fence and Signage	31	38		2000
24	Glen Ullin D57	Update ALP/MP with AGIS and Exhibit A	31	42		200
		Pavement Maintenance (RTA, RCF, Seal)	56	66	300	300
		Rehab Runway, MIRL and Taxiway (Design '19)	56	66	100	1500
		Rehab Apron (Design '26)	54	56		2000
		Taxilane Extension	45	38	500	
		Construct Hangar	12	29		400
		Construct X-wind Rwy, EA, RPZ Land Acquisition	46	59		700
		TRANSFER TO UNKNOWN	46	59		
25	Grafton GAF	Pavement Maintenance (RTA, RCF, Seal)	56	66	50	300
		Rwy 17/35 Lighting Rehabilitation/ PAPI Replacement	56	45	270	
		Hangar Taxilane/ Apron Rehabilita. (Phase 1-'18, Phas. 2-'19)	45	38	250	
		New Hangar ('19 Design, '20 Construction)	12	29	750	
		Rwy 17/35 Rehabilitation/Rejuvenator	56	66		1000
		Road Relocation/Obstruction Removal	47	57		250
		Wildlife Assessment/WHMP	31	55		100
		Wildlife Fence and Signage	31	38		1000

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					1 to 5 Yrs.	6 to 10 Yrs.
26	Gwinner GWR	Snow Removal Equipment (SRE)	32	36	275	
		New Hangar ('17 Design, '19 Construction)	12	29	650	
		East Access Road Improvements	33	20	450	
		Land Acquisition, 17 Acres (Wildlife Fence)	41	42		275
		Wildlife Hazard Assessment (WHA), WHMP	31	55	100	100
		Wildlife Fence and Signage	31	38	1500	
		SRE Building	32	36		800
27	Harvey 5H4	Pavement Maintenance (RTA, RCF, Seal)	56	66	50	100
		Pavement Maintenance (RTA, RCF, Slurry Seal)	56	66	300	
		Land Acquisition and EA	41	42	500	
		Rwy 11/29, Taxiway, Apron Rehabilitation, Mill and Overlay	46	66		1500
		New Crosswind Rwy	46	59		800
		Update ALP/MP with AGIS and Exhibit A	31	42		150
		Parallel Taxiway	45	64		500
28	Hazen HZE	Apron Expansion	44	38		300
		Wildlife Fence and Signage	31	38	1000	
		Pavement Maintenance (RTA, RCF, Seal)	56	66	200	200
		Rehabilitate Runway 14-32	56	66		2100
		Wildlife Hazard Site Visit / Signage / Fence	31	62		2500
		Construct Hangar	12	29	600	
		ALP/MP Update with AGIS and Exhibit A	31	62		200
29	Hettinger HEI	Construct Crosswind Runway	46	49		500
		Construct Fueling System	12	17		150
		Windcone Replacement and New Taxilane Widening	45	39	300	
		Install MIRLS and Signage	56	45		500
		Construct Parallel Taxiway	45	46		600
		Rehab Txy A South (Phase I) / Txy C and A North (Phase II)	55	58	2200	
		Construct New Taxilane	45	38		500
30	Hillsboro 3H4	Rehab Apron	54	55		1100
		Install MITL System	54	44		300
		Pavement Maintenance (RTA, RCF, Seal)	56	66	100	100
		Rwy 16/34 Reconstruction	56	66	4500	
		Partial Parallel Taxiway and Hangar Taxilane	45	64	2300	
		Full Parallel Taxiway	45	38	3000	
		Land Acquisition / EA (Rwy Extension)	41	42	450	
		Rwy 16/34 Extension	46	51		6500
		New Hangar	12	29		1000
		AWOS	32	38		150
30	Hillsboro 3H4	Reconstruct Service Road	33	20		500
		Wildlife Fence and Signage	31	38		1000
		Pavement Maintenance (RTA, RCF, Slurry Seal)	56	66	25	100

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					1 to 5 Yrs.	6 to 10 Yrs.
31	Kenmare 7K5	Reconstruct Airport Access Road / Expansion (Design '17)	33	20	300	
		East Hangar Area Expansion (EA '19)	45	47	800	1100
		Relocate Fuel System	22	17		80
		Runway 16-34 Expansion (EA '26)	46	42		300
		Construct GA Terminal Building	21	35		500
		Pavement Maintenance (RTA, RCF, Seal)	56	68	100	300
		Install AWOS	32	47		200
32	Kindred K74	Drainage Improv./Turf Rwy/Wdcon./Seg. Cir. ('17 D, '19 C)	56	56	1250	
		Pavement Maintenance (RTA, RCF, Seal)	56	66	50	400
		Land Acquisition/Survey (Hangar Area, 4.9 Acres)	41	42	175	
		Wetland Mitigation (6 Acres)	36	54	150	
		Taxiway Rehabilitation	45	64		500
		EA Fuel Facility Concrete Pads (30' X 20')	12	46		75
		Rwy 11/29 Extension, Parallel Taxiway Construction, EA	46	51		1800
		Wildlife Assessment (WHA), WHMP	31	55		100
		New Hangar	12	29		600
		Wildlife Fence and Signage	31	38		1000
33	Lakota 5LO	Hangar Taxilane, Park. Lot, Fuel Acc. Road ('17 D, '18 C)	45	64	500	
		Rwy 11/29 and Turnaround Rehab. ('20 Design, '21 Constr.)	56	66	1650	
		Parking Lot Design and Construct	23	27		150
		Pavement Maintenance (RTA, RCF, Seal)	56	66	50	100
		Wildlife Assessment (WHA), WHMP	31	55		100
		Wildlife Fence and Signage	31	38		1000
34	LaMoure 4F9	Pavement Maintenance (RTA, RCF, Seal)	56	66	50	150
		Replace Rwy 16/34 Lights	56	45	250	
		Twy Reconstruction	45	64	200	
		Apron Reconstruction	44	38	500	
		Acquire Land (Protective Surfaces)	41	42		300
		Wetland Mitigation	36	38		200
		Wildlife Assessment (WHA), WHMP	31	55		150
		GA Terminal	21	29	200	
		New Hangar	12	29		500
		Fuel System	22	17		200
35	Langdon D55	Rwy 14/32 Lighting and Signage Rehabilitation	56	45	250	
		ALP/MP Update with AGIS and Exhibit A	31	42	250	
		SRE Equipment	32	36	350	
		Hangar Taxilane Reconstruction	45	64	600	
		Parallel Taxiway ('21 Design, '22 Construction)	45	64	150	850
		New Hangar	12	29		1000
		GA Terminal Rehabilitation	21	29		150
		Rwy 8/26 Rehabilitation (Crosswind)	56	66		600
		Pavement Maintenance (RTA, RCF, Seal)	56	66	50	100

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					1 to 5 Yrs.	6 to 10 Yrs.
36	Linton 7L2	Install MIRLS, Windcone , Beacon and Vault	56	51	500	
		Runway 9/27 Extension (EA '20)	46	51	200	1000
		ALP/MP Update & AGIS and Exhibit A	31	42		200
		Construct Parallel Taxiway	45	64		1500
		Construct Hangar / SRE Building	12	36		400
		Access Road Improvements	33	20	500	
		Pavement Maintenance (RTA, RCF, Seal)	56	66	100	
37	Lisbon 6L3	Helipad Apron Expansion	44	38	120	
		Apron Expansion	44	38	400	1200
		Update ALP/MP with AGIS and Exhibit A	31	42	150	
		Parallel Taxiway	45	64		400
		Rwy 14/32, Taxiway Rehabilitation	56	66		600
		Rwy 3/21 Expansion	46	51		200
		Rwy 14/32 Light Rehabilitation (LED)	56	45		250
		SRE/Terminal Building	32	36		200
		Wildlife Fence and Signage	31	38		1000
Pavement Maintenance (RTA, RCF, Seal)	56	66	100	100		
38	Mandan Y19	Wildlife Fence (Design '17) / Wetland Mitigation/ Drainage	31	38	3200	
		Reconstruct Hangar Taxilane	45	46	2000	
		Construct Taxilane	45	46	400	400
		Pavement Maintenance (RTA, RCF, Seal)	56	70	160	400
		Construct Runway Expansion (EA '18)	46	48		4200
		AGIS Update / Aeronautical Survey and Exhibit A	31	42	120	
		Construct Corporate Apron	31	41		600
		Construct Terminal Building Expansion	21	29	500	
		Relocate County Road and Powerlines	46	48	2000	
		Construct Hangar	12	29	1000	
Reconstruct Apron	45	46		600		
39	Mohall HBC	Construct Runway 13 Extension and Widening (EA '17)	46	51	2200	
		Land Acquisition for Runway 13 Extension (45 acres)	46	48	250	
		Wetland Mitigation	31	55	200	
		Pavement Maintenance (RTA, RCF, Seal)	56	66	100	300
		Wildlife Assessment Study	31	55		50
		Construct Wildlife Fence	31	38		2500
		Taxiway Widening and Realignment	45	46		650
		Instrument Approach Development - Rwy 13	37	50		250
Construct SRE Building	32	44		450		
40	Mott 3P3	ALP/MP Update / AGIS/Exhibit A for Instrument Procedure	51	62	180	
		Pavement Maintenance (RTA, RCF, Seal)	56	66	200	300
		Construct Partial Parallel Taxiway	41	42	200	
		Construct Wildlife Fence / WHSV	31	64	50	2000
		Construct Hangar Taxilane	45	46		300
		Install AWOS	32	42		200
		Construct Hangar	12	29	400	
		Construct Runway Extension	46	56		1000

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					1 to 5 Yrs.	6 to 10 Yrs.
41	Northwood 4V4	Rwy 8/26, Taxiway, Apron Reconstruction (Overlay)	56	66	2050	
		Taxilane and Apron Expansion ('19 EA, '20 D, '21 C)	45	46	550	
		Fueling System	22	17		350
		GA Terminal	21	29		600
		Pavement Maintenance (RTA, RCF, Seal)	56	66	50	400
		New Rwy (14/32)	46	59		5200
42	Oakes 2D5	SRE/Terminal Building	32	36	450	
		Wildlife Hazard Assessment / WHMP	31	55	60	
		Wildlife Fence and Signage ('19 Design, '20 Construct)	31	38	1000	
		Parallel Taxiway	45	64	100	1000
		Pavement Maintenance (RTA, RCF, Seal)	56	66	50	100
43	Park River Y37	Update ALP/MP with AGIS and Exhibit A	31	42	225	
		Terminal Parking Lot	23	27	100	
		Environmental Assessment (EA)	46	48	125	
		Land Acquisition Rwy 13/31 Shift/Extension	46	52	250	
		Rwy 13/31 Shift Extension and Update Lighting	46	51		1000
		AWOS	32	42		280
		Wildlife Assessment/WHMP	31	55	50	
		Wildlife Fence and Signage	31	38	1000	
44	Parshall Y74	Pavement Maintenance (RTA, RCF, Seal)	56	66	200	200
		Construct Hangar	12	29	520	
		ALP/MP Update / AGIS/Exhibit A with WHSV	31	62	300	
		Construct Runway Extension (EA '23)	46	56		1300
		Land Acquisition for Rwy Extension	46	52		600
		Install AWOS	32	42		300
		Construct Apron	44	38		300
		Construct Fence and Signage	31	38	2000	
45	Pembina PMB	Construct Fuel System	22	17	200	
		Apron / Access Road Reconst. / Taxilane Const. ('17 D / '18 C)	45	64	1000	
		Flood Protection (Design '18, Construction '21)	54	-	300	
		SRE Building Construction (Design '21, Construction '23)	32	36	1500	
		Parking Area with Security Fence	23	27		150
		Rwy 15/33 and Taxiway Rehabilitate	56	66		1250
		Pavement Maintenance (RTA, RCF, Seal)	56	66	50	100
46	Rolla 06D	Wildlife Assessment/WHMP	31	55		50
		Wildlife Fence and Signage	31	38		1000
		Airfield Electrical Project and CS	56	66	450	
		Pavement Maintenance (RTA, RCF, Seal)	56	66	200	300
		ALP Update / AGIS and Exhibit A	32	55	250	
		Land Acquisition (RPZ)	41	44	300	
		Construct Fence and Signage	31	64		2000
		Construct Hangar	12	29		600

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47	Rugby RUG	Airfield Electrical Project, CS and Sfc Treatment	56	66	550	
		Pavement Maintenance (RTA, RCF, Seal)	56	66	50	100
		Construct SRE Building	32	36	500	
		Runway 12-30, Taxiway and Taxilane Rehabilitation	56	66		3000
		ALP Update / AGIS and Exhibit A	32	55		250
		WHA, Construct Fence and Signage	31	64		2200
48	Stanley 08D	Pavement Maintenance (RTA, RCF, Seal)	56	66	50	150
		Construct Jet Fuel System	22	17	100	
		Land Acquisition (16.7 Acres)	41	42	300	
		Hangar/Parking Lot Improvements	12	27	800	800
		Construct SRE Building	32	36		400
		AGIS Survey	31	42		100
		Construct Hangar	12	27		800
49	Tioga D60	Pavement Maintenance (RTA, RCF, Seal)	56	68	300	
		WHSV and WHMP Study	45	62	50	
		Construct Fence and Signage	31	64	1500	
		Runway 12-30 Rehabilitation	56	66		1300
		Construct Full Length Parallel Taxiway (EA '27)	41	42		2400
		Construct Terminal Building	21	40	500	
		Fuel System Relocation - Design and Construction	22	17	400	
50	Valley City BAC	Wildlife Fence, Hangar Park., Cultur. Inv. (D '17, C'18 / '20)	31	38	1000	
		Rwy 13/31 Rehabilitation and Marking	56	66		450
		Rwy 5/23 Construction (EA '23, Design '26, Construc. '27)	46	59		1300
		Apron Reconstruction (Design '25, Construction '26)	44	38		1100
		Land Acquisition (95 Acres)	41	42	475	475
		Update ALP/MP with AGIS and Exhibit A	31	42		250
		Pavement Maintenance (RTA, RCF, Seal)	56	66	100	100
51	Wahpeton BWP	Main Taxiway Reconstruction (Rwy 15 End)	41	64	410	
		Apron Rehabilitation (Design '19, Phase 1-'21, Phase2-'22)	44	38	2600	2500
		Land Acquisition (Rwy 33 End-House)	56			200
		Rwy 3/21 Paving (Crosswind)	46	59		1000
		Wildlife Fence and Signage	31	38		1000
		Pavement Maintenance (RTA, RCF, Seal)	56	66	50	100
52	Walhalla 96D	New Hangar	12	29	650	
		Update Lighting (MIRL)	56	45	50	300
		Parallel Taxiway Rejuvenate	45	64	250	
		Update ALP/MP with AGIS and Exhibit A	31	42		150
		Need \$ Transfer Out to Another Airport 2017	-	-		
		Pavement Maintenance (RTA, RCF, Seal)	56	66	50	100
		Rwy 15/33 Rehabilitation (Seal Coat)	56	66		250
		Wildlife Fence and Signage	31	38	1000	

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					1 to 5 Yrs.	6 to 10 Yrs.
53	Washburn 5C8	ALP/MIP Update, AGIS/Exhibit A, Environmental and WHSV	32	55	300	
		Construct Apron Expansion (Phase II - EA 18)	47	50	100	
		Construct Fueling System (Design '20)	22	59	600	
		Pavement Maintenance (RTA, RCF, Seal)	56	66		800
		Construct Hangar Taxilane	45	46		500
		Construct Fence and Signage	31	64		1400
		Construct Access Road	33	20		150
54	Watford City S25	Land Acquisition	41	42	700	
		Runway Realignment (Design '18)	46	48	18200	
		Construct Fence and Signage	31	64		3200
		New Airport Beacon	41	42	50	
		Pave Access Road / Parking	33	21		400
		Pavement Maintenance (RTA, RCF, Seal)	56	68	100	100
55	State PCI		51	56	1000	1000
56	State Av-Impact		51	64		600
57	State System Plan Update		51	64		600
Total Based AC:			GA Totals:		121,865	163,190
			CA Totals:		487,710	184,725
			CA & GA Totals:		606,775	347,915

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In addition the availability of State and Federal funding varies. Although listing a project in the CIP is the first step toward funding, that funding is not guaranteed for the projects listed.



1-D

A Statewide
Voice for
Aviation



Agency Mission

To serve the public by providing economic and technical assistance for the aviation community while ensuring the safe and cost effective advancement of aviation in North Dakota.

Agency Activities

ND Passport Program: a booklet stamping program that rewards pilots who fly to North Dakota's publicly-owned airports, visits North Dakota's aviation museums and attend FAA safety seminars.

Flight Training Assistance Program: a program that helps defray additional student pilot costs as a result of direct transportation costs incurred by commuting flight instructors.

Agricultural Operator Alert Map: a map of alert areas (towers, organic farms, ect.) can be found on the aeronautics commission website.

The International Aviation Art Contest: an annual event encouraging students ages six through 17 to express their creativity while celebrating aviation.

North Dakota Aviation Publications and Planning Documents: Aviation Economic Impact Studies, Aeronautical Charts, Airport Directories, State Aviation System Plan, Pavement Condition Index Study for ND Airports.

Regulatory Function: the office is responsible for administering North Dakota's laws in regards to registration of aircraft, aircraft dealers, aerial applicators, and the collection of aircraft excise tax.

Airport Intern Program: Encourages commercial service airports in ND to hire a management intern by providing a stipend to help defray the labor costs.

Aviation Education Grant Funding: The aeronautics commission provides grant funding for aviation education programs. Applications are accepted at any time from aviation enthusiasts, airports, or aviation organizations.

Airport Grant Funding: The aeronautics commission disperses approximately \$2.5 million annually to airports across the state for airport improvement projects. These funds are derived from aviation fuel taxes, aircraft excise taxes, and aircraft registrations.

Airport Inspections & Chart Supplement Updates: Each public airport is inspected at least once every three years and safety recommendations are made at the time of each inspection. North Dakota airport information that is used in the FAA Chart Supplement is also updated by the aeronautics commission staff.

Aviation Facts about North Dakota

- On and off-airport aviation related activity in North Dakota creates 32,200 jobs.
- \$1.6 billion in economic output activity is created each year by North Dakota Airports.
- Approximately 4.5 million acres of crops are sprayed annually by aerial applicators.
- More than 2.4 million airline passengers traveled through North Dakota's commercial airports in 2015.
- Approximately 3,600 people hold FAA pilot certificates in North Dakota
- Approximately 2,000 aircraft are registered with the state of North Dakota.

**North Dakota
Aeronautics
Commission
Staff**

Kyle Wanner – Director
Gaye Niemiller – Administrative Officer
Sheila Doll – Licensing Specialist
Jared Wingo – Airport Planner
Benjamin West – Airport Planner
Mike McHugh – Aviation Education Coordinator

ND Aeronautics Commission Members



Cindy Schreiber-Beck, Chair, Wahpeton

Currently Cindy serves as the Executive Director of the North Dakota Agricultural Aviation Association (NDAAA), is the owner of Tri-State Aviation, an FBO with a concentration on WWII aircraft restoration, and manages the Wahpeton Harry Stern Airport. She is active in the local business community and has served on the Commission since 1997.



Dr. Kim Kenville, Vice-Chair, Grand Forks

Kim began teaching for the University of North Dakota's John D. Odegard School of Aerospace Sciences in the fall of 1999 where she currently teaches airport management. Since 2008, Kim has been the director of the graduate program for the Department of Aviation and holds the rank of full professor. Dr. Kenville received her Ph.D. in 2005 from Capella University in Organization and Management. Prior to returning to UND, Kim worked in airport operations for Detroit Metropolitan and Milwaukee County airports. She is a certified member (C.M.) of the American Association of Airport Executives and holds a private pilot's license. Kim was appointed to the Aeronautics Commission in September of 2011.



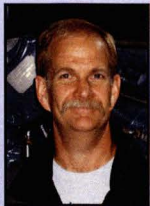
Maurice E. Cook, Member, Bismarck

Maurice retired from active legal practice at the end of 2010. During his legal career he served as a State's Attorney, City Attorney, Airport Authority Attorney, Assistant Attorney General as General Counsel for the Bank of North Dakota, as a member and Chairman of the Board of Directors of Prairie Public Broadcasting, ND Civil Air Patrol Wing Commander and ten years as Civil Air Patrol's National Legal Officer. He served as Bond Counsel to numerous ND political subdivisions and various agencies of the State of North Dakota in the issuance of municipal bonds for thirty years. He holds a multi engine instrument pilot's license and started flying in Hettinger, ND, in 1952. He has been a member of the ND Aeronautics Commission since 1999.



Jay B. Lindquist, Member, Hettinger

Jay is president of Air Dakota Flite, a full service, fixed base operator (FBO). J.B. has a strong aerial applicator background and has been crop spraying for 50 years. He has been a Certified Flight Instructor and has served as the Manager of the Adams County Municipal Airport, Hettinger, ND for 40 years. His other interests are in retail and farming. J.B. was inducted into the North Dakota Aviation Hall of Fame in 2012. He has been a member of the Commission since 1993.



Warren A. Pietsch, Member, Minot

Warren is president of Pietsch Aircraft Restoration & Repair and Minot Aero Center at the Minot International Airport. Warren soloed at the age of 16 and has continued in aviation. He began chartering for the family business, ventured into airshows in 1981, and worked for ATA Airlines 1989-2008 serving as a captain for L-1011, B-727, B-737. Warren is a current and founding board member of the Dakota Territory Air Museum and the Chief pilot for the Texas Flying Legends Museum, Houston TX. Holding a single & multi-engine ATP, SeaPlane rating, Commercial glider CFG & CFIs and is an Aerobatic Evaluator for ICAS, Warren was appointed to the Commission in May of 2012.

Facts on the Economic Impact of Airports in North Dakota

Airport Economic Impacts

North Dakota's 8 commercial and 81 general aviation airports provide and support significant annual economic impacts. Airport related benefits come from activities associated with airport management, airport tenants, capital investment, and spending by visitors to North Dakota who arrive on commercial airlines and general aviation aircraft. Economic impacts for the 89 airports are measured using employment, annual payroll and annual economic output.

A 2015 study completed by the North Dakota Aeronautics Commission shows there are significant positive economic impacts associated with the state's public-use airports. As shown below, there has been a notable increase in impacts between 2010 and 2015:

Annual economic impacts from public-use airports have increased from **\$1.06 billion** to **\$1.56 billion**, a **47%** increase.

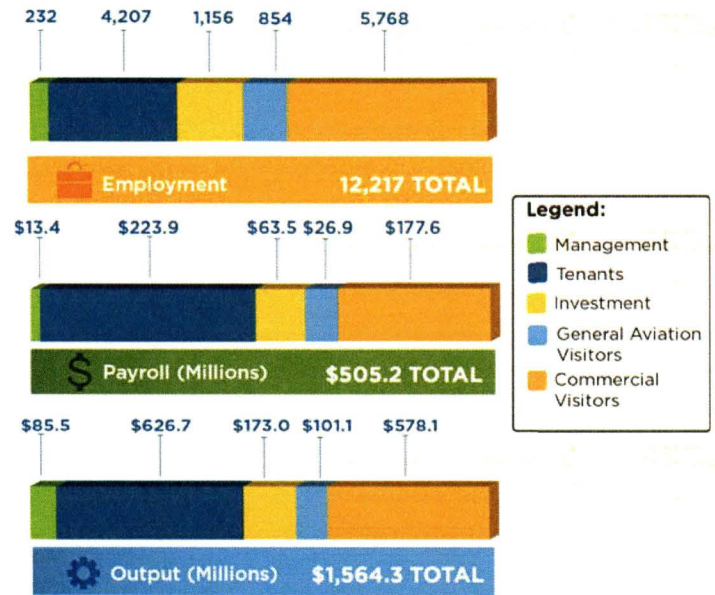
Jobs supported by North Dakota airports have grown from **8,872** to **12,217**, a **38%** increase.

Annual state and local sales tax revenues from airport supported activities have increased from **\$31.1 million** to over **\$60 million**, a **93%** increase.

The significant annual economic impact from North Dakota's 8 commercial and 81 general aviation airports comes from **five** centers of economic activity.

- Airport Management** Activities undertaken by airport employees to operate the airport on a daily basis.
- Airport Tenants** Aviation related businesses that provide airport, aircraft, or customer services.
- Capital Improvement Spending** Average annual investment made to maintain, improve, or expand an airport.
- General Aviation Visitors** Spending by general aviation visitors to North Dakota that support hotels, restaurants, and other visitor related activities.
- Commercial Visitors** Spending by commercial visitors to North Dakota that support hotels, restaurants, and other visitor related activities.

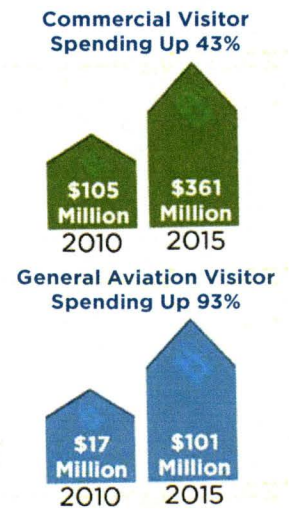
Economic impacts for North Dakota airports are measured using three indicators: employment, annual payroll, and annual economic output. For airport management and airport tenants, output is equal to their cost for purchasing goods and services to run the airport or their business. For capital investment, commercial visitors, and general aviation visitors, output is equal to average annual spending for airport improvements or annual spending by air visitors while they are in North Dakota.



2015 Total Annual Economic Impacts from Public-Use Airports
Jobs: 12,217
Payroll: \$505.2 million
Output: \$1.56 billion

Air Visitors to North Dakota

Since 2010, all air visitors to North Dakota have increased from **543,300** to **915,290**, an increase of 68%. Business travel to North Dakota has increased exponentially, leading to significant increases in visitor spending for both visitors arriving on general aviation aircraft and on commercial airline flights. Study surveys show business travelers are staying longer and spending more.



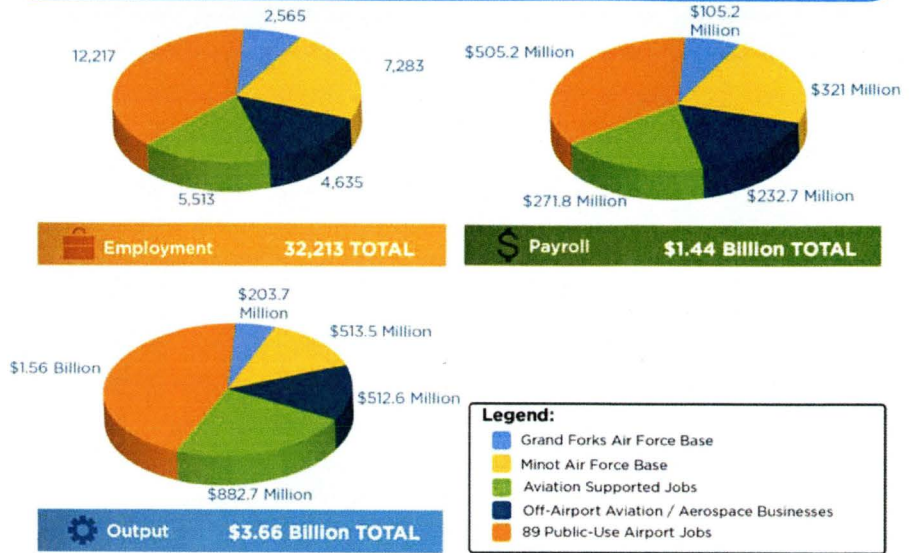
Other Economic Benefits from Aviation and Aerospace

Aside from economic benefits from North Dakota's public-use airports, there are other off-airport aviation and aerospace activities in North Dakota that provide additional economic benefits. These include benefits from:

- Grand Forks Air Force Base
- Minot Air Force Base
- Off-Airport Aviation and Aerospace Businesses (including aerial applicators)
- Jobs with Improved Efficiency from Aviation

When airport, military, and off-airport aerospace and aviation activities in North Dakota are combined, they provide the annual economic impact shown to the right. Included in the aviation supported jobs are over 100 aviation and aerospace related jobs at the University of North Dakota; these jobs are in addition to University jobs located at Grand Forks International Airport.

Annual Economic Impacts From Airports, Aviation, and Aerospace



TOTAL FOR ALL AIRPORT / AVIATION / AEROSPACE IMPACTS



Increasing Economic Benefits

Economic impacts for North Dakota's airports were previously estimated in 2010. Information presented here shows how economic impacts from the commercial and general aviation airports in North Dakota have increased over the past five years.



The North Dakota Statewide Economic Impact Study shows that when all airport, aviation, military, and aerospace activities in North Dakota are considered:

- **32,200** jobs for all airport/aviation/aerospace related activities account for an estimated **8%** of North Dakota's total employment which is estimated at **413,000**.
- The **\$3.7 billion** in total annual output for all airport/aviation/aerospace related activities accounts for an estimated **7%** of North Dakota's Real Gross State Product estimated at **\$48.2 billion**.



1-F



STATEWIDE ECONOMIC IMPACT OF AVIATION IN NORTH DAKOTA



**2015
Executive Summary**

1

INTRODUCTION

North Dakota's economy has recently undergone significant growth, driven primarily by energy exploration, production, and transportation. Airports in North Dakota are essential to supporting the state's economy. The state's economic growth has resulted in increased activity at many North Dakota airports. This increased activity has resulted in the growth of economic benefits that airports provide to the communities they serve.

North Dakota airports have responded to increased aviation activity generated by recent economic growth. More visitors flying for business are using commercial airports and are flying to the state on general aviation planes. Visitors to North Dakota are staying longer and spending more. Flights by larger and more demanding general aviation business jets have increased at many airports. General aviation planes connect North Dakota to business centers throughout the country.

Since statewide economic impacts were last measured in 2010:

- Annual economic benefits from public-use airports in North Dakota and the activities they support have increased 47%.
- Jobs supported by North Dakota airports have grown from 8,872 to 12,217, an increase of 3,345 jobs.
- Annual state and local sales tax revenues for airports and airport supported activities have increased from \$31.1 million to over \$60 million.
- Visitors coming to North Dakota each year on general aviation aircraft or commercial airline flights have grown from 545,300 to 915,290.



Airports Have Expanded Existing Facilities

Minot International is constructing a new passenger terminal. Passenger boardings have increased from 90,820 (2010) to 222,144 (2014), a 145% increase.

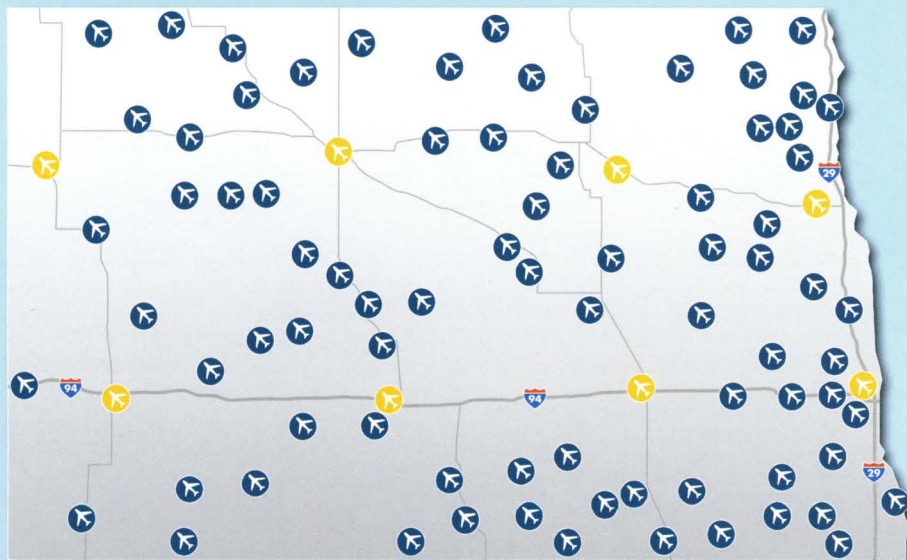
Airports Have Built New Facilities

Bowman recently constructed a new airport with a runway of 5,700 feet. This length enables larger business jets to reach the community.

Additional Aviation Businesses Have Been Attracted

Increased activity at the Tioga Municipal Airport attracted Tioga Aero Center in 2014. This aircraft service provider offers fuel, storage, maintenance, and ground transportation.

North Dakota Public-Use Airports

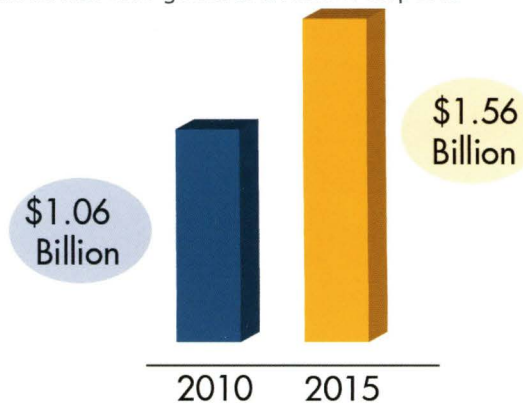


81 General Aviation Airports 8 Commercial Service Airports

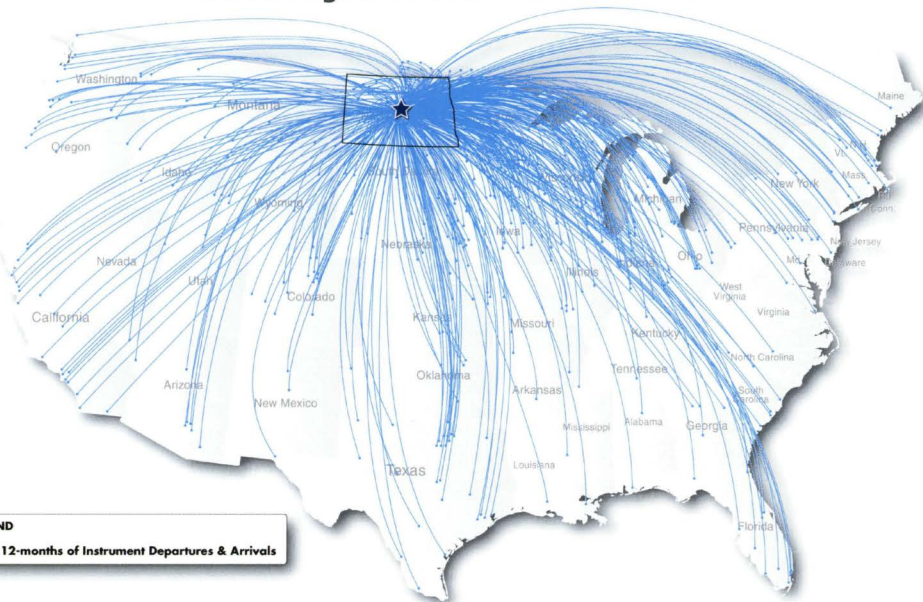
This report, authorized by the North Dakota Aeronautics Commission (NDAC), summarizes how growth at North Dakota's eight commercial service and 81 general aviation airports translates into higher annual economic impacts for the communities these airports serve and for the state. More detailed information on the study is available from the NDAC.

Change in Annual Airport Related Economic Impacts

When the economic impact of North Dakota's airport system was last measured in a study released in 2010, the total annual economic impact of commercial and general aviation airports was measured at \$1.06 billion. Just five years later, the total annual economic impact for the commercial and general aviation airports has increased to \$1.56 billion—a **47% increase.**



Business Connections Direct Flights To and From North Dakota

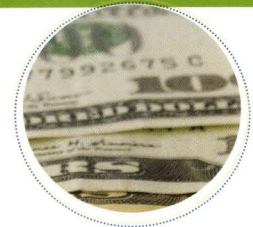


LEGEND
 12-months of Instrument Departures & Arrivals

North Dakota airports connect the state to business centers throughout the U.S. This map shows recorded instrument flight rule (IFR) arrivals and departures to the state over the last 12 months—most of these flights were on general aviation aircraft. According to FAA data, non-stop flights represent only 3% of all aircraft arrivals and departures to North Dakota airports over the past 12 months. This map clearly shows the important role that airports play in providing the transportation infrastructure that has supported the state's recent economic growth.

SOURCES OF AIRPORT ECONOMIC IMPACTS

For NDAC's statewide study for commercial service and general aviation airports, annual economic impacts were measured for **five** economic activity centers.



Economic Activity Centers

Airport Management	Activities undertaken by airport employees to operate the airport on a daily basis.
Airport Tenants	Aviation-related businesses that provide airport, aircraft, or customer services.
Capital Improvement Spending	Average annual investment made to maintain, improve, or expand an airport.
Commercial Visitor Spending	Spending by visitors to North Dakota who arrive by air that supports hotels, restaurants, and other visitor-related activities.
General Aviation Visitor Spending	Spending by visitors to North Dakota who arrive by air that supports hotels, restaurants, and other visitor-related activities.

5 Sources of Economic Impacts

On-Airport

- 1 Airport Management
- 2 Aviation-Related Tenants / Businesses
- 3 Investment for Capital Improvements

Off-Airport

- 4 Visitors Arriving on Commercial Airlines
- 5 Visitors Arriving on General Aviation Aircraft



Measurements of Economic Impacts



For each of these five categories, annual economic impacts were measured for jobs, payroll, and output. While employment and payroll measures are easy to understand, output is more complex. Output for airport management and airport tenants is generally equal to the purchase of goods and services needed by these two groups to support their operations or to run their businesses.

Output for capital improvement investment is equal to the average annual amount actually spent by federal, state, local, and private contributors to maintain and improve the airports. The annual spending of visitors in North Dakota is equal to direct output in the visitor category.

2015 TOTAL STATEWIDE ECONOMIC IMPACTS

NDAC's statewide economic impact study estimated annual economic impacts for each of the five activity centers. It is important to understand that impacts shown in this report represent a "snapshot in time," reflecting conditions at North Dakota airports when the study was prepared in the 2014/2015 time frame. While economic impacts from airport management, airport tenants, and visitor spending can change year-to-year, economic impacts from capital investment have a higher propensity to change between reporting periods.

Remaining portions of the summary provide more detail on economic impacts for each category and a general overview of the methodology used to complete the economic impact analysis. Other economic benefits associated with aviation and aerospace in North Dakota are also presented.

	TOTAL EMPLOYMENT	TOTAL PAYROLL	TOTAL OUTPUT
Total Airport Management	232	\$13.4 million	\$85.5 million
Total Airport Tenants	4,207	\$223.9 million	\$626.7 million
Total Capital Investments	1,156	\$63.5 million	\$173.0 million
Total General Aviation Visitors	854	\$26.9 million	\$101.1 million
Total Commercial Visitors	5,768	\$177.6 million	\$578.1 million
Total Statewide Annual Impacts	12,217	\$505.2 million	\$1.56 billion

Estimates Include Total Statewide Direct and Indirect Impacts

Total Annual Statewide Economic Impacts



Employment

Jobs related to airport management, airport tenants, capital investment at airports, and visitor spending

12,217 jobs



Payroll

Annual payroll associated with these jobs

\$505.2 million



Output

Annual economic output for five activity centers

\$1.56 billion



ECONOMIC IMPACT METHODOLOGY

Airport-related economic impacts measured in this study came from five sources: airport management, airport tenants, capital improvement spending, spending from visitors arriving on commercial airlines, and spending from visitors arriving on general aviation aircraft. For each of these five categories, economic impacts are estimated for jobs, annual payroll, and annual output.

For each impact category and each measurement, the process to estimate total economic impacts starts with estimating “direct” impacts. Once direct impacts for jobs, payroll, or output enter the North Dakota economy, other successive waves of economic impact occur. These additional impacts are “indirect impacts” but are sometimes more commonly referred to as “multiplier” impacts. Together, direct and indirect impacts equal total annual economic impact for individual airports and the state. The following pages discuss economic impacts for the five activity centers.



Indirect Impact Example

Sam is employed by the airport. This week when Sam receives his pay from the airport, he takes his “direct” salary and pays a baby sitter, takes the family dog to the vet and pays for their services, and pays a teacher for his daughter’s piano lesson. Direct payroll that started at the airport has now entered the economy of the community where Sam lives. As this example shows, Sam’s “direct” airport job and pay help to support other “indirect” jobs, payroll, and output for the babysitter, the vet, and the piano teacher. In this study, the IMPLAN model*, with data sets specific to North Dakota, was used to estimate all indirect economic impacts in the employment, payroll, and output categories.

* Information on the IMPLAN model is available in the study’s technical report

Impact Measures

For this report, economic impacts are expressed in terms of jobs, payroll, and total annual economic output. Each of these measures include the direct, indirect, and total impacts.



ANNUAL ECONOMIC IMPACTS FROM AIRPORT MANAGEMENT

Throughout North Dakota people are employed to manage, operate, and maintain the eight large commercial service airports and the 81 general aviation airports. These employees can be full-time, part-time, or seasonal. Interviews conducted for this study show that most often employees in the airport management function are located at the airport, but sometimes the airport management employees work in off-airport locations.

To translate part-time and seasonal jobs into full-time positions, each airport furnished information on the number of hours part-time employees work specifically to support the airport. This information provides a more accurate means to estimate how the part-time and seasonal workforce contributes to the full-time employment at each airport.

As part of this study, extensive outreach with airport managers throughout North Dakota was completed to gather information on direct employment, payroll, and annual purchases for goods and services (output) needed to run each airport. Many times, airport managers were interviewed in person, especially at the commercial service airports and larger general aviation airports. Airport managers also played an important role in this study, verifying direct economic impacts for their airport for all five impact categories. Airport Management statewide annual economic impacts, which include the direct and indirect impacts for all study airports, are shown in the accompanying table.



Total Annual Statewide Economic Impact Airport Management

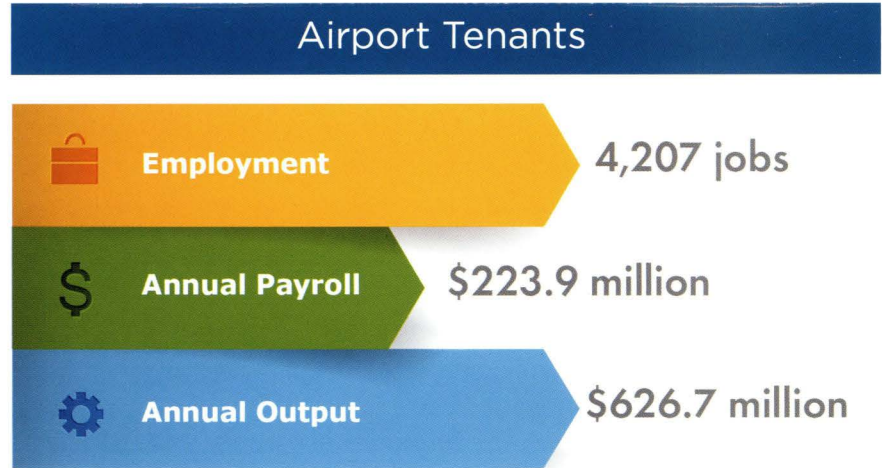
EMPLOYMENT		PAYROLL		OUTPUT	
• Direct	154	• Direct	\$9.6 million	• Direct	\$56.2 million
• Indirect	78	• Indirect	\$3.8 million	• Indirect	\$29.3 million
• Total	232	• Total	\$13.4 million	• Total	\$85.5 million

Source: North Dakota Airport Managers

ANNUAL ECONOMIC IMPACTS FROM AIRPORT TENANTS

There are many types of aviation-related businesses that operate at study airports. These businesses provide various types of aviation-related services to support aircraft and airport customers. Examples of airport tenants include, but are not limited to: Fixed Based Operators (FBOs); aircraft maintenance providers; aircraft charter, rental, and sales companies; air ambulance operators; aerial applicators; military units located at civilian airports; air cargo companies; ground transportation providers; flight schools; airlines; and corporate flight departments. Airport tenants who are not aviation-related are not included in this analysis.

For this study, all airport managers provided contact information for their aviation-related tenants. All tenants were contacted directly to obtain information on their full-time, part-time, and seasonal employment; annual payroll; and annual operating expenses (output). Tenants at North Dakota's airports were the primary source of direct impacts reported in this category. Indirect impacts (multiplier) for all airport tenant employment, payroll, and output were estimated using the IMPLAN model. Total statewide annual economic impacts for airport tenants are shown below.



Total Annual Statewide Economic Impact Airport Tenants

EMPLOYMENT

• Direct	2,738
• Indirect	1,469
• Total	4,207

PAYROLL

• Direct	\$150.5 million
• Indirect	\$73.4 million
• Total	\$223.9 million

OUTPUT

• Direct	\$408.3 million
• Indirect	\$218.4 million
• Total	\$626.7 million

Source: North Dakota Airport Tenants

ANNUAL ECONOMIC IMPACTS FROM CAPITAL INVESTMENT

Each year, federal, state, local, and private funds are invested to maintain, improve, and expand public-use airports in North Dakota. For each of the last three years, this combined investment has reach almost \$100 million per year. Recently, the North Dakota Legislature, FAA, and some local communities responded to growing airport infrastructure needs by allocating additional funds to help North Dakota’s airports keep pace with the state’s surging economy. Direct output in the capital investment category supports additional jobs and the payroll associated with those jobs, which were estimated with IMPLAN.

Economic impacts related to capital investment only exist when actual spending is taking place. Once a project is finished, employment, payroll, and output impacts in this category cease. When capital investment at an airport changes significantly, economic impacts stemming from this activity center also change.

To estimate economic impacts related to capital investment, a three-year average for annual capital investment at each study airport was developed. Information for airport-specific capital investment was provided by NDAC, FAA, study airports, and tenants at various airports. For this economic activity center, annual capital investment for each study airport is equal to its direct annual output. Based on estimated average annual investment, IMPLAN provides ratios which are used to estimate “direct” jobs and payroll supported by direct output, in this case average annual capital investment. IMPLAN also estimates “indirect” impacts associated with each capital investment impact measure: employment, payroll, and output provided by NDAC, FAA, airports, and tenants.

Average Annual Capital Investment



Employment

1,156 jobs



Annual Payroll

\$63.5 million



Annual Output

\$173.0 million



Total Annual Statewide Economic Impact Capital Investments

EMPLOYMENT

• Direct	534
• Indirect	622
• Total	1,156

PAYROLL

• Direct	\$39.8 million
• Indirect	\$23.7 million
• Total	\$63.5 million

OUTPUT

• Direct	\$99.4 million
• Indirect	\$73.6 million
• Total	\$173.0 million

Source: Airport Managers, Tenants, NDAC, FAA, IMPLAN

ANNUAL ECONOMIC IMPACTS FROM COMMERCIAL AND GENERAL AVIATION VISITOR SPENDING

North Dakota’s economic growth has resulted in more visitors, particularly business-related visitors, arriving to the state by air. These visitors are staying longer and spending more. Estimates of visitors arriving in North Dakota on a commercial airline were developed using each airport’s annual enplaned passengers and information from USDOT on the portion of these enplanements that are residents versus visitors.

The process to develop estimates of visitors arriving on general aviation aircraft was much more complex and involved several rounds of input from study airports and NDAC staff. Estimates developed in this study of visitors arriving on general aviation aircraft were individualized for each commercial and general aviation airport.

According to airport and USDOT information, an estimated 533,112 visitors arrive annually in North Dakota on commercial airline flights, and 382,177 visitors arrive on general aviation aircraft. Once in North Dakota, visitors have expenditures for items such as lodging, food, entertainment, retail, and ground transportation services. To capture specific visitor spending patterns on a per trip basis, visitors completed more than 4,000 surveys. These surveys were completed with assistance from airports throughout North Dakota. Using survey information, airport-specific estimates for spending per visitor trip were developed. It is important to note that a high percentage of visitors who come to North Dakota on general aviation aircraft do not spend the night. Some business visitors specifically use general aviation aircraft for travel so that they can shorten the length of their trip.

Similar to capital investment, annual “direct output” for the visitor category is equal to annual visitor spending. Once direct visitor spending was estimated, IMPLAN was used to estimate the number of direct jobs and payroll that direct visitor spending supports. The following table shows estimated annual economic impacts for the general aviation visitor category. It is important to note that visitors traveling to North Dakota on general aviation aircraft arrive at both commercial and general aviation airports.

General Aviation Visitor Spending					
EMPLOYMENT		PAYROLL		OUTPUT	
• Direct	619	• Direct	\$16.3 million	• Direct	\$64.0 million
• Indirect	235	• Indirect	\$10.5 million	• Indirect	\$37.1 million
• Total	854	• Total	\$26.9 million	• Total	\$101.1 million

Source: Airport Managers, Surveys, and IMPLAN



General Aviation Visitor Spending

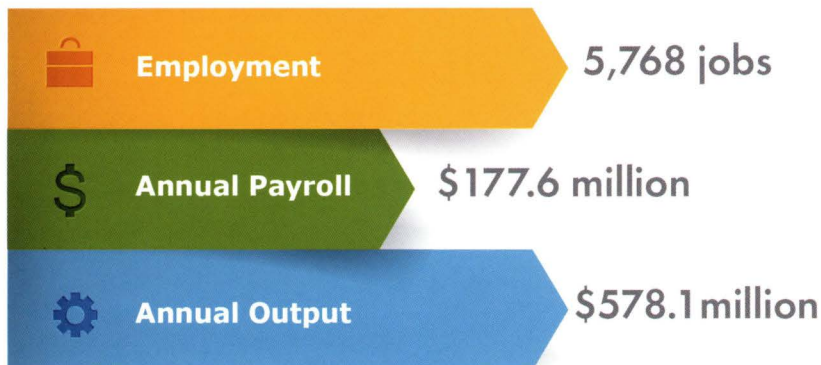


North Dakota's economic growth has attracted a growing number of visitors. These visitors arrive on commercial airline flights and on general aviation aircraft.

Not only are more visitors coming to North Dakota—these visitors are staying longer and spending more. The Annual and Average Spending Per Trip graphic shows, on a per trip basis, the average spending of visitors arriving on general aviation aircraft and on commercial airlines. It also shows how spending on a per trip basis for both types of visitors has increased since 2010.



Commercial Visitor Spending



Commercial Visitor Spending

EMPLOYMENT		PAYROLL		OUTPUT	
• Direct	4,151	• Direct	\$105.4 million	• Direct	\$360.9 million
• Indirect	1,617	• Indirect	\$72.2 million	• Indirect	\$217.2 million
• Total	5,768	• Total	\$177.6 million	• Total	\$578.1 million

Source: Surveys and IMPLAN

Spending per Commercial Visitor Trip

	ANNUAL COMMERCIAL VISITORS	TOTAL VISITOR SPENDING	SPENDING PER TRIP
Bismarck	110,342	\$68.8 million	\$624
Devils Lake	1,890	\$0.70 million	\$374
Dickinson	25,891	\$15.80 million	\$612
Fargo	179,539	\$96.10 million	\$535
Grand Forks	62,824	\$35.10 million	\$558
Jamestown	3,542	\$1.40 million	\$400
Minot	95,669	\$80.90 million	\$846
Williston	53,415	\$61.90 million	\$1,160

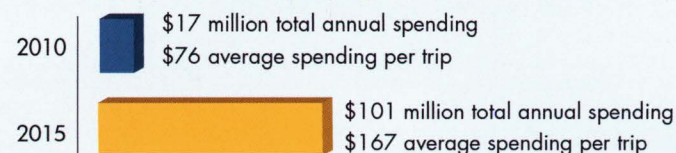
Residents and visitors comprise the annual passenger boardings; this table shows only visitor related boardings for each commercial airport.

Increase in North Dakota Air Visitors

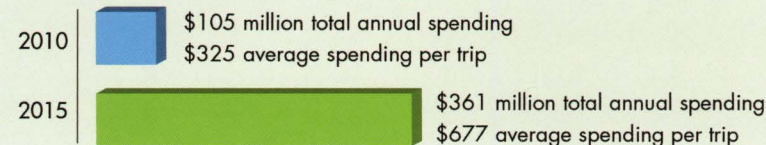
	2010	2015	Increase
General Aviation Visitors	222,318	382,177	72%
Commercial Visitors	322,983	533,112	65%

Annual and Average Spending Per Trip

General Aviation Visitors Spending



Commercial Aviation Visitors Spending



INDIVIDUAL AIRPORT ECONOMIC IMPACTS

This table presents current total annual economic impacts for each study airport. These estimates reflect total impacts, both direct and indirect, for airport management, airport tenants, capital investment, and all visitor-related spending. More information on impacts for individual airports is available in the study's technical report.

For the employment category, the table also shows how direct and indirect jobs contribute to total employment for each airport. **It is important to remember that direct jobs presented here come from as many as five activity centers. Indirect employment shown for each airport was estimated using the IMPLAN model.** Together, direct and indirect impacts represent the total employment impacts reported for each airport.

CITY	AIRPORT NAME	EMPLOYMENT			TOTAL PAYROLL	TOTAL OUTPUT
		Direct	Indirect	Total		
Bismarck	Bismarck Municipal	1,301	825	2,126	\$86,510,312	\$279,744,887
Devils Lake	Devils Lake Regional	59	30	89	\$4,013,851	\$11,811,488
Dickinson	Dickinson-Theodore Roosevelt Regional	314	161	475	\$20,322,935	\$76,618,095
Fargo	Hector International	2,391	962	3,353	\$142,166,337	\$387,465,584
Grand Forks	Grand Forks International	1,147	522	1,669	\$73,622,396	\$199,368,171
Jamestown	Jamestown Regional	65	55	120	\$4,797,458	\$24,425,703
Minot	Minot International	1,357	628	1,985	\$74,678,827	\$254,598,258
Williston	Sloulin Field International	1,004	470	1,474	\$57,256,315	\$209,047,988
Total Commercial Airports Impacts		7,638	3,653	11,291	\$463,368,431	\$1,443,080,174
Arthur	Arthur	0	0	0	\$0	\$23,250
Ashley	Ashley Municipal	13	4	17	\$806,986	\$2,382,031
Beach	Beach	6	7	13	\$283,851	\$656,324
Beulah	Beulah	10	3	13	\$625,781	\$1,708,123
Bottineau	Bottineau Municipal	7	3	10	\$522,677	\$1,546,789
Bowbells	Bowbells Municipal	0	0	0	\$0	\$8,200
Bowman	Bowman Regional	40	44	84	\$4,546,230	\$11,879,439
Cando	Cando Municipal	6	8	14	\$448,730	\$1,821,461
Carrington	Carrington Municipal	9	5	14	\$471,458	\$1,586,478
Casselton	Casselton Robert Miller Regional	32	23	55	\$2,192,020	\$5,610,341
Cavalier	Cavalier Municipal	10	4	14	\$573,265	\$1,933,077
Columbus	Columbus Municipal	0	0	0	\$0	\$3,000
Cooperstown	Cooperstown Municipal	2	1	3	\$129,618	\$431,535

CITY	AIRPORT NAME	EMPLOYMENT			TOTAL PAYROLL	TOTAL OUTPUT
		Direct	Indirect	Total		
Crosby	Crosby Municipal	6	7	13	\$452,141	\$1,473,286
Drayton	Drayton Municipal	1	0	1	\$64,809	\$185,378
Dunseith	International Peace Garden	<1	0	<1	\$0	\$69,753
Edgeley	Edgeley Municipal	5	4	9	\$408,353	\$1,261,884
Elgin	Elgin Municipal	0	0	0	\$0	\$3,625
Ellendale	Ellendale Municipal	4	5	9	\$246,800	\$1,031,194
Enderlin	Sky Haven	0	0	0	\$0	\$72,892
Fessenden	Fessenden-Streibel Municipal	5	2	7	\$336,038	\$874,424
Fort Yates	Standing Rock	<1	0	<1	\$0	\$7,133
Gackle	Gackle Municipal	<1	0	<1	\$0	\$7,686
Garrison	Garrison Municipal	4	2	6	\$302,006	\$819,976
Glen Ullin	Glen Ullin Regional	1	1	2	\$123,212	\$353,985
Grafton	Hutson Field	12	7	19	\$846,433	\$2,337,041
Gwinner	Gwinner-Roger Melroe Field	13	14	27	\$1,168,122	\$3,701,214
Harvey	Harvey Municipal	4	1	5	\$236,927	\$702,922
Hazelton	Hazelton Municipal	0	0	0	\$0	\$23,250
Hazen	Mercer County Regional	3	1	4	\$145,456	\$557,298
Hettinger	Hettinger Municipal	13	7	20	\$955,530	\$2,693,237
Hillsboro	Hillsboro Regional	18	6	24	\$887,146	\$2,922,895
Kenmare	Kenmare Municipal	17	9	26	\$1,301,723	\$3,034,219
Killdeer	Dunn County Airport - Weydahl Field	11	13	24	\$1,564,863	\$3,065,201
Kindred	Robert Odegaard Field	7	2	9	\$340,767	\$3,626,376
Kulm	Kulm Municipal	2	1	3	\$150,192	\$270,422

CITY	AIRPORT NAME	EMPLOYMENT			TOTAL PAYROLL	TOTAL OUTPUT
		Direct	Indirect	Total		
Lakota	Lakota Municipal	0	0	0	\$0	\$131,082
LaMoure	LaMoure Rott Municipal	2	1	3	\$129,618	\$361,906
Langdon	Robertson Field	5	4	9	\$289,506	\$1,053,010
Larimore	Larimore Municipal	9	3	12	\$507,389	\$1,886,989
Leeds	Leeds Municipal	1	1	2	\$70,700	\$225,343
Lidgerwood	Lidgerwood Municipal	0	0	0	\$0	\$9,443
Linton	Linton Municipal	9	3	12	\$508,504	\$1,589,613
Lisbon	Lisbon Municipal	3	2	5	\$311,872	\$699,239
Maddock	Maddock Municipal	7	5	12	\$1,230,638	\$2,012,105
Mandan	Mandan Municipal	38	29	67	\$3,149,158	\$8,950,629
Mayville	Mayville Municipal	11	9	20	\$778,094	\$2,436,563
McClusky	McClusky Municipal	<1	0	<1	\$0	\$7,117
McVille	McVille Municipal	0	0	0	\$0	\$23,450
Milnor	Milnor Municipal	0	0	0	\$0	\$38,448
Minto	Minto Municipal	5	1	6	\$301,736	\$806,069
Mohall	Mohall Municipal	12	7	19	\$631,793	\$2,180,976
Mott	Mott Municipal	3	1	4	\$195,633	\$493,806
Napoleon	Napoleon Municipal	2	1	3	\$129,618	\$372,540
New Rockford	Tomlinson Field	1	0	1	\$64,809	\$217,776
New Town	New Town Municipal	10	12	22	\$1,315,808	\$3,217,102
Northwood	Northwood Municipal-Vince Field	5	1	6	\$254,467	\$877,356
Oakes	Oakes Municipal	9	10	19	\$637,092	\$2,337,630
Page	Page Regional	9	4	13	\$498,619	\$2,085,675
Park River	Park River-WC Skjerven Field	6	2	8	\$388,854	\$1,108,549
Parshall	Parshall-Hankins	4	3	7	\$440,805	\$1,106,385
Pembina	Pembina Municipal	7	3	10	\$405,928	\$1,400,955
Plaza	Trulson Field	0	0	0	\$0	\$3,000
Richardton	Richardton	0	0	0	\$0	\$6,033
Riverdale	Garrison Dam Recreational	<1	0	<1	\$1,800	\$17,369
Rolette	Rolette	2	3	5	\$213,471	\$649,140

CITY	AIRPORT NAME	EMPLOYMENT			TOTAL PAYROLL	TOTAL OUTPUT
		Direct	Indirect	Total		
Rolla	Rolla Municipal	12	9	21	\$866,159	\$2,680,203
Rugby	Rugby Municipal	5	4	9	\$380,677	\$1,040,119
St. Thomas	St. Thomas Municipal	2	1	3	\$129,618	\$357,925
Stanley	Stanley Municipal	11	9	20	\$928,496	\$2,442,100
Tioga	Tioga Municipal	23	11	34	\$1,492,413	\$3,878,182
Towner	Towner Municipal	0	0	0	\$0	\$24,050
Turtle Lake	Turtle Lake Municipal	0	0	0	\$0	\$51,241
Valley City	Barnes County Municipal	14	8	22	\$901,786	\$2,803,132
Wahpeton	Harry Stern	25	11	36	\$1,446,088	\$4,397,025
Walhalla	Walhalla Municipal	7	5	12	\$580,058	\$1,559,947
Washburn	Washburn Municipal	0	0	0	\$0	\$138,429
Watford City	Watford City Municipal	28	16	44	\$2,063,056	\$5,205,805
West Fargo	West Fargo Municipal	8	4	12	\$374,063	\$1,262,928
Westhope	Westhope Municipal	2	1	3	\$129,618	\$355,215
Wishek	Wishek Municipal	0	0	0	\$0	\$85,259
Total General Aviation Airports Impacts		558	368	926	\$41,879,078	\$121,272,197
Total All Airports Impacts		8,196	4,021	12,217	\$505,247,509	\$1,564,352,371

Source: Airport Managers, Tenants, Surveys, NDAC, USDOT, IMPLAN, Dun & Bradstreet, and Manta



OTHER AVIATION / AEROSPACE ECONOMIC AND BENEFITS OF NORTH DAKOTA AIRPORTS

Aside from the 12,217 jobs, the \$505.2 million in annual payroll, and the \$1.56 billion in annual output, there are many, yet sometimes less visible activities that airports in North Dakota support. These activities include healthcare, emergency services, energy inspections, environmental patrols, research, and other vital services that help to improve the health, welfare, and safety of residents and business throughout the state. Having a general understanding of these additional benefits helps provide a better understanding of all of the different ways North Dakota airports support the communities they serve.



- Healthcare** - This study identified approximately 40 clinics and/or hospitals in North Dakota that rely on public-use airports. Several have doctors using general aviation aircraft to reach patients in small communities throughout the state. Small hospitals and clinics do not have a local patient base sufficient to support specialty doctors—flying doctors in North Dakota fill this void. Airports in North Dakota play an important role in providing both routine and advanced healthcare services.
- Emergency Services** - Fixed-wing aircraft and helicopters use North Dakota airports to transport North Dakota residents requiring time-sensitive care to larger medical facilities, both within and beyond the state. These lifesaving services cannot be assigned a dollar value, and essentially any airport in the state is a candidate for supporting emergency medical services.
- Education** - The University of North Dakota (UND) is home to one of the nation's leading aviation and aerospace programs, the John D. Odegard School of Aerospace Sciences. UND is educating tomorrow's airport managers, pilots, and air traffic controllers. Other colleges and universities in North Dakota also report that airports are essential to their ability to expand their market areas for attracting students, both domestic and international. Air access is important to helping North Dakota's centers of higher learning attract and retain the most qualified teaching and research staff.
- Research** - North Dakota was successful in being one of six states selected by the FAA as a test site for Unmanned Aerial Systems (UAS) research. There are many potential practical private and public applications for UAS technology. Grand Sky, located in Grand Forks, is a multi-faceted center for advancing UAS applications and technology. Companies in North Dakota are leading the way in exploring uses for this emerging technology. Some estimates indicate that as many as 3,000 new jobs could be supported by UAS in North Dakota by 2025.
- Taxes** - Activities at airports and activities supported by airports make significant contributions to state and local tax revenues. A significant portion of these tax revenues are collected as a result of spending by visitors who come to North Dakota on general aviation aircraft and scheduled commercial aircraft. The NDAC study estimates that, on an annual basis, approximately \$64 million in local and state tax revenues are generated by the 89 study airports and the activities they support.

There are other non-airport-specific aviation and aerospace activities in North Dakota that make direct contributions to the state's economy. A listing of these additional activities is provided below, and more information on each these additional economic contributors is provided in the study's technical report:

- Activities associated with the mission of the 319th Air Wing Base in Grand Forks.
- Jobs, payroll, and output associated with the operation and mission of Minot Air Force Base.
- Aviation and aerospace companies, including aerial applicators, doing business in North Dakota, but not located at a study airport.
- North Dakota companies with employees whose jobs have improved efficiency from using commercial and general aviation and air cargo services.

The statewide total annual economic impacts of these activities, as identified or estimated in this NDAC study, are shown in the table below. It is important to re-state that these benefits are in addition to those estimated for the 89 study airports.

Economic Impacts from Airports, Aviation, and Aerospace in North Dakota

	TOTAL EMPLOYMENT	TOTAL PAYROLL	TOTAL OUTPUT
Grand Forks AFB	2,565	\$105.2 million	\$203.7 million
Minot AFB	7,283	\$321 million	\$513.5 million
Off-Airport Aviation / Aerospace Businesses	4,635	\$232.7 million	\$512.6 million
Aviation Supported Jobs	5,513	\$271.8 million	\$882.7 million
Sub-Total	19,996	\$930.7 million	\$2.1 billion
Total for 89 Study Airports	12,217	\$505.2 million	\$1.56 billion
Total for All Airport / Aviation / Aerospace Impacts	32,213	\$1.44 billion	\$3.66 billion

North Dakota Jobs Supported by or Benefiting from Aviation, Airports, or Aerospace



Aviation-Related Jobs in North Dakota: 32,213

The statewide economic impact study estimated economic impacts for 89 public airports, Grand Forks and Minot AFBs, off-airport aviation/aerospace businesses in the state, and other businesses in the state with employees who gain efficiency by using aviation. **When combined, all sources support approximately 32,200 direct and indirect jobs in North Dakota.** These jobs account for almost **8%** of North Dakota's total employment which was estimated at 413,000 in 2014.

As this report clearly shows, aviation, aerospace, and North Dakota's system of public-use airports are essential underpinnings to the present and future success of North Dakota's economy.

When combined, all aviation- and aerospace-related contributors discussed in this study (airports, the military, aviation/aerospace companies, and aviation-reliant businesses) provide annual economic benefits to North Dakota that approach **\$3.7 billion**. The 2014 Real Gross State Product of North Dakota is estimated at \$48.2 billion. All airport, aviation, and aerospace activities in North Dakota account for **7.6%** of the state's total annual economic activity.



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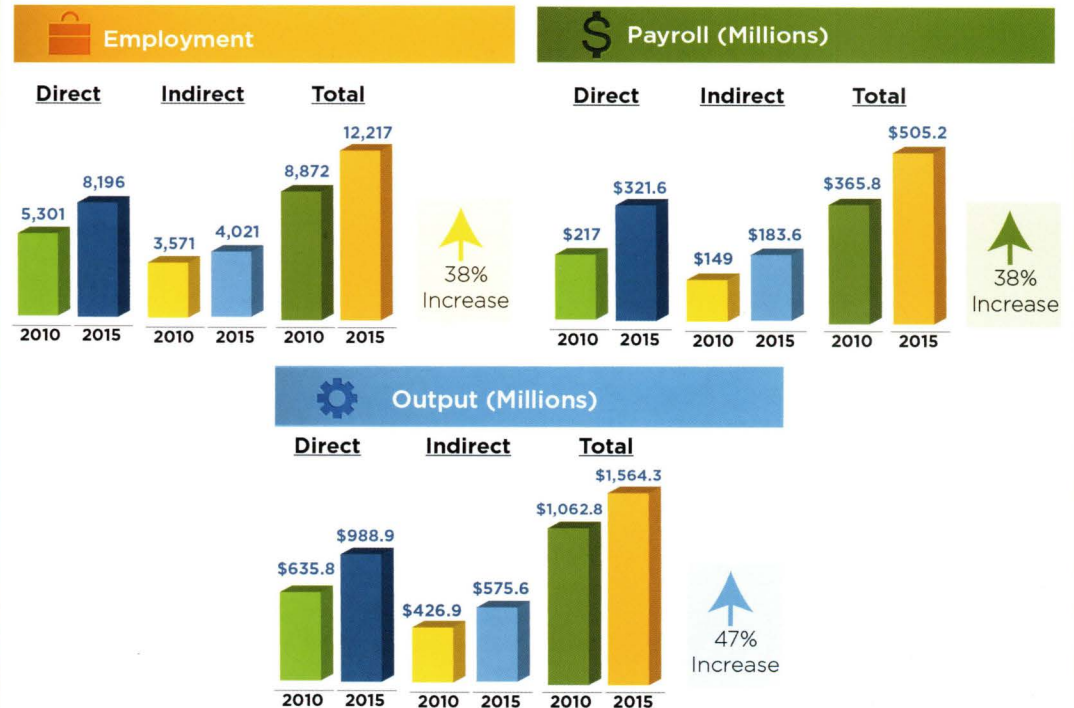
Input for this study was obtained from: airlines, passengers, North Dakota businesses, airport representatives, the North Dakota Aeronautics Commission (NDAC), the Federal Aviation Administration (FAA), and other private and government sources. Analysis completed in the study was based on data collected in 2014 and 2015, with the final report released November 2015. Preparation of this report was financed in part through a planning grant from the FAA as approved under the Airport and Airway Improvement Act of 1982. The contents of this report reflect the views of the Consultant, which is responsible for the facts and the accuracy of the data depicted herein, and do not necessarily reflect the official views or policy of the FAA. Acceptance of this report by the FAA does not in any way constitute a commitment on the part of the United States to participate in any development depicted therein, nor does it indicate that the proposed development is environmentally acceptable in accordance with applicable public laws.

AVIATION

Increasing Economic Impacts for North Dakota Airports

One objective the NDAC had for the 2015 update to their Statewide Aviation Economic Impact Study was to determine how economic contributions from the 89 public-use airports have changed since it was measured in 2010. The graphic below provides a comparison of findings from the 2010 and 2015 studies. The comparison shows direct, indirect, and total statewide economic impacts for employment, payroll, and output. The 2015 study took a conservative approach to estimate indirect impacts; as a result, 2015 indirect impacts represent a smaller percentage of total impacts than they did in the 2010 study.

As shown, direct statewide economic impacts for the 89 public-use airports increased between 2010 and 2015 for employment, payroll, and output. Increases in direct impacts contributed to the overall increase for total impacts for all three categories as shown here.



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16

2015 PAVEMENT CONDITION INDEX (PCI) STUDY **EXECUTIVE SUMMARY**

www.aero.nd.gov



NORTH DAKOTA
AERONAUTICS COMMISSION
A STATEWIDE VOICE FOR AVIATION

FEDERAL AVIATION ADMINISTRATION
A.I.P. NO. 3-38-0000-013-2015



NORTH DAKOTA
AERONAUTICS COMMISSION
A STATEWIDE VOICE FOR AVIATION

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**2015 PAVEMENT
CONDITION INDEX (PCI)
STUDY EXECUTIVE
SUMMARY**
www.aero.nd.gov

Overview



The Airport Pavement Management System (APMS) was developed by the Federal Aviation Administration (FAA) and is intended to provide a consistent and systematic approach to identifying pavement that is in need of maintenance or rehabilitation. The North Dakota Aeronautics Commission (NDAC) developed a customized APMS in accordance with FAA requirements.

An APMS evaluates both the current condition of the pavement as well as predicts a future condition based on the Pavement Condition Index (PCI). This in turn allows the individual airports, the NDAC and the FAA to monitor the condition of the airport pavements and budget for required maintenance to avoid excessive deterioration. The timing of this maintenance or rehabilitation is vital as airport pavement conditions play a crucial role in ensuring the safety of all airport users.

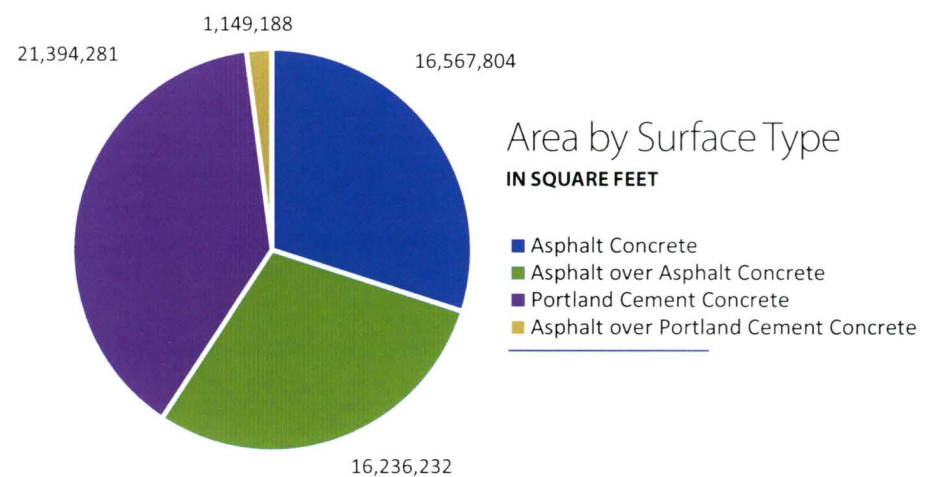
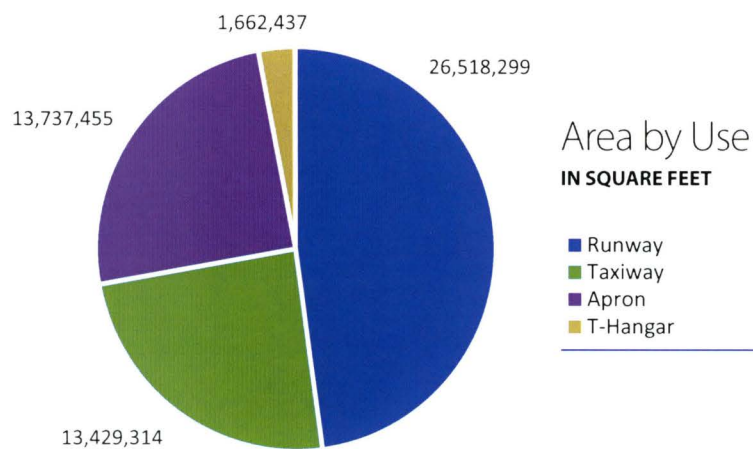
This system is updated every three years to accurately reflect current pavement conditions across the state's airports. In 2012, the APMS was updated to an electronic format to allow the data to be readily available to the airports, the FAA and the NDAC.

In 2015, Mead & Hunt along with Applied Pavement Technology and EVS conducted the update to the APMS. During the 2015 update, record information collected in the previous three-year cycle has been added to the database. Pavement inspections have been completed, and additional airports have been added that were not part of the previous study. Functionality changes also have been made to the website itself. The findings and recommendations of the APMS update are included in this report. Full results can be found online on the NDAC website, www.aero.nd.gov.

Pavement Inventory

In 2015, a total of 71 airports were assessed for the current project. Of these, 52 were part of the National Plan of Integrated Airport Systems (NPIAS) and 19 were non-NPIAS. NPIAS airports qualify for federal funding. Non-NPIAS airports do not qualify for federal funding and must be funded solely by state and local contributions. Therefore, the FAA only provided funding for pavement inspections and reports for the NPIAS airports as part of this study. NPIAS airports inspected included 7 commercial service airports and 45 general aviation airports. Williston was not inspected as part of the 2015 study due to future relocation of the existing airport. However, Williston's 2012 pavement inventory data was used in the 2015 data analysis and is included as part of the 2015 results. Pavement inventory data includes area, age and condition. Projected costs for Williston were excluded from the funding assessment needs. A PCI of 100 was assumed for all newly constructed pavement or pavement programmed to be reconstructed in the next year. The map on page 5 identifies all of the airports in North Dakota that were included as part of the 2015 APMS update.

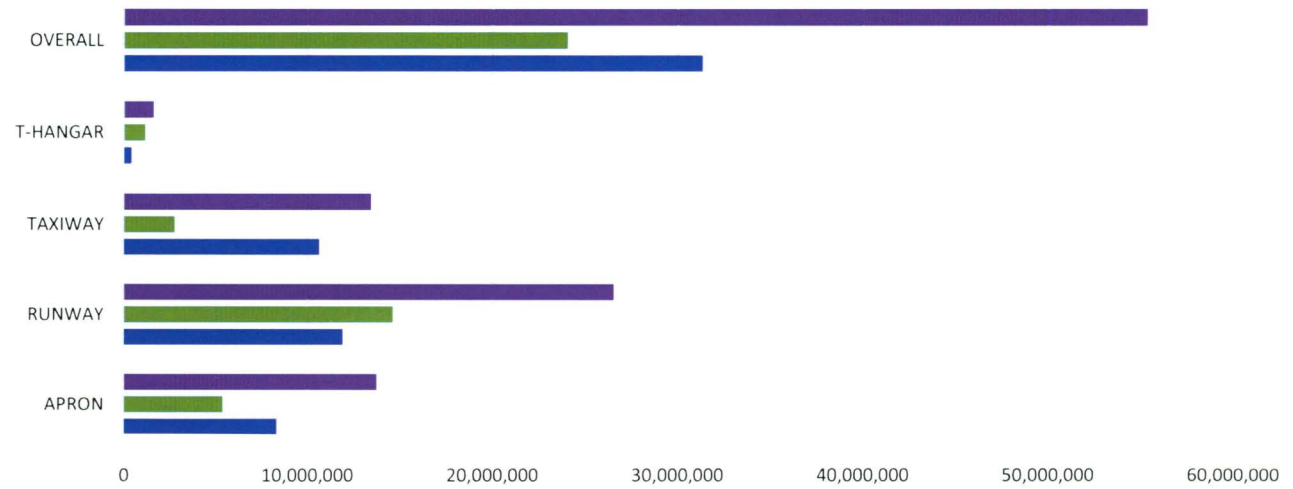
These airports represent 55.3 million square feet of pavement – 26.5 million square feet of runway pavement, 13.4 million square feet of taxiway pavement, 13.7 million square feet of apron pavement, and 1.7 million square feet of T-hangar pavement, comprised of both concrete and asphalt, as shown in the *Area by Use* and *Area by Surface Type* pie charts below. Pavement at the airports in the state have an average age of 17 years for commercial service airports and 10 years for general aviation airports. Throughout the years, the airports have performed preventive maintenance and carried out a series of rehabilitation/reconstruction projects to sustain and extend the pavement life. The charts shown on the next page, *Pavement Area by Use* and *Area-Weighted Average Age by Use*, summarize the total square footage of pavements found in the state and the average age of those pavements based on use.



Pavement Area by Use

IN SQUARE FEET

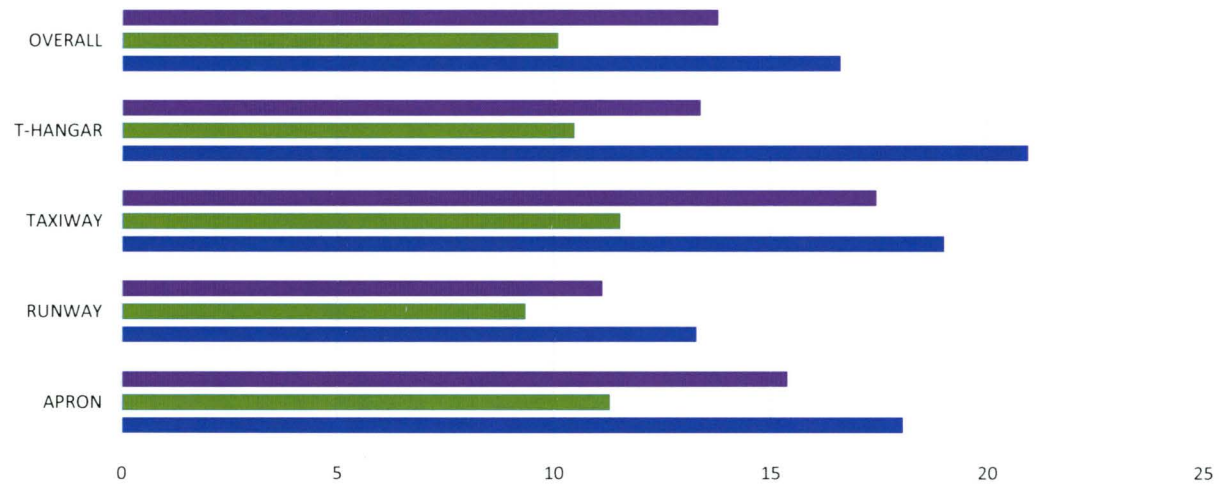
- Overall State System
- General Aviation
- Commercial Service



Area-Weighted Average Age by Use

IN YEARS

- Overall State System
- General Aviation
- Commercial Service



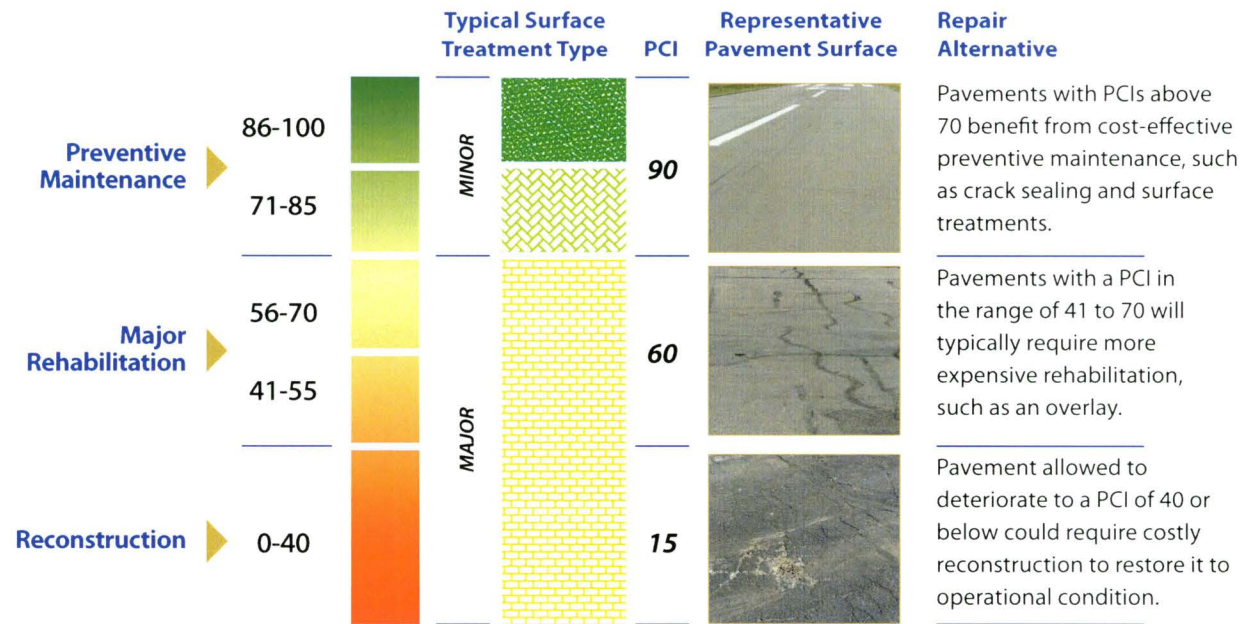
Pavement Evaluation

Pavement Evaluation Procedure

A PCI survey was conducted in accordance with the procedures outlined in American Society for Testing and Materials (ASTM) Standard D5340, *Standard Test Method for Airport Pavement Condition Index Surveys* and the FAA's Advisory Circular 150/5380-6B, *Guidelines and Procedures for Maintenance of Airport Pavements*. A PCI survey consists of dividing pavement into a series of sections, selecting random sections for sampling, and inspecting a given portion of each sample section to determine overall pavement deterioration. Pavement deterioration is based on the quantification of the different types, the severity and the number of distresses present in the sample section. This information is then used to formulate a composite index numerical value that represents the overall pavement condition. This value will range from 0 (failed) to 100 (excellent).

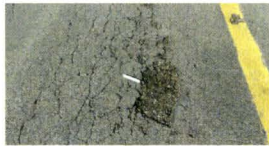
As part of the APMS, the PCI will be used to determine current pavement conditions, predict future conditions, develop a maintenance program and identify the most cost-effective time frame to perform major rehabilitation.

The PCI will also aid in tracking and determining causes of deterioration on a pavement. The correlation between a PCI number and a recommended repair is shown in the illustration to the right. Preventive maintenance consists of patching, crack sealing and joint sealing. Pavement rehabilitation includes surface treatments and thin overlays. Pavement reconstruction refers to full-depth reconstruction and thick overlays. Minor surface treatments are used to address weathering and low-severity raveling. Major surface treatments are used to address medium- and high-severity raveling.



Typical Distress Types

The FAA Advisory Circular provides a list of specific distresses to be analyzed and recorded when inspecting pavement. Airports in North Dakota are a combination of asphalt concrete (AC) pavement and Portland cement concrete (PCC) pavement with there being slightly more AC pavement than PCC pavement. These two pavement types have unique pavement distresses and repairs. The following is a brief description of commonly observed pavement distresses at North Dakota airports.



ALLIGATOR (FATIGUE) CRACKING. Alligator (fatigue) cracking is a load-related distress. Alligator cracking is caused by excessive tensile strains at the bottom of the AC layer or stabilized asphalt base layer from repeated aircraft loadings. Alligator cracking typically shows up on the surface as a series of parallel cracks, which eventually interconnect to form a pattern resembling the skin of an alligator.



JOINT SEAL DAMAGE. Joint sealant damage is any condition that enables soil or rocks to accumulate in the joints or allows significant infiltration of water. Accumulation of incompressible materials prevents the slabs from expanding and may result in buckling, shattering, or spalling. A pliable joint filler bonded to the edges of the slabs protects the joints from accumulation of materials and also prevents water from seeping down and softening the foundation supporting the slab. Typical types of joint seal damage are: (1) stripping of joint sealant, (2) extrusion of joint sealant, (3) weed growth, (4) hardening of the filler (oxidation), (5) loss of bond to the slab edges, and (6) absence of sealant in the joint.



LONGITUDINAL AND TRANSVERSE CRACKING. The predominant distress type found on asphalt pavements at North Dakota airports is longitudinal and transverse (L&T) cracking. This distress can be caused by any of the following: (1) separation of pavement at paving lane joints, (2) shrinkage of AC pavement due to temperature differentials in older or brittle pavements, or (3) reflection cracking from underlying faults in supportive layers of pavement or subgrade. Cracking is also a common distress type for PCC pavement. This distress is caused by a combination of load repetition, curling stresses, and shrinkage stresses.





RAVELING. As pavements age and are exposed to oxidation and other environmental stresses, they may experience a loss in the material making up the pavement matrix. Raveling is the dislodging and loss of coarse aggregate in the surface of a pavement. The pavement may be showing signs of aging and hardening and may result in the production of FOD.



SPALLING. Spalling, in PCC pavement, is the breakdown of the slab edges in close proximity to the slab joint. Spalling is identified as occurring in the corner or along the joint of a PCC slab. Spalling is typically caused by the introduction of incompressible material in the joint, weaker pavement at the joint caused by overworking of the pavement during construction, traffic loading or a combination of these.



WEATHERING. As pavements age and are exposed to oxidation and other environmental stresses, they may experience a loss in the material making up the pavement matrix. Weathering is the loss of asphalt binder and fine aggregate in the surface of the pavement. The loss of fine matrix material in the surface may eventually lead to the exposure and dislodging of coarse aggregate, leading to raveling and FOD.

Pavement Classification Number (PCN)

A PCN is a value that indicates the strength of a pavement as it relates to aircraft classification numbers, which are assigned to each type of aircraft. Aircraft traffic information as well as subgrade and pavement strengths are critical inputs in determining this value. Pavements at the commercial service airports were analyzed in 2012 to provide a PCN value as detailed in FAA Advisory Circular 150/5335-5B, *Standardized Methods of Reporting Airport Pavement Strength – PCN*. The PCN is expressed as a five-part code. The first part of the PCN is a numerical value indicating the load-carrying capacity of the pavement. This numerical value is followed by four codes representing the following categories:

■ PAVEMENT TYPE

- R = Rigid
- F = Flexible

■ SUBGRADE STRENGTH

- A = High (k-value \geq 442 psi/in or CBR \geq 13)
- B = Medium (221 psi/in < k-value < 442 psi/in or 8 < CBR < 13)
- C = Low (92 psi/in < k-value \leq 221 psi/in or 4 < CBR \leq 8)
- D = Ultra Low (k-value \leq 92 psi/in or CBR \leq 4)

■ MAXIMUM ALLOWABLE TIRE PRESSURE

- W = High (no pressure limit)
- X = Medium (146 to 218 psi)
- Y = Low (74 to 145 psi)
- Z = Ultra Low (pressure limited to 73 psi)

■ PAVEMENT EVALUATION METHOD

- T = Technical Evaluation
- U = Using Aircraft Evaluation

PCN results were not calculated as part of the 2015 study. The 2012 PCN results for the state are listed in the table below. A detailed PCN report for each airport can be found online on the NDAC website, www.aero.nd.gov.

2012 PCN Results

AIRPORT	BRANCH ID	PCN
Bismarck Municipal	Runway 13-31	42 F/A/W/T
	Runway 3-21	26 F/A/W/T
Devils Lake Regional	Runway 13-31	27 F/D/W/T
	Runway 3-21	26 F/D/W/T
Dickinson Theodore Roosevelt Regional	Runway 14-32	20 F/D/W/T
	Runway 7-25	6 F/D/W/T
Fargo - Hector International	Runway 18-36	95 R/C/W/T
	Runway 9-27	25 R/C/W/T
	Runway 13-31	17 R/D/W/T
Grand Forks International	Runway 17L-35R	9 R/C/W/T
	Runway 17R-35L	35 R/C/W/T
	Runway 9L-27R	24 R/B/W/T
	Runway 9R-27L	10 R/C/W/T
Jamestown Regional	Runway 13-31	79 F/C/W/T
	Runway 4-22	25 F/D/W/T
Minot International	Runway 13-31	43 R/C/W/T
	Runway 8-26	34 F/D/W/T

Analysis of Results

Critical PCI Values

For each year of the analysis, the future condition of each of the pavements was estimated and a determination was made as to whether preventive maintenance or major rehabilitation/reconstruction was the appropriate and most cost-effective method of maintaining pavement life. If a pavement was projected to be above the critical PCI values listed below, the pavement was recommended for preventive maintenance. Major rehabilitation/reconstruction was recommended for any PCI value below the PCI critical thresholds. Surface treatments were identified for viable candidates that exhibited weathering and/or raveling. These were identified separate from the critical value analysis.

- 60 for general aviation taxiways and aprons
- 65 for commercial service taxiways and aprons
- 70 for general aviation runways
- 75 for commercial service runways



Interested in a Particular Airport's Pavement Condition & History?

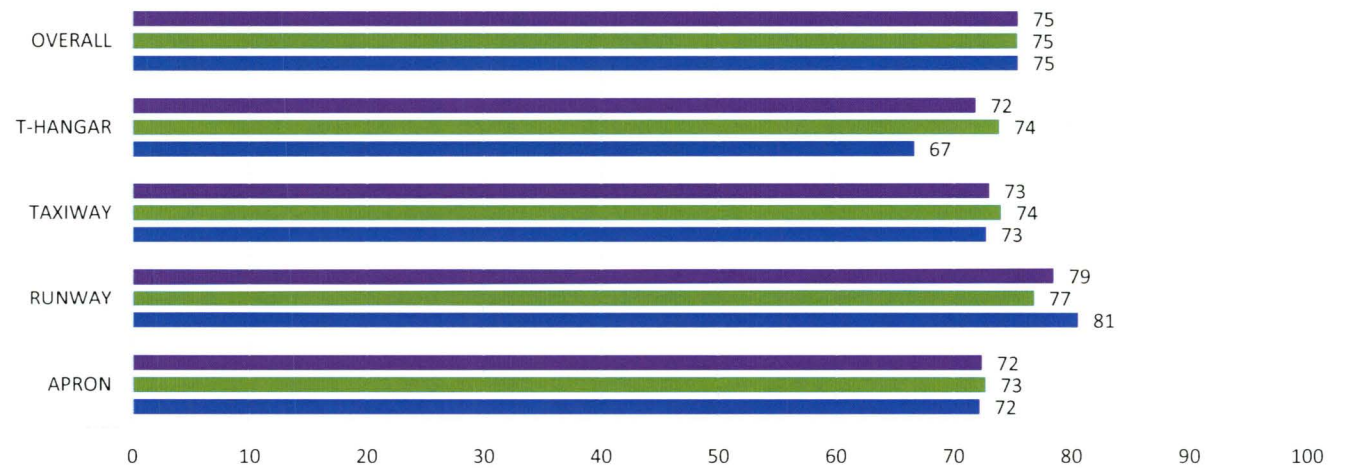
For information on *pavement distresses for a specific airport*, visit the *Interactive Data Exchange Application (IDEA)* website by going to www.aero.nd.gov and navigating to "*Studies*" then "*Pavement Condition Index*" then "*Click Here.*" Once there, you can view a list of the distresses that were identified as well as a maintenance and rehabilitation plan for each airport. The IDEA site also contains photos of each airport along with an interactive version of the airport's PCI map.

Overall Pavement Condition

Each airport was inspected and an overall area-weighted pavement condition is assigned to each. The information collected at each airport is used to provide greater detail on the uses of pavements and the correlating PCI value associated with each use. The overall area-weighted PCI of all the airports included in this study is 75. The chart below, *Area-Weighted Average PCI Value by Use*, shows the 2015 condition of the pavement broken out by use and airport classification. The *Overall Area-Weighted PCI* table on the next page provides the overall area-weighted PCI for each airport.

Area-Weighted Average PCI Value by Use

- Overall State System
- General Aviation
- Commercial Service



Overall Area-Weighted PCI

AIRPORT NAME	AREA-WEIGHTED PCI
Ashley Municipal	59
Beach	79
Beulah Municipal	84
Bismarck Municipal	69
Bottineau Municipal	82
Bowman Regional	100
Cando Municipal	63
Carrington Municipal	72
Casselton Robert Miller Regional	70
Cavalier Municipal	81
Cooperstown Municipal	53
Crosby Municipal	78
Devils Lake Regional	76
Dickinson Theodore Roosevelt Regional	72
Drayton Municipal	67
Dunseith - International Peace Garden	79
Edgeley Municipal	43
Ellendale Municipal	91
Enderlin - Sky Haven	80
Fargo - Hector International	77
Fort Yates - Standing Rock	82
Garrison Municipal	71
Glen Ullin Regional	80
Grafton - Hutson Field	76
Grand Forks International	80
Gwinner - Roger Melroe Field	96
Harvey Municipal	79

AIRPORT NAME	AREA-WEIGHTED PCI
Hazen - Mercer County Regional	77
Hettinger Municipal	58
Hillsboro Regional	55
Jamestown Regional	62
Kenmare Municipal	93
Killdeer - Dunn County	93
Kindred - Robert Odegaard Field	71
Lakota Municipal	71
LaMoure Rott Municipal	29
Langdon - Robertson Field	46
Larimore Municipal	77
Leeds Municipal	44
Linton Municipal	41
Lisbon Municipal	47
Maddock Municipal	100
Mandan Municipal	85
Mayville Municipal	91
Minot International	82
Minto Municipal	71
Mohall Municipal	85
Mott Municipal	71
Napoleon Municipal	69
New Rockford - Tomlinson Field	63
New Town Municipal	100
Northwood Municipal - Vince Field	43
Oakes Municipal	91
Page Regional	18

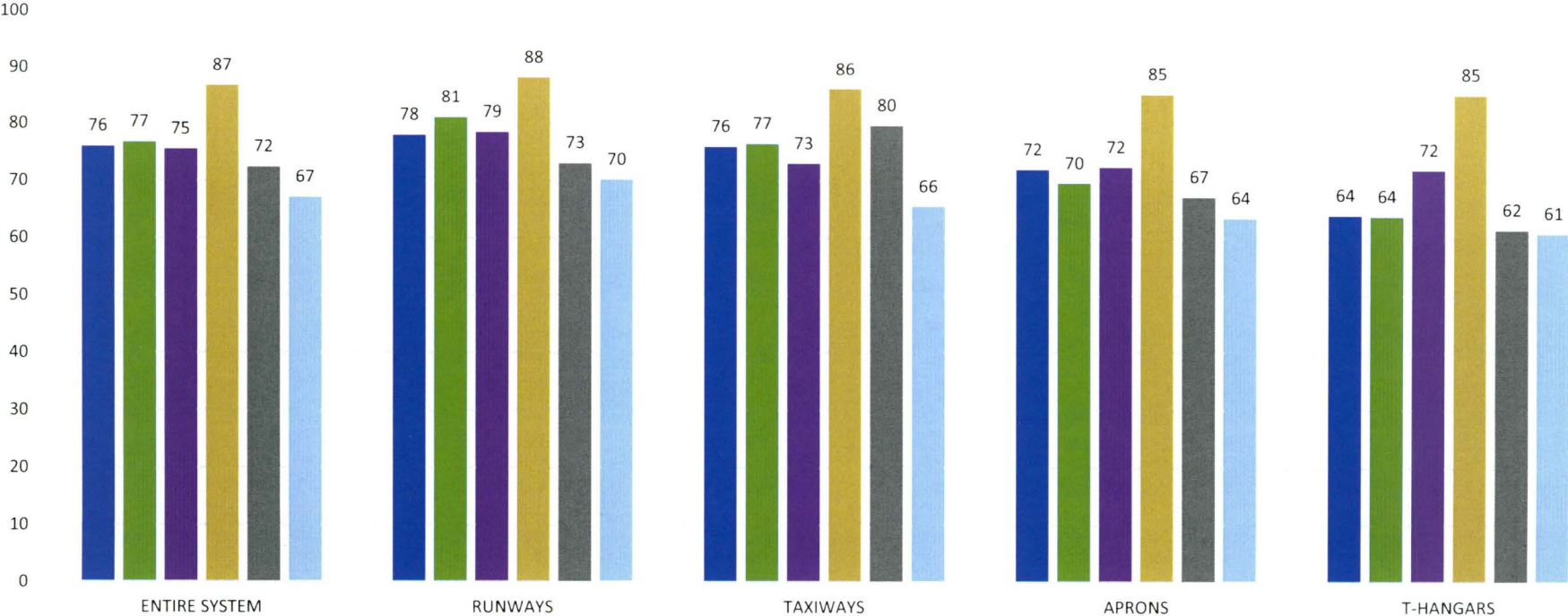
AIRPORT NAME	AREA-WEIGHTED PCI
Park River - W C Skjerven Field	83
Parshall-Hankins	93
Pembina Municipal - Thomas Nord Field	65
Rolette	82
Rolla Municipal	93
Rugby Municipal	76
St. Thomas Municipal	69
Stanley Municipal	80
Tioga Municipal	71
Valley City - Barnes County Municipal	91
Wahpeton - Harry Stern	81
Walhalla Municipal	88
Washburn Municipal	99
Watford City Municipal	77
West Fargo Municipal	83
Westhope Municipal	78
Wishek Municipal	40

Historic Pavement Condition

The APMS is updated every three years and it is important to show how the system as a whole is performing from update to update. The *Area-Weighted Average PCI by Use* chart below provides a summary of the 2009 and 2012 historic PCI values; current 2015 PCI values; projected PCI values in 2020 if unlimited funding were available; projected PCI values in 2020 if only the anticipated state budget funding were available; and the projected PCI values in 2020 if no improvements were completed on the existing system.

Area-Weighted Average PCI by Use

- 2009
- 2012
- 2015
- Unlimited Funding 2020
- Anticipated Funding 2020
- No Improvements 2020

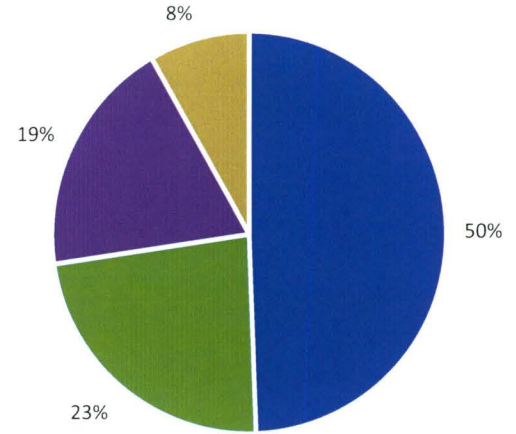


Pavement Condition Distribution

Approximately 50 percent of the airports included in the 2015 APMS are at the condition level where they will benefit from preventative maintenance actions, such as crack sealing, joint sealing, and patching. Roughly 23 percent would benefit from applying a surface treatment. Approximately 19 percent of the pavement infrastructure is in need of more extensive rehabilitation, while 8 percent is in need of reconstruction to restore the pavement. The following pie charts show the level of work that is needed in the system.

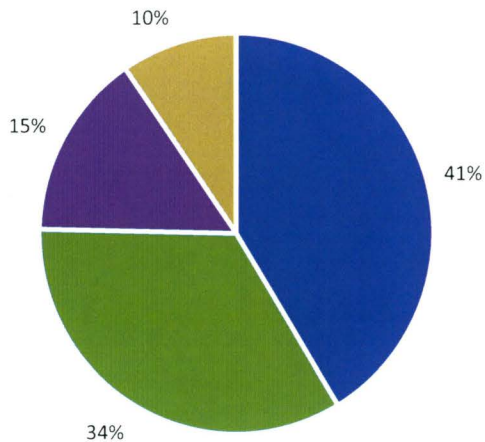
Overall State

- Preventative Maintenance
- Surface Treatments
- Major Rehabilitation
- Major Reconstruction



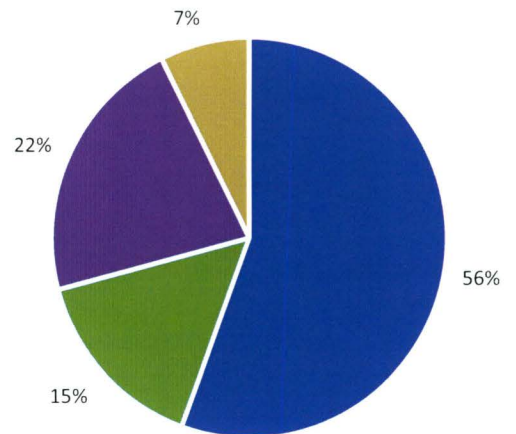
General Aviation

- Preventative Maintenance
- Surface Treatments
- Major Rehabilitation
- Major Reconstruction



Commercial Service

- Preventative Maintenance
- Surface Treatments
- Major Rehabilitation
- Major Reconstruction



Pavement Funding Assessment

Funding for aviation projects within the state is crucial in order to maintain a steady pavement condition and ensure safety of all aviation users. If no funding is provided for pavement maintenance and repair, North Dakota's pavement system will experience a slow and steady decline in condition. This decline would result in a need for more major rehabilitation or reconstruction projects, which in turn significantly increases future cost.

Using the information collected during the pavement inspection, a rehabilitation program for 2016 through 2020 was developed for every airport in the state. A five-year program was prepared with the goal of maintaining the pavement above the established critical PCI values listed earlier in this report. This program generates a major rehabilitation recommendation for pavement in the year they drop below their critical PCI.

If all projects identified in the PCI study were funded, an approximate total of \$181 million would be needed during the next five years – \$105.1 million for commercial service airports and \$75.9 million for general aviation airports. The unlimited budget funding for individual airport needs through 2020 are summarized in the table shown to the right, *Five-Year Funding Plan*. This analysis is for 2016 through 2020 with an inflation factor of four percent when calculating future cost of work. The unit costs used to estimate overall project costs are based on averages of recent projects completed throughout the state. These costs are averages and are not intended to be used for specific project planning purposes. Money identified in an unlimited budget scenario is to maintain or rehabilitate existing infrastructure and does not include any additional needs or improvements made.

Five-Year Funding Plan

CLASSIFICATION	AIRPORT NAME	5-YEAR TOTAL FUNDING NEEDS
Commercial Service	Bismarck Municipal	\$20,141,319
	Devils Lake Regional	\$5,168,798
	Dickinson Theodore Roosevelt Regional	\$8,443,856
	Fargo - Hector International	\$26,825,163
	Grand Forks International	\$16,429,217
	Jamestown Regional	\$13,353,434
	Minot International	\$14,764,949
Five-Year Commercial Service Funding Total		\$105,126,736
General Aviation (NPIAS)	Beach	\$833,072
	Bottineau Municipal	\$384,900
	Bowman Regional*	\$0
	Cando Municipal	\$1,866,699
	Carrington Municipal	\$1,741,238
	Casselton Robert Miller Regional	\$4,275,086
	Cavalier Municipal	\$1,114,929
	Cooperstown Municipal	\$1,933,878
	Crosby Municipal	\$1,320,059
	Dunseith - International Peace Garden	\$95,764
	Edgeley Municipal	\$2,599,711
	Ellendale Municipal	\$350,709
	Fort Yates - Standing Rock	\$232,100
	Garrison Municipal	\$1,643,969
	Glen Ullin Regional	\$1,361,368
	Grafton - Hutson Field	\$1,153,065
Gwinner - Roger Melroe Field	\$127,003	
Harvey Municipal	\$383,986	
Hazen - Mercer County Regional	\$2,085,064	

* No or minimal five-year funding needed because airport was recently constructed or reconstructed.

CLASSIFICATION	AIRPORT NAME	5-YEAR TOTAL FUNDING NEEDS
General Aviation (NPIAS)	Hettinger Municipal	\$4,236,058
	Hillsboro Regional	\$2,900,094
	Kenmare Municipal	\$187,004
	Kindred - Robert Odegaard Field	\$2,548,473
	Lakota Municipal	\$1,755,477
	LaMoure Rott Municipal	\$2,495,926
	Langdon - Robertson Field	\$2,780,281
	Linton Municipal	\$2,788,554
	Lisbon Municipal	\$2,362,470
	Mandan Municipal	\$1,692,069
	Mohall Municipal	\$372,430
	Mott Municipal	\$284,808
	Northwood Municipal - Vince Field	\$2,831,781
	Oakes Municipal	\$327,941
	Park River - W C Skjerven Field	\$234,257
	Parshall-Hankins	\$203,261
	Pembina Municipal - Thomas Nord Field	\$1,943,878
	Rolla Municipal	\$404,465
	Rugby Municipal	\$461,607
	Stanley Municipal	\$1,080,600
	Tioga Municipal	\$2,033,820
	Valley City - Barnes County Municipal	\$196,511
	Wahpeton - Harry Stern	\$1,921,626
	Walhalla Municipal	\$288,251
	Washburn Municipal	\$10,096
	Watford City Municipal	\$1,517,867
Five-Year General Aviation NPIAS Funding Total	\$61,362,205	

CLASSIFICATION	AIRPORT NAME	5-YEAR TOTAL FUNDING NEEDS
General Aviation (Non-NPIAS)	Ashley Municipal	\$2,403,220
	Beulah Municipal	\$297,012
	Drayton Municipal	\$459,907
	Enderlin - Sky Haven	\$379,776
	Killdeer - Dunn County*	\$35
	Larimore Municipal	\$594,863
	Leeds Municipal	\$1,872,596
	Maddock Municipal*	\$0
	Mayville Municipal	\$574,093
	Minto Municipal	\$327,389
	Napoleon Municipal	\$231,099
	New Rockford - Tomlinson Field	\$1,685,344
	New Town Municipal*	\$0
	Page Regional	\$1,097,942
	Rolette	\$412,820
	St. Thomas Municipal	\$862,280
	West Fargo Municipal	\$725,030
	Westhope Municipal	\$77,601
	Wishek Municipal	\$2,534,289
	Five-Year General Aviation Non-NPIAS Funding Total	\$14,535,296
Five-Year Statewide Funding Total	\$181,024,237	

* No or minimal five-year funding needed because airport was recently constructed or reconstructed.

Summary



This report summarizes the results of the pavement evaluation conducted in North Dakota as part of the state APMS database update for airports. This includes **7* NPIAS commercial service airports, 45 NPIAS general aviation airports and 19 non-NPIAS general aviation airports.** The system currently has 55.3 million square feet of pavement – 31.3 million square feet at commercial service airports and 24 million square feet at general aviation airports. In 2012, the PCI value for the state was 77. During a visual inspection of the pavements in 2015, it was found that the current weighted PCI of the pavement network is 75. If no funding is provided, this PCI value will steadily fall to 67 by the end of 2020. If the state budget anticipated funding is provided, the 2020 overall PCI value of the system is anticipated to be 72. If all work identified were to be completed, the 2020 overall PCI of the system is anticipated to increase to a value of 87.

Approximately \$181 million in funding would be needed over the next five years to complete all work that has been identified in the unlimited budget scenario. This includes approximately \$105.1 million for commercial service airports and \$75.9 million for general aviation airports. **Additional information can be found by visiting the NDAC website, www.aero.nd.gov.**

** Williston was not inspected as part of the 2015 study. The 2012 Williston pavement inventory data used as part of the analysis includes area, age and condition but does not include the cost.*



FOR ADDITIONAL
INFORMATION, PLEASE VISIT
WWW.AERO.ND.GOV



NORTH DAKOTA
AERONAUTICS COMMISSION
A STATEWIDE VOICE FOR AVIATION

20

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SB2006

March 3, 2017

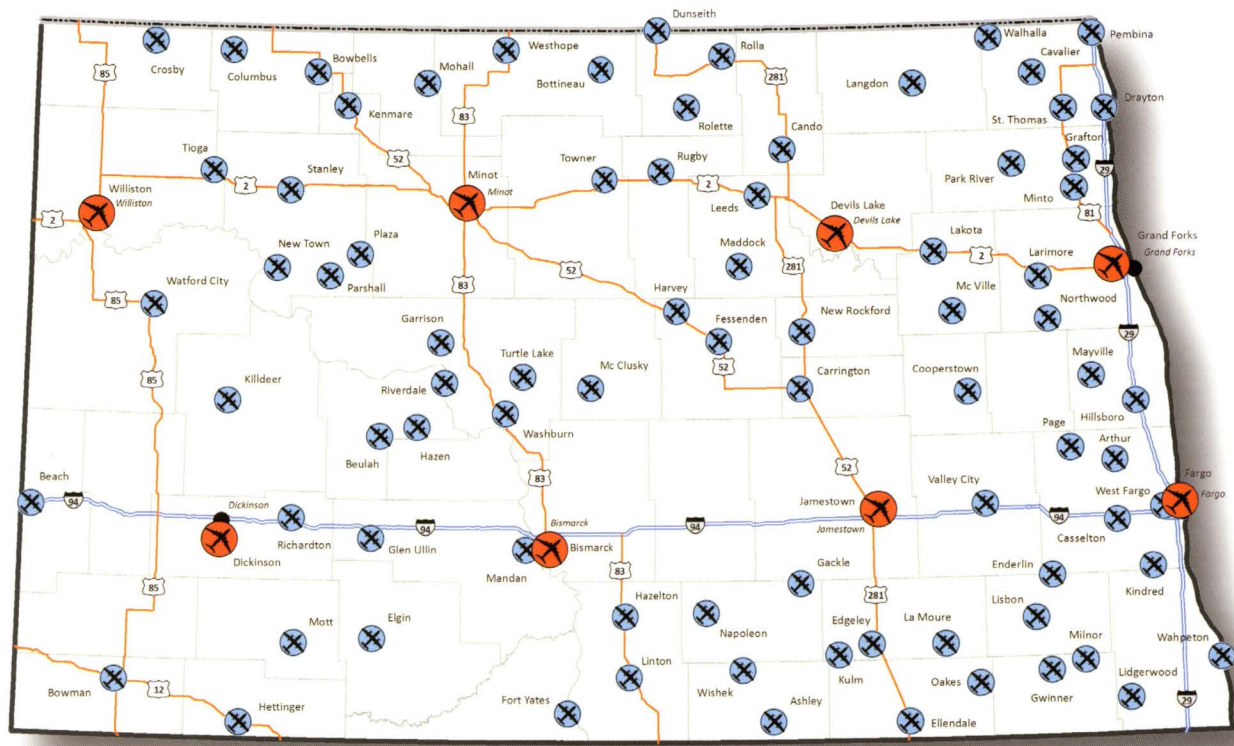
Attachment B

North Dakota

AIRPORT DIRECTORY

2017-2018





- Commercial Airport (8)
(Primary and Non-Primary)
- General Aviation Airport (81)
- Major City
- County Boundary

NDSASP System Airports

PUBLIC AIRPORTS IN NORTH DAKOTA

2



Greetings and welcome to the skies of North Dakota!

The North Dakota Aeronautics Commission is committed to providing the public with a safe and efficient air transportation system. North Dakota's 89 public-use airports are conveniently located throughout the state and support a full range of business, commercial, and recreational activities. A recent research project undertaken by our agency has shown that our public-use airports have an estimated annual economic impact of \$1.6 billion dollars on the state's overall economy while providing support for over 12,200 jobs.

The numbers clearly show that our public airports are valuable assets to our communities, but they do so much more than what the numbers and statistics can reveal. Our airports are providing many opportunities for current and future generations to discover their passion for the field of aviation. Public access to the skies has enabled all of us to open doors to endless possibilities and lifetime experiences.

I also want to encourage you to also take a tour of our updated website which can be found at <https://aero.nd.gov>. Our office works hard to ensure that this website is a one-stop shop for all of your North Dakota aviation needs.

As you travel throughout the state for business or pleasure, I sincerely hope that you will enjoy the time that you spend with us.

Wishing you smooth flying,

Kyle C. Wanner

Kyle C. Wanner
Executive Director

COPIES OF THIS DIRECTORY ARE AVAILABLE BY WRITING OR CALLING:



North Dakota Aeronautics Commission

P.O. Box 5020

Bismarck, North Dakota 58502-5020

TEL: (701) 328-9650

FAX: (701) 328-9656

E-mail: ndaero@nd.gov

Visit our website: <http://aero.nd.gov>

ND Tourism: www.ndtourism.com

Tel: 1-800-435-5663



Special appreciation to NDDOT for airport photos.

AMENITIES LISTED FOR EACH AIRPORT



Directory Disclaimer

Aeronautical information on this airport directory is up to date through March of 2015, and is obtained from the Federal Aviation Administration Chart Supplement and the North Dakota Aeronautics Commission. Printer, publisher, and the North Dakota Aeronautics Commission make no warranty, express or implied, as to accuracy of information expressly disclaim liability for the accuracy thereof. We recommend that you check Airman's Information Manual, Chart Supplement, NOTAMS, and the Safety Bulletins from the Federal Aviation Administration for supplemental data and current information.

FLY North Dakota AIRPORTS!

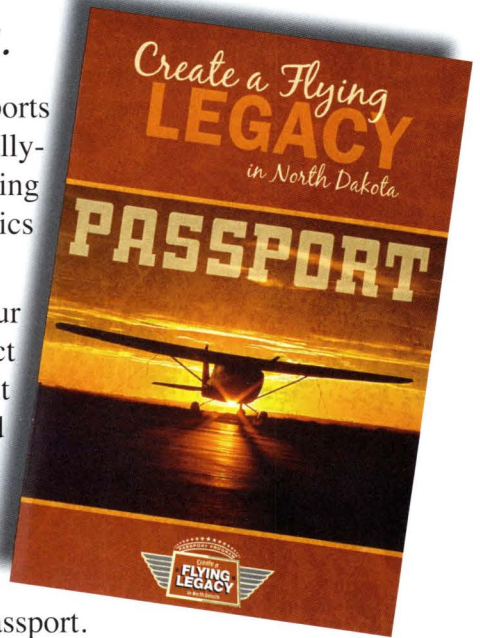
North Dakota's passport program rewards pilots who fly to North Dakota's publically-owned airports, attend FAA safety seminars, and visit North Dakota's aviation museums. Fly North Dakota airports promotes safety and education, and encourages pilots to practice approaches and landings in many different environments. It's also a great way to support general aviation airports, businesses, and tourism. Just visit one of the places or events listed in our passports, and have your passport stamped in the appropriate box. It's as easy as that!



HOW TO PARTICIPATE.

Get a Fly North Dakota Airports Passport at your local publically-owned airport or by contacting the North Dakota Aeronautics Commission.

Fill in the page at the front of your passport with your name and contact information. Each time you visit a North Dakota publically-owned airport, aviation museum, or participating FAA safety seminar, have your passport stamped in the appropriate box. The location of the airport stamp is stated in the passport.



When you have earned the proper number of stamps, submit your passport (they will be returned) to the North Dakota Aeronautics Commission, P.O. Box 5020, Bismarck, ND 58502. Phone: (701) 328-9650. Email: ndaero@nd.gov

Visit a community event or attraction by searching NDtourism.com

or call 1-800-HELLO-ND on your legacy flight! Each airport box in the Passport has an attraction listed.



North Dakota Airport Association



LOCATION & FREQ.	REMARKS
BISMARCK (BIS) ASOS Vortac/DME 116.5 ILS 31 110.3 ILS 13 111.5 RCO 122.2 Tower/CTAF 118.3 Ground 121.9 App/Dep Con 126.3 ATIS 119.35 Unicom 122.95 Center 135.25	(701) 255-7563 HIWAS Rwy 31 Rwy 13 GFK FSS Tower Open (1200-0600Z)
BOTTINEAU (DO9) Center 127.6 Minot APP/Dep 119.6 Unicom/CTAF 122.8	MPLS Center
BOWMAN (BWW) AWOS-3 118.075 Center 126.85 RCO 122.4 Unicom/CTAF 122.8	(701) 523-3412 Salt Lake Center
CARRINGTON (46D) AWOS-3 118.575 Center 124.2 UNICOM/CTAF 122.9	701-652-1875 MPLS Center
CASSELTON (5N8) Center 127.35 Fargo APP/Dep 120.4 Vortac FAR 116.2 Unicom/CTAF 122.8	
CAVALIER (2C8) AWOS-3 118.275 Devils Lake RCO 122.3 Unicom/CTAF 122.8	701-265-8050 GFK Radio
COOPERSTOWN (S32) AWOS-3 118.750 Jamestown RCO 123.6 Unicom/CTAF 122.9	701-797-2566 GFK Radio
CROSBY (D50) AWOS-3 118.025 Center 126.85 Unicom/CTAF 122.9	701-965-6732 Salt Lake Center
DEVILS LAKE (DVL) AWOS-3 125.875 Vortac/DME 111.0 ILS 31 108.7 RCO 122.3 Unicom/CTAF 122.8	(701) 662-7214 Hiwas Rwy 31 GFK FSS

5

9

LOCATION & FREQ.	REMARKS
DICKINSON (DIK) ASOS 118.375 VOR DME 112.9 ILS 32 108.3 RCO 122.2 Center 124.25 Unicom/CTAF 123.0	(701) 227-0280 HIWAS Rwy 32 GFK FSS MPLS Center
FARGO (FAR) ASOS Vortac W 116.2 RCO 122.425 ILS 18 108.9 ILS 36 110.3 App/Dep Con 120.4 Center 127.35 Tower 133.8 Ground 121.9 ATIS 124.5 Unicom 122.95	(701) 298-3877 GFK FSS Rwy 18 Rwy 36
GARRISON (DO5) Center 127.6 Unicom/CTAF 122.9	MPLS Center
GLEN ULLIN AWOS 118.75 Center 124.25 RCO 122.45 Unicom/CTAF 122.9	(701) 348-9581
GRAFTON (GAF) AWOS-3 118.625 Center 132.15 GFK App/Dep 118.1 Unicom/CTAF 122.8	(701) 352-0581
GRAND FORKS (GFK) ASOS Vortac/DME 114.3 ILS 35L 109.1 LOC BC Rwy17R 109.1 RCO 122.2-122.6 App/Dep Con 118.1 Center 133.15 Tower/CTAF 118.4-120.55 Ground 124.575 ATIS 119.4 Unicom 122.95 Clearance 135.725	(701) 772-3486 HIWAS Rwy 35L Rwy 17R GFK FSS MPLS CTAF Tower Open (1200-0530)
GWINNER (GWR) AWOS 118.325 Center 127.35 Unicom/CTAF 122.7	(701) 678-6801 MPLS Center

LOCATION & FREQ.	REMARKS
HARVEY (5H4) AWOS-3 118.825 Center 135.25 Unicom/CTAF 122.8	(701) 324-2058 MPLS Center
HAZEN (HZE) AWOS-3 118.625 Center 124.25 RCO 122.45 Unicom/CTAF 122.8	(701) 748-2443 MPLS Center GFK FSS
HETTINGER (HEI) ASOS 119.925 Center 124.25 Unicom/CTAF 122.8	(701) 567-4594 MPLS Center
HILLSBORO (3H4) Center 127.35 Fargo App/DEP 120.4 Unicom/CTAF 122.9	
JAMESTOWN (JMS) ASOS 118.425 VOR/DME 114.5 ILS 31 109.3 RCO 122.2-123.6 Center 124.2 Unicom/CTAF 123.0	(701) 251-9002 HIWAS Rwy 31 GFK FSS MPLS Center
KENMARE (7K5) Center 127.6 Minot App/DEP 119.6 Unicom/CTAF 122.8	MPLS Center
MANDAN (Y19) AWOS-3 118.225 Bismarck App/DEP 124.2 Center 135.25 Unicom/CTAF 122.8 VOR/DME 116.5	(701) 663-0271 (1200-0600Z) MPLS Center (0600-1200Z) HIWAS
MINOT (MOT) ASOS 118.725 Vortac W 117.1 ILS 31 111.9 LOC BC Rwy 13 111.9 App/Dep Con 119.6 Tower/CTAF 118.2 Ground 121.9 RCO 122.2 Unicom 122.95 Center 127.6	(701) 837-9379 HIWAS Rwy 31 Rwy 13 Minot Air Base CTAF Tower open (1300-0400Z) GFK FSS MPLS Center

n

LOCATION & FREQ.	REMARKS
MOHALL (HBC) Minot App/DEP Con. 119.6 Center 127.6 Unicom/CTAF 122.8	
Northwood (4V4) Grand Forks App/DEP 118.1 Unicom/CTAF 122.8	
OAKES (205) AWOS-3 118.675 Center App/DEP 124.2 Unicom/CTAF 122.9	(701) 742-3991 MPLS Center
PEMBINA (PMB) VORTAC 112.4 FSS 122.1 R Center 132.15 Unicom/CTAF 122.8	MPLS Center
ROLLA (06D) AWOS-3 118.125 Center 127.6 RCO 122.65 Unicom/CTAF 122.8	(701) 447-0055 MPLS Center GFK FSS
RUGBY (RUG) AWOS-3 118.475 RCO 122.2 Unicom/CTAF 122.8	(701) 776-6100 GFK FSS
STANLEY (08D) AWOS-3 121.1 Center App/DEP 127.6 Unicom/CTAF 122.9	(701) 628-1737 MPLS Center
TIOGA (D60) AWOS-3 118.575 Center 127.6 Unicom/CTAF 122.9	(701) 664-4490 MPLS Center
VALLEY CITY (BAC) AWOS-3 118.725 Center App/DEP 124.2 Unicom/CTAF 122.8	(701) 845-9117 MPLS Center
WAHPETON (BWP) AWOS-3 127.875 Vortac 116.2 RCO 122.425 Unicom/CTAF 123.0	(701) 642-9800

8

LOCATION & FREQ.	REMARKS
WALHALLA (96D) Center App/DEP 132.15 Unicom/CTAF 122.9	MPLS Center
WATFORD CITY (S2,5) Center 126.85 Unicom/CTAF 122.8	Salt Lake Center
WILLISTON (ISN) ASOS 125.92 VORTAC 116.3 ILS 29 108.7 Center 126.85 RCO 123.6 Unicom/CTAF 122.8	(701) 774-3124 HIWAS Rwy 29 Salt Lake Center GFK FSS

Temporary Flight Restrictions

FAA NOTAMS 1-877-487-6867
<https://pilotweb.nas.faa.gov>

While TFR's may be triggered by different events, it is important that pilots familiarize themselves with each type of restriction, and how it may impact a pilot's proposed flight. Of equal importance, pilots must know how best to gain information concerning TFR's before each flight. Inadvertent flight into a TFR not only places a pilot's certificate at risk; it also increases the chances of being intercepted by military or law enforcement aircraft. Straying into TFR airspace may also increase the risk of a mid-air collision.

For further information on TFR's, you may visit FAA's website at <http://tfr.faa.gov> While flying in the vicinity of the Grand Forks Airport (KGFK), please familiarize yourself with the TFR located to the west of the airport.



AIR TRAFFIC CONTROLLER (ATCT)

- Bismarck ATCT – 701-223-8790
- Fargo ATCT – 701-239-5188
- Grand Forks ATCT – 701-775-2898
- Minot ATCT – 701-852-2346

a

AIRPORT FIXED BASE OPERATORS

Ashley

LaDelles Flying Service.....T: 288-3194

Beulah

Dakota Helicopter Services.....T: 873-4100

(Shawn Morten).....C: 870-4100

www.dakotahelicopter.com

Bismarck

Bismarck Aero Center.....T: 223-4754

(Jon Simmers)

www.bismarckaero.com

Executive Air TaxiT: 258-5024

(Paul Vetter).....T: 1-800-932-8924

www.executive-air.com

Bottineau

Botno Aircraft ServiceT: 228-5265

(Curt Aalund).....T: 228-5103

Bowman

Bottom Line Aviation.....T: 523-7484

(Brent Kline).....T: 440-7449

Casselton

AIC MaintenanceT: 347-4680

(Trent Teets).....C: 730-0123

www.aicaviation.com

Aircraft Investment Co.T: 347-4303

(Randy Vining).....T: 799-5782

Custom Aircraft RefinishingT: 347-5262

(Roy Kieffer).....T: 1-877-347-5262

www.aircraftrefinishing.com

Tundra Aviation.....T: 347-4303

(Randy Vining).....T: 799-5782

www.tundraaviation.com

Cavalier

Hartje Aviation.....T: 507-560-5638

Cavalier Air Service.....T: 265-4466

Devils Lake

Foss & Meier Flight.....T: 662-3221

(Troy Meier).....C: 351-4082

DL Aero Service.....T: 662-4416

(Tanner Sotvik).....C: 520-0229

DL Aviation.....T: 739-9349

(Scott Dimmler).....T: 644-2618

Dickinson

Western Edge Aviation, LLCT: 483-4221

(Pat Giese).....C: 260-4221

(Rick Petroff).....T: 264-9966

www.westernedgeaviation.net

Edgeley

Delux AviationT: 320-8740

Fargo

Exclusive AviationT: 235-3600

(Randy Jenson).....T: 1-800-770-0538

www.exclusiveaviation.com

Fargo Flight School.....T: 373-8816

(Mike Paulson).....T: 1-800-770-0538

www.fargopilot.com

Fargo Jet CenterT: 373-8800

(Jim Sweeney).....T: 1-800-770-0538

www.fargojet.com

Kindred Arcft Maintenance.....T: 232-8403

(David Sahl).....C: 610-1094

Red River AeroT: 232-2403

(Lyle Andvik)

www.redriveraero.com

Vic's Aircraft SalesT: 293-8362

(Victor Gelking)

www.vicsaircraftsales.net

Fessenden

Lloyd Crop ManagementT: 547-3371

Grafton

AgrimaxT: 352-0271

(Andy Tibert).....C: 520-9174

Grand Forks

AV Flight Grand Forks

(Jeff Ohman).....T: 383-5435

www.flygfk.com

Hazen

Vanco AviationT: 748-5592

(Joe Van Inwagen)

Hettinger

Air Dakota FliteT: 567-0269

(JB Lindquist).....T: 567-2223

T: 567-4469

Hillsboro

Sky Tractor Supply T: 436-5880
(Ron Deck) T: 430-0071
On-Site Aviation..... T: 400-1113
(Chad Hanson)..... T: 400-1113
www.on-siteaviation.com

Jamestown

James River Aviation T: 252-7978
(Allen Lamp) C: 320-7978
First Class Aviation T: 952-1515
(Jon Cave)..... C: 320-7861

Kindred

Odegaard Aviation..... T: 428-999
www.odegaardaviation.homsestead.com
Odegaard Wings..... T: 428-3457
(Brent Meester)

Langdon

Boarder Aviation T: 370-2076
Forest Flying Service T: 256-5108

Larimore

Larimore Air Service..... T: 343-2065
(Jesse Morten) T: 343-2790

Linton

North Central Aviation..... T: 254-5449
(Mike Gunia) T: 321-0913

Maddock

Slater Spray Service..... T: 438-2444
(Richard Slater)

Mandan

Double M Helicopter Service T: 642-5777
www.doubleMhelicopters.com
Mandan Aviation T: 390-3759
Clear Skies Aviation..... T: 663-5386
Mandan Aero Center..... T: 663-9925

Minot

Minot Aero Center T: 857-4738
www.minotaerocenter.com

Northwood

Northwood Aero Service..... T: 587-5171
(Richard Altendorf) T: 218-779-1242

Oakes

Bear Creek Flying Service..... T: 742-3145
(Travis McPherson)

Page

Tall Towers..... T: 668-2302
(Tim McPherson)..... T: 799-8626

Park River

Northern Aircraft Service..... T: 284-7303
(Glen/Jayse Wharam) T: 284-7804/6798

Pembina

Nord Aviation Inc..... T: 825-6615
(Terry Nord)

Rolla

Rolla Flying Service T: 477-5145
(Gordon Krech) T: 477-6780
C: 550-9884

Rugby

Schneider Aerial Spraying T: 776-5171
(Steve Schneider)..... T: 776-5176

St. Thomas

TLB Air..... T: 257-6629

Tioga

Tioga Aero Center T: 641-6020
T: 664-3012
tiogaaero@gmail.com

Knutson Flying Service

T: 664-2220

Valley City

North Valley Aircraft..... T: 845-2100
(Paul & Jarrod Lindemann)..... C: 793-0626
www.northvalleyaircraft.com

Wahpeton

Tri-State Aviation T: 642-5777
(Cindy-Schreiber-Beck) T: 899-3232
www.tri-stateaviation.com
Wilbur-Ellis Air..... T: 643-1300
(Eric Klindi)

Walhalla

Walhalla Aviation LLC T: 281-9394

Watford City

Taylor Aviation..... T: 444-3772
(Kent Taylor) T: 842-6188
C: 770-6739

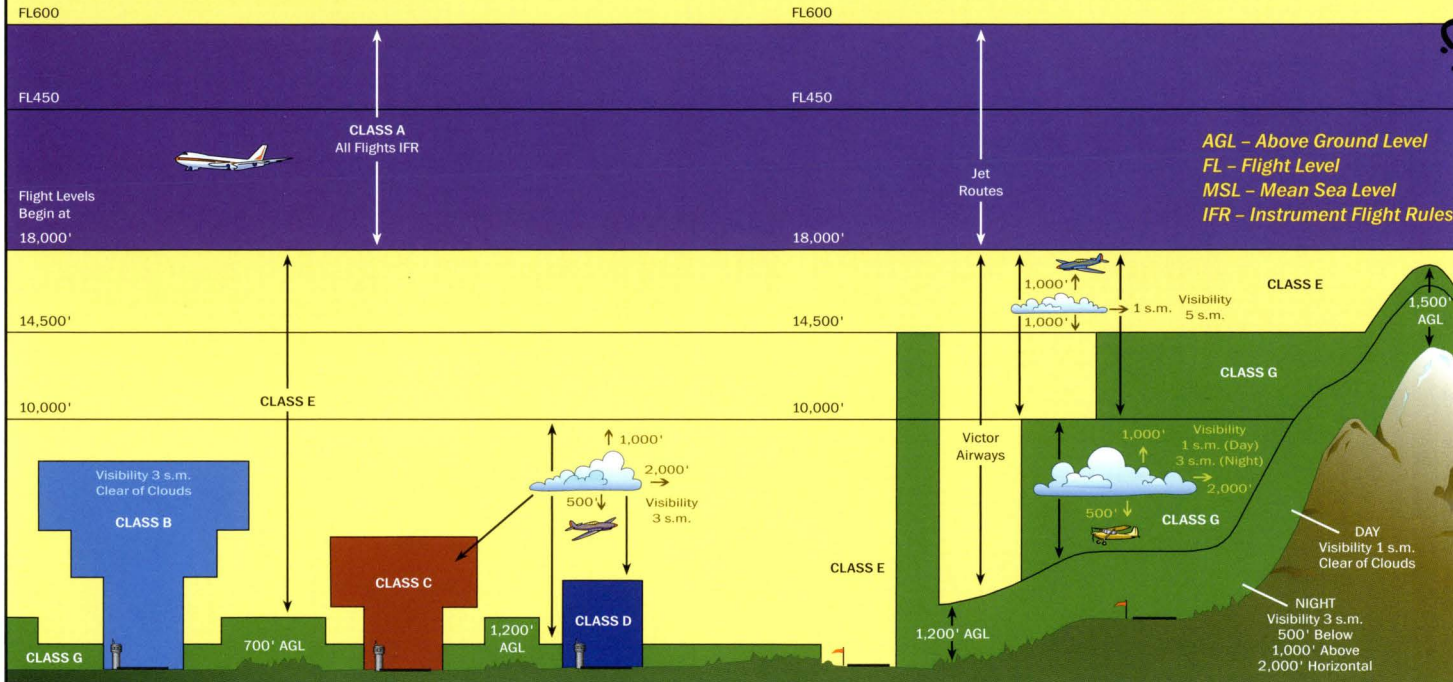
West Fargo

Delta 54 Aviation T: 371-2655
(Robbie Grande)

Williston

Landmark Aviation..... T: 774-2300
www.landmarkaviation.com

CLASS E



AGL – Above Ground Level
 FL – Flight Level
 MSL – Mean Sea Level
 IFR – Instrument Flight Rules

Classification	Definition
CLASS A	Generally airspace above 18,000 feet MSL up to and including FL 600.
CLASS B	Generally multi-layered airspace from the surface up to 10,000 feet MSL surrounding the nation's busiest airports.
CLASS C	Generally airspace from the surface to 4,000 feet AGL surrounding towered airports with service by radar approach control.

Classification	Definition
CLASS D	Generally airspace from the surface to 2,500 feet AGL surrounding towered airports.
CLASS E	Generally controlled airspace that is not Class A, Class B, Class C, or Class D.
CLASS G	Generally uncontrolled airspace that is not Class A, Class B, Class C, Class D, or Class E.

Automated Weather Observation System

The Automated Weather Observation System (AWOS) enhances safety by providing critical airport weather information to pilots to be used for flight planning and in-flight decision-making. The system provides real-time weather observations including wind, visibility, current weather, sky conditions, temperature, dew point, altimeter setting, and remarks, such as density altitude and local airport conditions.

AWOS information can be accessed in a variety of ways, including radio frequency, telephone and weather terminals at airports with AWOS. It can also be accessed from a variety of Web sites, most AWOS information is disseminated nationwide through a system called NADIN, making it available to sources like Flight Service Stations, the National Weather Service and Weather Channel.

What every pilot should know about AWOS

Wind

- taken every second and a running 2-minute average is updated every 5 seconds
- wind speeds of less than 3 knots are reported as calm
- if the difference between the highest 5-second average and 2-minute average exceeds 5 knots, gusts are reported
- wind direction is reported from the nearest 10 degree magnetic heading

Visibility

- readings are taken every 15 seconds and are averaged over a 10-minute period

Present weather

- a precipitation sensor samples every 15 seconds
- temperature and visibility measurements are used to determine precipitation type

Sky conditions (ceilings)

- readings are taken every 30 seconds and averaged over a 30-minute period
- ceiling measurements are rounded as follows:
 - nearest 100' up to 5000' AGL
 - nearest 500' from 5000'-10,000' AGL
 - nearest 1000' above 10,000'

Temperature and dew point

- four, 1-minute averages are used to determine the temperature

Altimeter (barometric pressure)

- pressure sensors take readings every 10 seconds and a 1-minute average is calculated

Remarks

- a calculated density altitude report is provided, if density altitude is greater than 1000' above the airport's field elevation
- Occasionally, airport managers will provide recorded remarks regarding NOTAM's or local airport conditions.

AWOS is maintained by the airport in North Dakota and is continuously monitored to ensure its operational status. Individual sites are also maintained and calibrated on a regular basis to ensure reliability and accuracy. As with any electronic device, care must be used when interpreting data. By knowing how AWOS data is collected, a pilot can better understand the information they are receiving.

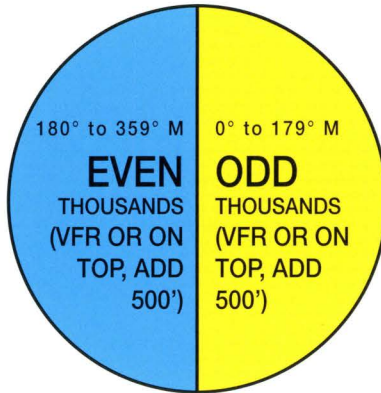
ASOS or AWOS

CITY	ID.	FREQ.	PHONE
Beach	2OU	118.175	(701) 872-9225
Bismarck	BIS	119.35*	(701) 255-7563
NWS			** (701) 223-4582
Bowman	BWW	118.075	(701) 523-3412
Cando	9D7	118.325	(701) 968-3625
Carrington	46D	118.575	(701) 652-1875
Cavalier	2C8	118.275	(701) 265-8050
Cooperstown	S32	118.750	(701) 797-2566
Crosby	D50	118.025	(701) 965-6732
Devils Lake	DVL	125.875	(701) 662-7214
Dickinson	DIK	118.375	(701) 227-0280
Fargo	FAR	124.50*	(701) 298-3877
Glen Ullin	D57	118.75	(701) 348-9581
Grafton	GAF	118.625	(701) 352-0581
Grand Forks	GFK	119.40*	(701) 772-3486
NWS			** (701) 772-0720
Gwinner	GWR	118.325	(701) 678-6801
Harvey	5H4	118.825	(701) 324-2058
Hazen	HZE	118.675	(701) 748-2443
Hettinger	HEI	119.925	(701) 567-4594
Jamestown	JMS	118.425	(701) 251-9002
Langdon	D55	118.225	(701) 256-2121
Linton	7L2	118.175	(701) 254-4965
Mandan	Y19	118.225	(701) 663-0271
Minot	MOT	118.725	(701) 837-9379
Oakes	2D5	118.675	(701) 742-3991
Rolla	06D	118.125	(701) 477-0055
Rugby	RUG	118.475	(701) 776-6100
Stanley	08D	121.1	(701) 628-1737
Tioga	D60	118.575	(701) 664-4490
Valley City	BAC	118.725	(701) 845-9117
Wahpeton	BWP	127.875	(701) 642-9800
Watford City	S25	118.175	(701) 842-4855
Williston	ISN	125.92	(701) 774-3124
NWS			** (701) 572-3198

*ATIS **NATIONAL WEATHER SERVICE (NWS)

DIRECTIONAL ALTITUDE CHART

CRUISING ALTITUDES
(IFR WITHIN CONTROLLED AIRSPACE
MAY BE MODIFIED BY ATC)



Below 29,000' MSL

MORSE CODE AND PHONETIC ALPHABET

Alfa ..—	Juliett ..— — — —	Sierra ...	2 ..— — — —
Bravo — — —	Kilo — — —	Tango — —	3 — — — —
Charlie — — .	Lima . — — .	Uniform — — —	4 — — — —
Delta — — .	Mike — — —	Victor — — —	5 — — — —
Echo .	November — — .	Whiskey . — — —	6 — — — —
Foxtrot — — .	Oscar — — — —	Xray — — — —	7 — — — —
Golf — — .	Papa . — — .	Yankee — — — —	8 — — — —
Hotel — — .	Quebec — — — —	Zulu — — — .	9 — — — —
India ..	Romeo . — — .	1. — — — —	0 — — — —

VFR TRANSPONDER CODES

Code 1200 – Surface to 18,000 Feet

Code 7600 – Radio Failure

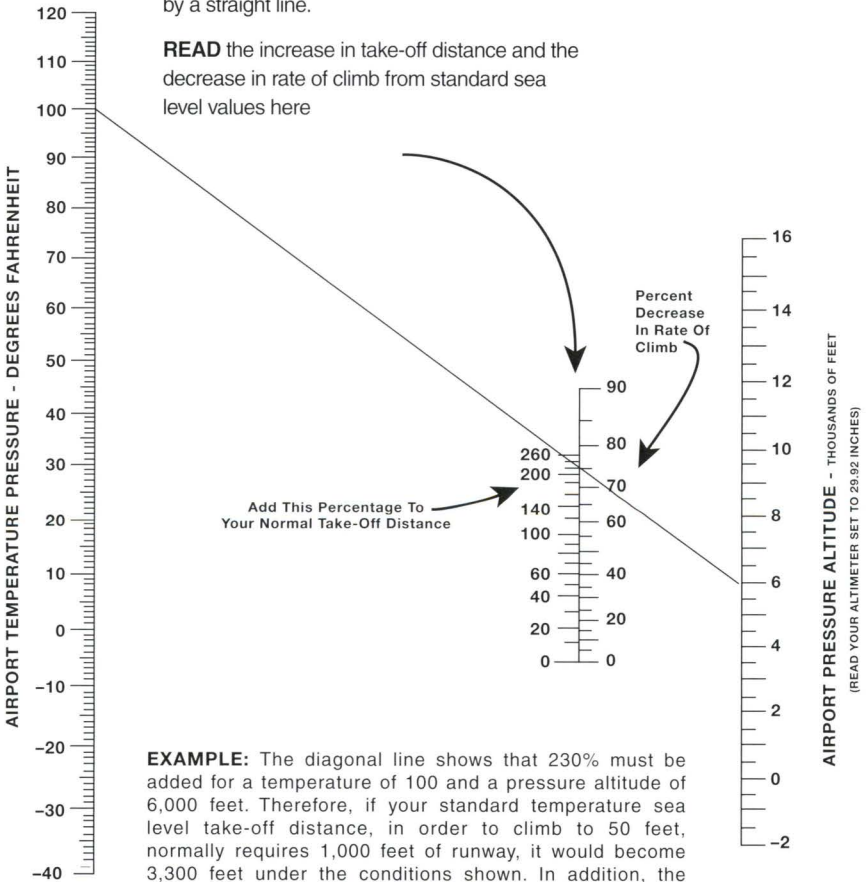
Code 7700 – Emergency

↳

MODIFIED KOCH CHART FOR ALTITUDE AND TEMPERATURE EFFECTS

TO FIND the effect of altitude and temperature
CONNECT the temperature and airport altitude
 by a straight line.

READ the increase in take-off distance and the
 decrease in rate of climb from standard sea
 level values here



EXAMPLE: The diagonal line shows that 230% must be added for a temperature of 100 and a pressure altitude of 6,000 feet. Therefore, if your standard temperature sea level take-off distance, in order to climb to 50 feet, normally requires 1,000 feet of runway, it would become 3,300 feet under the conditions shown. In addition, the rate of climb would be decreased 76%. Also, if your normal sea level rate of climb is 500 feet per minute, it would become 120 feet per minute.

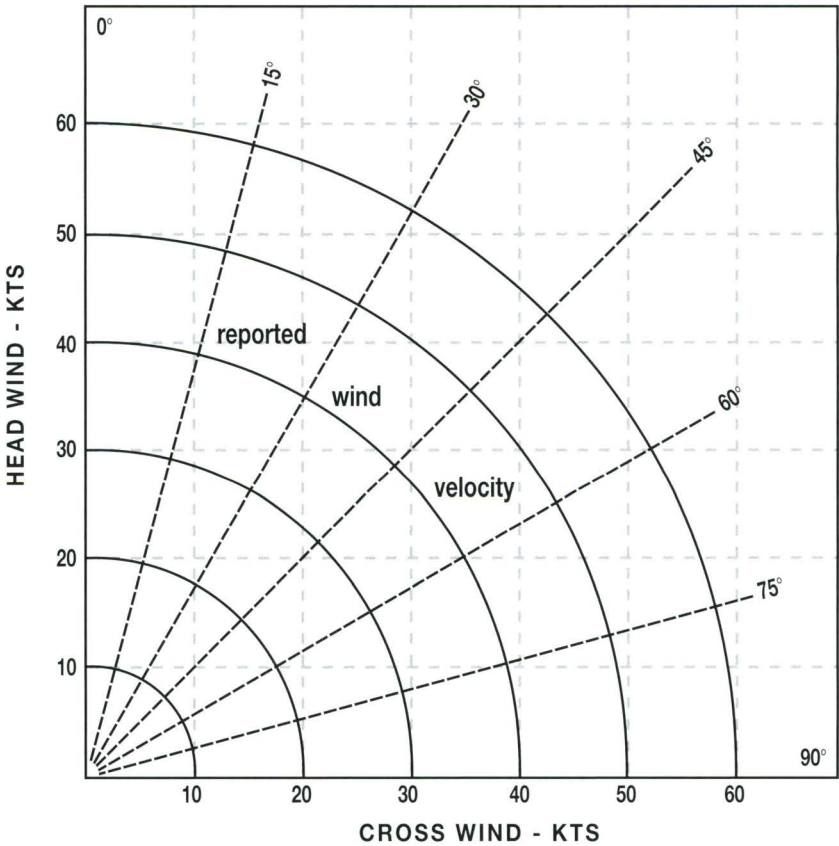
This chart indicates typical representative values for "personal" airplanes.

For exact values, consult your airplane flight manual.

The chart may be conservative for airplanes with supercharged engines.

Also, remember that long grass, sand, mud or deep snow can easily double your take-off distance.

WIND CHART FOR TAKEOFF



INSTRUCTIONS

1. Determine maximum 90° Cross Wind that you can handle. (Suggest 20% X Stall Speed). Place dot on 90° line at this value.
2. Determine maximum 45° Cross Wind that you can handle. (Suggest 30% X Stall Speed). Place dot on 45° line at this value.
3. Determine maximum Head Wind that you can handle. (Suggest 60% X Stall Speed). Place dot on 0° line at this value.
4. Connect dots with red line. Values to left of line are go wind velocities and directions.



ASHLEY ASY

ASHLEY MUNICIPAL



ATTENDANCE: UNATNDD
FUEL: 100LL, JET A REPAIRS: NONE

LIGHTS: LOW RDO-CTL BEACON: YES
SNOW REMOVAL: Call Ahead

UNICOM: NAV: NONE

CTAF: 122.9 WX: 118.175 LISBON



FIELD ELEVATION	REMARKS	IN-PERSON CONTACT
<p style="text-align: center; font-size: 2em;">2032</p>	<p>Rwy 14/32 Activate lights CTAF. MxGWt S-6</p>	<p>Ladelle George PHONE: 701-371-8707 Addl: 701-288-3194 PUBLIC TERMINAL PHONE: Yes</p> <p style="text-align: right; font-size: 2em;">A</p>



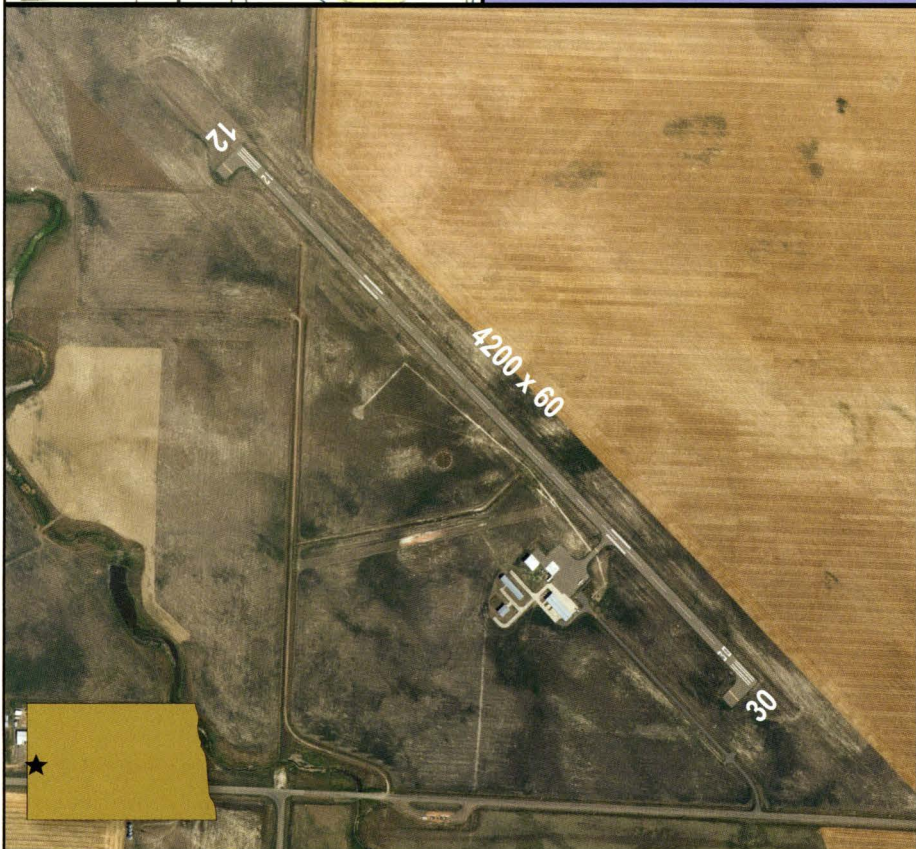
BEACH 20U BEACH AIRPORT

ATTENDANCE: UNATNDD
FUEL: 100LL, JET A REPAIRS: NONE

LIGHTS: MED*RDO-CTL BEACON: YES
SNOW REMOVAL: Confirm after storms

UNICOM: 122.8 NAV: PAPI

CTAF: 122.8 WX: 118.175



FIELD ELEVATION	REMARKS	IN-PERSON CONTACT
2756	Fuel-self service credit card. Activate MIRL&PAPI-CTAF. Deer on/near airport. MxGWt S-12.5 Confirm snow removal with airport manager.	Boyd Trester PHONE: 701-260-1053 Addl: 701-872-3413 PUBLIC TERMINAL PHONE: Yes

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BEULAH 95D

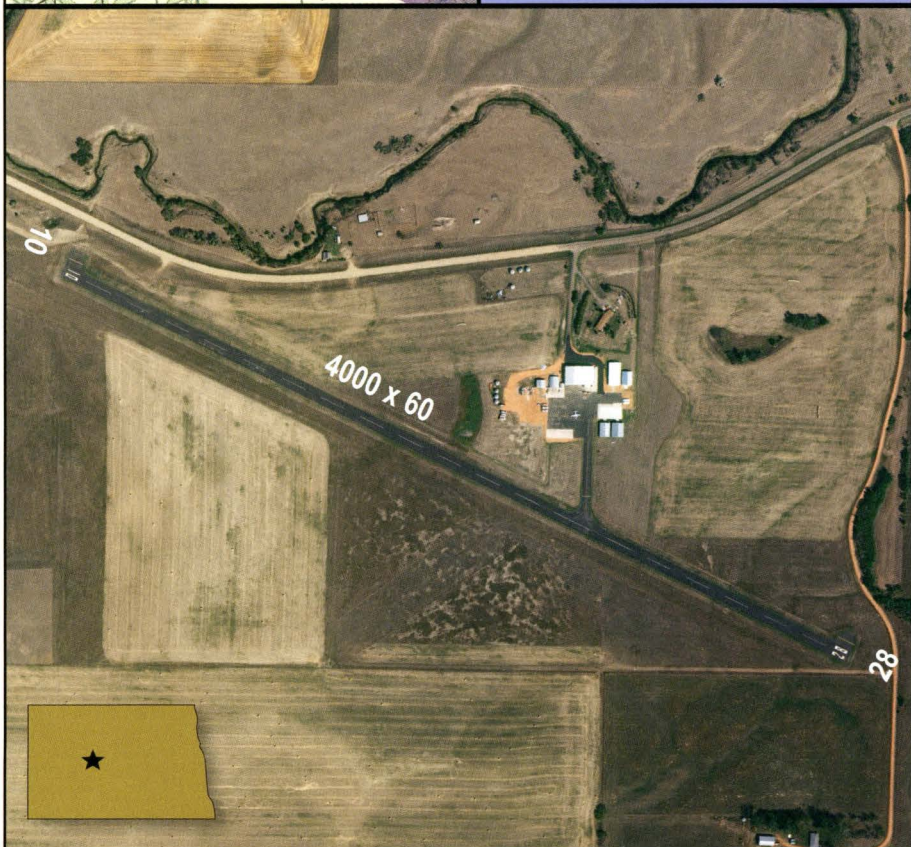
BEULAH MUNICIPAL

ATTENDANCE: M-F 8-5 PM / ON CALL
FUEL: 100LL JETA REPAIRS: MAJOR

LIGHTS: LOW*RDO-CTL BEACON: YES
SNOW REMOVAL: Irregular-Confirm

UNICOM: NAV: VASI

CTAF: 122.9 WX: 118.675 HAZEN



FIELD ELEVATION

REMARKS

IN-PERSON CONTACT

1791

Lighted Stack 498' AGL located
1.8 NM south, activate lights,
SAVASI and beacon CTAF.
MxGWT S-12.5

Shawn Morten
PHONE: 701-873-4100
Addl: 701-873-2259/2311/5837
PUBLIC TERMINAL PHONE: Yes

12



BISMARCK BIS

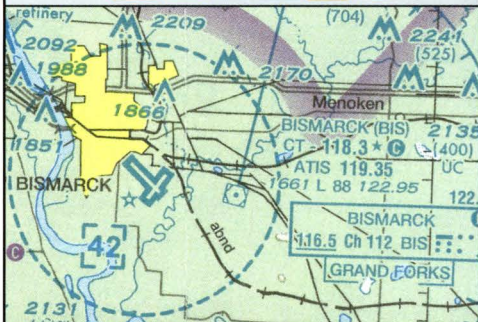
BISMARCK MUNICIPAL

ATTENDANCE: 24 HOUR SERVICE
 FUEL: 100LL JET A REPAIRS: MAJOR

LIGHTS: HIGH BEACON: YES
 SNOW REMOVAL: Regular Service

UNICOM: 122.95 GROUND 121.9
 NAV: ILS, VOR, PAPI

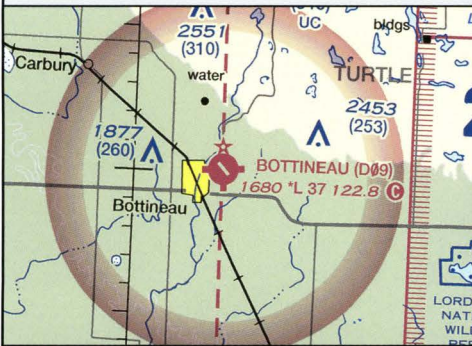
TOWER/CTAF: 118.3 WX: 119.35 ATIS



FIELD ELEVATION	REMARKS	IN-PERSON CONTACT
1661	When tower closed lights preset med. Intensity. Deer/birds on airport vicinity. ASOS 255-7563.	Greg Haug/Tim Thorsen PHONE: 701-355-1808 Addl: See FBO Listing PUBLIC TERMINAL PHONE: Yes

Handwritten initials or mark.





BOTTINEAU D09

BOTTINEAU MUNICIPAL

ATTENDANCE: M-F 8-5 PM / ON CALL
FUEL: 100LL REPAIRS: MAJOR

LIGHTS: MED*RDO-CTL BEACON: YES
SNOW REMOVAL: Confirm aft storm

UNICOM: 122.80 NAV: PAPI

CTAF: 122.8 WX: 118.125 ROLLA



FIELD ELEVATION

REMARKS

IN-PERSON CONTACT

1680

Ry 3/21 closed winter months.
Migratory birds in area. Fuel-
self-service-credit card. MxGWt
S-12.5. 3/21 dsplcd thrsholds.

Curt Aalund
PHONE: 701-228-5265/5103
Addl: 701-228-2983
PUBLIC TERMINAL PHONE: Yes

85



BOWBELLS 5B4

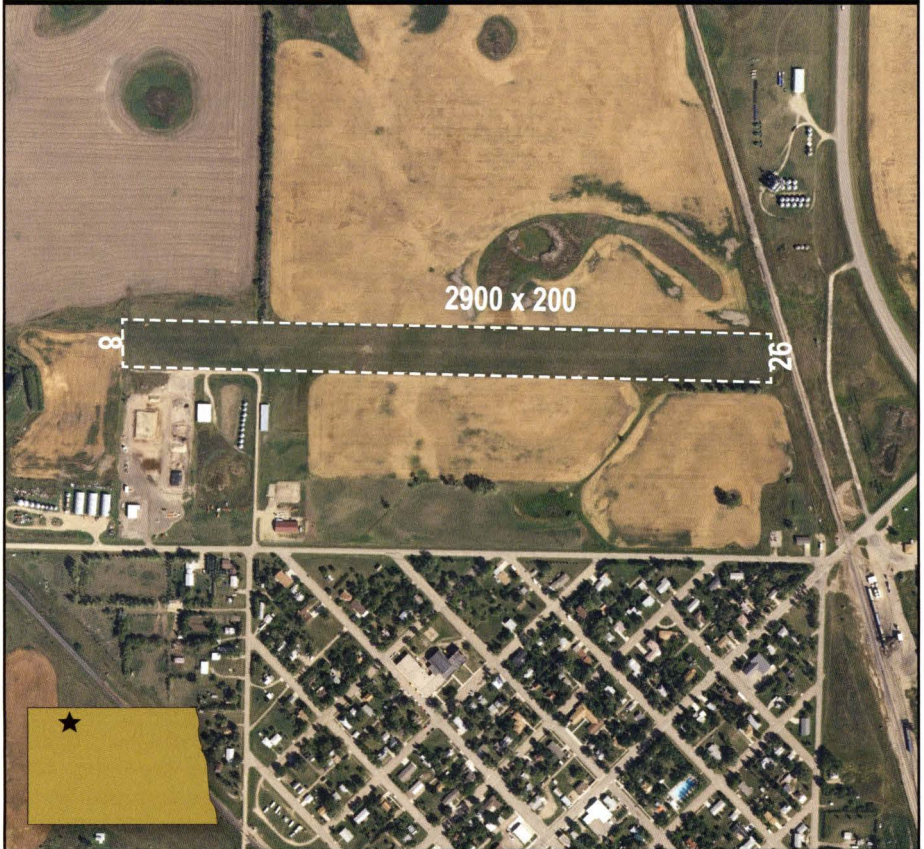
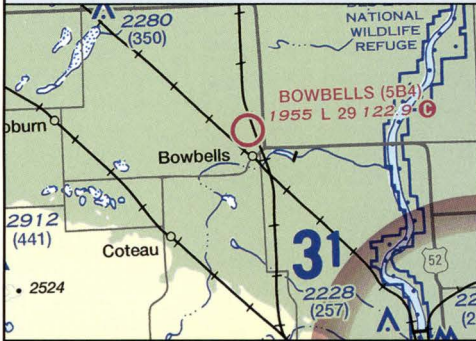
BOWBELLS MUNICIPAL

ATTENDANCE: UNATNDD
FUEL: NONE REPAIRS: NONE

LIGHTS: INOP BEACON: NONE
SNOW REMOVAL: Irregular-Confirm

UNICOM: NAV: NONE

CTAF: 122.9 WX: 118.575 TIOGA



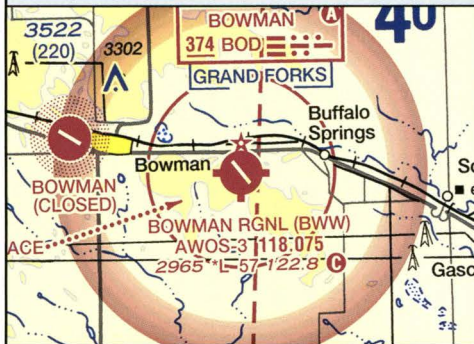
FIELD ELEVATION	REMARKS	IN-PERSON CONTACT
1955	Turf surface after rain, standing water at midpoint. Ry 26 railroad tracks; displaced threshold 460 marked day only.	Wayne Jacobson PHONE: 701-377-2731/339-1574 Addl: 701-377-2608

24





MX hanger can be used for storage with prior notifications



BOWMAN BWW

BOWMAN REGIONAL

ATTENDANCE: M-F 8-5:30 PM / ON CALL
FUEL: 100LL JETA REPAIRS: MAJOR

LIGHTS: MED BEACON: YES
SNOW REMOVAL: Confirm aft storm

UNICOM: 122.80
NAV: PAPI

CTAF: 122.8 WX: 118.075



FIELD ELEVATION	REMARKS	IN-PERSON CONTACT
2965	MxGwT D-30.0 AWOS (701-523-3412). Fuel-self service credit card.	Brent Kline PHONE: 701-523-7484, 701-440-7489 Email: fuel@bottomlineaviation.com

205



CANDO 9D7

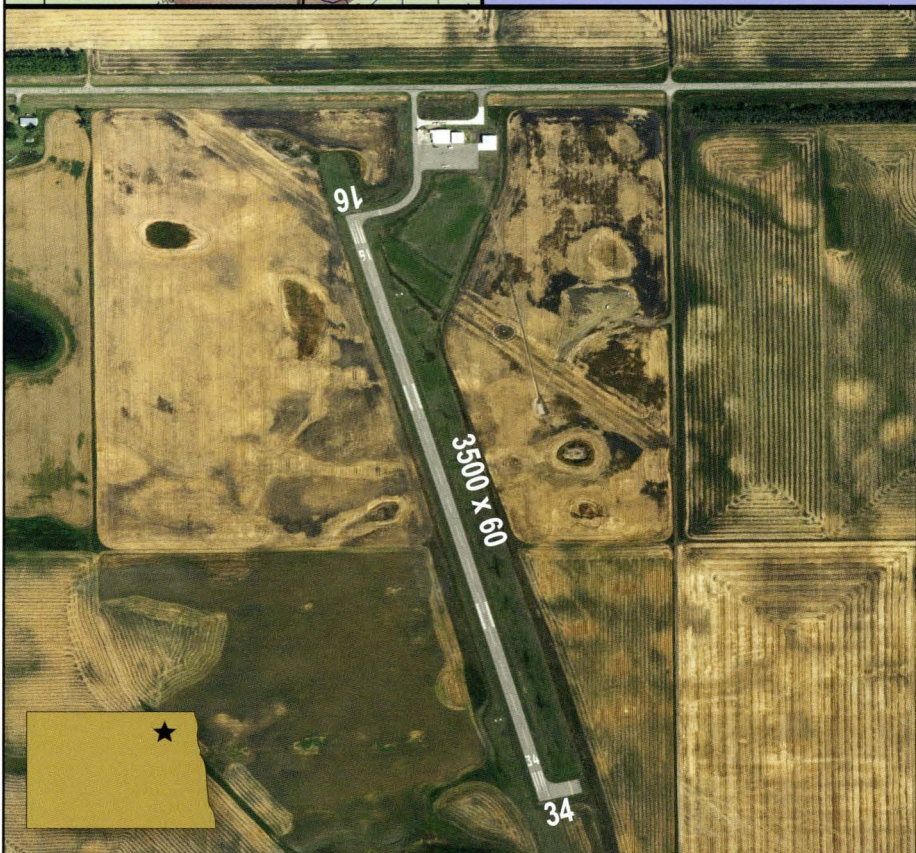
CANDO MUNICIPAL

ATTENDANCE: UNATNDD
FUEL: NONE REPAIRS: NO

LIGHTS: Med BEACON: YES
SNOW REMOVAL: Regular basis-Confirm

UNICOM: NAV: PAPI

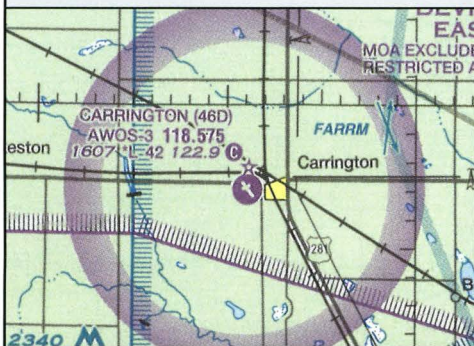
CTAF: 122.9 WX: 118.325



FIELD ELEVATION	REMARKS	IN-PERSON CONTACT
1482	Migratory waterfowl in vicinity, Activate MIRL and PAPI CTAF, AWOS 968-3625. MxGWt S-12. Contact airport manager for vehicle access.	Rollie Bjornstad PHONE: 701-739-8026 / 968-3043 PUBLIC TERMINAL PHONE: NONE

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CARRINGTON 46D

CARRINGTON MUNICIPAL

ATTENDANCE: UNDATND
 FUEL: 100LL REPAIRS: NONE

LIGHTS: Med RDO CTRL BEACON: YES
 SNOW REMOVAL: Confirm 652-2911 city

UNICOM: NAV: PAPI

CTAF: 122.9 WX: 118.575



FIELD ELEVATION	REMARKS	IN-PERSON CONTACT
1607	AWOS 652-1875. Self-service 24hour credit card fueling. Activate MIRL/PAPI aft 2400hr. CTAF	Dan Trosen PHONE: 701-652-2911/652-5206 ADDL. PHONE: 701-652-3321 PUBLIC TERMINAL PHONE: Yes



CASSELTON 5N8

ROBERT MILLER REGIONAL

ATTENDANCE: MON-SAT 8-5PM/ ON CALL

FUEL: 100LL REPAIRS: MAJOR

LIGHTS: MED*RDO-CTL BEACON: NONE

SNOW REMOVAL: Available-Confirm

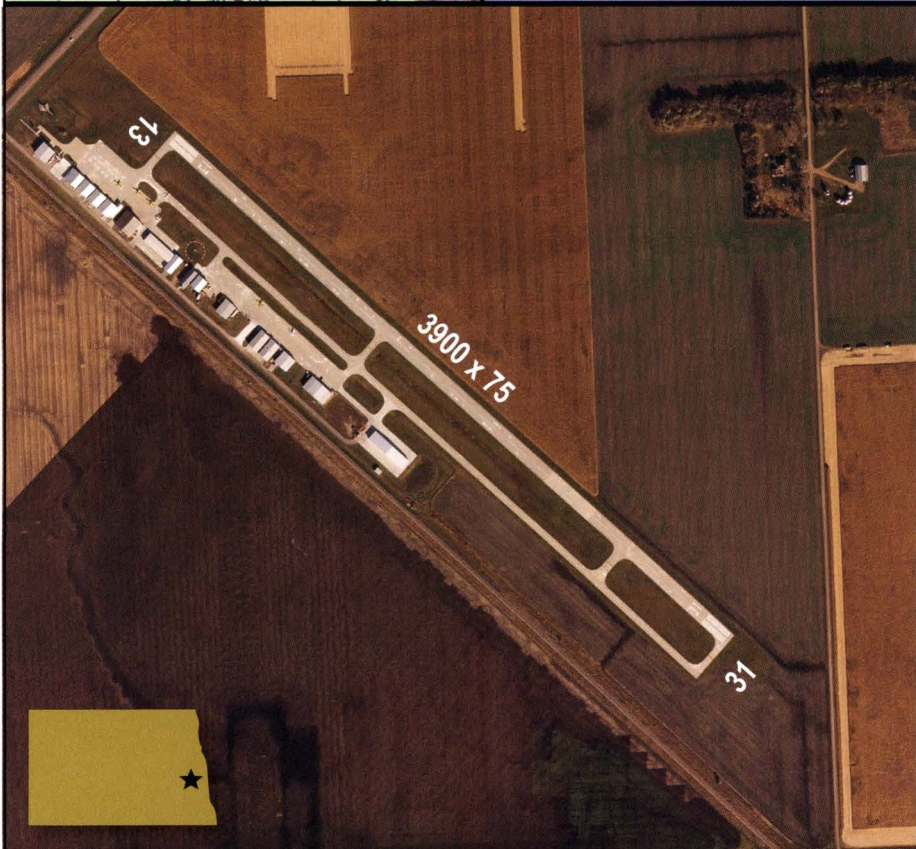
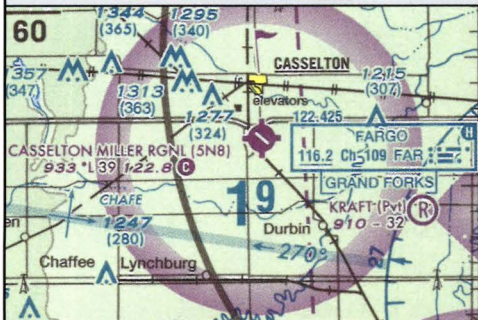
UNICOM: 122.80

NAV: PAPI, REIL

CTAF: 122.8

WX: 124.5

FARGO



FIELD ELEVATION	REMARKS	IN-PERSON CONTACT
<p style="text-align: center; font-size: 2em;">933</p>	<p>Fuel-self service credit card. Activate med. lights & PAPI CTAF. MXGWT S-12.5 www.Casselton.com/community/airport</p>	<p>Robert Miller PHONE: 701-347-0201 ADDL. PHONE: 701-347-5519/ 799-4606 PUBLIC TERMINAL PHONE: Yes</p>

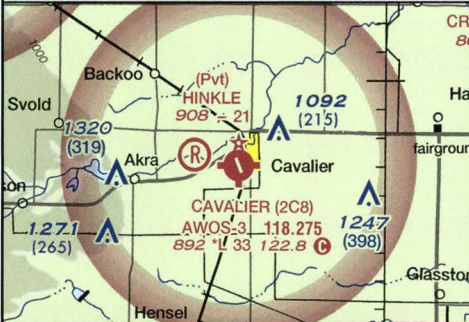
A





CAVALIER 2C8

CAVALIER MUNICIPAL



ATTENDANCE: ON CALL
FUEL: 100LL, JETA REPAIRS: YES

LIGHTS: Med*dusk2230 BEACON: YES
SNOW REMOVAL: Confirm after storm

UNICOM: 122.80
NAV: PAPI

CTAF: 122.8 WX: 118.275



FIELD ELEVATION	REMARKS	IN-PERSON CONTACT
<p style="font-size: 2em; font-weight: bold; text-align: center;">892</p>	<p>AWOS 265-8050. Ry 34 x 31' powerline 1300' from threshold. Elevator SE of ry 34 centerline. MXGWt S-12.5</p>	<p>Harrold McConnell PHONE: 701-265-3186/520-8631 ADDL. PHONE: 701-265-4466 PUBLIC TERMINAL PHONE: Yes</p>



COLUMBUS D49

COLUMBUS MUNICIPAL



ATTENDANCE: UNATNDD

FUEL: NONE

REPAIRS: NONE

LIGHTS: Reflectors BEACON: NONE

SNOW REMOVAL: Closed winter months

UNICOM:

NAV: NONE

CTAF: 122.9

WX: 118.575

TIOGA



FIELD ELEVATION

REMARKS

IN-PERSON CONTACT

1930

Closed winter months.
Call for grass mowing.

Rich Castell - Manager
PHONE: 701-339-0355
ADDL. PHONE: 701-939-7831/4511
PUBLIC TERMINAL PHONE: No

30



COOPERSTOWN S32

COOPERSTOWN MUNICIPAL

ATTENDANCE: UNATDD
 FUEL: 100LL REPAIRS: NONE

LIGHTS: Med*dusk/dawn BEACON: NONE
 SNOW REMOVAL: Irregular-Confirm

UNICOM: NAV: AWOS

CTAF: 122.9 WX: 118.75



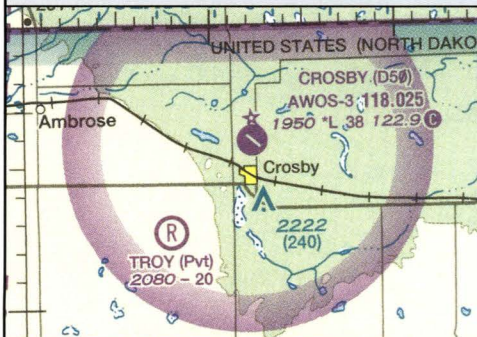
FIELD ELEVATION	REMARKS	IN-PERSON CONTACT
1424	Fuel-self service credit card. AWOS 797-2566 MxGWt S-12.5	John Wakefield PHONE: 701-789-0666 ADDL. PHONE: 701-789-0667 PUBLIC TERMINAL PHONE: Yes

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CROSBY D50

CROSBY MUNICIPAL



ATTENDANCE: UNATNDD

FUEL: 100LL

REPAIRS: NONE

LIGHTS: MED RDO CTRL BEACON: YES

SNOW REMOVAL: Confirm after storm.

UNICOM:

NAV: PAPI

CTAF: 122.9

WX: 118.025



FIELD ELEVATION	REMARKS	IN-PERSON CONTACT
1950	Rwy 03/21 closed winter. AWOS 965-6732 Fuel-self service credit card. Use CTAF for PCL after 0100. MxGWt S-12.5	Mike Melby -Chairman PHONE: 701-570-0944/965-4284 ADDL. PHONE: 701-965-6512/4279/6038 PUBLIC TERMINAL PHONE: Yes

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DEVILS LAKE DVL

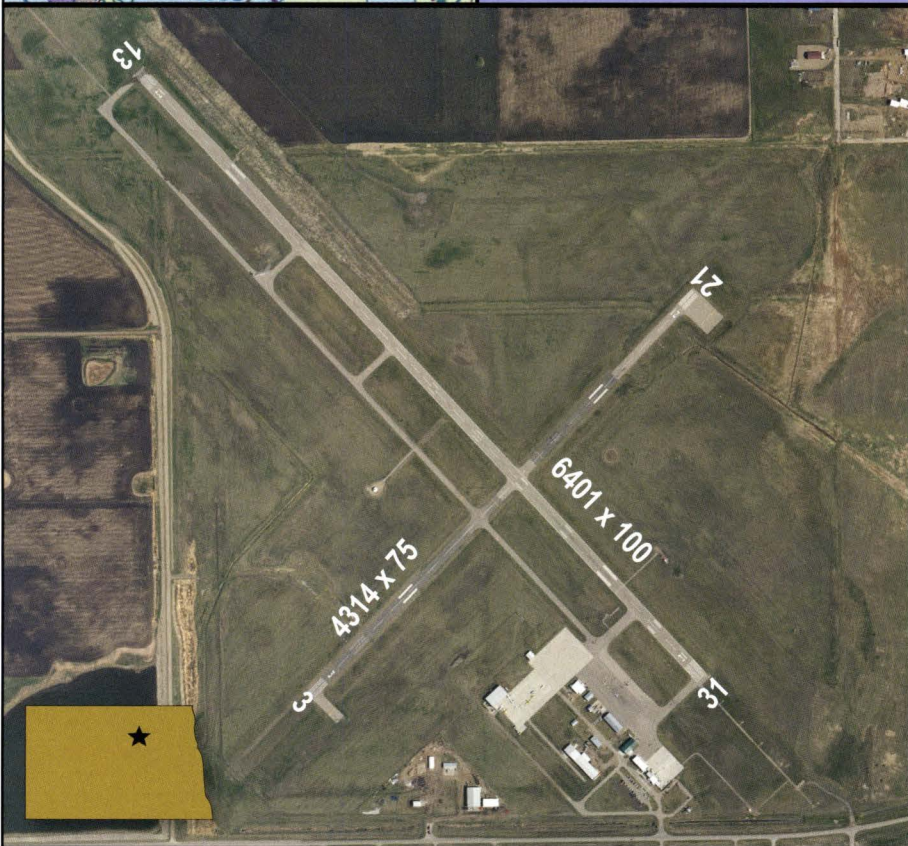
DEVILS LAKE REGIONAL

ATTENDANCE: DAYTIME HOURS
 FUEL: JETA, 100LL REPAIRS: MAJOR

LIGHTS: MED RDO CTRL BEACON: YES
 SNOW REMOVAL: Confirm after storm

UNICOM: 122.80
 NAV: ILS, VOR, VASI, PAPI

CTAF: 122.8 WX: 125.875



FIELD ELEVATION	REMARKS	IN-PERSON CONTACT
1470	AWOS (701-662-7214) To increase to med. lights CTAF. Birds/deer possible.	John Nord PHONE: 701-662-5833 ADDI. PHONE: 701-662-3221 FBO PUBLIC TERMINAL PHONE: Yes



DICKINSON DIK

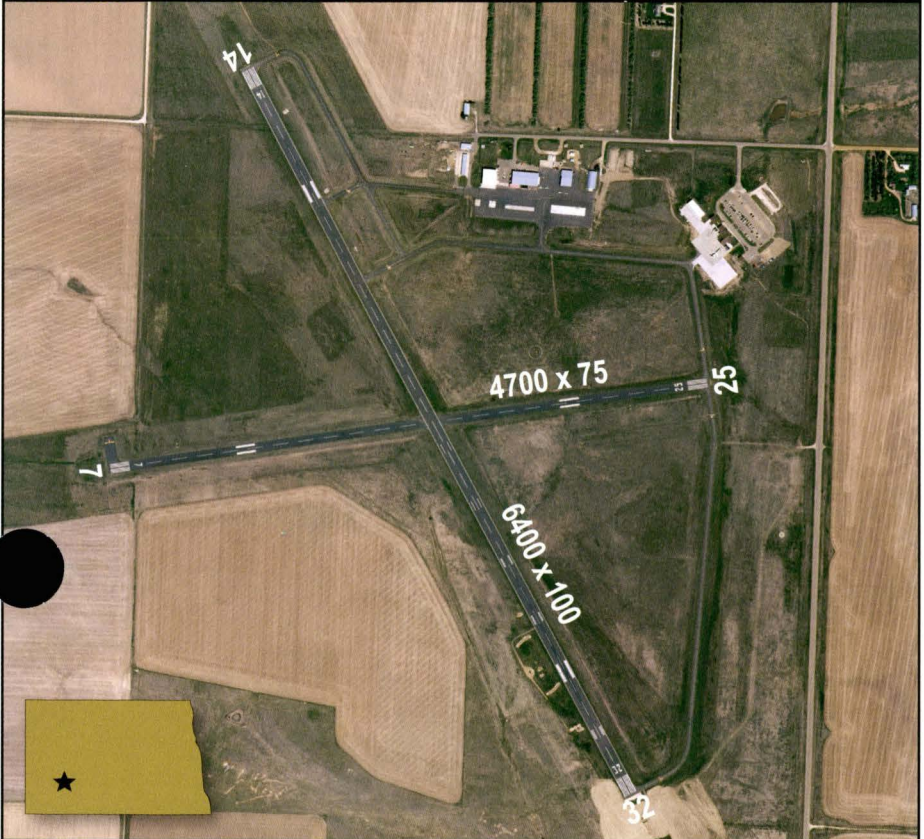
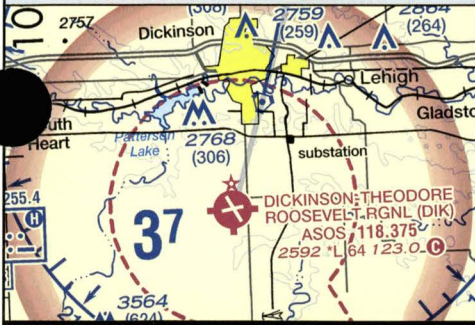
DICKINSON THEODORE ROOSEVELT REGIONAL

ATTENDANCE: ALL DAYS 8-5PM MST
FUEL: 100LL, JET A REPAIRS: MAJOR

LIGHTS: MED RDO CTRL BEACON: YES
SNOW REMOVAL: Regular Confirm

UNICOM: 123.00
NAV: LOC, ILS, VOR, PAPI

CTAF: 123.00 WX: 118.375



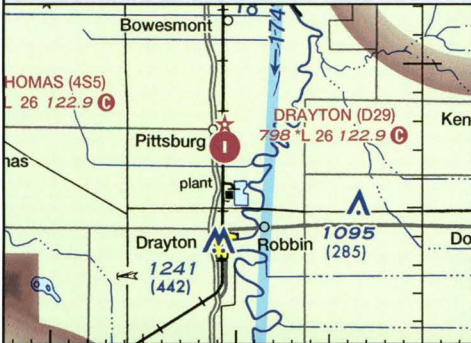
FIELD ELEVATION	REMARKS	IN-PERSON CONTACT
2592	Self-service 24-hr fuel After 2200 MIRL/PAPI/REILS. ASOS 701- 227-0280, TPA 3602, multi 4102	Kelly Braun PHONE: 701-483-1062 ADDL. PHONE: 701-483-4221 PUBLIC TERMINAL PHONE: Yes

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DRAYTON D29

DRAYTON MUNICIPAL

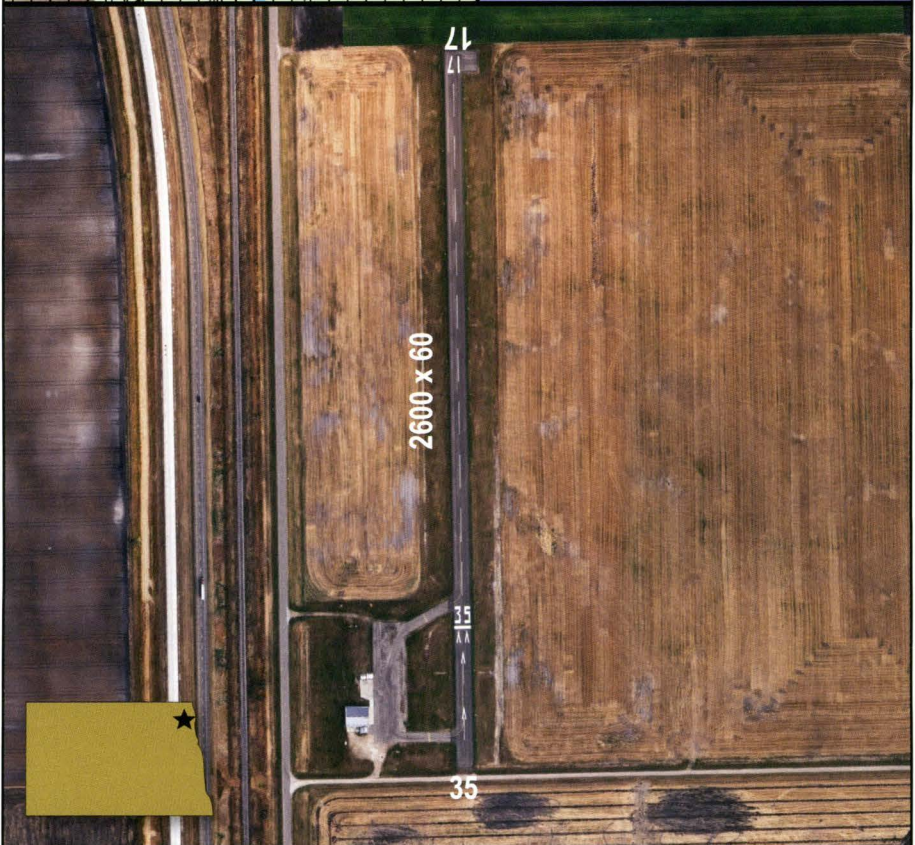


ATTENDANCE: UNATDDD
 FUEL: NONE REPAIRS: NONE

LIGHTS: LOW BEACON: YES
 SNOW REMOVAL: Irregular-Confirm

UNICOM: NAV: NONE

CTAF: 122.9 WX: 118.625 GRAFTON



FIELD ELEVATION

REMARKS

IN-PERSON CONTACT

798

Ry 35 displaced 320' to clear road. Apron soft when frost season. Small aircraft pavement rating. MxGwt S-4

Rob Boll
 PHONE: 701-454-3317
 ADDL PHONE: 701-454-3590
 PUBLIC TERMINAL PHONE: None

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DUNSEITH S28

INTERNATIONAL PEACE GARDEN

ATTENDANCE: UNATNDD

FUEL: NONE

REPAIRS: NONE

LIGHTS: NONE

BEACON: NONE

SNOW REMOVAL: Irregular must Confirm

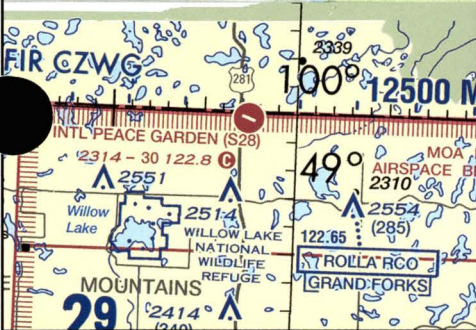
UNICOM: 122.80

NAV: NONE

CTAF: 122.8

WX: 118.125

ROLLA



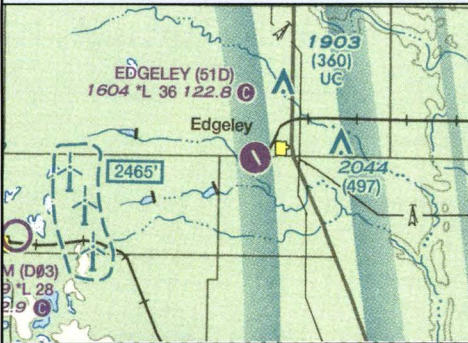
FIELD ELEVATION	REMARKS	IN-PERSON CONTACT
2314	Deer/bird on airport caution advised. For US Customs 701-263-4513 or 204-534-6820 Canadian. MxGWt S12.5. Day use only.	Kyle Wanner PHONE 701-328-9650 ADDL. PHONE: 701-425-5926/471-5548 PUBLIC TERMINAL PHONE: Customs

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EDGELEY 51D

EDGELEY MUNICIPAL

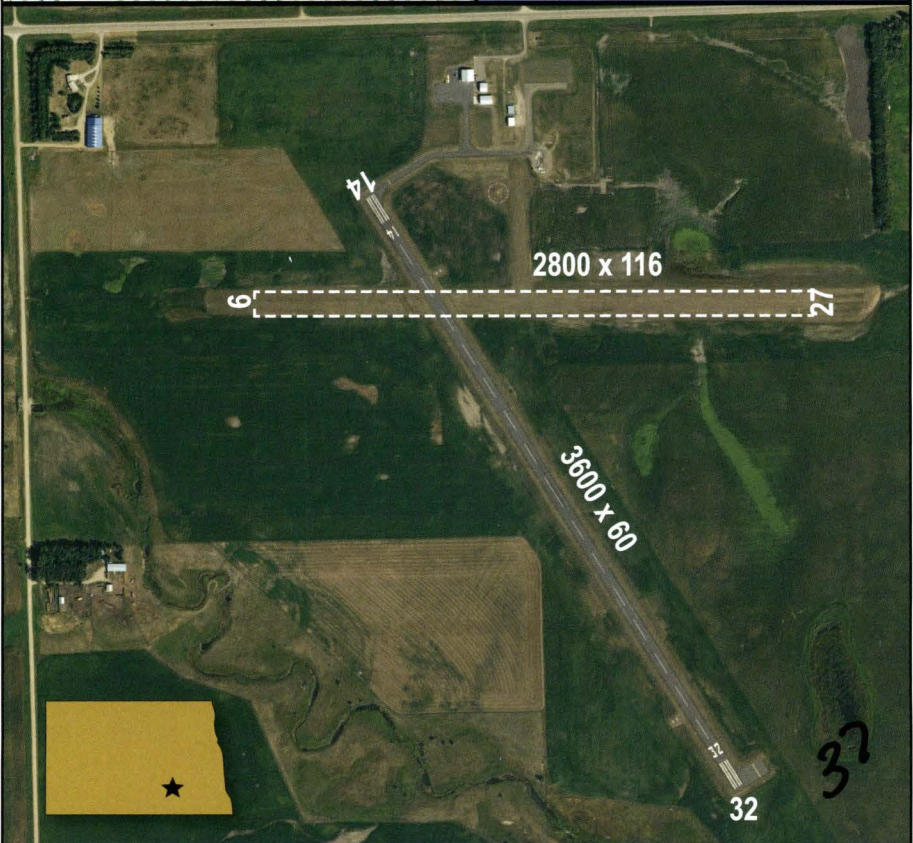


ATTENDANCE: UNATDDD
FUEL: 100LL REPAIRS: NONE

LIGHTS: MED*RDO-CTL BEACON: NONE
SNOW REMOVAL: Irregular-Confirm

UNICOM: 122.80 NAV: PAPI, VASI

CTAF: 122.8 WX: 118.675 OAKES



FIELD ELEVATION	REMARKS	IN-PERSON CONTACT
<p style="font-size: 2em; font-weight: bold; text-align: center;">1604</p>	<p>Activate MIRL/PAPI-CTAF. Deer on/near airport possible. MXGWt S-12.5 Confirm snow removal before use. Fuel-self service credit card. Heated Hanger</p>	<p>Dave Lux PHONE: 701-320-8740 ADDL PHONE: 701-493-2927/269-2732 PUBLIC TERMINAL PHONE: Yes</p>

Transportation can be arranged.
Call prior to arrival.



ELGIN Y71

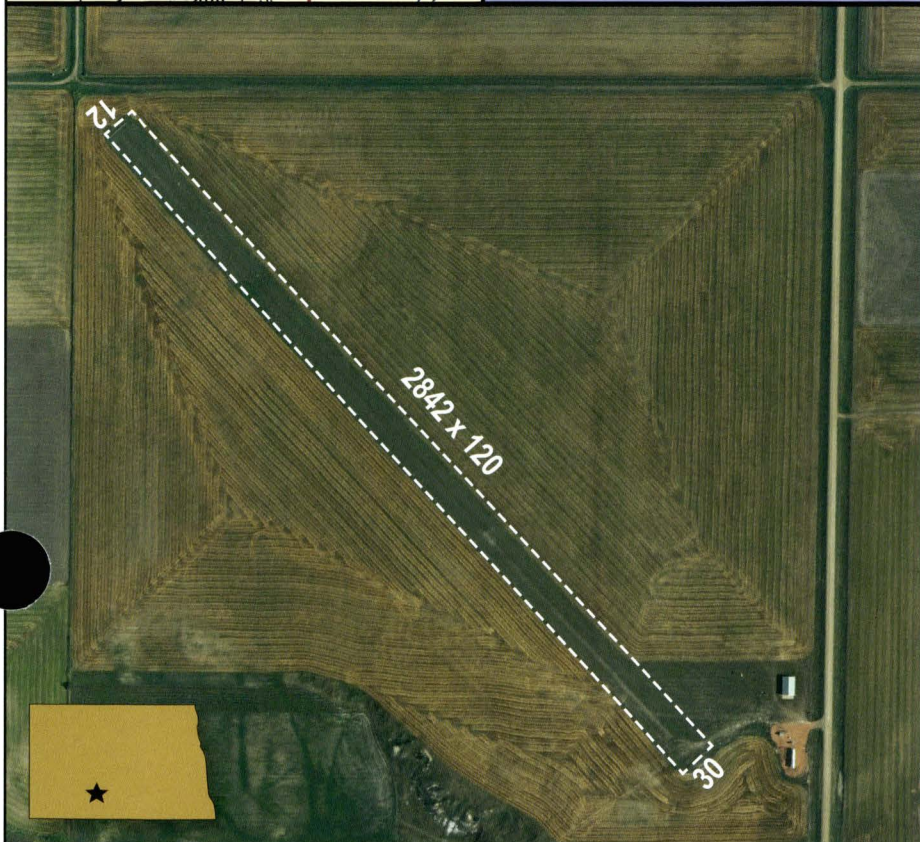
ELGIN MUNICIPAL

ATTENDANCE: UNATNDD
FUEL: NONE REPAIRS: NONE

LIGHTS: Low*RDO Ctrl BEACON: YES
SNOW REMOVAL: Irregular on request

UNICOM: NAV: NONE

CTAF: 122.9 WX: 118.75 GLEN ULLIN



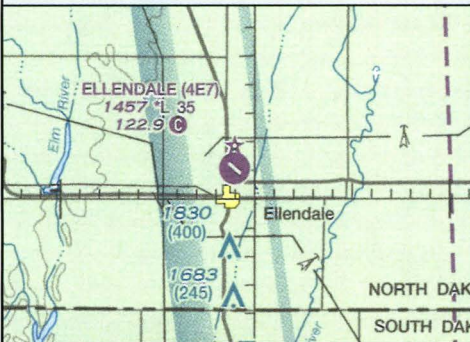
FIELD ELEVATION	REMARKS	IN-PERSON CONTACT
2355	Ry 30 -10' dropoff 100 from thr. No line-sight between Ry ends. Activate Lights on CTAF	Aaron Levorsen PHONE: 701-584-2525/220-3442 PUBLIC TERMINAL PHONE: None

38



ELLENDALE 4E7

ELLENDALE MUNICIPAL



ATTENDANCE: UNATDDD
 FUEL: NONE REPAIRS: NONE

LIGHTS: MED RDO-CTL BEACON: YES
 SNOW REMOVAL: Irregular-Confirm

UNICOM: NAV: NONE

CTAF: 122.9 WX: 118.675 OAKES



FIELD ELEVATION

REMARKS

IN-PERSON CONTACT

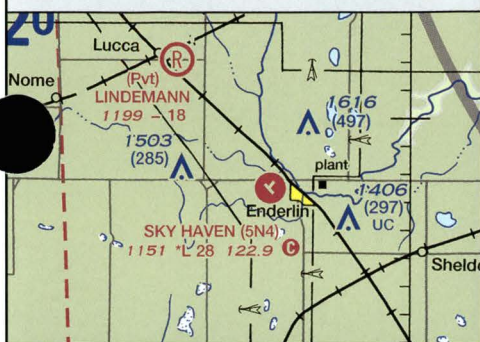
1457

Ry 17/35 closed winter months,
 Deer and birds possible.
 MxGWt S-12.5 Power lines N.
 of Airport.

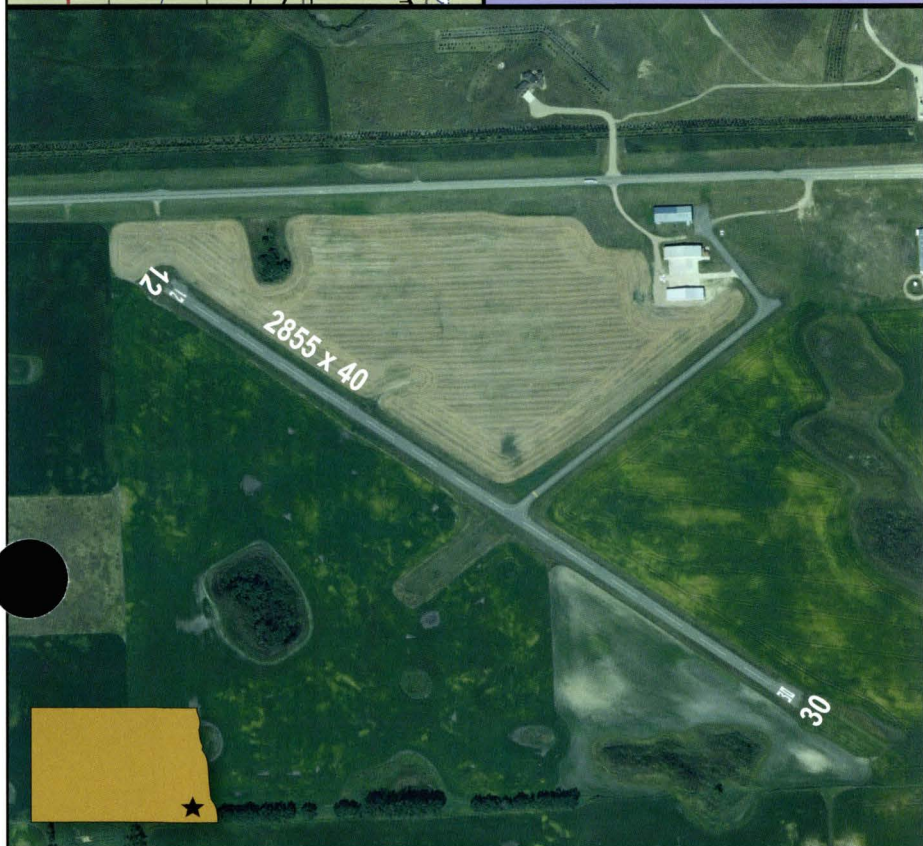
Tom Ulmer
 PHONE: 701-710-0105
 ADDL PHONE: 701-349-4152/4748/3252
 PUBLIC TERMINAL PHONE: Yes



ENDERLIN 5N4 SKY HAVEN



ATTENDANCE: UNATNDD	
FUEL: 100LL	REPAIRS: NONE
LIGHTS: LOW* RDO-CTL BEACON: NONE	
SNOW REMOVAL: Regular-Confirm	
UNICOM: 122.9	NAV: NONE
CTAF: 122.9	WX: 118.325 GWINNER



FIELD ELEVATION	REMARKS	IN-PERSON CONTACT
1151	MxGwt S-8	Bobby Geske PHONE 701-799-6082 ADDL PHONE: 701-437-3437 PUBLIC TERMINAL PHONE: Yes

40



FESSENDEN D24

FESSENDEN-STREIBEL MUNICIPAL

ATTENDANCE: UNATNDD

FUEL: NONE

REPAIRS: NONE

LIGHTS: LOW*RD0-CTL BEACON: NONE

SNOW REMOVAL: NONE

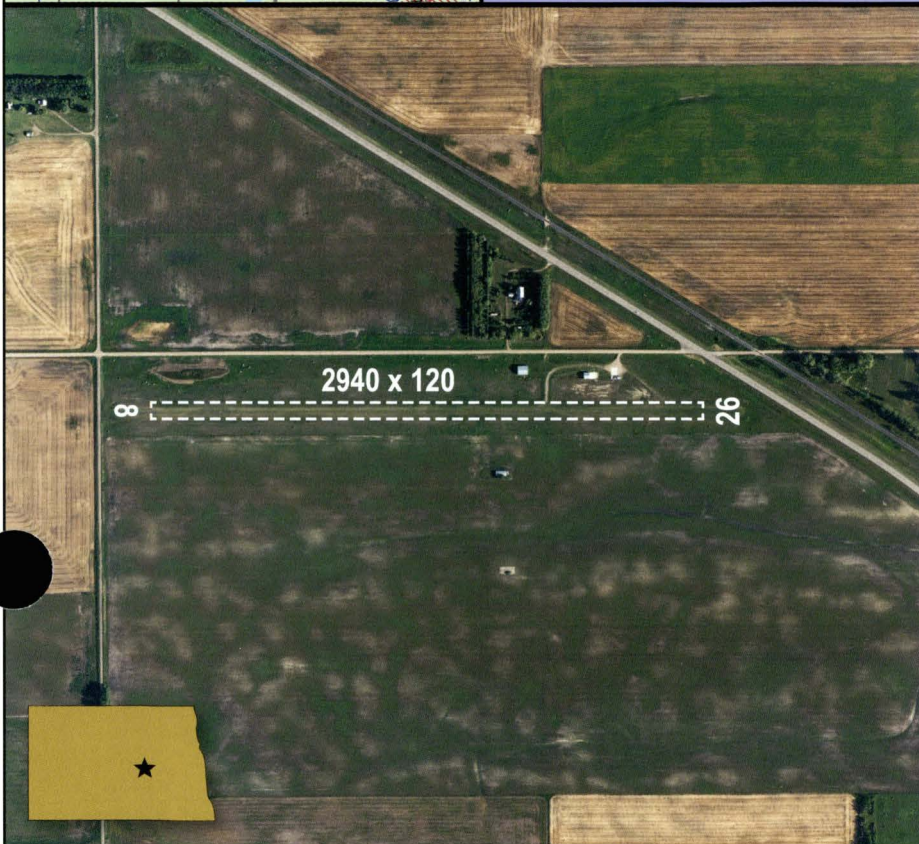
UNICOM:

NAV: NONE

CTAF: 122.9

WX: 118.825

HARVEY



FIELD ELEVATION

REMARKS

IN-PERSON CONTACT

1619

Daylight cone markers.
Activate lights CTAF. Note road
end of ry

Mark Nelson-charmn
PHONE 701-547-3731
ADDL PHONE: 701-653-5069
PUBLIC TERMINAL PHONE: None

42



FORT YATES Y27

STANDING ROCK

ATTENDANCE: UNATDD

FUEL: NONE

REPAIRS: NONE

LIGHTS: MED+ dusk/dawn BEACON: YES

SNOW REMOVAL: Irregular-Confirm

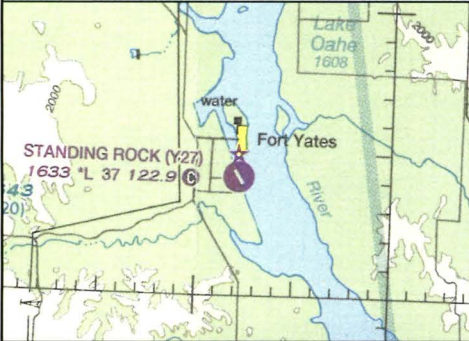
UNICOM:

NAV: NONE

CTAF: 122.9

WX: 118.175

LINTON



FIELD ELEVATION

REMARKS

IN-PERSON CONTACT

1633

Deer possible.
MxGwt S-11

Ron His Horse Is Thunder
PHONE: 701-854-8611
ADDL PHONE: 701-854-8500 ext 7002
PUBLIC TERMINAL PHONE: None



GACKLE 9G9

GACKLE MUNICIPAL

ATTENDANCE: UNATNDD

FUEL: NONE

REPAIRS: NONE

LIGHTS: NONE

BEACON: NONE

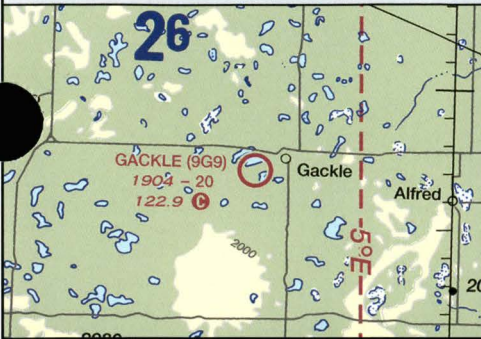
SNOW REMOVAL: NONE - call prior

UNICOM:

NAV: NONE

CTAF: 122.9

WX: 118.425 JAMESTOWN



FIELD ELEVATION	REMARKS	IN-PERSON CONTACT
1904	Deer/birds in vicinity. Check notams.	Ardell Schmidt-public works PHONE 701-320-3655/485-3655 ADDL PHONE: 701-485-3331 PUBLIC TERMINAL PHONE: None

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GARRISON D05

GARRISON MUNICIPAL

ATTENDANCE: UNATTTD

FUEL: 100LL

REPAIRS: NONE

LIGHTS: MED RDO CTRL BEACON: YES

SNOW REMOVAL: Irregular-Confirm

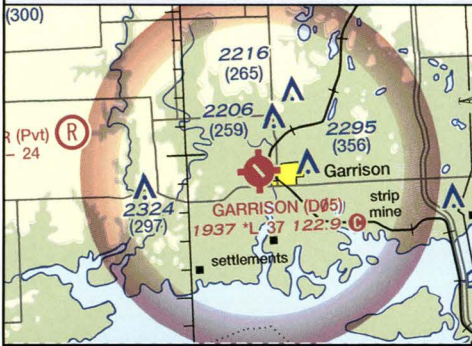
UNICOM:

NAV: PAPI

CTAF: 122.9

WX: 118.675

HAZEN



FIELD ELEVATION	REMARKS	IN-PERSON CONTACT
1937	RY 3/21 closed in winter. Birds/ deer possible. Fuel self-service credit card. MxGWt S-12.5	Jim Wilcox- Chairman PHONE: 701-463-7699/897-1571 ADDL PHONE: 701-463-2600 City PUBLIC TERMINAL PHONE: Yes



GLEN ULLIN D57

GLEN ULLIN REGIONAL

ATTENDANCE: UNATNDD

FUEL: 100LL

REPAIRS: NONE

LIGHTS: Med*RDO-CTL BEACON: YES

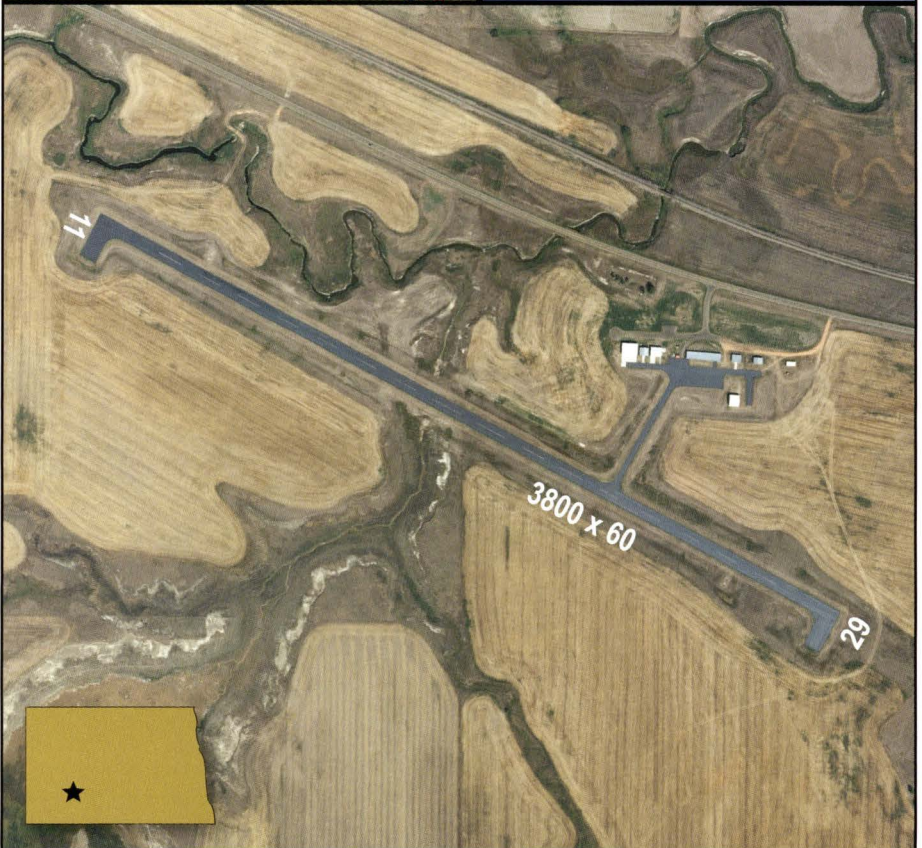
SNOW REMOVAL: Irreglar-confirm

UNICOM:

NAV: PAPI

CTAF: 122.9

WX: 118.75



FIELD ELEVATION	REMARKS	IN-PERSON CONTACT
2091	Deer/birds on and in vicinity of airport. Activate Lights on CTAF. Fuel-self service credit card. Hangar space call ahead. MxGWt S-12.5	Gene Glasser PHONE 701-226-1147 ADDL PHONE: 701-226-7994 PUBLIC TERMINAL PHONE: Yes

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GRAFTON GAF

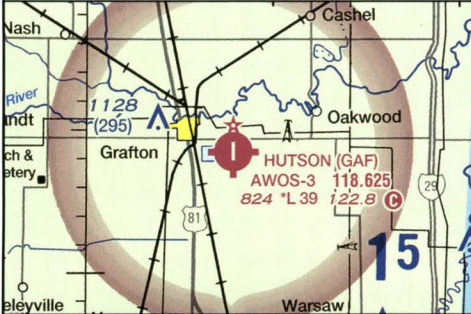
GRAFTON HUTSON FIELD

ATTENDANCE: Regular Business Hours
 FUEL: JET A, 100LL REPAIRS: MINOR

LIGHTS: MED* RDO CTRL BEACON: YES
 SNOW REMOVAL: YES

UNICOM: 122.80
 NAV: PAPI

CTAF: 122.8 WX: 118.625



FIELD ELEVATION	REMARKS	IN-PERSON CONTACT
824	Ry 8/26 soft if wet. Birds on/near airport. Lights CTAF. Self service credit card fuel. MxGWt S-12.5.	Andrew Tibert PHONE: 701-352-0271 ADDL PHONE: 701-520-9174 PUBLIC TERMINAL PHONE: Yes



GRAND FORKS GFK

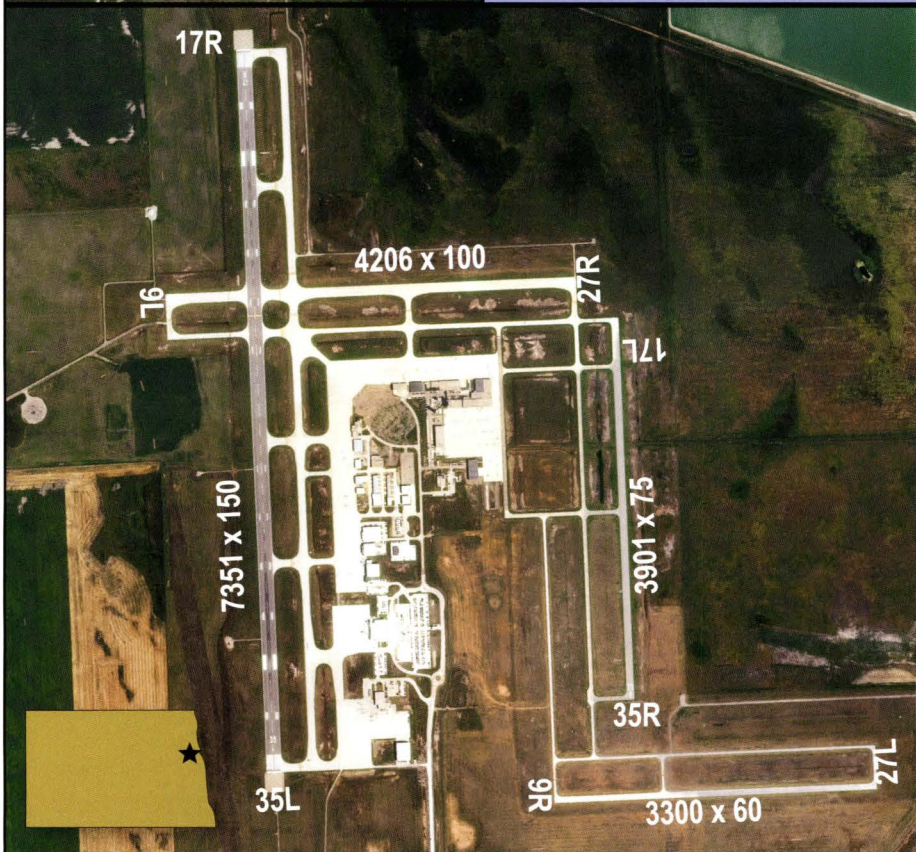
GRAND FORKS INTERNATIONAL

ATTENDANCE: ALL HOURS
FUEL: 100LL, JET A REPAIRS: MAJOR

LIGHTS: High*Duskdawn BEACON: YES
SNOW REMOVAL: If tower clse-CTAF

UNICOM: 122.95
NAV: ILS, VOR, PAPI

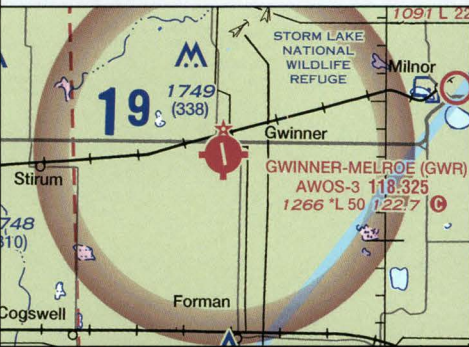
CTAF: 118.4 ATIS: 119.4



FIELD ELEVATION	REMARKS	IN-PERSON CONTACT
845	US Customs avail to clear flights 24/7- call 701-772-3301. Birds on or near airport. TFR west of airport, Pilot controlled lighting for 17R/35L	Ryan Riesinger PHONE: 701-795-6981 FBO PHONE: 701-772-5504 PUBLIC TERMINAL PHONE: Yes

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**GWINNER
GWR**
GWINNER-ROGER MELROE FIELD

ATTENDANCE: UNATDD
FUEL: 100LL, JET A REPAIRS: NONE

LIGHTS: MED*RDO-CTL BEACON: YES
SNOW REMOVAL: Confirm after storm

UNICOM: 122.7
NAV: PAPI

CTAF: 122.7 WX: 118.325

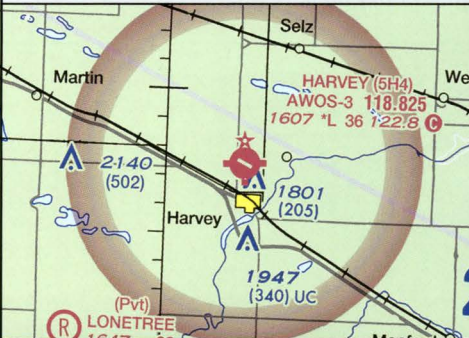


FIELD ELEVATION	REMARKS	IN-PERSON CONTACT
1266	Ry 6/24 closed winter months & ends marked with red cones AWOS 678-6801 MxGwt S-14	Rick Hoistad - Chrmn PHONE: 701-680-8000/724-3186 ADDL PHONE: 701-678-2639/680-0605 PUBLIC TERMINAL PHONE: Yes

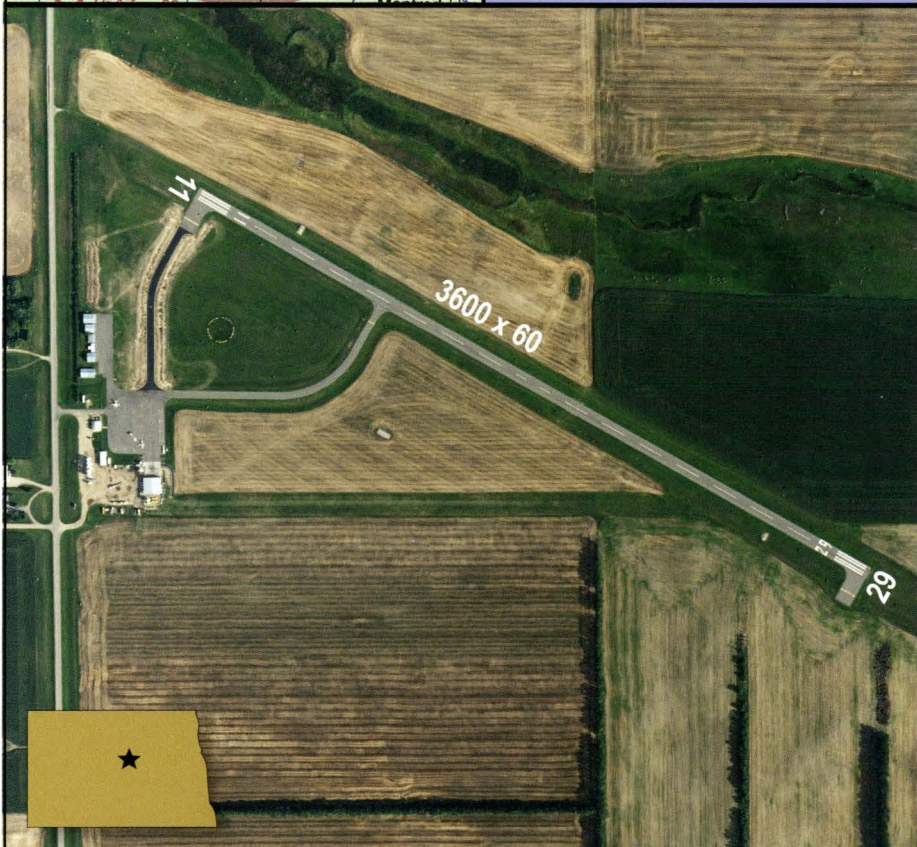


HARVEY 5H4

HARVEY MUNICIPAL



ATTENDANCE: UNATNDD	
FUEL: 100LL	REPAIRS: NONE
LIGHTS: Med Rdo Ctrl BEACON: YES	
SNOW REMOVAL: Regular- confirm	
UNICOM: 122.80	NAV: PAPI
CTAF: 122.8	WX: 118.825



FIELD ELEVATION	REMARKS	IN-PERSON CONTACT
1607	Self service credit card fuel. Increase light intensity CTAF. AWOS 324-2058. MxGwt S-12.5	Shari Nyhus - Chairperson PHONE: 701-324-2000 ADDL PHONE: 701-324-4137/341-1042 PUBLIC TERMINAL PHONE: None



HAZELTON 6H8

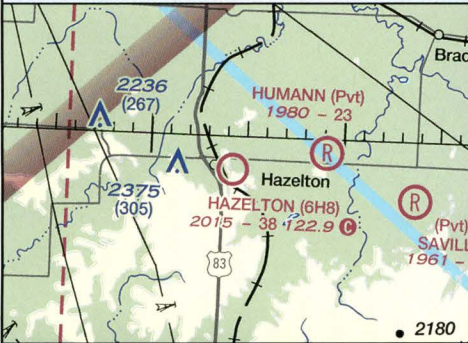
HAZELTON MUNICIPAL

ATTENDANCE: UNATDD
FUEL: NONE REPAIRS: NONE

LIGHTS: NONE BEACON: NONE
SNOW REMOVAL: None-Confirm

UNICOM: NAV: NONE

CTAF: 122.9 WX: 118.175 LINTON



FIELD ELEVATION

REMARKS

IN-PERSON CONTACT

2015

Turf clumpy.
3 tiedowns at west apron

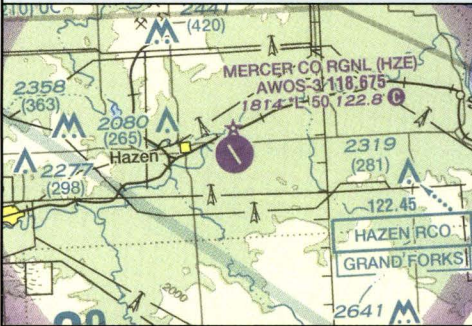
Mgr: Mike Appert
PHONE: 701-782-6269
PHONE: 701-220-6816
PUBLIC TERMINAL PHONE: None





HAZEN HZE

MERCER COUNTY REGIONAL

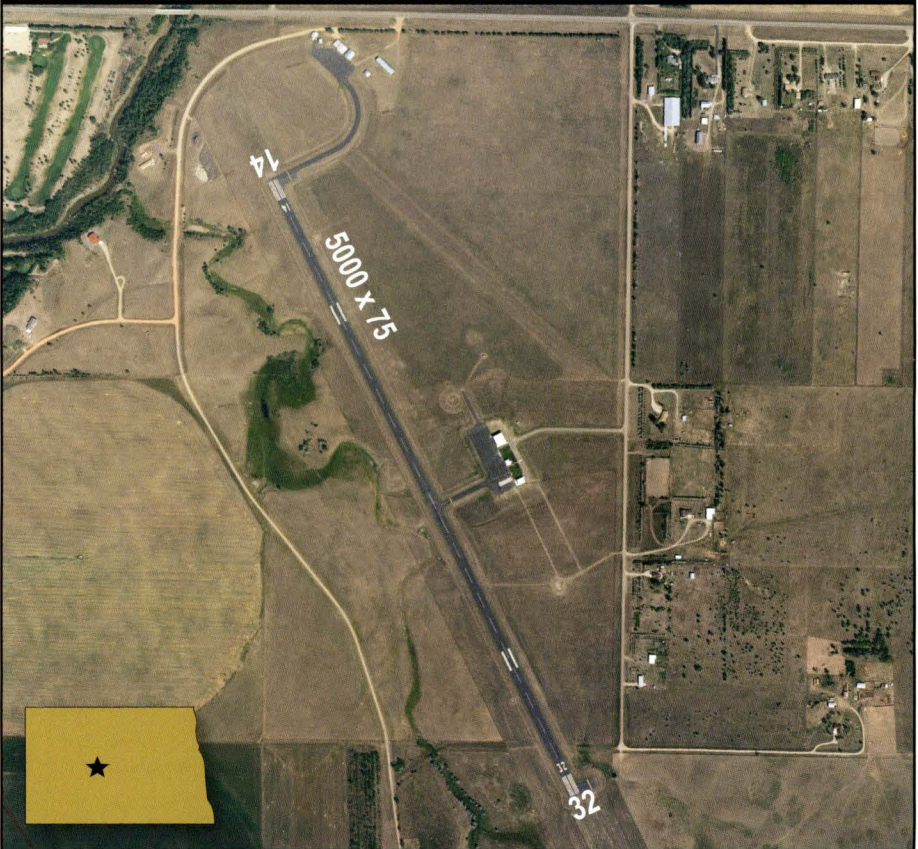


ATTENDANCE: UNATNDD
FUEL: 100LL JETAw/prist REPAIRS: MINOR

LIGHTS: Med*RDO-CTL BEACON: YES
SNOW REMOVAL: Regular- confirm

UNICOM:
NAV: PAPI

CTAF: 122.8 WX: 118.675



FIELD ELEVATION	REMARKS	IN-PERSON CONTACT
1814	Activate lights, PAPI, REIL, CTAF. AWOS 748-2443. Fuel- self-service credit card. Call ahead hangar. MxGWt S-17	Steve Frovarp Manager/Clerk PHONE 701-880-0042 ADDL PHONE: 701-748-2550 PUBLIC TERMINAL PHONE: Yes

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HETTINGER HEI

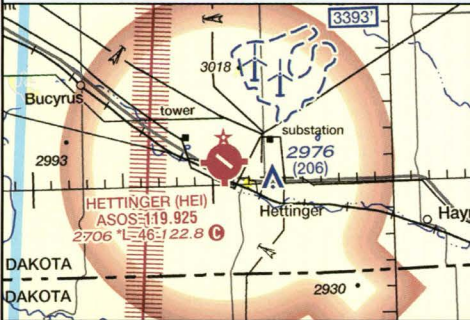
HETTINGER MUNICIPAL

ATTENDANCE: Mon-Fri 7-5pm, Sat 7-noon
 FUEL: 100LL, JET A REPAIRS: MAJOR

LIGHTS: MED Rdo Ctrl BEACON: YES
 SNOW REMOVAL: Confirm w/mgr

UNICOM: 122.80
 NAV: PAPI

CTAF: 122.8 WX: 119.925



FIELD ELEVATION	REMARKS	IN-PERSON CONTACT
<p style="text-align: center; font-size: 2em;">2706</p>	<p>Deer on/near airport. ASOS 701-567-4594. Fuel self service credit card fuel. MxGWt S-11.5</p>	<p>J.B. Lindquist PHONE: 701-567-2069 ADDL PHONE: 701-567-4469/2714 PUBLIC TERMINAL PHONE: No</p>





HILLSBORO 3H4

HILLSBORO REGIONAL

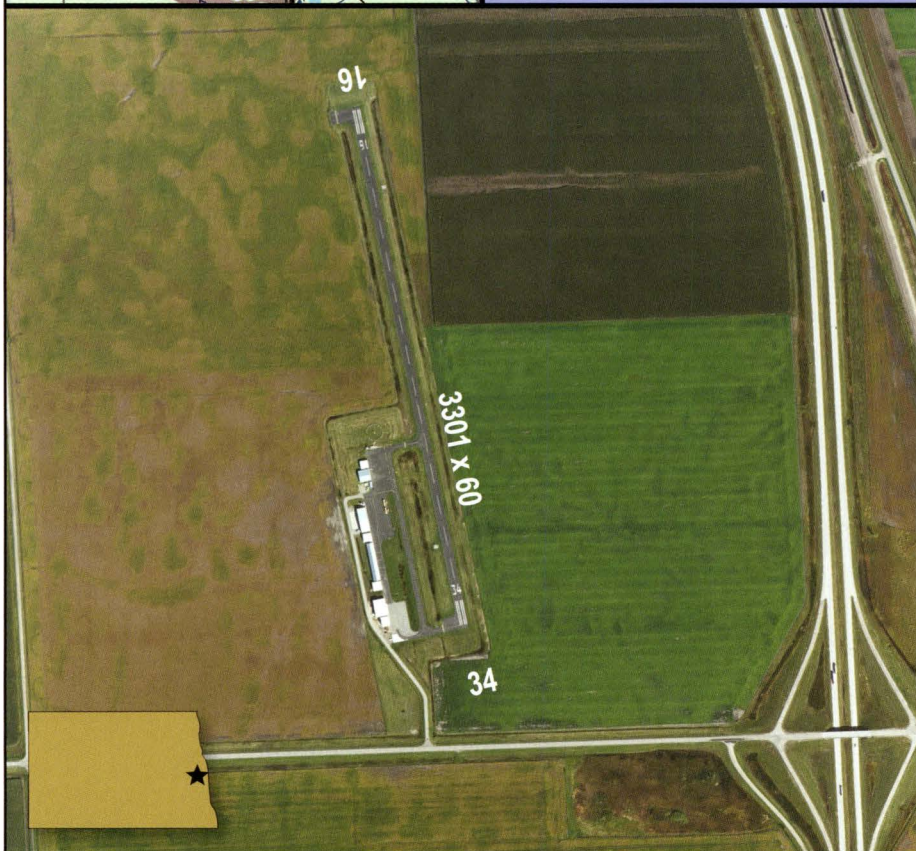
ATTENDANCE: MON-FRI 8-5PM

FUEL: 100LL REPAIRS: MAJOR

LIGHTS: Med RDO-CTL BEACON: YES
SNOW REMOVAL: Regular- confirm after storm

UNICOM: 122.9 NAV: PAPI

CTAF: 122.9 WX: 124.5 FARGO



FIELD ELEVATION	REMARKS	IN-PERSON CONTACT
906	Activate MIRL/PAPI-CTAF. For fuel-self service credit card. For snow removal 701-400-1113. flyhillsboro.com MxGWt S-16.5	Larry Mueller PHONE 701-430-1642 Terminal 701-636-1113 ADDL PHONE: 701-400-1113 FBO PUBLIC TERMINAL PHONE: Yes

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JAMESTOWN JMS

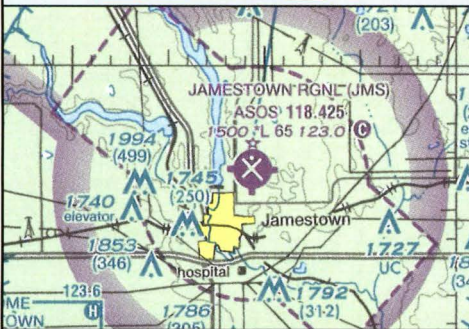
JAMESTOWN REGIONAL

ATTENDANCE: Mon-Fri 7-5pm
 FUEL: 100LL, JET A +Prist REPAIRS: MAJOR

LIGHTS: HIGH* RDO-CTL BEACON: YES
 SNOW REMOVAL: Regular schedule

UNICOM: 123.00
 NAV: ILS, VOR, PAPI

CTAF: 123.0 WX: 118.425



FIELD ELEVATION	REMARKS	IN-PERSON CONTACT
<p style="font-size: 2em; font-weight: bold;">1500</p>	<p>Activate lights, PAPI, REILS-CTAF. Birds possible. ASOS 701-251-9002 Credit card fuel</p>	<p>Sam Seafeldt PHONE: 701-252-6466/320-6466 ADDL PHONE: 701-952-1515/7978 PUBLIC TERMINAL PHONE: Yes</p>



KENMARE 7K5

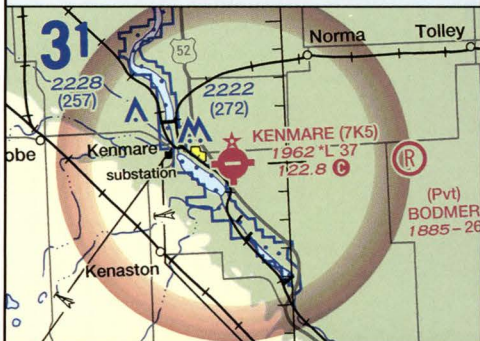
KENMARE MUNICIPAL

ATTENDANCE: UNATNDD
FUEL: 100LL REPAIRS: NONE

LIGHTS: Med*RDO-CTL BEACON: YES
SNOW REMOVAL: Irregular- confirm

UNICOM: NAV: PAPI

CTAF: 122.8 WX: 121.1 STANLEY



FIELD ELEVATION

REMARKS

IN-PERSON CONTACT

1962

For fuel: self service MC/Visa.
Birds vicinity of airport. CTAF
for MIRL/PAPI. MxGwt S-12.

Hank Bodmer
PHONE 701-848-6322
ADDL PHONE: 701-848-6046
PUBLIC TERMINAL PHONE: Yes

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KILLDEER 9Y1

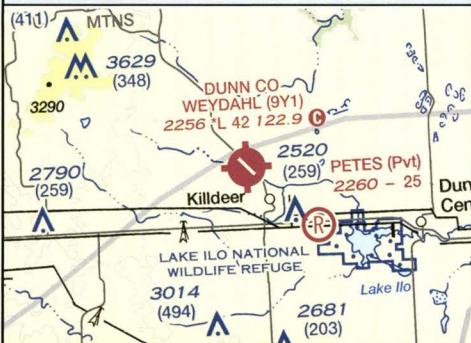
DUNN COUNTY

ATTENDANCE: UNATNDD
FUEL: 100LL JET A REPAIRS: NONE

LIGHTS: Med*RDO-CTL BEACON: NONE
SNOW REMOVAL: Irregular-confirm

UNICOM: NAV: NONE

CTAF: 122.9 WX: 118.175 WATFORD CITY



FIELD ELEVATION	REMARKS	IN-PERSON CONTACT
<p>2256</p>	<p>Check NOTAMS Snow removal 701-523-6723/764-5295 or 260-2317 city. Deer in area.</p>	<p>Gregg Synnes PHONE: 701-523-6723 ADDL PHONE: 701-764-5359 PUBLIC TERMINAL PHONE: No</p> <p style="text-align: right;">5</p>



KINDRED K74

ROBERT ODEGAARD FIELD

ATTENDANCE: MON-FRI 8-5PM

FUEL: 100LL

REPAIRS: MAJOR

LIGHTS: Med Rdo Ctrl

BEACON: NONE

SNOW REMOVAL: Regular- confirm after storm

UNICOM:

NAV: PAPI

CTAF: 122.9

WX: 124.5

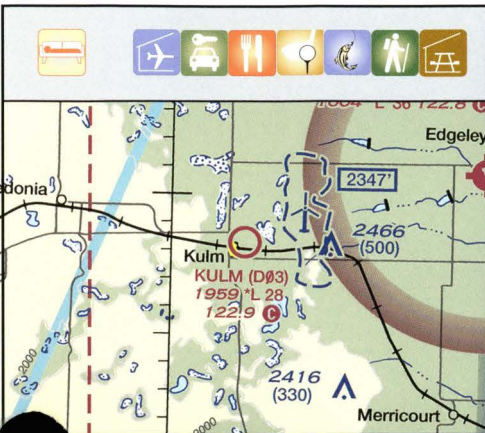
FARGO ATIS



FIELD ELEVATION	REMARKS	IN-PERSON CONTACT
947	MIRL/PAPI after 2330 hour- CTAF. For fuel: Self-service credit card.	Casey Odegaard PHONE 701-428-9990 ADDL PHONE: 701-367-6710 PUBLIC TERMINAL PHONE: Yes

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KULM D03	
KULM MUNICIPAL AIRPORT	
ATTENDANCE: UNATNDD	REPAIRS: NONE
FUEL: NONE	
LIGHTS: Low Rdo Ctr	BEACON: NONE
SNOW REMOVAL: Regular- confirm after storm	
UNICOM:	NAV: NONE
CTAF: 122.9	WX: 118.675 OAKES

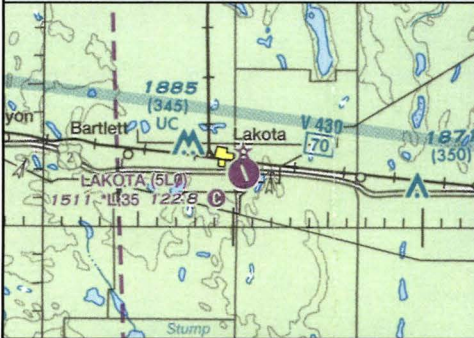


FIELD ELEVATION	REMARKS	IN-PERSON CONTACT
1959	Activate lights - CTAF Waterfowl & deer on or near airport. Car available upon request.	Lorence Holmgren PHONE: 701-830-2205 ADDL PHONE: 701-830-0292/647-2207 PUBLIC TERMINAL PHONE: None



LAKOTA 5L0

LAKOTA MUNICIPAL

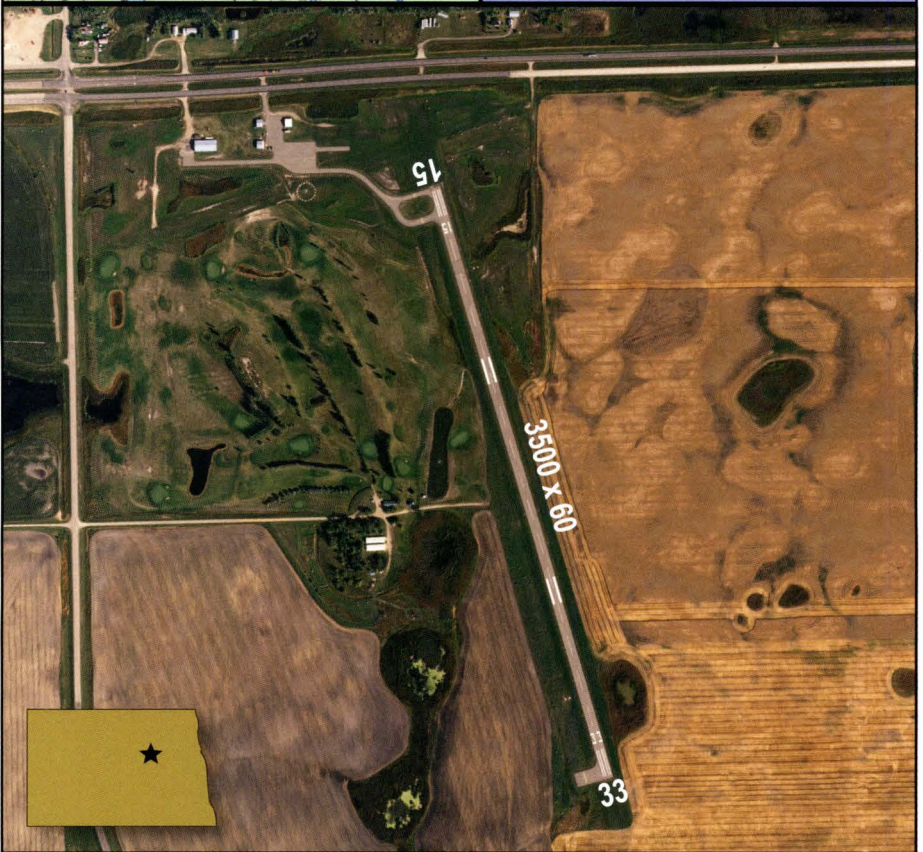


ATTENDANCE: UNATNDD
FUEL: NONE REPAIRS: NONE

LIGHTS: Med Rdo Ctrl BEACON: YES
SNOW REMOVAL: Irregular- Call confirm

UNICOM: NAV: PAPI

CTAF: 122.8 WX: 118.75 COOPERSTOWN



FIELD ELEVATION	REMARKS	IN-PERSON CONTACT
<p style="text-align: center; font-size: 2em;">1511</p>	<p>CTAF for MIRL/PAPI. Deer/birds possible on runway. MxGWt S-12.5</p>	<p>Matt Nelson PHONE 713-320-4770/247-2561 ADDL PHONE: 701-247-3112 PUBLIC TERMINAL PHONE: None</p>

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LA MOURE 4F9

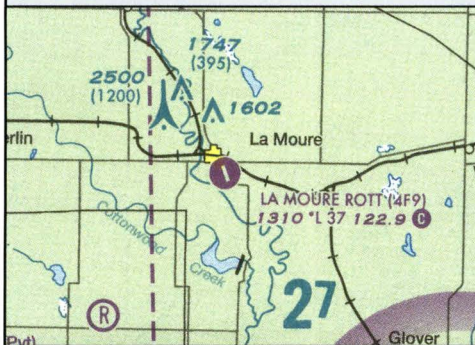
LA MOURE ROTT MUNICIPAL

ATTENDANCE: May-Sep daylight
 FUEL: 100LL CALL AHEAD REPAIRS: NONE

LIGHTS: low*RDO-CTL BEACON: YES
 SNOW REMOVAL: Regular- confirm after storm

UNICOM: NAV: NONE

CTAF: 122.9 WX: 118.675 OAKES



FIELD ELEVATION	REMARKS	IN-PERSON CONTACT
1308	Irrigation 15' pivot 120' from rwy centerline. Cultivated fields 30' from threshold. Activate lights CTAF.	Blane Robert PHONE: 701-883-5047/320-4189 ADDL PHONE: 701-709-0284/320-5657 PUBLIC TERMINAL PHONE: None



LANGDON D55

ROBERTSON FIELD

ATTENDANCE: MON-FRI 9-5PM
FUEL: 100LL REPAIRS: NONE

LIGHTS: Med*RDO-CTL BEACON: YES
SNOW REMOVAL: Irregular- confirm

UNICOM: 122.80
NAV: PAPI

CTAF: 122.8 WX: 118.225



FIELD ELEVATION	REMARKS	IN-PERSON CONTACT
1608	Ry 8/26 closed in winter. Deer & Birds possible. MIRL/PAPI-CTAF. AWOS 256-2121. MxGWt \$12.5 Credit Card Fuel after hours.	Ryan Howatt PHONE 701-370-9710 ADDL PHONE: 701-256-3639/5900 701-370-2076 PUBLIC TERMINAL PHONE: Yes

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LARIMORE 2L1

LARIMORE MUNICIPAL

ATTENDANCE: Mon-Sat on call
 FUEL: NONE REPAIRS: NONE

LIGHTS: NONE BEACON: NONE
 SNOW REMOVAL: Irregular- confirm

UNICOM: NAV: NONE

CTAF: 122.9 WX: 119.4 GRAND FORKS



FIELD ELEVATION	REMARKS	IN-PERSON CONTACT
<p style="font-size: 2em; font-weight: bold;">1130</p>	<p>Ry shoulders soft when wet. Cultivated field Rwy 12 end. Ry 30 dspcd 200'. MxGWt S-4. Right traffic runway 12.</p>	<p>Jesse Morten PHONE: 701-343-2065/2790 ADDL PHONE: 701-343-6273/218-779-4244 PUBLIC TERMINAL PHONE: Yes</p>



LEEDS D31

LEEDS MUNICIPAL

ATTENDANCE: UNATTNDD

FUEL: NONE

REPAIRS: NONE

LIGHTS: Low RDO-CTL BEACON: NONE

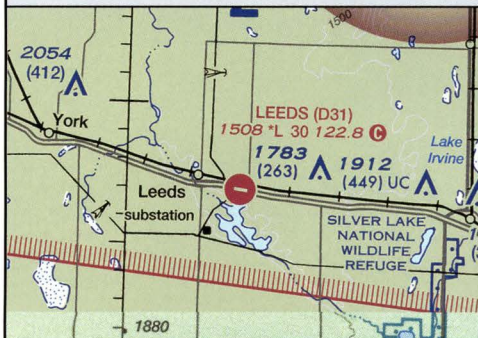
SNOW REMOVAL: Confirm after storm

UNICOM:

NAV: NONE

CTAF: 122.8

WX: 125.875 DEVILS LAKE



FIELD ELEVATION	REMARKS	IN-PERSON CONTACT
1508	Ry lights located 15' from edge. Ry 9 threshold lights located at 600' grass stopway. CTAF for lights. MxGWt S-7	Erika Kenner PHONE 406-581-1188 ADDL PHONE: 701-740-7309 PUBLIC TERMINAL PHONE: None

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LIDGERWOOD 4N4

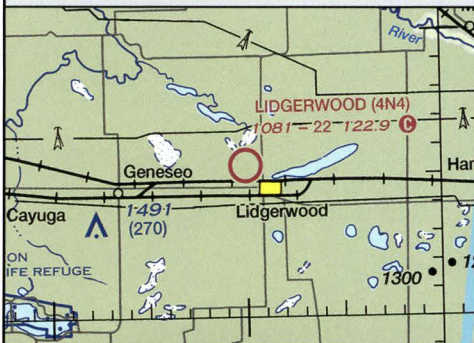
LIDGERWOOD MUNICIPAL

ATTENDANCE: UNATNDD
 FUEL: NONE REPAIRS: NONE

LIGHTS: NONE BEACON: NONE
 SNOW REMOVAL: NO REMOVAL- confirm

UNICOM: NAV: NONE

CTAF: 122.9 WX: 118.325 GWINNER



FIELD ELEVATION	REMARKS	IN-PERSON CONTACT
<p style="text-align: center; font-size: 2em;">1081</p>	<p>Ry soft when wet. Check winter conditions before use due to no snow removal, call. Birds in area.</p>	<p>Alfred Neiber PHONE: 701-640-0107/538-7411 PUBLIC TERMINAL PHONE: None</p>



LINTON 7L2

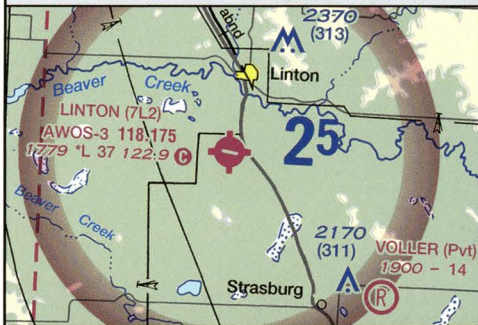
LINTON MUNICIPAL

ATTENDANCE: MON-FRI 8-5:30PM /ON CALL
FUEL: 100LL, JET A REPAIRS: MAJOR

LIGHTS: Med*RDO-CTL BEACON: NONE
SNOW REMOVAL: Confirm prior use

UNICOM:
NAV: PAPI

CTAF: 122.9 WX: 118.175



FIELD ELEVATION	REMARKS	IN-PERSON CONTACT
1779	Act. Lights CTAF. Deer & Birds possible. Self service credit card fueling. AWOS 254-4965. MxGwt S-12.5	Mike Gunia PHONE 701-254-5449/321-0913 ADDL PHONE: 701-254-4905/321-1226 PUBLIC TERMINAL PHONE: Yes

66





LISBON 6L3

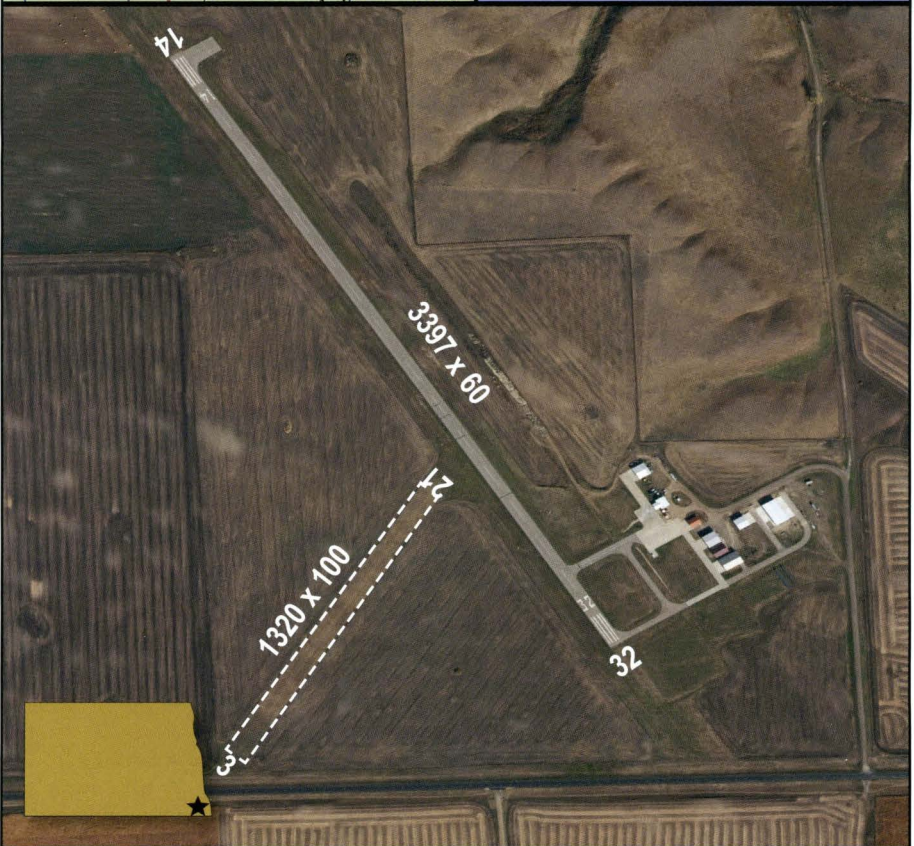
LISBON MUNICIPAL

ATTENDANCE: MAY-SEP Daylight/on call
 FUEL: 100LL REPAIRS: NONE

LIGHTS: Med*RDO-CTL BEACON: YES
 SNOW REMOVAL: Irregular - Call Mgr.

UNICOM: NAV: PAPI

CTAF: 122.9 WX: 118.325 GWINNER



FIELD ELEVATION	REMARKS	IN-PERSON CONTACT
1241	Ry 03/21 closed winters. Concrete apron for Twin aircraft. Activate Lights - CTAF self service fuel credit card. MxWGt \$12.5	John Goerger PHONE: 701-683-5501 ADDL PHONE: 701-640-2212

61



MADDOCK 6D3

MADDOCK MUNICIPAL

ATTENDANCE: ON CALL

FUEL: NONE

REPAIRS: NONE

LIGHTS: Low/Solar

BEACON: NONE

SNOW REMOVAL: Irregular - call to confirm

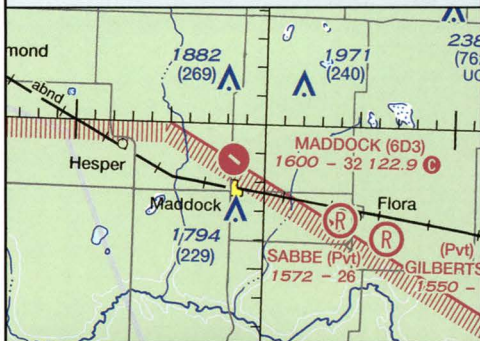
UNICOM:

NAV: NONE

CTAF: 122.9

WX: 118.825

HARVEY



FIELD ELEVATION	REMARKS	IN-PERSON CONTACT
1600	Public Apron & Hangar on West side.	Richard Slater PHONE: 701-739-4875 ADDL PHONE: 701-438-2444 PUBLIC TERMINAL PHONE: None

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MANDAN Y19

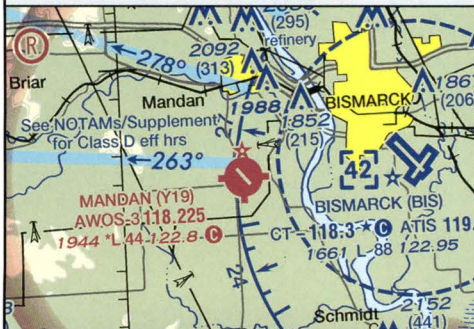
MANDAN MUNICIPAL

ATTENDANCE: Mon-Fri 8-7pm/Weekends on Call
 FUEL: 100LL, JET A REPAIRS: MAJOR

LIGHTS: Med*RDO-CTL BEACON: YES
 SNOW REMOVAL: Regular - Confirm

UNICOM: 122.80
 NAV: PAPI

CTAF: 122.8 WX: 118.225



FIELD ELEVATION	REMARKS	IN-PERSON CONTACT
1944	Activate lights - CTAF AWOS 663-0271. MxGWT 12.5 Deer & Birds possible.	Jim Lawler PHONE: 701-663-0669/391-1394 ADDL PHONE: 701-220-0715/663-9864 PUBLIC TERMINAL PHONE: Yes www.mandanairport.com



MAYVILLE D56

MAYVILLE MUNICIPAL


ATTENDANCE: APR-OCT 7-7PM / ON CALL
 FUEL: NONE REPAIRS: NONE

LIGHTS: Med Rdo Ctrl BEACON: YES
 SNOW REMOVAL: Irregular - confirm

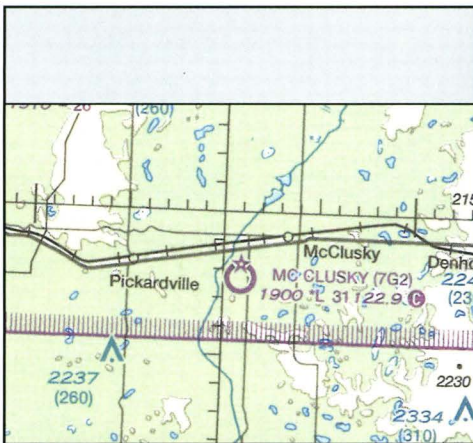
UNICOM: 122.80 NAV: NONE

CTAF: 122.8 WX: 119.4 GFK ATIS



FIELD ELEVATION	REMARKS	IN-PERSON CONTACT
977	Activate lights CTAF.	Lance Fugleberg PHONE 701-361-0330 ADDL PHONE: 701-430-1521 PUBLIC TERMINAL PHONE: Yes 





MCCLUSKY 7G2

MCCLUSKY MUNICIPAL

ATTENDANCE: UNATNDD
 FUEL: NONE REPAIRS: NONE

LIGHTS: Inop BEACON: NONE
 SNOW REMOVAL: Emergency only-call

UNICOM: NAV: NONE

CTAF: 122.9 WX: 118.825 HARVEY



FIELD ELEVATION	REMARKS	IN-PERSON CONTACT
1900	Ry 13/31 turf grass clumps	Orrin Holen PHONE: 701-363-2221/527-7875 ADDL PHONE: 701-363-2945 PUBLIC TERMINAL PHONE: None



MCVILLE 8M6

MCVILLE MUNICIPAL

ATTENDANCE: UNATNDD

FUEL: NONE

REPAIRS: NONE

LIGHTS: Low Rdo Ctrl BEACON: NONE

SNOW REMOVAL: Irregular - confirm

UNICOM:

NAV: NONE

CTAF: 122.9

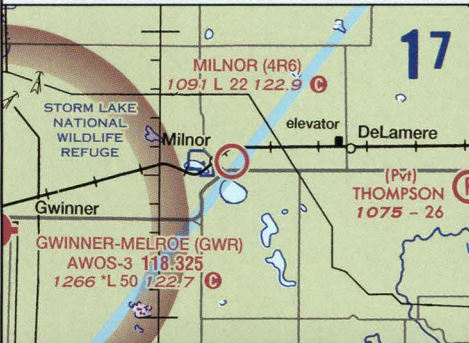
WX: 118.75 COOPERSTOWN



FIELD ELEVATION	REMARKS	IN-PERSON CONTACT
1473	Activate runway lighting 13/31 CTAF; No lighting 18/36	Neil Reiten PHONE 701-739-1345 ADDL PHONE: 701-322-4343 PUBLIC TERMINAL PHONE: None

72





MILNOR 4R6

MILNOR MUNICIPAL AIRPORT

ATTENDANCE: UNATNDD	
FUEL: NONE	REPAIRS: NONE
LIGHTS: Low	BEACON: NONE
SNOW REMOVAL: Irregular - confirm	
UNICOM:	NAV: NONE
CTAF: 122.9	WX: 118.325 GWINNER



FIELD ELEVATION	REMARKS	IN-PERSON CONTACT
1091	Ry 08/26 turbulence possible due to tall trees. Deer on or near airport. Fuel available for emergency. www.milnorairport.com	Mark Gainor - chrnm PHONE: 701-680-1001 ADDL PHONE: 701-680-1146 PUBLIC TERMINAL PHONE: Yes



MINTO D06

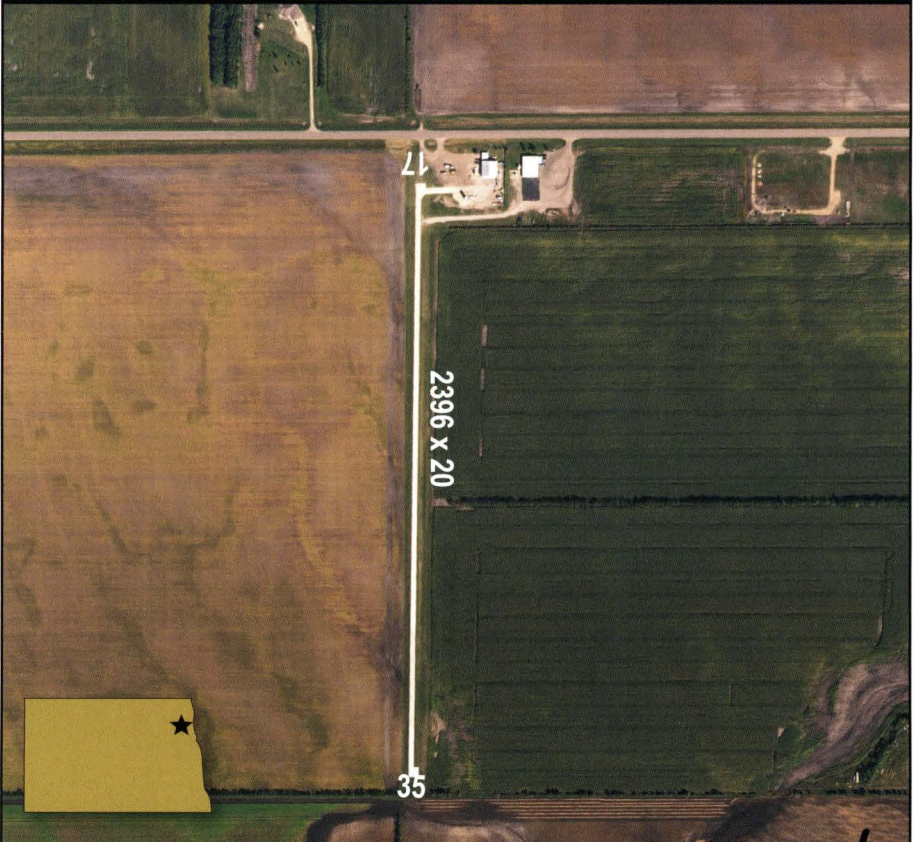
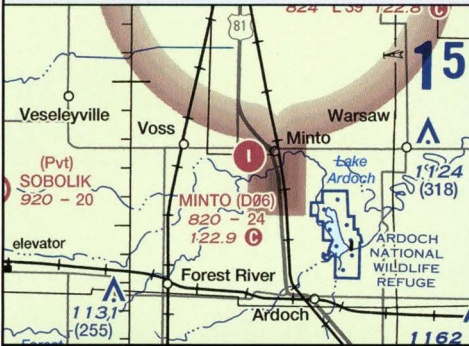
MINTO MUNICIPAL

ATTENDANCE: May-Sep 8-5pm /On Call
 FUEL: NONE REPAIRS: NONE

LIGHTS: NONE BEACON: NONE
 SNOW REMOVAL: Irregular - confirm

UNICOM: NAV: NONE

CTAF: 122.9 WX: 118.625 GRAFTON

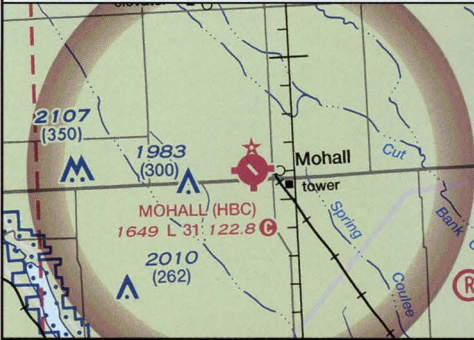


FIELD ELEVATION	REMARKS	IN-PERSON CONTACT
820	Ry 17/35 - 2396'x 20' concrete and remaining grass clumpy, soft when wet. Contact mgr prior to use!	Brad Guadry PHONE: 701-248-3224/218-779-7940 ADDL PHONE: 701-248-3359 PUBLIC TERMINAL PHONE: Yes



MOHALL HBC

MOHALL MUNICIPAL



ATTENDANCE: YEAR-ROUND ON CALL
 FUEL: 100LL, A JET REPAIRS: NONE

LIGHTS: LOW*^RDO-CTL BEACON: YES
 SNOW REMOVAL: Irregular - confirm

UNICOM: 122.80 NAV: NONE

CTAF: 122.8 WX: 118.725 MINOT



FIELD ELEVATION	REMARKS	IN-PERSON CONTACT
1649	Activate lights - CTAF Fuel-self-service-Credit Card. Birds and deer possible. MxGWt S-12.5.	Mike Nehring PHONE 701-263-1008/756-7177 ADDL PHONE: 701-756-7258/6464 PUBLIC TERMINAL PHONE: Yes

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MOTT 3P3

MOTT MUNICIPAL

ATTENDANCE: UNATNDD
 FUEL: 100LL REPAIRS: NONE

LIGHTS: Low^WRDO-CTL BEACON: NONE
 SNOW REMOVAL: Irregular - confirm

UNICOM: NAV: PAPI

CTAF: 122.9 WX: 119.925 HETTINGER



FIELD ELEVATION	REMARKS	IN-PERSON CONTACT
2413	For fuel: self service credit card. For lights activate CTAF. Bird and deer possible. MxGwt S-12.5. Car upon request.	Rex Kelsch PHONE: 701-824-2983 ADDL PHONE: 701-440-0281/824-3111 PUBLIC TERMINAL PHONE: Yes



NAPOLEON 5B5

NAPOLEON MUNICIPAL

ATTENDANCE: UNATNDD

FUEL: 100LL

REPAIRS: NONE

LIGHTS: LOW RDO CTRL BEACON: NONE

SNOW REMOVAL: Regular - Contact after storm

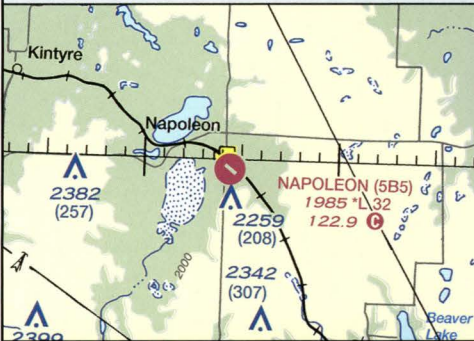
UNICOM:

NAV: NONE

CTAF: 122.9

WX: 118.175

LINTON



FIELD ELEVATION

REMARKS

IN-PERSON CONTACT

1985

Ry 08/26 closed in winter. For fuel after hours call police 754-2626. Activate lights-CTAF. MxGWt S-6

John Wald 701-426-9341
701-754-2317
PUBLIC TERMINAL PHONE: None

Handwritten mark





NEW ROCKFORD 8J7

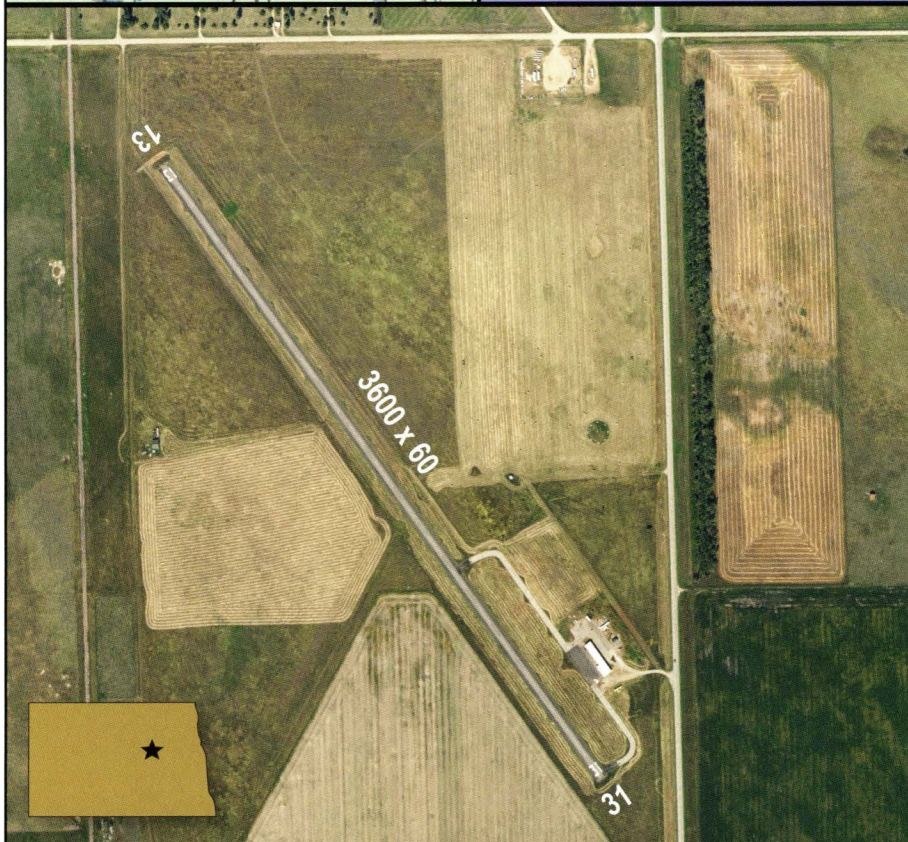
TOMLINSON FIELD

ATTENDANCE: UNATNDD
FUEL: NONE REPAIRS: NONE

LIGHTS: Low*duskdawn BEACON: NONE
SNOW REMOVAL: Irregular - confirm

UNICOM: NAV: NONE

CTAF: 122.9 WX: 118.575 CARRINGTON



FIELD ELEVATION	REMARKS	IN-PERSON CONTACT
<p>1533</p>	<p>Confirm winter conditions. MxGwt S-12.5</p>	<p>Erling Rolfson PHONE: 701-947-2417/650-8418 ADDL PHONE: 701-947-2461 PUBLIC TERMINAL PHONE: Yes</p>



NEW TOWN 05D

NEW TOWN MUNICIPAL

ATTENDANCE: UNATNDD

FUEL: NONE

REPAIRS: NONE

LIGHTS: Med*RDO-CTL BEACON: NONE

SNOW REMOVAL: Irregular - confirm

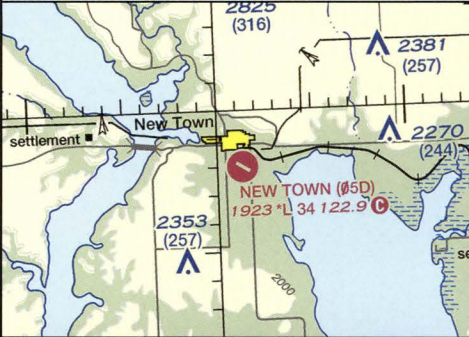
UNICOM:

NAV: PAPI

CTAF: 122.9

WX: 121.1

STANLEY



FIELD ELEVATION	REMARKS	IN-PERSON CONTACT
1923	Ry 12 -8' dropoff. CTAF activate lights. Deer & Birds possible. MxGwt S-12.5	Mylo Wolding PHONE 701-898-4918 ADDL PHONE: 701-421-9019 PUBLIC TERMINAL PHONE: Yes

80





NORTHWOOD 4V4

MUNICIPAL - VINCE FIELD

ATTENDANCE: MON-SAT 8-5PM

FUEL: 100LL

REPAIRS: MAJOR

LIGHTS: Med RDO CTRL BEACON: YES

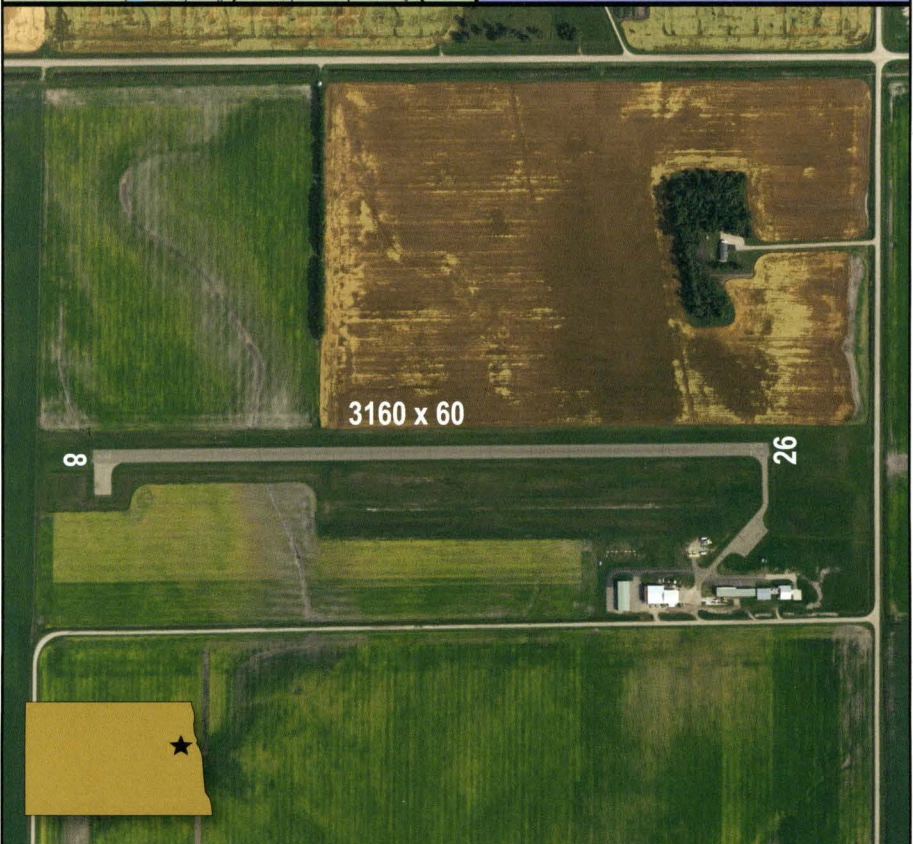
SNOW REMOVAL: Regular - call after storm

UNICOM: 122.80 NAV: PAPI

CTAF: 122.8

WX: 119.4

GFK ATIS



FIELD ELEVATION

REMARKS

IN-PERSON CONTACT

1119

Activate MIRL/PAPI CTAF.
Right hand traffic patterns Ry 8
MxGWt S-12.5

Rich Altendorf
PHONE: 701-587-5171/6014
ADDL PHONE: 218-779-6567
218-779-1242
PUBLIC TERMINAL PHONE: Yes

8



OAKES 2D5

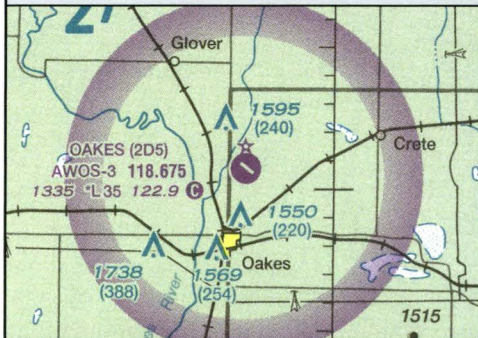
OAKES MUNICIPAL

ATTENDANCE: MON-FRI ON CALL
FUEL: 100LL, JET A REPAIRS: NONE

LIGHTS: Med*RDO-CTL BEACON: YES
SNOW REMOVAL: Irregular - confirm

UNICOM: NAV: PAPI

CTAF: 122.9 WX: 118.675



FIELD ELEVATION	REMARKS	IN-PERSON CONTACT
1335	Ry 17/35 closed winter months & surface clumpy. Activate lights CTAF. AWOS 742-3991	Arnie Widmer PHONE 701-779-3725/742-2293 ADDL PHONE: 701-742-2095/2192/2231 PUBLIC TERMINAL PHONE: Yes

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PAGE 64G

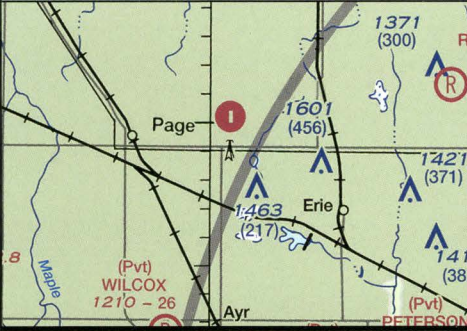
PAGE REGIONAL

ATTENDANCE: Mon-Fri 8-5/ on call weekends
 FUEL: 100LL REPAIRS: MAJOR

LIGHTS: Low[#]RDL-CTL BEACON: NONE
 SNOW REMOVAL: Irregular - confirm

UNICOM: NAV: NONE

CTAF: 122.9 WX: 118.725 VALLEY CITY



FIELD ELEVATION	REMARKS	IN-PERSON CONTACT
<p style="text-align: center; font-size: 2em;">1218</p>	<p>Activate lights CTAF. Grain fields at both Ry ends.</p>	<p>Tim McPherson PHONE: 701-668-2302/799-8629 ADDL PHONE: 701-488-2586 PUBLIC TERMINAL PHONE: Yes</p>



PARK RIVER Y37

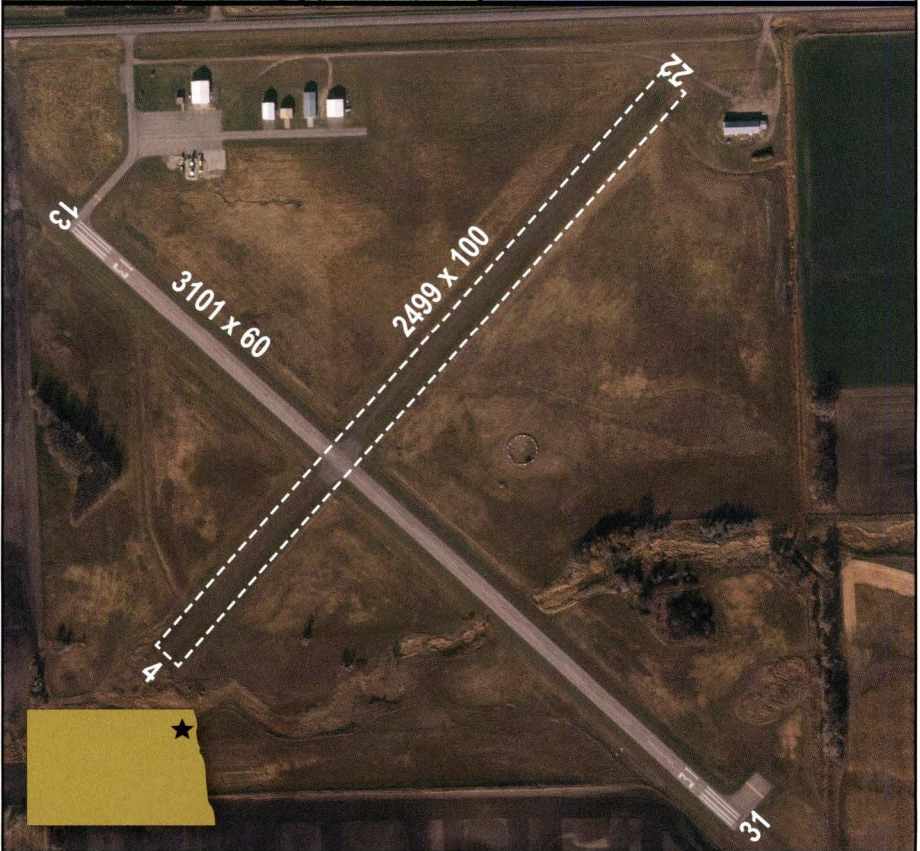
W.C. SKJERVEN

ATTENDANCE: MON-FRI 8-5PM/ ON CALL
FUEL: 100LL REPAIRS: MAJOR

LIGHTS: Med*RDO-CTL BEACON: YES
SNOW REMOVAL: Confirm after storm

UNICOM: 122.8 NAV: PAPI

CTAF: 122.8 WX: 118.625 GRAFTON



FIELD ELEVATION	REMARKS	IN-PERSON CONTACT
1104	Ry 4/22 closed winter months & surface clumpy. Deer on or near airport. Activate lights CTAF. MxGwt S-12	Glenn Wharam PHONE 701-284-7303/7804 ADDL PHONE: 701-331-1110/284-6755 PUBLIC TERMINAL PHONE: No

89





PARSHALL Y74

PARSHALL-HANKINS

ATTENDANCE: May-Sep on call

FUEL: 100LL

REPAIRS: NONE

LIGHTS: Med RDO CTRL

BEACON: YES

SNOW REMOVAL: Irregular - call

UNICOM:

NAV: NONE

CTAF: 122.9

WX: 121.1

STANLEY



FIELD ELEVATION	REMARKS	IN-PERSON CONTACT
2032	City snow removal 862-3459. Activate lights-CTAF. MxGwt S-12.	Richard Bolkan PHONE: 701-898-3144 ADDL PHONE: 701-862-3386 PUBLIC TERMINAL PHONE: Yes



PEMBINA PMB

THOMAS NORD FIELD

ATTENDANCE: 8-8, 7 DAYS A WEEK
FUEL: 100LL REPAIRS: MINOR

LIGHTS: Med RDO CTRL BEACON: YES
SNOW REMOVAL: REG-Confirm after storm

UNICOM: 122.8
NAV: VOR@Hallock, PAPI

CTAF: 122.8 WX: 118.275 CAVALIER

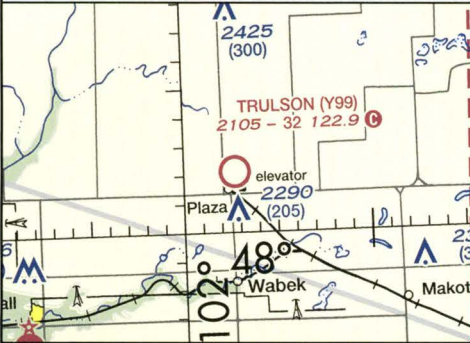


FIELD ELEVATION	REMARKS	IN-PERSON CONTACT
796	US Customs service-Phone: 701-825-5800. Deer possible. Activate lights CTAF. MxGWt S-12.5. Ry 15 dsplacd thshld.	Terry Nord PHONE 701-825-6615 ADDL PHONE: 701-331-4458 PUBLIC TERMINAL PHONE: Yes

86

PLAZA Y99

TRULSON FIELD

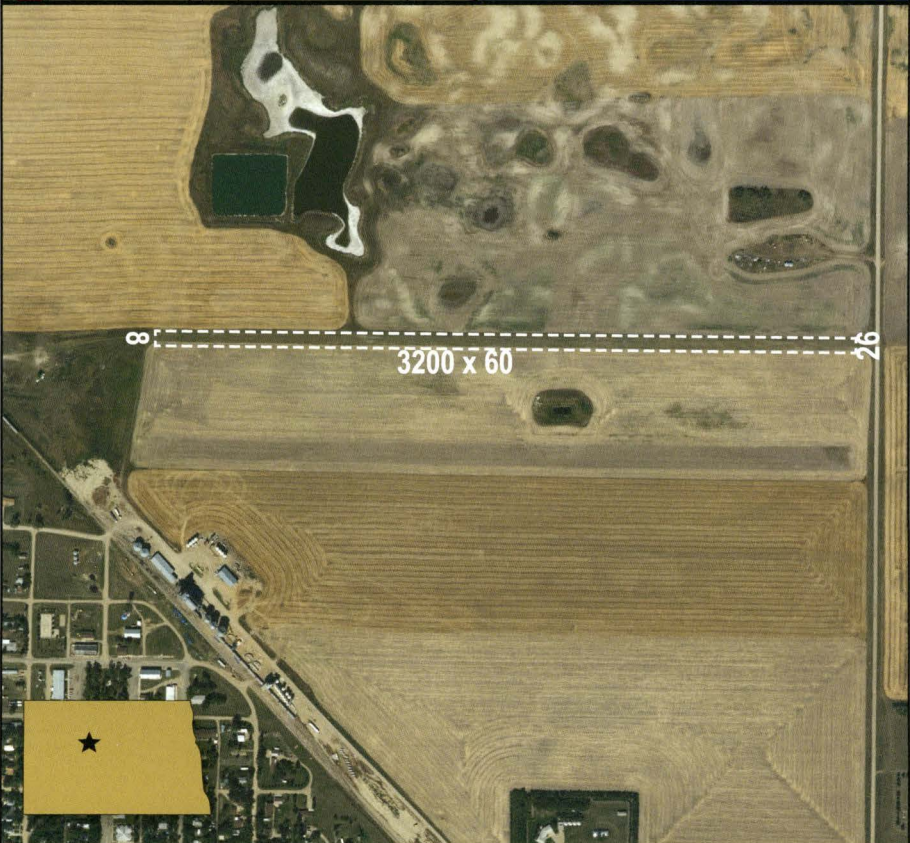



ATTENDANCE: UNATNDD
 FUEL: NONE REPAIRS: NONE

LIGHTS: NONE BEACON: NONE
 SNOW REMOVAL: Irregular - confirm w/airport mgr

UNICOM: NAV: NONE

CTAF: 122.9 WX: 121.1 STANLEY



FIELD ELEVATION	REMARKS	IN-PERSON CONTACT
<p>2105</p>	<p>Call prior for conditions. Birds possible.</p>	<p>Jay Harstad  PHONE: 701-898-3387/453-3387 PUBLIC TERMINAL PHONE: None</p>



RICHARDTON 4E8

RICHARDTON MUNICIPAL

ATTENDANCE: UNATNDD

FUEL: NONE

REPAIRS: NONE

LIGHTS: NONE

BEACON: NONE

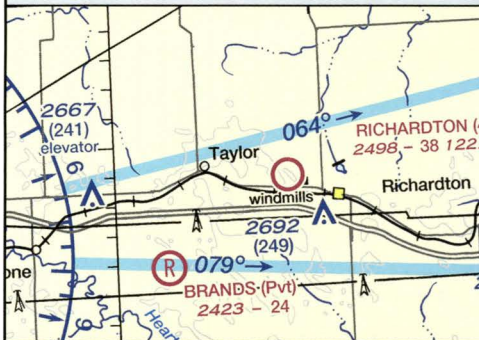
SNOW REMOVAL: NONE

UNICOM:

NAV: NONE

CTAF: 122.9

WX: 118.375 DICKINSON



FIELD ELEVATION

REMARKS

IN-PERSON CONTACT

2498

Ry grass clumping & rough with holes possible. Cattle grazing Sep-Dec. 120' wind mill 800' north Ry 29.

Jody Hoff
PHONE 701-974-3315
ADDL PHONE: 701-974-4230/3399 city
PUBLIC TERMINAL PHONE: None

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RIVERDALE 37N

GARRISON DAM RECREAT'L AIRPORT

ATTENDANCE: UNATNDD

FUEL: NONE

REPAIRS: NONE

LIGHTS: NONE

BEACON: NONE

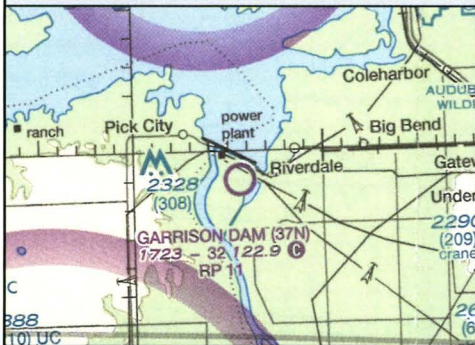
SNOW REMOVAL: No snow removal

UNICOM:

NAV: NONE

CTAF: 122.9

WX: 118.675 HAZEN



FIELD ELEVATION

REMARKS

IN-PERSON CONTACT

1723

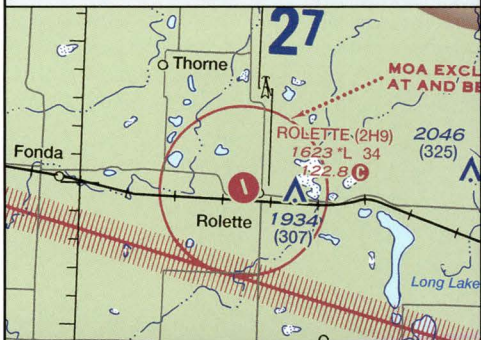
Airport closed in winter. Ry is gravel with loose small stone & soft when wet. Deer & birds possible. MxGWt S-4. 11 dsclplacd threshold. Daytime use. Ry 11 right traffic.

Kyle Wanner
PHONE: 701-328-9650
ADDL PHONE: 701-425-5926/471-5548

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ROLETTE 2H9 ROLETTE AIRPORT

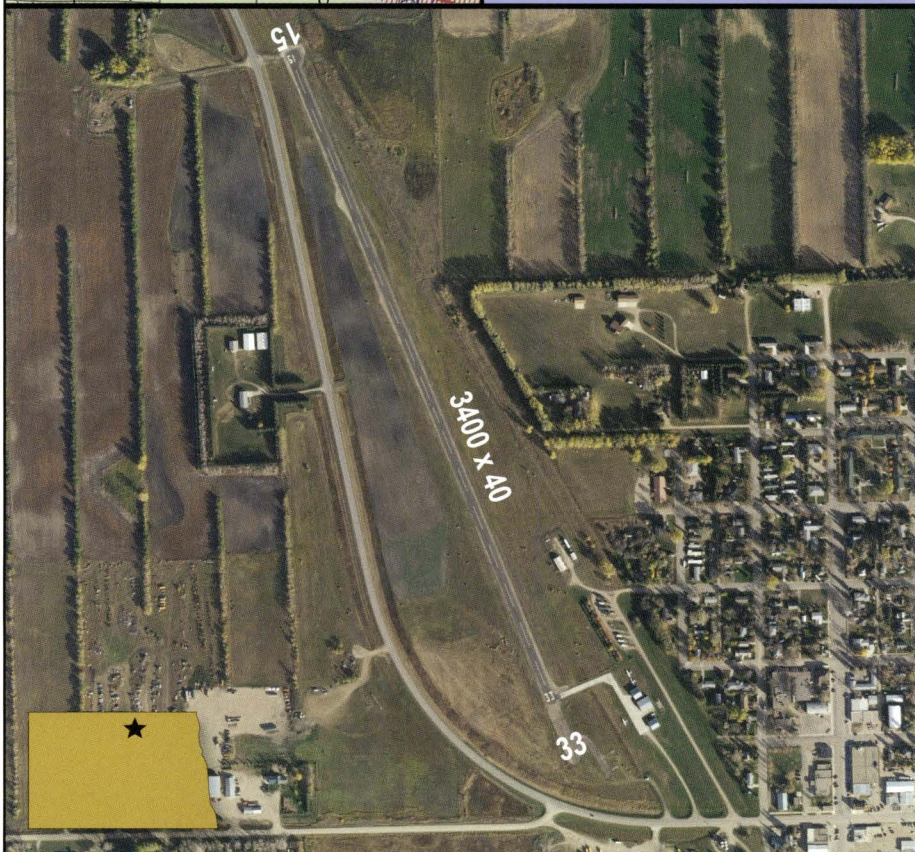


ATTENDANCE: UNATNDD
FUEL: NONE REPAIRS: NONE

LIGHTS: Low*RDO-CTL BEACON: NONE
SNOW REMOVAL: Irregular - confirm

UNICOM: NAV: NONE

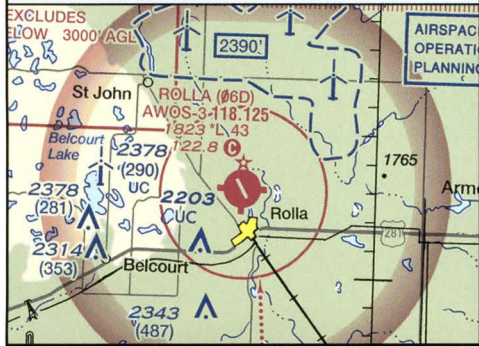
CTAF: 122.8 WX: 118.475 RUGBY



FIELD ELEVATION	REMARKS	IN-PERSON CONTACT
1623	Activate rwy lights CTAF. Rwy width only 40' with lights 20' from edges. MxGWt S-8	Mark Myhre PHONE 701-246-3395 ADDL PHONE: 701-246-3348 PUBLIC TERMINAL PHONE: None

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ROLLA 06D

ROLLA MUNICIPAL

ATTENDANCE: Mon-Sat daylight hrs
FUEL: 100LL, JET A **REPAIRS:** NO

LIGHTS: Med***RDO-CTL** **BEACON:** YES
SNOW REMOVAL: confirm aft storm

UNICOM: 122.80 **NAV:** PAPI

CTAF: 122.8 **WX:** 118.125



FIELD ELEVATION	REMARKS	IN-PERSON CONTACT
<h2>1823</h2>	Ry 7/25 closed winters. Activate lights CTAF. Birds & deer possible. Fuel self service credit card. MxGWt S-12.5	Gordon Krech PHONE: 701-477-5145/550-9884 ADDL PHONE: 701-477-6780/550-0134 PUBLIC TERMINAL PHONE



RUGBY RUG

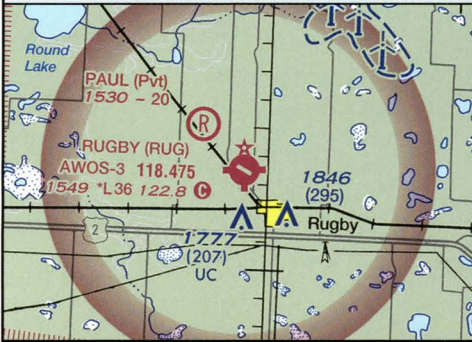
RUGBY MUNICIPAL

ATTENDANCE: Mon-Fri 8-5pm/ On Call
FUEL: 100LL, JET A Call Prior REPAIRS: NONE

LIGHTS: Med RDO-CTL BEACON: YES
SNOW REMOVAL: Regular - confirm

UNICOM: 122.80 NAV: PAPI

CTAF: 122.8 WX: 118.475



FIELD ELEVATION	REMARKS	IN-PERSON CONTACT
1549	Fuel-self service credit card. Activate lights CTAF. Birds & deer possible. AWOS 776-6100. MxGwt S-12.5	Steve Schneider PHONE 701-776-5171/5176 ADDL PHONE: 701-208-1630/776-5746 PUBLIC TERMINAL PHONE: Yes

92





STANLEY 08D

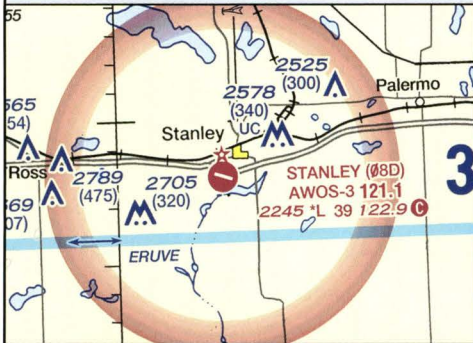
STANLEY MUNICIPAL

ATTENDANCE: 8AM-5PM WEEKDAYS
FUEL: 100LL 92 AUTO REPAIRS: YES

LIGHTS: Med RDO-CTL BEACON: YES
SNOW REMOVAL: Regular - confirm

UNICOM: NAV: RY27-PAPI

CTAF: 122.9 WX: 121.1



FIELD ELEVATION

REMARKS

IN-PERSON CONTACT

2245

Activate lights CTAF. Birds/deer on or near airport. Self service credit card fuel. MxGWt S-14. Road off end of ry.

Jason Bromley
PHONE: 612-867-1849
ADDL PHONE: 701-830-0474
PUBLIC TERMINAL PHONE: Yes





ST. THOMAS 4S5

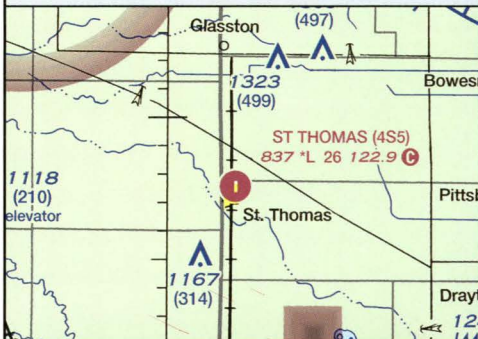
ST. THOMAS MUNICIPAL

ATTENDANCE: UNATNDD - CALL
FUEL: NONE REPAIRS: NONE

LIGHTS: Low* RDO-CTL BEACON: NONE
SNOW REMOVAL: Confirm after storm

UNICOM: NAV: NONE

CTAF: 122.9 WX: 118.275 CAVALIER



FIELD ELEVATION	REMARKS	IN-PERSON CONTACT
837	Unmarked surfaces. Roadways located at both Ry ends. Displcd thresholds lighted only. Activate lights 122.8. MxGwt S-5	John Blair - apt auth PHONE 701-520-1597 ADDL PHONE: 701-257-6765/6629 PUBLIC TERMINAL PHONE: Yes

act



TIOGA D60

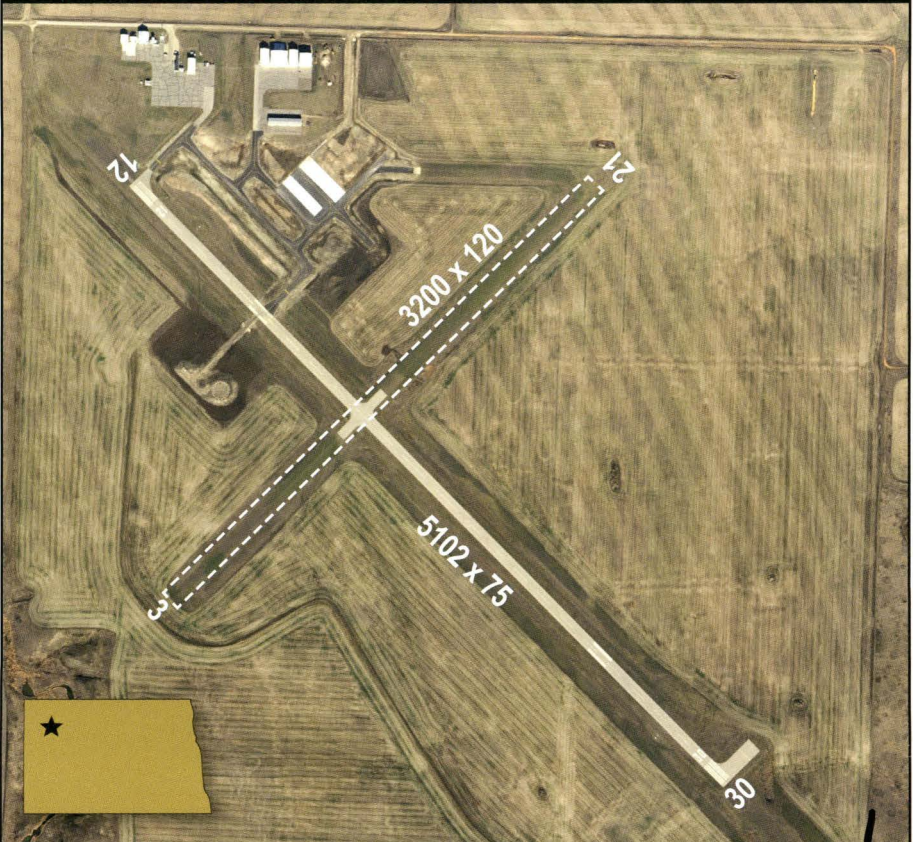
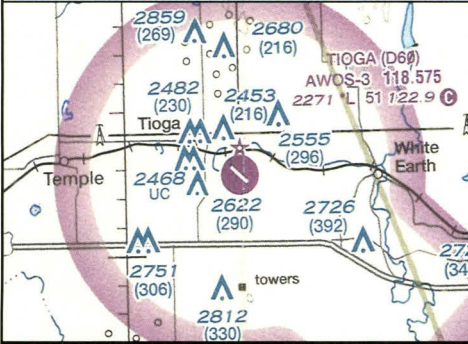
TIOGA MUNICIPAL

ATTENDANCE: All days Daylight/On call
FUEL: 100LL, JET A **REPAIRS:** MINOR

LIGHTS: Med***RDO CTRL** **BEACON:** YES
SNOW REMOVAL: Confirm after storm

UNICOM: **NAV:** PAPI

CTAF: 122.9 **WX:** 118.575



FIELD ELEVATION	REMARKS	IN-PERSON CONTACT
2271	Activate lights CTAF. AWOS 664-4490. MxGWt S-25.	Chris Norgaard - mgr/chrn PHONE: 507-649-0831 ADDL PHONE: TAC-701-664-3012 KFS-701-664-2220 PUBLIC TERMINAL PHONE: Yes



TOWNER D61

TOWNER MUNICIPAL

ATTENDANCE: UNATNDD

FUEL: NONE

REPAIRS: NONE

LIGHTS: Low*RDO-CTL BEACON: YES

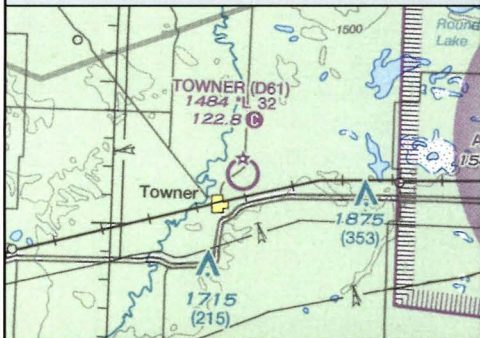
SNOW REMOVAL: Confirm after storms

UNICOM: 122.80 NAV: NONE

CTAF: 122.8

WX: 118.475

RUGBY



FIELD ELEVATION

REMARKS

IN-PERSON CONTACT

1484

Ry 34 - 3' ditch at stopway. Ry 16 + 30' pole 500' from end.
Activate Ry 16/34 lights - CTAF

Daniel Gunter
PHONE 701-537-3519
ADDL PHONE: 701-537-5849
PUBLIC TERMINAL PHONE: NONE

ale



TURTLE LAKE 91N

TURTLE LAKE MUNICIPAL

ATTENDANCE: UNATNDD
FUEL: NONE REPAIRS: NONE

LIGHTS: Low*^RD0-CTL BEACON: NONE
SNOW REMOVAL: Irregular - confirm

UNICOM: NAV: NONE

CTAF: 122.8 WX: 118.675 HAZEN



FIELD ELEVATION

REMARKS

IN-PERSON CONTACT

1916

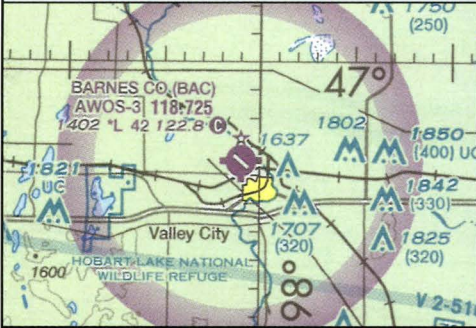
Ry 8/26 grass center sparse & clumpy. Activate lights - CTAF.
Ry8 end -10' dropoff. Deer & birds in area.

Joe Johnson
PHONE: 701-448-2253/2252
ADDL PHONE: 701-448-2654/391-6028
PUBLIC TERMINAL PHONE: None



VALLEY CITY BAC

BARNES COUNTY MUNICIPAL

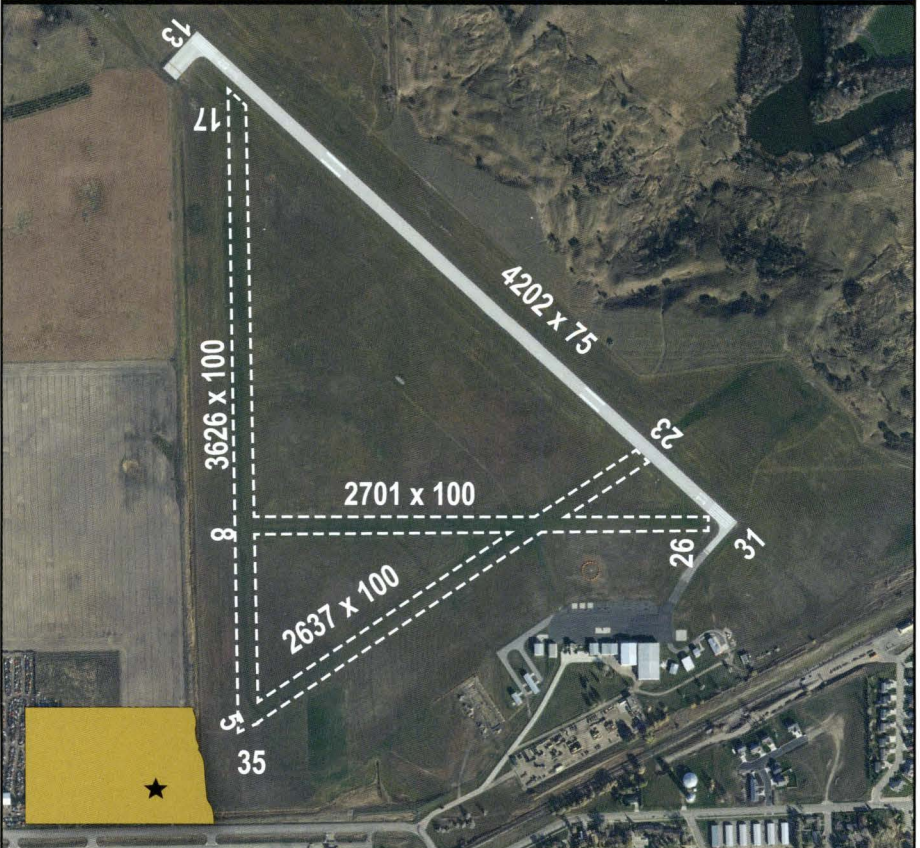


ATTENDANCE: Mon-Fri 8-5pm On Call
FUEL: 100LL, JET A **REPAIRS:** MAJOR

LIGHTS: Med* dusk/dawn **BEACON:** YES
SNOW REMOVAL: Regular

UNICOM: 122.80
NAV: PAPI

CTAF: 122.8 **WX:** 118.725



FIELD ELEVATION	REMARKS	IN-PERSON CONTACT
1402	Turf Ry's closed winters. Activate lights CTAF. Self service credit card fuel. AWOS 845-9117. MxGWt S-12.5	Michael Lerud PHONE 701-840-5903 ADDL PHONE: 701-845-2100 793-0626 FBO PUBLIC TERMINAL PHONE: Yes

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WAHPETON BWP

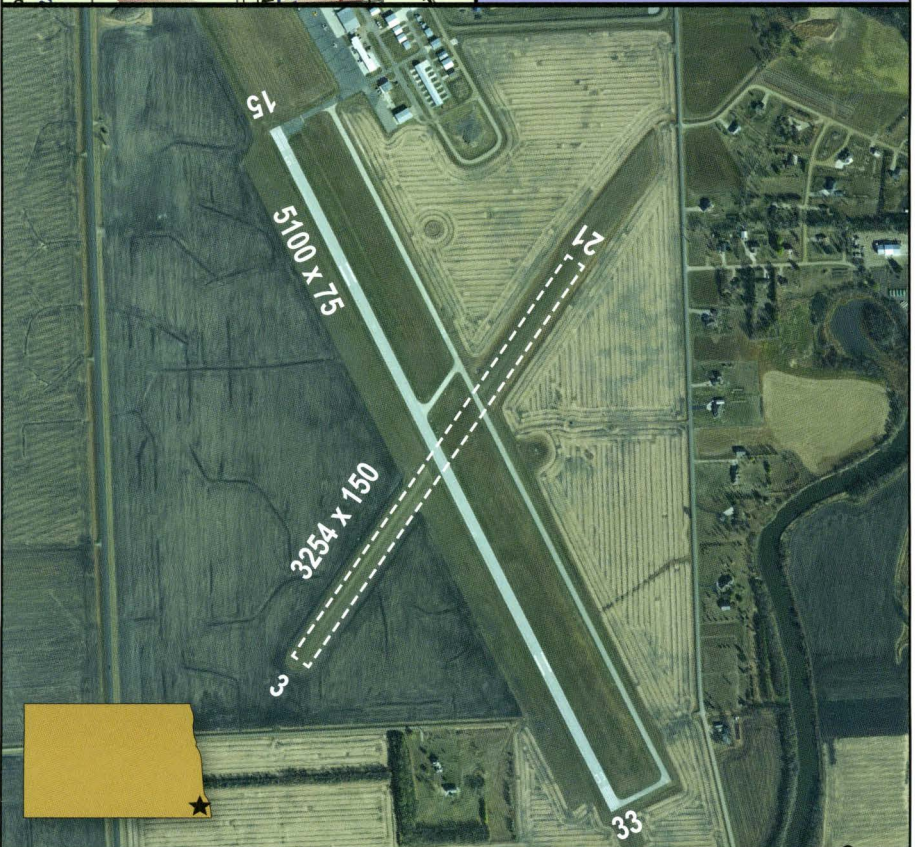
HARRY STERN

ATTENDANCE: Mon-Fri 8-5pm/ On Call
FUEL: 100*LL, JET A **REPAIRS:** MAJOR

LIGHTS: Med duskdawn **BEACON:** YES
SNOW REMOVAL: Confirm after storm

UNICOM: 123.00
NAV: PAPI

CTAF: 123.0 **WX:** 127.875



FIELD ELEVATION	REMARKS	IN-PERSON CONTACT
968	Self service credit card 100LL. AWOS 642-9800. Ry 3/21 closed winters. Activate lights CTAF. Taxi Service: 701-642-5757. MxGwt S-34/Dual-50	Cindy Schreiber-Beck  PHONE: 701-642-5777/899-3232/361-0230 ADDL PHONE: Police 642-7722 PUBLIC TERMINAL PHONE: Yes



WALHALLA 96D

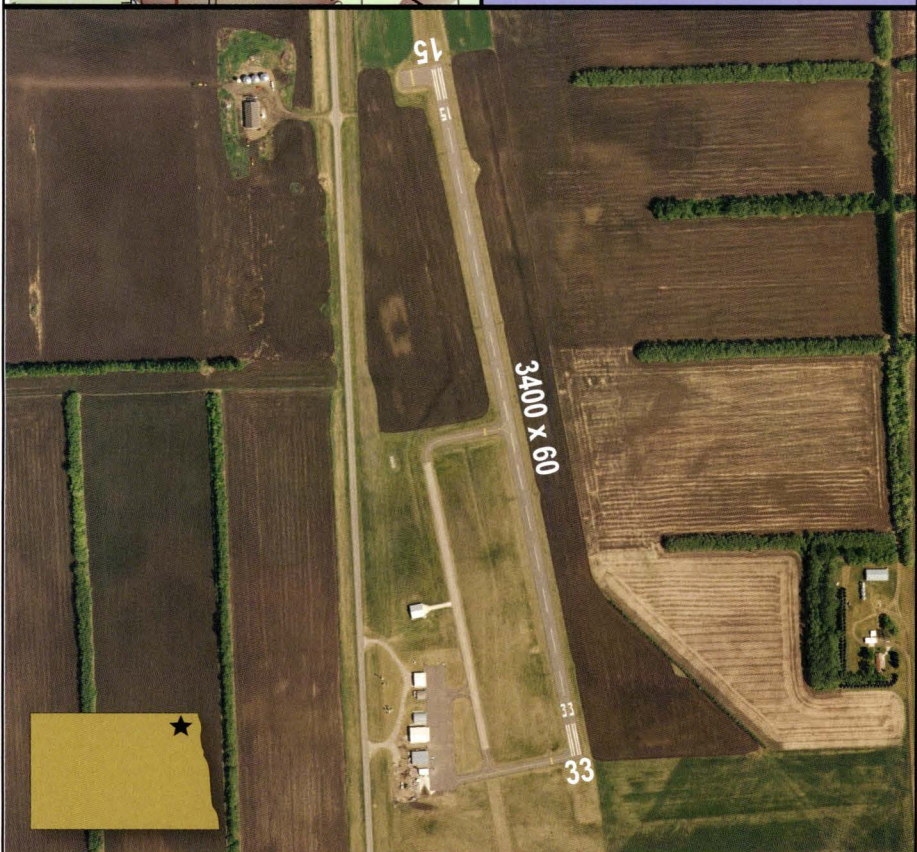
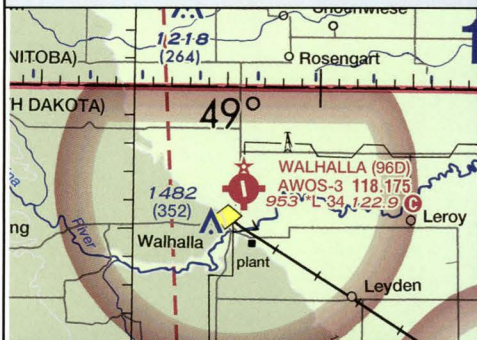
WALHALLA MUNICIPAL

ATTENDANCE: Daylight Hours
FUEL: 100LL REPAIRS: NONE

LIGHTS: Med*dusk2200 BEACON: YES
SNOW REMOVAL: Confirm prior to use

UNICOM: NAV: PAPI

CTAF: 122.9 WX: 118.175



FIELD ELEVATION	REMARKS	IN-PERSON CONTACT
953	Activate lights CTAF. Self service fuel. Deer possible. AWOS 549-3402, MxGwt S-20.	David Carignan PHONE 701-549-3500 ADDL PHONE: 701-265-2617 PUBLIC TERMINAL PHONE: None

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WASHBURN 5C8

WASHBURN MUNICIPAL

ATTENDANCE: UNATNDD
FUEL: NONE REPAIRS: NONE

LIGHTS: Med*RDO-CTL BEACON: YES
SNOW REMOVAL: Irregular - confirm

UNICOM: NAV: PAPI

CTAF: 122.9 WX: 118.675 HAZEN



FIELD ELEVATION	REMARKS	IN-PERSON CONTACT
<p>1908</p>	<p>Ry 17/35 closed winter months. Deer and Birds possible. Activate lights CTAF</p>	<p>Ron Becker-Chrmn PHONE: 701-315-0860/751-3123 ADDL PHONE: 701-462-7331/8413 PUBLIC TERMINAL PHONE: None</p>



WATFORD CITY S25

WATFORD CITY MUNICIPAL

ATTENDANCE: UNATNDD
 FUEL: 100LL, JET A REPAIRS: NONE

LIGHTS: Med RDO CTRL BEACON: NONE
 SNOW REMOVAL: Regular - confirm

UNICOM: 122.80
 NAV: PAPI

CTAF: 122.8 WX: 118.125



FIELD ELEVATION	REMARKS	IN-PERSON CONTACT
2111	Ry 18/36 closed in winter. Activate lights CTAF. Self-service credit card fuel. AWOS 701-842-4855. MxGwt S-12.5	Luke Taylor PHONE 701-444-6411/770-7171 ADDL PHONE: 701-444-3772/770-6739 PUBLIC TERMINAL PHONE: Yes

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WESTHOPE D64

WESTHOPE MUNICIPAL

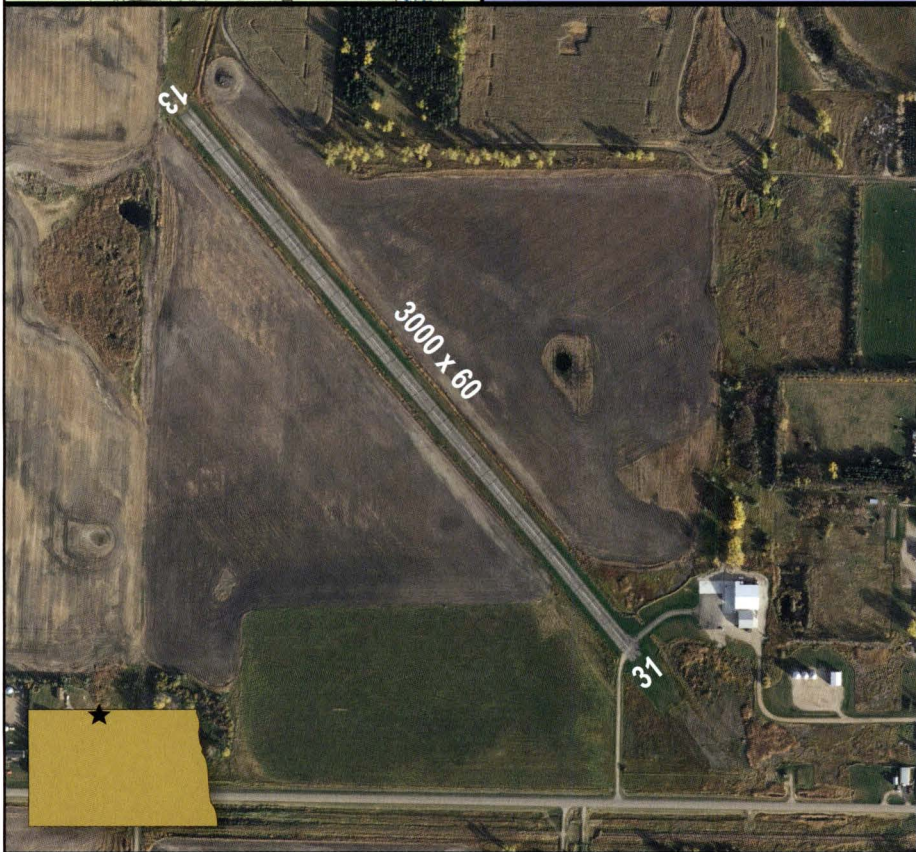


ATTENDANCE: UNATNDD
FUEL: NONE REPAIRS: NONE

LIGHTS: Low*RDO_CTL BEACON: NONE
SNOW REMOVAL: Irregular - confirm

UNICOM: NAV: NONE

CTAF: 122.9 WX: 120.65 ATIS MINOT AFB



FIELD ELEVATION

REMARKS

IN-PERSON CONTACT

1492

Lights located 55' from ry centerline. Ry 13 3' Road 100' outbound. Activate lights-CTAF. MxGWt S-4

Chad Tofteland
PHONE 701-263-1304
ADDL PHONE: 701-263-1383
PUBLIC TERMINAL PHONE: Outside

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WILLISTON ISN

SLOULIN FIELD INTERNATIONAL

ATTENDANCE: 24 Hour Service
 FUEL: 100LL, JET A REPAIRS: MAJOR

LIGHTS: Med RDO CTRL BEACON: YES
 SNOW REMOVAL: Yes

UNICOM: 122.80
 NAV: PAPI, REIL, VOR, GPS

CTAF: 122.8 WX: 125.92



FIELD ELEVATION

REMARKS

IN-PERSON CONTACT

1982

Customs on call. Ry 11/29 increase intensity, Ry 2/20 actvt lgts CTAF. Right-hand traffic Ry 11&20. ASOS-125.92. Check Unicom Freq prior to arrival. MxGWt S-16.

Steve Kjergaard
 PHONE: 701-774-8594/580-5699
 ADDL PHONE: FBO 701-774-2300
 Customs: 701-572-6552

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WISHEK 6L5

WISHEK MUNICIPAL

ATTENDANCE: UNATNDD
 FUEL: NONE REPAIRS: NONE

LIGHTS: LOW RDO-CTL BEACON: YES
 SNOW REMOVAL: Irregular - confirm

UNICOM: NAV: NONE

CTAF: 122.9 WX: 118.175 LINTON



FIELD ELEVATION	REMARKS	IN-PERSON CONTACT
<p style="font-size: 2em; font-weight: bold;">2035</p>	<p>Activate lights and beacon - CTAF . Confirm snow removal with apt mgr or AFSS. Birds & deer possible. MxGWt S-8</p>	<p>Jeff Schauer PHONE: 701-866-0500 ADDL PHONE: 701-452-2314/4291 PUBLIC TERMINAL PHONE: Outside</p>

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METAR ABBREVIATIONS

ABBREVIATIONS

AOI	Automated Observation without precipitation discriminator (rain/snow)
AO2	Automated Observation with precipitation discriminator (rain/snow)
AMD	Amended Forecast (TAF)
BECMG	Becoming (expected between 2-digit beginning hour and 2-digit ending hour)
BKN	Broken
CLR	Clear at or below 12,000 feet (AWOS/ASOS report)
COB	Correction to the observation
FEW	1 or 2 octas (eighths) cloud coverage
FM	From (4 digit beginning time in hours and minutes)
LDG	Landing
M	In temperature field means "minus" or below zero
M	In RVR listing indicates visibility less than lowest reportable sensor value (e.g. M600)
NO	Not available (e.g. SLPNO, RVRNO)
NSW	No Significant Weather
OVC	Overcast
P	In RVR indicates visibility greater than highest reportable sensor value (e.g. P6000FT)
P6SM	Visibility greater than 6 SM (TAF only)
PROB40	Probability 40 percent
R	Runway (used in RVR measurement)
RMK	Remark
RV/RWY	Runway
SCT	Scattered
SKC	Sky Clear
SLP	Sea Level Pressure (e.g., 1013 reported as 013)
SM	Statute mile(s)
SPECI	Special Report
TEMPO	Temporary changes expected (between 2-digit beginning hour and 2-digit ending hour)
TKOF	Takeoff
T01760158, 10142, 20012 and 401120084	In Remarks-examples of temperature information
V	Varies (wind direction and RVR)
VC	Vicinity
VRB	Variable wind direction when speed is less than or equal to 6 knots
VV	Vertical Visibility
WS	Wind shear (In TAFs, low level and not associated with convective activity)

DESCRIPTORS

BC	Patches	MI	Shallow
BL	Blowing	PR	Partial
DR	Low Drifting	SH	Showers
FZ	Supercooled/freezing	TS	Thunderstorm

WEATHER PHENOMENA

BR	Mist	PE	Ice Pellets
DS	Dust Storm	P0	Dust/Sand Whirls
DU	Widespread Dust	PY	Spray
DZ	Drizzle	RA	Rain
FC	Funnel Cloud	SA	Sand
FC	Tornado/Water Spout	SG	Snow Grains
FG	Fog	SN	Snow
FU	Smoke	SQ	Squall
GA	Hail	SS	Sandstorm
GS	Small Hail/Snow Pellets	UP	Unknown Precipitation (Automated Observations)
HZ	Haze	VA	Volcanic Ash
IC	Ice Crystals		

CLOUD TYPES

CB	Cumulonimbus	TCU	Towering Cumulus
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CLOSE YOUR FLIGHT PLAN

FLIGHT PLAN

AFSS 1-800-992-7433

1. TYPE	2. AIRCRAFT IDENTIFICATION	3. AIRCRAFT TYPE SPECIAL EQUIPMENT	4. TRUE AIRSPEED	5. DEPARTURE POINT	6. DEPARTURE TIME		7. CRUISING ALTITUDE	
					VFR	PROPOSED (Z)		ACTUAL (Z)
					IFR			
DVFR			KTS					
5. ROUTE OF FLIGHT								
9. DESTINATION (Name of Airport and City)		10. EST TIME ENROUTE		11. REMARKS				
		HOURS	MINUTES					
12. FUEL ON BOARD		13. ALTERNATE AIRPORT		14. PILOT'S NAME, ADDRESS & TELEPHONE NUMBER & AIRCRAFT HOME BASE		15. NUMBER ABOARD		
HOURS	MINUTES							
16. COLOR OF AIRCRAFT								
17. DESTINATION CONTACT/TELEPHONE (OPTIONAL)								

- /X - NO TRANSPONDER.
- /T - TRANSPONDER NO ALTITUDE ENCODING CAPABILITY.
- /U - TRANSPONDER WITH ALTITUDE ENCODING CAPABILITY.
- /J - DME, BUT NO TRANSPONDER.
- /B - DME, AND TRANSPONDER, BUT NO ALTITUDE ENCODING CAPABILITY.
- /A - DME AND TRANSPONDER WITH ALTITUDE ENCODING CAPABILITY.
- /M - TACAN ONLY, BUT NO TRANSPONDER.
- /N - TACAN ONLY AND TRANSPONDER, BUT NO ALTITUDE ENCODING CAPABILITY.
- /F - RNAV ONLY AND TRANSPONDER WITH ALTITUDE ENCODING CAPABILITY.
- /C - RNAV AND TRANSPONDER, BUT NO ALTITUDE ENCODING CAPABILITY.
- /R - RNAV AND TRANSPONDER WITH ALTITUDE ENCODING CAPABILITY.
- /W - RNAV BUT NO TRANSPONDER.
- /G - GPS

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FLIGHT LOG

DEPARTURE POINT	VOR	RADIAL	DISTANCE	TIME		GROUND SPEED
	IDENT. FREQ.	TO FROM	LEG	POINT - POINT	TAKE OFF	
			REMAINING	CUMMULATIVE		
CHECK POINT					ETA	
					ATA	
DESTINATION						
			TOTAL			

PREFLIGHT CHECK LIST

DATE

EN ROUTE WEATHER / WEATHER ADVISORIES

DESTINATION WEATHER

WINDS ALOFT

ALTERNATE WEATHER

FORECASTS











NOTAMS / AIRSPACE RESTRICTIONS

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GUIDE FOR AIRFIELD SIGNS

SIGN and LOCATION




PILOT ACTION or SIGN PURPOSE

 <p>On Taxiways at Intersection with a Runway</p>	<p>Controlled Airport - Hold unless ATC Clearance has been received.</p> <p>Uncontrolled Airport - Proceed when no traffic conflict exists.</p>
 <p>Runway / Runway Intersection</p>	<p>Taxiing - Same action as above.</p> <p>Taking Off or Landing - Disregard unless a "Land, Hold Short" clearance has been accepted.</p>
 <p>Taxiway in Runway Approach of Departure Area</p>	<p>Controlled Airport - Hold when instructed by ATC.</p> <p>Uncontrolled Airport - Proceed when no traffic conflict exists.</p>
 <p>ILS Critical Area</p>	<p>Hold when approaches are being made with visibility less than 2 miles or ceiling less than 800 feet.</p>
 <p>Areas where Aircraft are Forbidden to Enter</p>	<p>Do not enter.</p>
 <p>Taxiway</p>	<p>Identifies taxiway on which aircraft is positioned.</p>
 <p>Runway</p>	<p>Identifies runway on which aircraft is positioned.</p>
 <p>Edge of Protected Airway for Runway</p>	<p>These signs are used on controlled airports to identify the boundary of the runway protected area. It is intended that pilots exiting this area would use this sign as a guide to judge when the aircraft is clear of the protected area.</p>
 <p>Edge of ILS Critical Area</p>	<p>These signs are used on controlled airports to identify the boundary of the LS critical area. It is intended that pilots exiting this area would use this sign as a guide to judge when the aircraft is clear of the ILS critical area.</p>
 <p>Taxiways and Runway</p>	<p>On Taxiways - Provides direction to turn at next intersection to maneuver aircraft onto named runway.</p>

GUIDE FOR AIRFIELD SIGNS

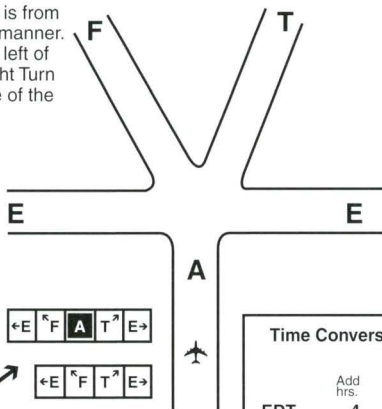
SIGN and LOCATION

PILOT ACTION or SIGN PURPOSE

 <p>Taxiways</p>	<p>Provides general taxiing direction to named runway.</p>
 <p>Taxiways and Runways</p>	<p>Provides general taxiing direction to identified destination.</p>
 <p>Runway</p>	<p>Provides remaining runway length in 1,000 feet increments.</p>

ARRANGEMENT OF SIGNS AT INTERSECTION

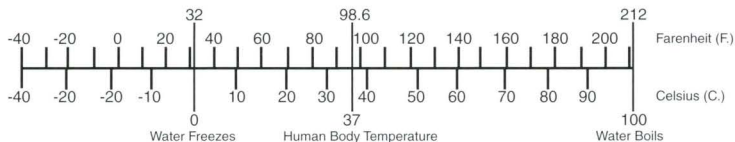
Note: Orientation of signs is from left to right in a clockwise manner. Left Turn Signs are on the left of the Location Sign and Right Turn Signs are on the right side of the Location Sign.



Alternate array of signs shown to illustrate sign orientation when Location Sign not installed.

Time Conversion to UTC (Z)			
	Add hrs.		Add hrs.
EDT	4	MDT	6
EST	5	MST	7
CDT	5	PDT	7
CST	6	PST	8
Hawaii & Alaska	10		

TEMPERATURE CONVERSION



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INTERCEPTING SIGNALS

Signals initiated by intercepting aircraft and responses by intercepted aircraft (as set forth in ICAO Annex 2-Appendix A, 2.1)

Series	Intercepting Aircraft Signals	Meaning	Intercepted Aircraft Responds	Meaning
1	<p>Day - Rocking wings from a position slightly above and ahead of, and normally to the left of, the intercepted aircraft and, after acknowledgement, a slow level turn, normally to the left, on to the desired heading.</p> <p>Night - Same and, in addition, flashing navigational lights at irregular intervals.</p> <p>Note 1 - Meteorological conditions or terrain may require the intercepting aircraft to take up a position slightly above and ahead of, and to the right of, the intercepted aircraft and to make the subsequent turn to the right.</p> <p>Note 2 - If the intercept aircraft is not able to keep pace with the intercepting aircraft, the latter is expected to fly a series of race-track patterns and to rock its wings each time it passes the intercepted aircraft.</p>	You have been intercepted! Follow me.	<p>Aeroplanes: Day - Rocking wings and following.</p> <p>Night - Same and, in addition, flashing navigational lights at regular intervals.</p> <p>Helicopters: Day or Night-Rocking Aircraft, flashing navigational lights at irregular intervals and following.</p>	Understood, will comply.
2	<p>Day or Night - An abrupt break-away maneuver from the intercepted aircraft consisting of a climbing turn of 90 degrees or more without crossing the line of flight of the intercepted aircraft.</p>	You may proceed.	<p>Aeroplanes: Day or Night - Rocking Wings.</p> <p>Helicopters: Day or Night - Rocking Aircraft.</p>	Understood, will comply.
3	<p>Day - Circling aerodrome, lowering landing gear and over-flying runway in direction of landing or, if the intercepted aircraft is a helicopter, over-flying the helicopter landing area.</p> <p>Night - Same and, in addition, showing steady landing lights.</p>	Land at this aerodrome.	<p>Aeroplanes: Day - Lowering landing gear, following the intercepting aircraft and, if after over-flying the runway landing is considered safe, proceed to land. Night - Same and, in addition, showing steady lights (if carried).</p> <p>Helicopters: Day or Night - Follow the intercepted aircraft and proceed to land, showing a steady landing light (if carried).</p>	Understood, will comply.
4	<p>Day or Night - Raising landing gear (if fitted) and flashing landing lights while passing over runway in use or helicopter landing area at a height exceeding 2,000 ft (in case of helicopter, at a height exceeding 170 ft, but not exceeding 330 ft) above the aerodrome level, and continuing to circle runway in use or helicopter landing area. If unable to flash landing lights, flash any other lights available.</p>	Aerodrome you have designated is inadequate.	<p>Day or Night - If it is desired that the intercepted aircraft follow the intercepting aircraft to an alternate aerodrome, the intercepting aircraft raises its landing gear (if fitted) and uses the Series 1 signals prescribed for intercepting aircraft.</p> <p>It is decided to release the intercepted craft, the intercepting aircraft uses the Series 2 signals prescribed for intercepting aircraft.</p>	Understood, follow me. Understood, you may proceed.
5	<p>Day or Nights - Regular switching on and off of all available lights but in such a manner as to be distinct from flashing lights.</p>	Cannot comply.	<p>Day or Night - Use Series 2 signals prescribed for intercepting aircraft.</p>	Understood
6	<p>Day or Nights - Irregular flashing of all available lights.</p>	In distress.	<p>Day or Night - Use Series 2 signals prescribed for intercepting aircraft.</p>	Understood

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Light Gun Signals

Color and Type of Signal	Movement of Vehicles, Equipment and Personnel	Aircraft on the Ground	Aircraft in Flight
Steady Green	Cleared to Cross, Proceed or Go	Cleared for Take-off	Cleared to Land
Flashing Green	Not Applicable	Cleared for Taxi	Return for Landing, to be Followed by Steady Green at the Proper Time
Steady Red	STOP	STOP	Give Way to Other Aircraft and Continue Circling
Flashing Red	Clear the Taxiway/Runway	Taxi Clear of the Runway in Use.	Airport Unsafe, Do not Land
Flashing White	Return to Starting Point on Airport	Return to Starting Point on Airport	Not Applicable
Alternating Red and Green	Exercise Extreme Caution	Exercise Extreme Caution	Exercise Extreme Caution

10 Ways To Help Prevent Runway Incursions

- 1 See The “Big Picture”**
Monitor both ground and tower communications when possible.
- 2 Transmit Clearly**
Make your instructions and read-backs complete and easy to understand.
- 3 Listen Carefully**
Listen to your clearance. Listen to what you read back. Do not let communications become automatic.
- 4 Copy Clearances**
Clearances can change. Keep a note pad and copy your clearance. If needed, refer to your notes.
- 5 Situational Awareness**
Know your location. If unfamiliar with an airport keep a current airport diagram available for easy reference.
- 6 Admit When Lost**
If you get lost on an airport, ask ATC for help. Better to damage your pride than your airplane.
- 7 Sterile Cockpit**
Maintain a sterile cockpit until reaching cruising altitude. Explain to your passengers that talking should be kept to a minimum.
- 8 Understand Signs, Lights And Markings**
Keep current with airport signs, lights and markings. Know what they mean and what action to take.
- 9 Never Assume**
Do not take clearances for granted. Look both ways before entering or crossing taxiways and runways.
- 10 Follow Procedures**
Establish safe procedures for airport operations. Then follow them.

For more information see the following:
www.faa.gov/airports/runway-safety

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AIRPORT IDENTIFIERS

IDENT.	LOCATION	CTAF	IDENT.	LOCATION	CTAF
1A2	Arthur	122.9*	D55	Langdon	122.8*
ASY	Ashley	122.9*	2L1	Larimore	122.9
20U	Beach	122.8*	D31	Leeds	122.8*
95D	Beulah	122.9*	4N4	Lidgerwood	122.9
BIS	Bismarck	118.3* -TWR	7L2	Linton	122.9*
D09	Bottineau	122.8*	6L3	Lisbon	122.9
5B4	Bowbells	122.9	7G2	McClusky	122.9*
BWW	Bowman	122.8*	8M6	McVile	122.9
9D7	Cando	122.9*	6D3	Maddock	122.9
46D	Carrington	122.9*	Y19	Mandan	122.8*
5N8	Casselton	122.8*	D56	Mayville	122.8*
2C8	Cavalier	122.8*	4R6	Milnor	122.9
D49	Columbus	122.9	MOT	Minot	118.2* -TWR.
S32	Cooperstown	122.9*	D06	Minto	122.9
D50	Crosby	122.9*	HBC	Mohall	122.8*
DVL	Devils Lake	122.8*	3P3	Mott	122.9*
DIK	Dickinson	123.0*	5B5	Napoleon	122.9*
D29	Drayton	122.9*	8J7	New Rockford	122.9
S28	Dunseith	122.8	05D	New Town	122.9*
51D	Edgeley	122.8*	4V4	Northwood	122.8*
Y71	Elgin	122.9*	2D5	Oakes	122.9*
4E7	Ellendale	122.9*	64G	Page Regional	122.9
5N4	Enderlin	122.9*	Y37	Park River	122.8*
FAR	Fargo	133.8 - TWR	Y74	Parshall	122.8*
D24	Fessenden	122.9*	PMB	Pembina	122.8*
Y27	Fort Yates	122.9	Y99	Plaza	122.9
9G9	Gackle	122.9	4E8	Richardton	122.9
D05	Garrison	122.9*	37N	Riverdale	122.9
D57	Glen Ullin	122.9*	2H9	Rolette	122.8*
GAF	Grafton	122.8*	06D	Rolla	122.8*
GFK	Grand Forks	118.4* TWR	RUG	Rugby	122.8*
GWR	Gwinner	122.7*	4S5	St. Thomas	122.9*
5H4	Harvey	122.8*	08D	Stanley	122.9*
6H8	Hazelton	122.9	D60	Tioga	122.9*
HZE	Hazen	122.8*	D61	Towner	122.8*
HEI	Hettinger	122.8*	91N	Turtle Lake	122.8*
3H4	Hillsboro	122.9*	BAC	Valley City	122.8*
JMS	Jamestown	123.0*	BWP	Wahpeton	123.0*
7K5	Kenmare	122.8*	96D	Walhalla	122.9*
9Y1	Killdeer	122.9*	5C8	Washburn	122.9*
K74	Kindred	122.9*	S25	Watford City	122.8*
5K9	Kulm	122.9	D54	West Fargo	122.7*
5L0	Lakota	122.9*	D64	Westhope	122.9*
4F9	LaMoure	122.9*	ISN	Williston	122.8*
			6L5	Wishek	122.9*

* - Aircraft Radio Controlled Airport Lighting Activation and/or increase intensity level through 3, 5, or 7 microphone clics.

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State of North Dakota

Office of the Governor

Doug Burgum
Governor



Welcome to the Legendary Skies of North Dakota!

As you plan your business or vacation flight, we invite you to take a scenic journey through our state. Discover the stunning beauty of our diverse landscape and the abundant recreational opportunities that make North Dakota an exceptional destination to include on your flight plan. Our state offers many great adventures, breathtaking natural wonders and exciting events for residents and visitors alike.

North Dakota's aviation industry enjoys a well-earned reputation as a world leader in cutting-edge technology and research. The John D. Odegard School of Aerospace Sciences at the University of North Dakota in Grand Forks operates the largest civilian training fleet in the world. The Northern Plains Unmanned Aerial Systems (UAS) Test Site continues to lead the country in UAS research and development as we work toward a solution to integrating UAS into the national airspace system.

As North Dakota continues efforts to strengthen its position as an aerospace industry leader, our state remains committed to fostering an innovative and nurturing environment where the spirit of entrepreneurial ideas can take flight.

I hope you enjoy your time here and create lasting memories as you experience all that North Dakota has to offer.

Sincerely,

Doug Burgum
Governor



Commissioners

- Cindy Schreiber-Beck, Chair, Wahpeton
- Dr. Kim Kenville, Vice-Chair, Grand Forks
- Maurice Cook, Bismarck
- Jay B. Lindquist, Hettinger
- Warren Pietsch, Minot

Mission

To serve the public by providing economic and technical assistance for the aviation community while ensuring the safe and cost-effective advancement of aviation in North Dakota.

March 3, 2017

SB2006

Attachment C



Airport Association of North Dakota

Matthew Remyse - President Anthony Dudas - Vice President
Samuel Seafeldt - Sec. / Treasurer
PO Box 1560 Jamestown, North Dakota 58402-1560
(701) 355-1808

March 3, 2017

**RE: Testimony to House Appropriations –Government Operations Division on SB 2006
(Aeronautics Budget)**

Chairman Brandenburg and members of the committee,

I am Matthew Remyse, the President of the Airport Association of North Dakota (AAND). I want to thank you for the opportunity to speak here today and thank you for the past support of airports. AAND is the professional organization for North Dakota Airports and it serves to promote airports, aviation, and safety across North Dakota. Among its members are all eight commercial service airports, 70 of 81 general aviation airports and aviation engineering and planning firms. I'm here today on behalf of the association to express our support of SB 2006 and would respectfully request the Appropriations Committee consider an additional one-time appropriation of \$9 million in grants for the North Dakota Aeronautics Commission (NDAC).

Airports are a valuable asset for North Dakota's economy. North Dakota's 89 airports generate an economic impact of \$1.56 billion annually. This is an impressive 47% increase from 2010 when airports generated \$1.06 billion annually. Airports play a vital role in the state and touch all major industries, including agriculture, manufacturing, healthcare, tourism, energy, and technology. A great example I like to share is that many rural communities receive the same type of healthcare that is in the major cities because doctors fly to the rural communities. This eases the burden for rural North Dakota to get great health care in their communities, and it's because of aviation and airports.

North Dakota's airports grew at an unprecedented rate in the first part of this decade surpassing many of the forecasted estimates. Unfortunately, airports were affected by the economic downturn just as many North Dakota industries were. Airports have leveled off to an extent, and are now operating at a more manageable pace than they experienced during the boom years. Although airports have leveled off, their needs are still there and higher than ever because the activity never returned to pre boom levels. Many of the western ND airports were not built for the traffic they saw during the boom, which is now the new normal. Regional jets at the Dickinson and Williston airports are a great example.

Currently the North Dakota Aeronautic Commission's ability to meet the needs of airports is underfunded. Without additional funding airport infrastructure projects will be delayed. Delaying vital projects will hinder a vital driver of the state's economic development, and quality of life. Additional funding is needed not only to support anticipated growth but also to repair facilities that deteriorated at a much faster rate than expected due to the economic surge.

The Aeronautics Commission works hand in hand with the Federal Aviation Administration (FAA), and airports regarding grant funding. Federal grant funding can cover up to 90% of eligible projects, but with such a high demand of large projects in the state the FAA is not always able to provide a 90% cost share. With the lack of both state and federal funding, airports are making the difficult decision of going into debt to complete their projects. Additional state funding for airport grants would assure that crucial projects are being completed on time and would reduce the amount of debt airports would have to take on. Also, when additional state funding is appropriated it typically generates more federal dollars.

In the upcoming biennium there are several airports throughout the state with large capital projects:

- Bismarck Airport has a main runway reconstruction project that will total \$70 million when complete. The City of Bismarck is funding \$30 million dollars of this project because of limited Federal funding.
- Williston's new airport broke ground last fall and is scheduled to be completed in 2019.
- The Dickinson and Grand Forks airports are starting to develop runway reconstruction projects
- Several general aviation airports are preparing large projects too: Northwood, Ashely, Hillsboro, and Watford City will have major runway projects this biennium.
- In addition to these major projects, airports must maintain their capital investments, and there are several projects that are not included on the capital improvement plans because they are ineligible for grant funding and must be funded solely by the airport.


I want to point out that AAND and airports are working to create to create language that would allow airports and airport authorities to be eligible to receive mills from a city or county's capital projects levy. This would provide additional flexibility to airports when developing budgets for capital projects.

I have focused mainly on the NDAC's grant funding program and how that is vital to airports but I would also like to highlight the other services the NDAC provides to support airports and the aviation community. The NDAC has a fantastic education program that is drawing young adults into aviation. The NDAC helps general aviation airports with developing their capital improvement plans and conducting safety inspections. The studies that the NDAC completes are an extremely useful tools for airports. A Pavement Condition Index Study is a federal requirement for each airport to receive federal funding. The NDAC puts this study together for all airports. This a is large undertaking and Mr. Wanner and his staff do an amazing

job managing that study and assuring that there is a useful end product for airports. Overall, the NDAC provide an enormous amount of support to airports and aviation and that should not be overlooked when considering their budget.

In, conclusion, AAND fully understands that the priority of the Legislature and Governor is to reduce spending and that there will be several industries vying for the funding available. I ask that you please do not look at airport infrastructure as spending but rather a sound investment in a vital driver of the State's economy. As you work through the State's budget AAND would greatly appreciate your consideration for an additional one-time funding of \$9 million for airport grants. Thank you for allowing me the opportunity to testify on SB 2006. I will take any questions at this time.

Respectfully,



Matthew Remyse
President, AAND

**Testimony of Gregory B. Haug
Airport Director, Bismarck Airport**

Senate Bill 2006

House Appropriations – Government Operations Division

65th North Dakota Legislative Assembly

March 3, 2017

Chairman Delzer and Members of the committee,

My Name is Greg Haug and I am the director of the Bismarck Airport and I will be providing testimony regarding Senate Bill 2006 on behalf of the Bismarck Airport and the City of Bismarck.

First I would like to say a few words about the Bismarck Airport and provide the committee a brief update on some recent activities and milestones.

Bismarck works hard to make improvements to the air service offered and our newest and 5th airline to enter the market was American Airlines in October of 2014. American provides daily service to Dallas/Fort Worth and Chicago and has done well in their first

two years of service. We have also been fortunate to retain Frontier Airlines and are now the only location in ND that Frontier still provides their ultra-low cost service to. Bismarck Airports passenger traffic has set a new record every year for the last seven (7) years, including 2016. Yes, even with the downturn in the oil activity the Bismarck Airport is still booming with passenger traffic! No doubt the oil activity out west impacted the Bismarck Airport over the last several years but Bismarck's economy is continuing to do well which continues to add more passenger demand at the airport.

The Airport has had to make some incremental improvements over the last several years in order to accommodate the needs of our passengers and the increase in demand. A few of these improvements include parking lot expansions, an additional passenger boarding bridge, a car rental wash facility and expansion of the security checkpoint, not only once, but twice, and we now have three (3) x-ray lanes to speed up passenger throughput. These have all been good projects, they have helped us keep pace with the passenger demand and they have been financially doable. But now we have an 800 Lb. gorilla on our back, it's called **the runway 13/31 reconstruction project**. This is by far the most expensive and complex project I have been involved with in my 30 year career in airport management. When it's done we will get a nice smooth strip of concrete nearly two (2) miles long that people forget about. It's not as sexy as building a shiny new terminal that people can admire. It's just expected that every airport will have a safe runway for aircraft to use. In Bismarck's case, it just happens to be the primary runway, the longest, widest and strongest one and the most expensive one.

Here's a quick update on Bismarck's main runway reconstruction project:

- Our runway pavement dates back to the 1950's, 60's, & 70's.
- The pavement is rapidly deteriorating according to the state sponsored pavement condition study.
- We have spent the last 3 years preparing for the start of this project.
- Our engineer's current estimated construction costs are 70 million dollars.
- Construction is planned over the next 3 years.
- We have awarded \$24 million dollars in bids for phase one.
- Construction starts in May 2017.

On the funding side FAA has the ability to fund up to 90% of the cost but has only committed 53% or 37 million. That leaves 33 million to the state and local levels. The NDAC generally funds up to 5% of regular airport projects so that would leave approximately 30 million to the City & Airport.

The airport plans to use all its cash reserves plus issue a 10 to 15-million-dollar bond and then lean on the City of Bismarck's cash reserves for the remainder.

We have no choice the work must be done!

On behalf of the City of Bismarck and the Bismarck Airport, we support Senate Bill 2006 and the Aeronautics Commission and all their programs.

On behalf of the City of Bismarck, the Bismarck Airport, and the hundreds of thousands of North Dakota Passengers, Business folks, & Visitors that use the Airport annually, we also request that this committee review the Aeronautics Commission's original Budget

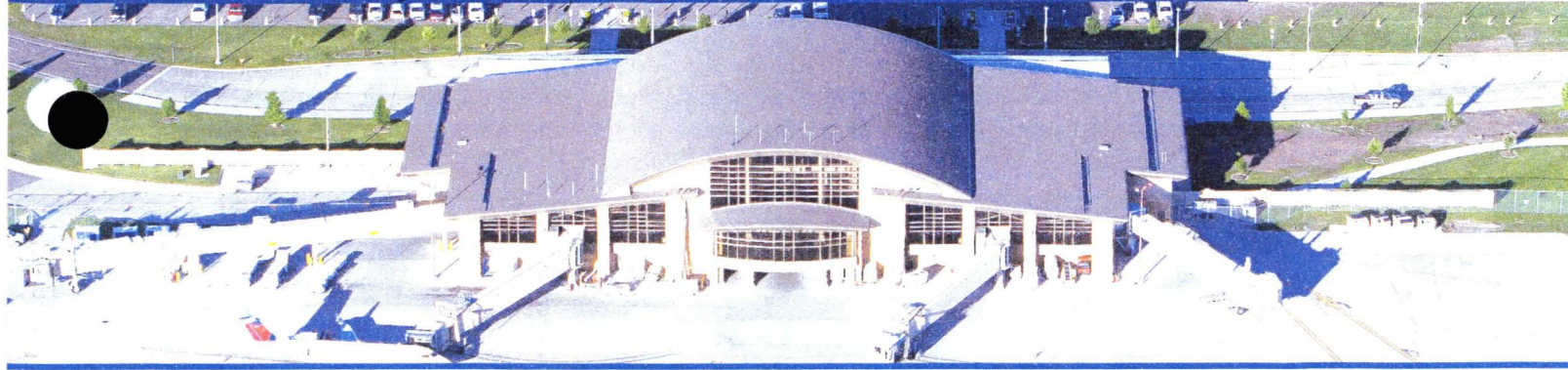
Request and reconsider the 9 million dollars of the one-time funding that was originally requested by the Aeronautics Commission. If allocated by the legislature, a portion of those funds could be used by the Aeronautics Commission to help Bismarck fund this enormous and very important project at the capital city airport.

Thank you for allowing me to address the committee, I would be happy to answer any questions.

4

BISMARCK AIRPORT (BIS)

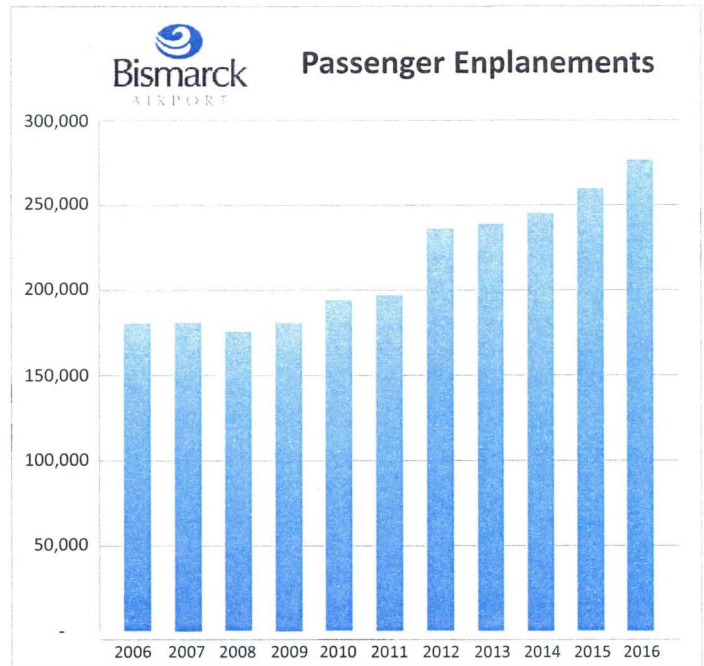
BISMARCK, ND



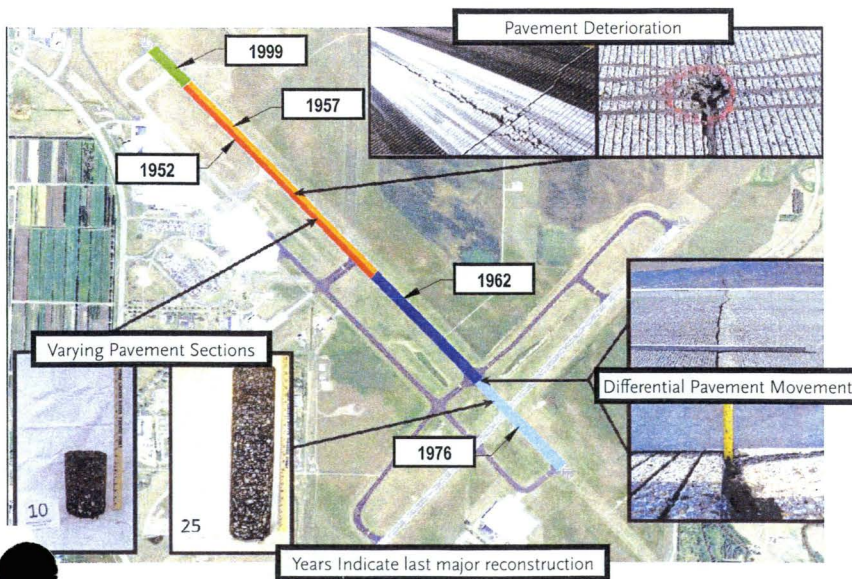
BISMARCK AIRPORT (BIS)

The Bismarck Airport plays a vital economic role for the City of Bismarck and the surrounding region. The 2015 Economic Impact Study for North Dakota Airports, conducted by the North Dakota Aeronautics Commission, indicates the Bismarck Airport brings 110,342 visitors to North Dakota annually, which contributes an estimated \$68,838,160 each year to the city of Bismarck and surrounding region on items such as food, local ground transportation, hotels, shopping and entertainment. In addition to contributing to local economy, the Bismarck Airport supports 2,216 jobs and contributes more than \$10 million in annual state and local tax revenues.

The economic impact of the Bismarck Airport continues to grow as existing airlines have expanded service and new airlines have been added in recent years. Expansions include new service from Frontier Airlines in May 2012 and Allegiant adding a new route to Orlando, FL in November 2013. American Airlines became the newest airline to serve the Bismarck area when they began offering service to Dallas/Fort Worth and Chicago in October 2014. The Bismarck Airport recorded a 4.4 percent increase in enplanements in 2016.



The Bismarck Airport has experienced steady growth in enplanements over the last 8 years. Despite oil market volatility, Bismarck Airport experienced 4.4 percent growth in enplanements in 2016.



AIRPORT NEEDS

Due to the age and increased utilization, primary Runway 13-31 pavement has been deteriorating at an increased rate over the past several years. Runway 13-31 pavement is showing significant distress and in many areas the pavement is popping out causing foreign object debris (FOD) and maintenance issues. Runway 13-31 does not meet current design standards and preliminary work shows the runway profile elevation needs to be raised by more than four feet in areas to meet Federal Aviation Administration (FAA) standards. The existing runway areas drain poorly and are highly susceptible to frost heaves. Airfield drainage improvements are necessary to improve both surface flow and eliminate subsurface moisture under the pavement. Bismarck Airport's primary runway was constructed and reconstructed over a number of years ranging from 1952 to 1999. Sections of the existing runway have been in existence for more than 64 years with the support of rehabilitation projects. The map to the left highlights key issues.

Key Issues:

- Portions of the runway are more than 60 years old
- Varying pavement sections
- Differential pavement movements
- Declining pavement condition index ratings (2016 NDAC PCI Study)

March 3, 2017

SB2006 ①

Attachment E

FUNDING NEEDS

To sustain air carrier operations, it is necessary to reconstruct Runway 13-31 at an estimated cost of \$70 million. Due to the significant cost to complete the project, financial assistance from the FAA and state of North Dakota is critical to complete improvements.

ANTICIPATED FUNDING NEEDS:

TOTAL PROJECT COST: \$70M

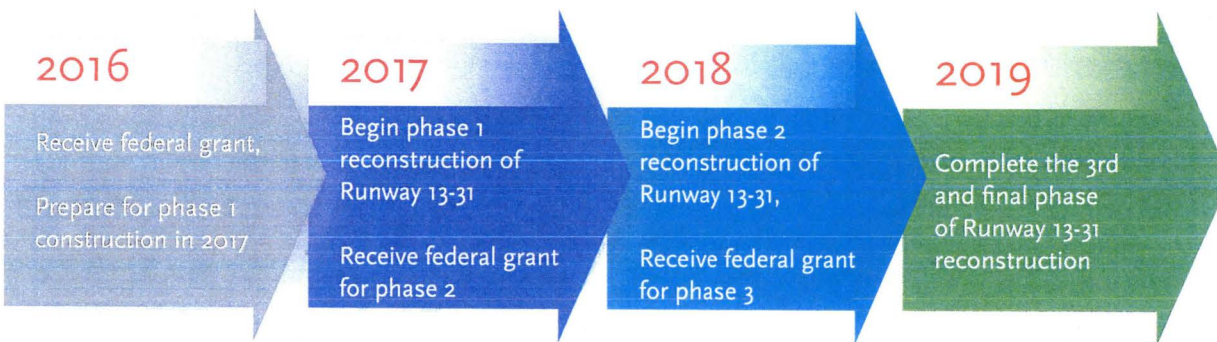
FEDERAL*
\$37M

STATE/LOCAL**
\$33M

* Estimated federal participation

** Local participation contingent on state participation

ESTIMATED RECONSTRUCTION PROJECT TIMELINE



FORTHCOMING AIRPORT NEEDS

In addition to reconstruction of the primary runway, the Bismarck Airport has two additional critical projects to complete immediately after the primary runway reconstruction project. The projects include rehabilitating Runway 3-21 and removing known wildlife attractants at the airport. Total costs are estimated to be in excess of \$41 million.



Subject: SB 2006

March 3, 2017

To: Appropriation Committee Members

From: Rodney Schaaf, Bowman Regional Airport Board Chairman

Subject: Proposed North Dakota Aeronautics Commission Budget

Representation: North Dakota General Aviation airports

You will hear a lot about the "Willistons, Bismarcks, Dickinsons, Minots" concerning their airport projects. Rightfully so, but I am here today to represent the small general aviation airports, (the little guys), and to show our support for the Aeronautics Commission's proposed budget.

1- Bowman Regional is 1 of 81 small airports in North Dakota. Our new airport opened in May, 2015. It was a 10 year project from scratch to dedication.

The last totally new constructed airport was in 1985 at West Fargo.

2- Primary services provided include MediVac ops, visiting Doctors to satellite clinics, Eye in the Sky for rural firefighter ops, Game and Fish Department aerial surveys, Weather Modification ops, oil and gas company ops, predator control, and weather radar ops. Similar services, as with other small airports, include fuel and maintenance, flight instruction, seasonal bird and big game hunting ops, crop spraying, corporate, transient and local flight operations.

3- In the "perfect world" of airport construction projects, upgrades, and funding resources, the FAA cost shares 90%- the State 5%- and local 5%.

4- The Bowman Regional Airport project costs= see attached Costs page
 17.7 m total, FAA 68%- 12 m, State 18%- 3.1 m, Local 14%- 2.5m

5- In conclusion, our project, along with other small airports, could NOT be completed without the State Aeronautics Commissions assistance (above and beyond). We urge you to consider and support the Aeronautics Commission proposed budget and if additional funds may be available, please consider the aviation project needs for the 89 North Dakota airports

THANK YOU

Costs - New Airport 8-15-16

	<u>Total</u>	<u>Federal</u>	<u>State</u>	<u>Local</u>
2012/2013 Improvements (Grading & dirt work)	\$ 4,443,794.00	\$ 3,998,627.00	\$ 221,839.00	\$ 223,327.00
2013/2014 Improvements (Surfacing & Electrical)	\$ 8,904,289.00	\$ 5,749,226.00	\$ 2,589,523.00	\$ 565,540.00
2014/2015 Improvements (Terminal/SRE & Fencing)	\$ 2,777,036.00	\$ 2,294,368.00	\$ 124,709.00	\$ 357,959.00
2014/2015 Improvements (Fueling Facility)	\$ 425,144.00	\$ -	\$ 212,141.00	\$ 213,003.00
2014/2015 Improvements (T-Hangars)	\$ 755,033.00	\$ -	\$ -	\$ 755,033.00
2015 Improvements	\$ 437,299.00	\$ -	\$ -	\$ 437,299.00

Totals

\$17,742,595.00 \$12,042,221.00 \$3,148,212.00 \$2,552,161.00
 100% = 68% 18% 14%