

INTRODUCTION AND INVENTORY

This airport layout plan (ALP) update and narrative report are intended to provide the airport sponsor (City of York), the Nebraska Department of Transportation (NDOT) Division of Aeronautics, and the Federal Aviation Administration (FAA) with a clear vision for the future of York Municipal Airport (JYR), including any necessary improvements that may be needed over the next 20 years. The report will include an updated ALP set, which will depict current and future conditions at the airport. The updates to the ALP set will focus on facility changes that have occurred at the airport since the last study was completed, as well as the development direction of planned future projects.

This study was designed to guide future development and provide updated justification for projects for which the airport may receive funding participation through federal and state airport improvement programs. Coffman Associates, an airport consulting firm that specializes in master planning and environmental studies, and Olsson, an engineering and design firm, are preparing this plan.

The ALP update and narrative report are being prepared in accordance with FAA requirements, including Advisory Circular (AC) 150/5300-13B, *Airport Design*, AC 150/5070-6B, *Airport Master Plans*, and FAA Office of Airports (ARP) Standard Operating Procedure (SOP) 2.00, Appendix A, *ALP Review Checklist*. The following paragraphs outline the study background, objectives, elements, and process.

PROCESS

The ALP update and narrative report are prepared in a systematic fashion, pursuant to the scope of services that was coordinated with the City of York and the FAA. The study includes several elements:

- **Study Initiation** includes the development of the scope of services, budget, and schedule.
- **Inventory** involves the collection of facility and operational data. This step establishes existing airfield facility conditions and capacities and identifies existing environmental conditions at the airport.
- **Forecasts** of demand levels at the airport (based aircraft and operations) are prepared for a 20-year period to establish the existing and ultimate critical aircraft, per FAA AC 150/5000-17. The forecasting approach utilizes the FAA's *Terminal Area Forecast* (TAF), as well as regional and local socioeconomic and aviation trends. The forecasts will ultimately be submitted to the FAA for review and approval.
- **Facility Requirements** determines the airport's facility requirements for existing, short-term, intermediate-term, and long-term timeframes, based on the critical aircraft and updated forecasts.
- **Alternatives** evaluates various development alternatives to accommodate current and forecasted needs for airside and landside facilities.

- **Airport Layout Plan Drawings** are prepared to depict the recommended development concept. The drawings are developed to meet the requirements of FAASOP 2.00, *Standard Procedure for FAA Review and Approval of Airport Layout Plans (ALPs)* (effective October 1, 2013). The updated ALP set will be included as an appendix to this report.
- **Environmental Overview** identifies potential environmental issues that may require further *National Environmental Policy Act* (NEPA) analysis as a result of plan implementation.
- **Airport Development Schedules and Cost Estimates** prepares development schedules for the recommended concept and identifies potential federal and state aid for specific projects. A 20-year capital improvement program (CIP) will be prepared to identify capital funds required by the City of York to accomplish each proposed stage of improvements for the airport.
- **Final Drawings and Reports** will include a technical report (in printed and digital formats), full-size/full-color copies of report exhibits, and drawings produced for the study.

STUDY PARTICIPATION

This report is of interest to many within the local community and region, including local citizens and businesses, community organizations, City of York officials, airport users and tenants, and aviation organizations, as well as representatives from the FAA and NDOT. To assist in the development of the study, the city has identified a group of stakeholders to act in an advisory role as the plan progresses. The planning advisory committee (PAC) is comprised of individuals and organizations with a vested interest in the future development of the airport. Members of the PAC will meet at designated points during the planning process to review draft study materials and provide comments to help ensure the development of a realistic and viable plan. A community outreach program will also be established to allow members of the public to review and comment on the study as it develops. Two public workshops will be held during the course of the study.

AIRPORT BACKGROUND

York Municipal Airport is located two miles northwest of the City of York, near the intersection of Highway 4 and the Highway 81 bypass, in the southeast part of Nebraska, approximately 45 miles west of the state capital of Lincoln, NE. According to the U.S. Census Bureau¹, the City of York has a population of 8,066 (as of 2020). York is a major contributor to the regional economy, particularly in agricultural and related industries. Several businesses regularly utilize JYR, including CSB Services, Inc., Heinen Brothers Agra Services, Aurora Cooperative, POET Inc., Beck's Hybrids, and Fagen Inc. The airport is frequently utilized by agricultural spraying operators.

¹ U.S. Census Bureau, 2020 Decennial Census (<https://data.census.gov/all?q=population%20in%20York%20city,%20Nebraska>)

York Municipal Airport encompasses approximately 467 acres at an elevation of 1,669 feet and is owned and operated by the City of York. **Exhibit A** depicts the airport in its regional setting.

AIRPORT ECONOMIC IMPACT

In 2019, the NDOT Division of Aeronautics commissioned an economic impact study of the commercial service and general aviation airports in Nebraska, titled *Nebraska Aviation Counts*. The study examined 70 general aviation airports and nine commercial service airports, many of which are included in the FAA's *National Plan of Integrated Airport Systems* (NPIAS).

Table 1A presents the economic impact of Nebraska's airport system, as well as the specific economic impact of York Municipal Airport. JYR accounted for 40 jobs, over \$1.5 million in payroll, and nearly \$4 million in total economic impact.

TABLE 1A Airport Economic Impact		
	Nebraska	York Municipal Airport
Total Employment	90,300	40
Total Payroll	\$3.5 Billion	\$1,522,000
Total Economic Impact	\$8.6 Billion	\$3,788,000

Source: *Nebraska Aviation Counts Economic Impact Study, 2019*

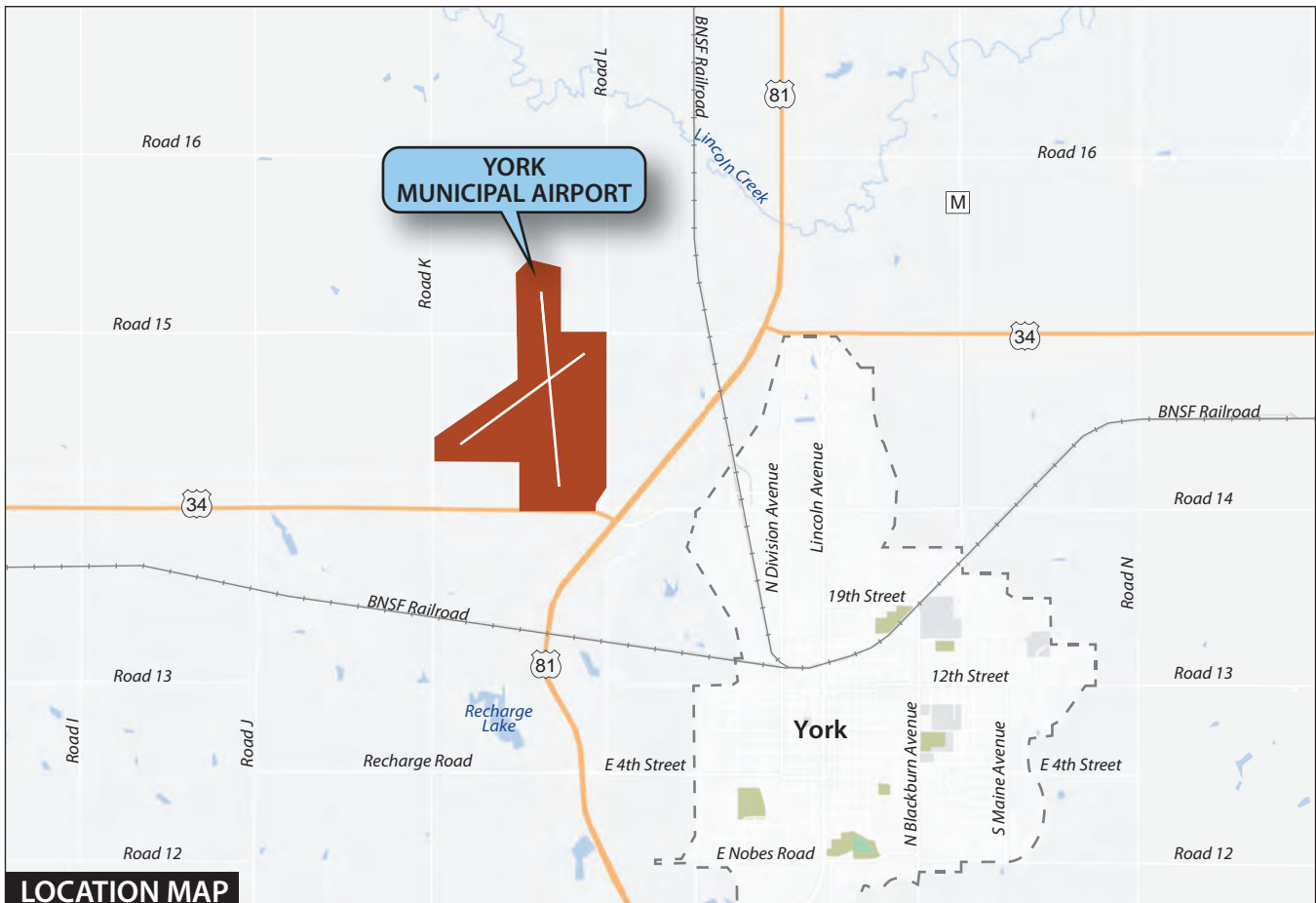
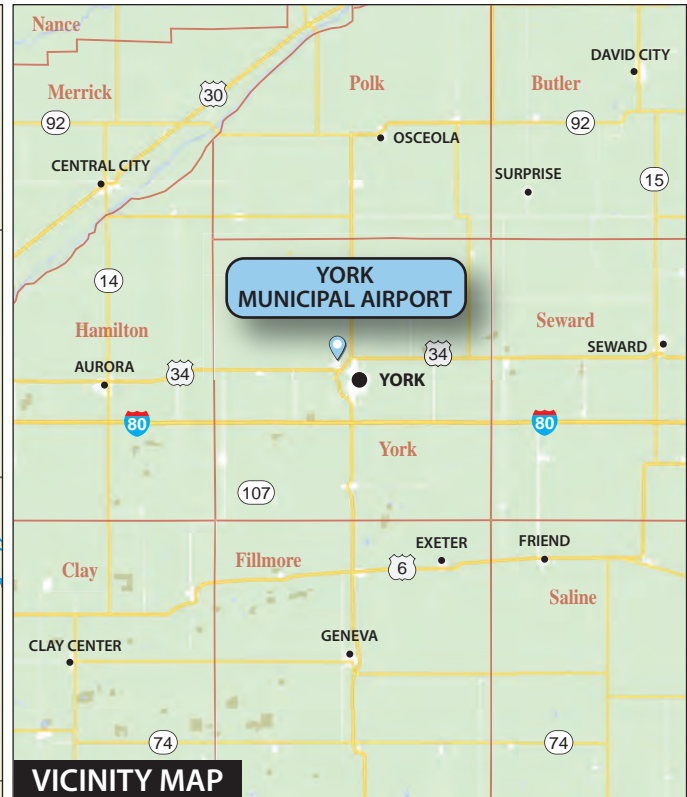
AIRPORT ROLE

An airport's role – both nationally and regionally – plays a critical role in facility planning. At the national level, the NPIAS categorizes airports based on their importance to national air transportation. Airports included within the NPIAS qualify for federal funding through the Airport Improvement Program (AIP).

York Municipal Airport is classified as a general aviation (GA) airport in the NPIAS. GA airports are further classified into four categories: National, Regional, Local, and Basic. JYR falls into the Local GA category. Local GA airports are located near large population centers – but not necessarily in metropolitan areas – and accommodate flight training and emergency services. Local GA airports account for 40 percent of all NPIAS airports.

At the state level, York Municipal Airport is included in the Nebraska Aviation System Plan (NASP) under the NDOT Division of Aeronautics. NDOT provides statewide planning to airports through the NASP, which was last updated in 2002 but is currently undergoing an update.² The primary purpose of a state airport system plan is to study the performance and interaction of the entire aviation system. The objective of the NASP is the identification, preservation, and enhancement of the aviation system to meet current and future demand. The NASP also provides guidance on maximizing the system benefits of airport investments and aligning federal priorities with state and local objectives.

² Nebraska Department of Transportation, Division of Aeronautics, *Aviation in Nebraska* (<https://govdocs.nebraska.gov/epubs/A4000/B004-2002.pdf>), 2002



According to the most recent annual report (2023) from the Nebraska Department of Transportation, there are 79 public-use airports within the state’s airport system with a total of 1,817 based aircraft at public-use airports across the state’s aviation system. York Municipal Airport is one of 18 National airports in the State of Nebraska. National airports maintain a consistent and contributing role in enabling the local, regional, and statewide economy to access the national and worldwide economy. According to the 2002 NASP, National airports should have an airport reference code (ARC) of C-II or greater and have a primary runway length intended to meet the needs of 75 percent of large aircraft at 60 percent useful load. Other necessities include a precision instrument approach, full parallel taxiways, a precision approach path indicator (PAPI system)/medium intensity approach lighting system with runway alignment indicator lights (MALSR), and landside facilities to meet aviation needs.³

GRANT HISTORY

The airport has been the recipient of federal grants, which are funded through the AIP. Dating back to 2005, the AIP has provided more than \$2.7 million for improvement projects at the airport, including land acquisition for approaches, runway safety area construction, building construction, runway light installation, and runway rehabilitation. The complete list of projects and their associated grant amounts is included in **Table 1B**.

Year	Grant	Project Description	State Grant	FAA Grant	Total
1981	SA-PG-01	Site Selection, Airport Layout Plan, Financial Plan	\$8,000	–	\$8,000
1982	3-31-0104-01	Acquire Land	\$50,000	\$900,000	\$950,000
1983	3-31-0104-02	Acquire Land, Site Preparation & Grading for New Airport 17/35, 5/23, Connecting Taxiway, Apron and Hangar Area	\$51,212	\$776,824	\$828,036
1984	3-31-0104-03	Concrete Paving & Lighting 17/35, Connecting Taxiway & Apron	\$100,000	\$1,312,000	\$1,412,000
1984	SA-02	Relocate T-Hangar and Shop Hangar to New Airport	\$50,000	–	\$50,000
1984	SA-03	Admin. Building, Access Road, T-hangar Taxiway	\$100,000	–	\$100,000
1994	3-31-0104-04	Extension of Runway 17/35	\$72,105	\$2,163,147	\$2,235,252
1996	SA-06	T-Hangar Taxiway	\$23,700	–	\$23,700
2000	SA-07	Install AWOS III	\$60,000	–	\$60,000
2001	3-31-0104-05	Construct and Light Partial Parallel Taxiway (Phase I)	\$65,067	\$828,500	\$893,567
2002	3-31-0104-06	Construct and Light Partial Parallel Taxiway (Phase II)		\$373,000	\$373,000

Continues on next page.

³ Nebraska Department of Transportation, 2023 Annual Report (<https://dot.nebraska.gov/media/oiwol5p5/annual-report-2023-final.pdf?fr=sNGU1ZDYwMTI5NDc>), 2023

TABLE 1B | FAA Grant History (continued)

2003	3-31-0104-07	Update Airport Layout Plan	–	\$24,300	\$24,300
2007	3-31-0104-09	Acquire Land for Approaches	–	\$121,384	\$121,384
2007	3-31-0104-08	Construct Runway Safety Area 17/35 (Phase I)	–	\$102,324	\$102,324
2008	3-31-0104-10	Construct Runway Safety Area 17/35 (Phase II)	–	\$390,000	\$390,000
2010	3-31-0104-11	Replace MIREL, PAPI, Beacon, and Wind Cone	–	\$268,000	\$268,000
2013	3-31-0104-12	Construct 2 Place Hangar with Apron Expansion, ALP Revisions	–	\$750,000	\$750,000
2017	3-31-0104-13	Rehabilitate Airport Pavement	–	\$675,000	\$675,000
2021	3-31-0104-15	Acquire Snow Removal Equipment	–	\$370,000	\$370,000
2023	3-31-0104-18	Runway Rehabilitation, Preliminary Engineering Services		\$92,790	\$92,790
2023	3-31-0104-19	Airport Layout Plan Update		\$300,000	\$300,000
TOTAL			–	\$9,447,269	\$10,027,353

N/A = data unavailable

Source: NDOT Division of Aeronautics Grant History; York Municipal Airport

CLIMATE

Climate plays an important role in airport planning. For example, runway length requirements are directly impacted by temperature, humidity, and elevation, while wind direction and speed determine the optimal orientation of the runway. The frequency of cloud cover and inclement weather determines the need for navigational aids and lighting. Knowledge of these weather conditions during the planning process allows the airport to prepare for any improvements that may be needed on the airfield.

Climate data were sourced from the National Oceanic and Atmospheric Administration (NOAA). As depicted in **Figure A**, the hottest month is July, with a mean maximum temperature of 87.1 degrees Fahrenheit (°F), and January is the coldest month, with an average low of 12.6°F. Precipitation is most abundant during the month of May, which receives an average of 4.92 inches of rain. During the winter months, the most snowfall recorded is in February, with an average of 9.1 inches of snow.

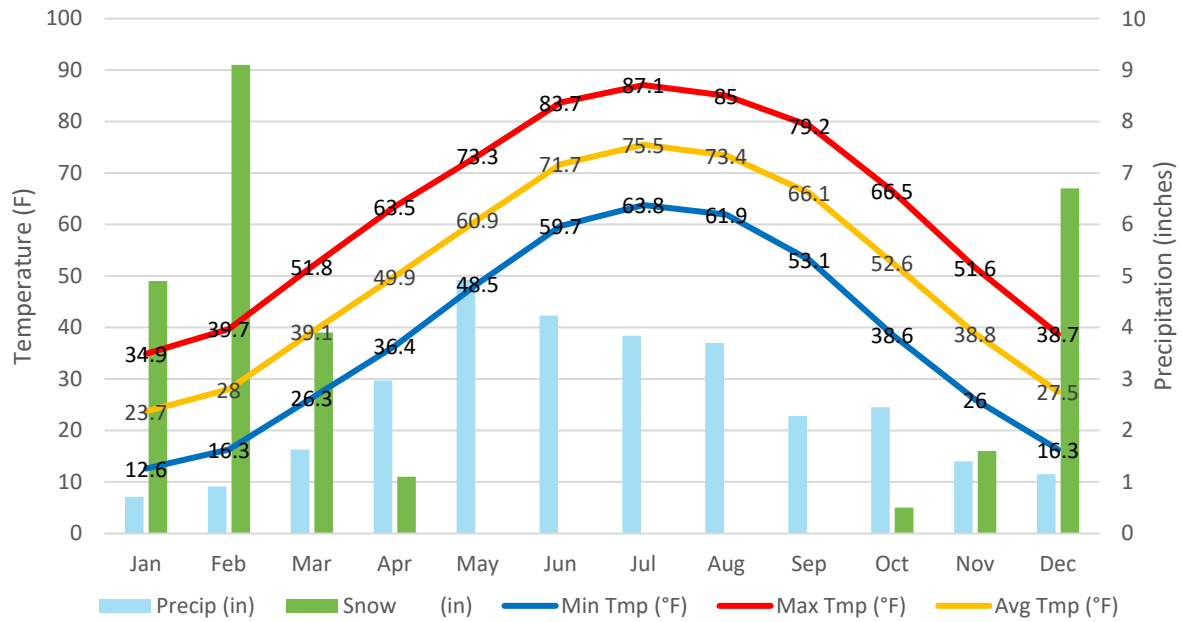


Figure A – Climate Data⁴

WIND DATA

Wind data have also been collected from York Municipal Airport for the on-site automated weather observation system (AWOS), including wind speeds and direction. Observations of wind direction were collected over a 10-year period beginning January 1, 2014, and ending December 31, 2023. For the operational safety and efficiency of an airport, it is desirable for the runway to be oriented as close as possible to the direction of the prevailing wind. This reduces the impact of wind components perpendicular to the direction of travel of an aircraft that is landing or taking off.

Exhibit B presents the wind coverage for the runway system at York Municipal Airport. In all weather conditions, Runway 17-35 provides 92.86 percent coverage at 10.5 knots, 96.38 percent coverage at 13.0 knots, 98.83 percent at 16 knots, and 99.70 percent at 20.0 knots. When combined with crosswind Runway 5-23, the wind coverage is 96.32 percent at 10.5 knots, 98.51 percent at 13.0 knots, and increases to nearly 100 percent at 16 and 20 knots. The facility requirements section, presented later in this report, includes additional information pertaining to wind coverage and runway orientation.

⁴ National Oceanic and Atmospheric Administration (NOAA) (<https://www.ncei.noaa.gov/access/us-climate-normals/#dataset=normals-monthly&timeframe=30&location=NE&station=USC00259513>), 2024

AIRSIDE FACILITIES

Airport facilities are functionally classified into two broad categories: airside and landside. The airside category includes those facilities directly associated with aircraft operations, such as runways and taxiways. The landside category includes those facilities necessary to provide a safe transition from surface to air transportation, such as aircraft aprons, terminal and hangar buildings, and support functions (such as fixed base operator [FBO] services).

Existing airside facilities are illustrated on **Exhibit C** and generally consist of the following.

RUNWAYS AND TAXIWAYS

The airport configuration at York Municipal Airport consists of two runways. Runway 17-35 is constructed of concrete and serves as the primary runway. It measures 5,898 feet long by 100 feet wide and is oriented in a north-south manner. Runway 17-35 is in good condition and has a strength rating of 30,000 pounds single wheel loading (SWL) and 38,000 pounds dual wheel loading (DWL). The landing threshold on Runway 35 is displaced by 400 feet.

The crosswind runway, Runway 5-23, is constructed of turf, measures 4,500 feet long by 150 feet wide, and is oriented in a northeast-southwest manner. Runway 5-23 is also in good condition.

Taxiways are constructed primarily to facilitate aircraft movements to and from the runway system. Some taxiways are necessary simply to provide access between the aprons and runways, whereas other taxiways become necessary to provide safe and efficient use of the airfield as activity increases at an airport.

Runway 17-35 is served by a full-length parallel taxiway and five connecting taxiways, each of which are 35 feet wide and provide access to all landside facilities.

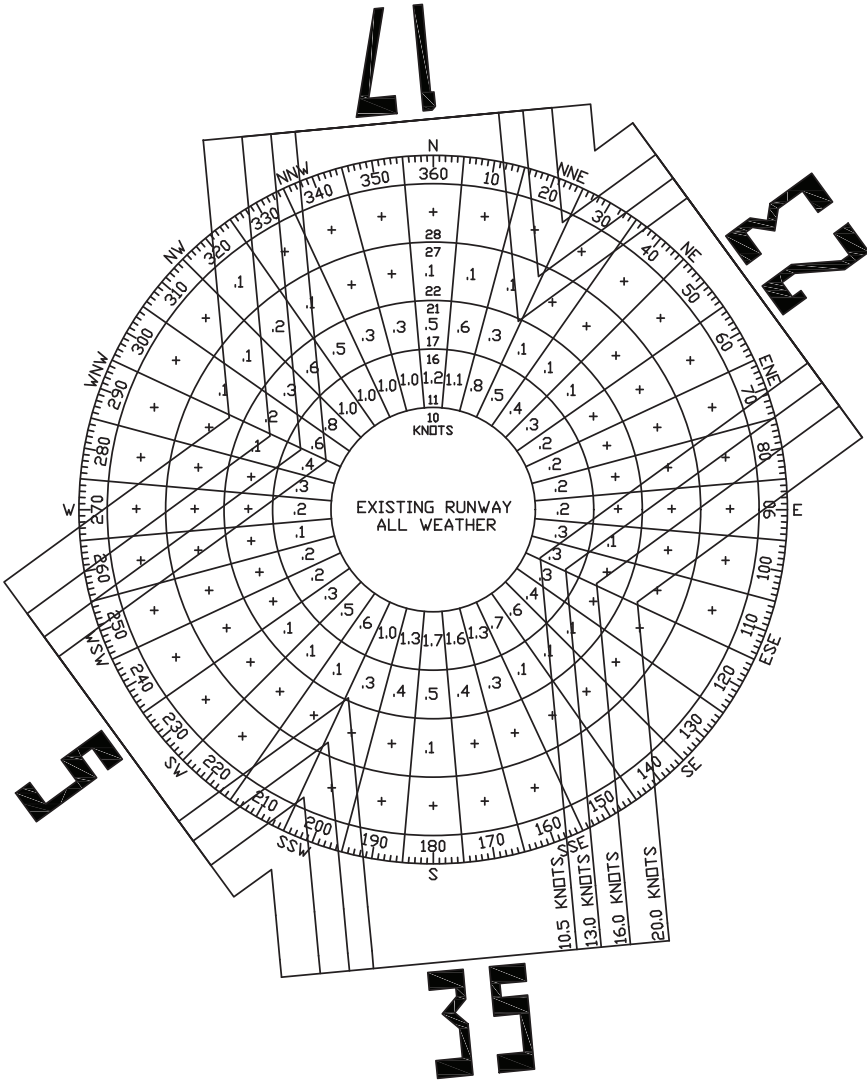
RUNWAY SAFETY AREAS

As shown on the prior Airport Layout Plan (ALP) for JYR, the airfield is currently designed to B-II existing and C-II ultimate standards. Accordingly, the following table presents dimensions of the airport's prescribed runway safety areas in place since the previous planning effort.

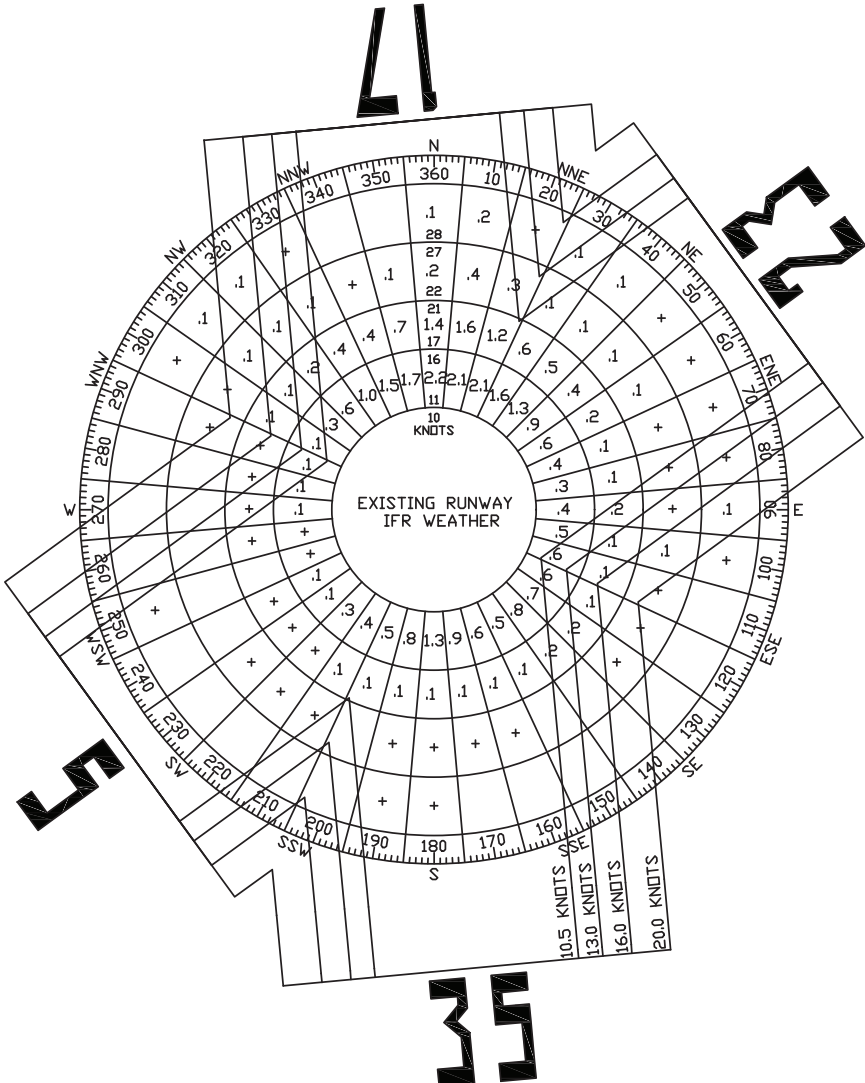
TABLE 1C Runway Safety Area Dimensions from JYR ALP		
	Runway 17-35	Runway 5-23
Ultimate Runway Design Code	C-II	B-II
RSA (width x length beyond runway end)	400' x 1,000'	150' x 0'
ROFA (width x length beyond runway end)	800' x 1,000'	500' x 0'
ROFZ (width x length beyond runway end)	400' x 200'	250' x 0'
Runway Protection Zones		
Approach (inner width x outer width x length)	1,000' x 1,510' x 1,700'	1,000' x 500' x 700'
Departure (inner width x outer width x length)	1,000' x 1,510' x 1,700'	1,000' x 500' x 700'

Key: RSA – Runway Safety Area; Runway Obstacle Free Area (ROFA); Runway Obstacle Free Zone (ROFZ)
Source: York Municipal Airport ALP, (March 2008, Rev. February 2015)

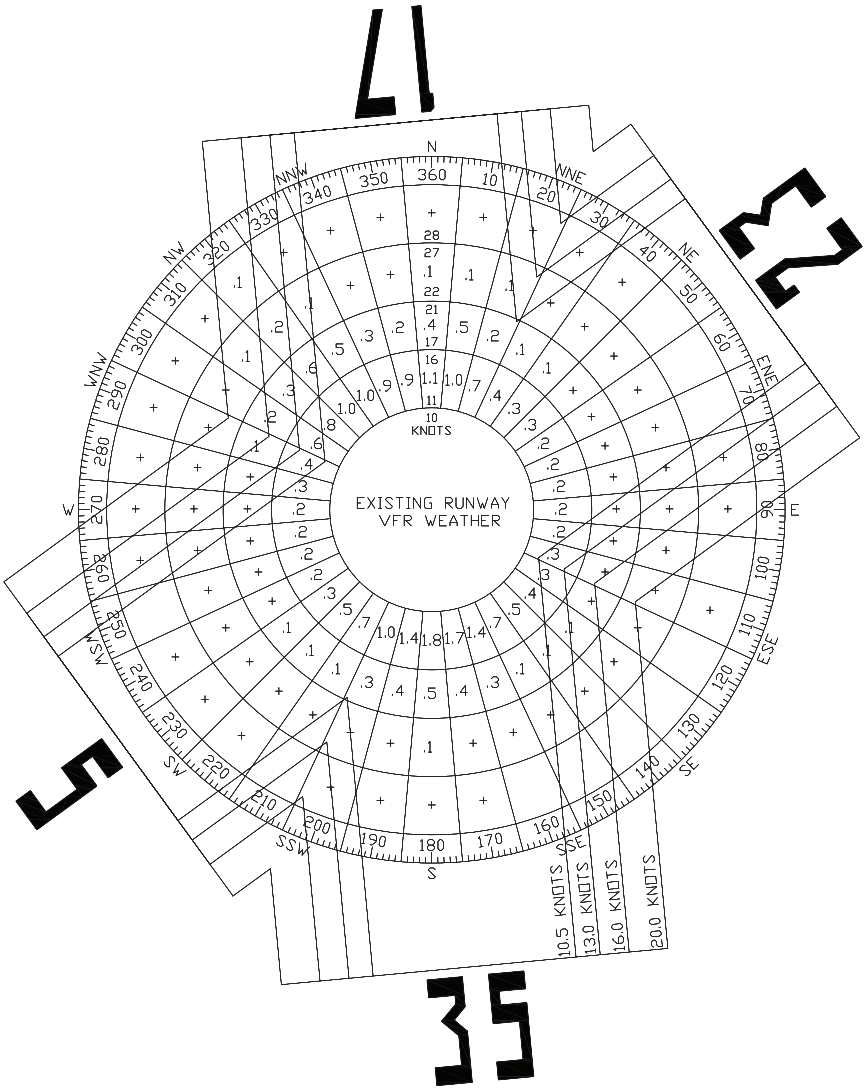
DESCRIPTION	10.5 KNOTS	13.0 KNOTS	16.0 KNOTS	20.0 KNOTS
ALL RUNWAYS - ALL WEATHER	96.32%	98.51%	99.49%	99.88%
ALL RUNWAYS - IFR	96.56%	98.67%	99.50%	99.85%
ALL RUNWAYS - VFR	96.48%	98.61%	99.54%	99.89%



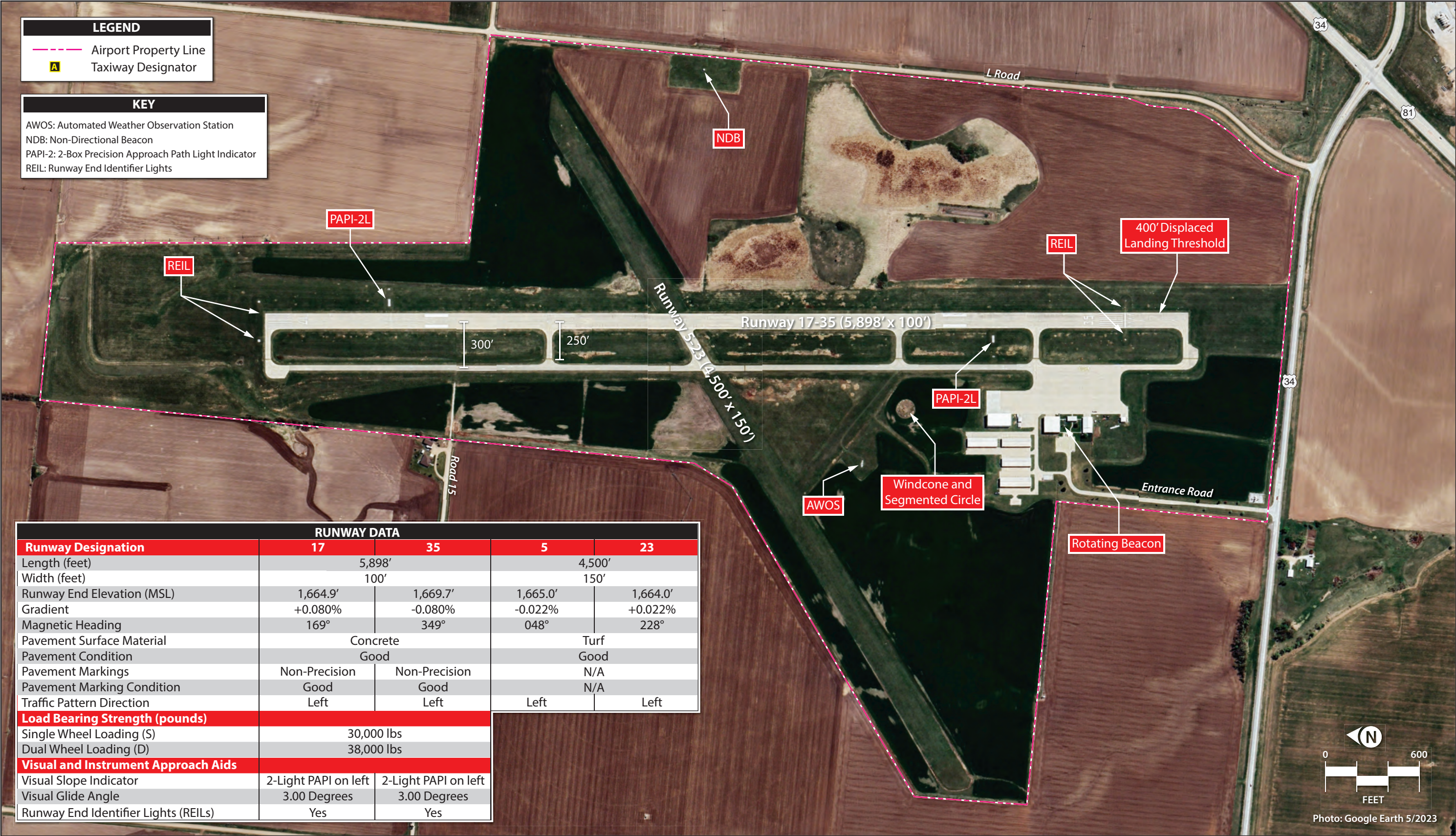
DESCRIPTION	10.5 KNOTS	13.0 KNOTS	16.0 KNOTS	20.0 KNOTS
RUNWAY 17/35 - ALL WEATHER	92.86%	96.38%	98.83%	99.70%
RUNWAY 17/35 - IFR	90.88%	95.06%	97.99%	99.32%
RUNWAY 17/35 - VFR	93.26%	96.65%	98.97%	99.75%



DESCRIPTION	10.5 KNOTS	13.0 KNOTS	16.0 KNOTS	20.0 KNOTS
RUNWAY 5/23 - ALL WEATHER	80.37%	88.08%	95.24%	98.54%
RUNWAY 5/23 - IFR	78.71%	87.39%	95.14%	98.67%
RUNWAY 5/23 - VFR	80.94%	88.53%	95.51%	98.62%



SOURCE: 725512 YORK MUNICIPAL AIRPORT ANNUAL PERIOD RECORD 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023



AIRFIELD LIGHTING

Airfield lighting systems extend an airport's usefulness into periods of darkness and/or poor visibility. Various lighting systems are installed at an airport for this purpose. These lighting systems are categorized by function and are summarized as follows:

Identification Lighting | The location of the airport is identified by a rotating beacon that projects two beams of light (one white and one green) 180 degrees apart. The rotating beacon at York Municipal Airport is located southwest of the airport administration building. It operates from sunset to sunrise and during periods of low visibility conditions as detected by photocell.

Runway and Taxiway Lighting | Runway and taxiway edge lighting systems utilize light fixtures placed near the edge of the pavement to define the lateral limits of the pavement. Light fixtures are set atop frangible supports, so if one is struck by an object – such as an aircraft wheel – it can easily break away. Both runway and taxiway lighting are imperative for safe and efficient access to and from aircraft parking areas and the runway, especially at night and during times of low visibility. Runway 17-35 is equipped with medium intensity runway lighting (MIRL). The parallel and connecting taxiways are equipped with medium intensity taxiway lighting (MITL). Runway 5-23 is not equipped with runway or taxiway lighting systems; however, cones are present to identify the runway thresholds and edge boundary.



Example Taxiway Edge Lighting Fixture

Visual Approach Lighting | Both ends of Runway 17-35 are equipped with two-box precision approach path indicators (PAPI-2s). The PAPIs project a red or white light up and away from the runway at a 3.0-degree glide path, which pilots can interpret to determine if they are on the correct glide path to landing.

Runway End Identification Lights (REILs) | REILs provide a visual identification of the runway end for landing aircraft. The REILs consist of two synchronized flashing lights that are located laterally on each side of the runway end, facing the approaching aircraft. These flashing lights can be seen, day or night, for up to 20 miles, depending on visibility conditions. REILs are present on both ends of Runway 17-35.

Pilot-Controlled & Photocell Functions | The primary lighting control at JYR is pilot-controlled via radio signal. The airfield lighting and navigation system is also equipped with a photocell. If the pilot activates the radio control during the day, only the PAPIs and REILs turn on and the runway lights do not illuminate. If activated during night or other low light conditions (as detected by photocell), both the runway lights illuminate and the navigational aids turn on.

PAVEMENT MARKINGS

Pavement markings aid in the movement of aircraft along airport surfaces and identify closed or hazardous areas on the airport. The non-precision markings on Runway 17-35 identify the runway threshold, runway designation, runway aiming points, and runway centerline. Markings at the end of Runway 35 identify the displaced threshold, which is not available for landings.



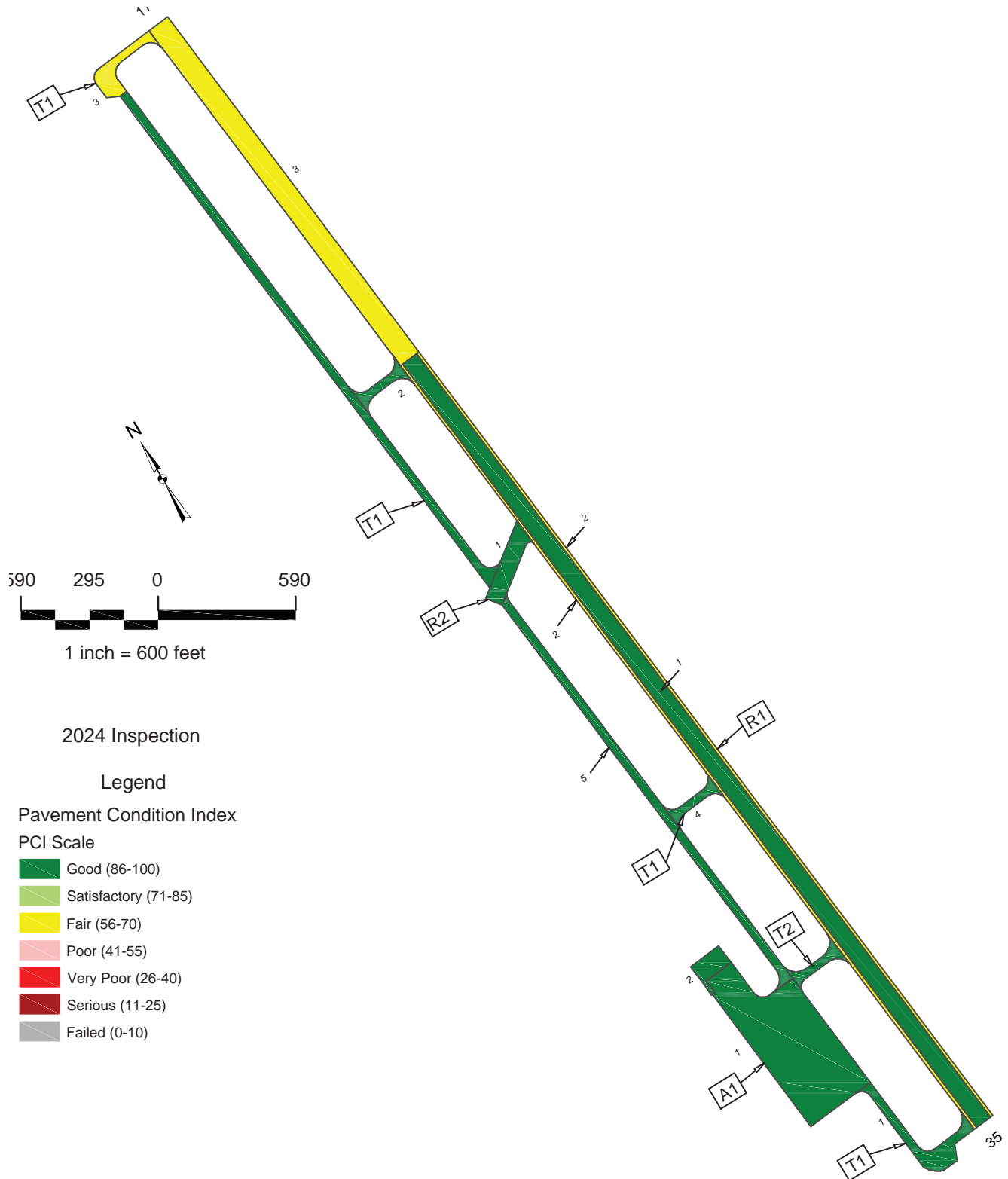
Runway Pavement Markings

Taxiways and taxilanes are marked with yellow centerline markings to assist pilots in maintaining proper clearance from pavement edges and objects near the taxiway/taxilane edges. The parallel taxiway has 300 feet of centerline-to-centerline separation from Runway 17-35. Each connecting taxiway to Runway 17-35 is marked with yellow holding position markings. The holding position marking on each connecting taxiway is 250 feet from the Runway 17-35 centerline.

PAVEMENT CONDITION

In 2024, the Nebraska Statewide Pavement Management System conducted a pavement condition assessment at York Municipal Airport. This study consisted of visual inspections and evaluation in accordance with the FAA guidance. The various pavements surfaces were inspected and assigned a pavement condition index number (PCI). The PCI scale ranges from a value of 0 (representing a failed pavement condition) to a value of 100 (representing pavement in good condition). In general terms, pavements above a PCI of 70 that are not exhibiting significant load-related distress will benefit from preventative maintenance actions, such as crack sealing and surface treatments. Pavements with a PCI of 100 to 86 fall within the “good” condition, 85 to 71 falls within the “satisfactory” condition, and 70 to 56 falls within the “fair” condition. Pavements with a PCI of 55 to 41 fall within the “poor” condition, 40 to 26 falls within the “very poor” condition, 25 to 11 falls within the “serious” condition, and 10 to 0 fall within the “failed” condition. Pavements with a PCI of 70 or below may require major rehabilitation, such as an overlay. Often when the PCI is less than 40, reconstruction is the only viable alternative due to the substantial damage to the pavement section.

The PCI study showed the parallel taxiway and most of the connecting taxiways have PCI ratings in the “good” category, except for the north end connecting taxiway with a PCI rating of 60, which puts the pavement condition in the “fair” category. The extension portion of Runway 17-35 has a PCI rating of 67 and the edges spanning the length of the Runway 17-35 have a PCI rating of 68, putting those sections in the “fair” category. The center portion of Runway 17-35, as well as the apron and other connecting taxiways, have PCI ratings in the “good” category. **Exhibit D** illustrates the PCI conditions at York Municipal Airport. Throughout the planning period it is recommended that the primary pavements should be maintained at a PCI of 75 and above. In this case, all the airfield pavement is considered



primary. Primary pavements include the primary runways, primary taxiways, and primary aprons, in contrast to secondary runways and their associated taxiways and aprons.

It should be noted that FAA Advisory Circular 10/5320-6G states “Pavement Condition Index (PCI) numbers should be ‘used with caution since they only give a relative indication of the surface condition of a pavement. The PCI numbers referenced for maintenance, rehabilitation and reconstruction are just relative limits and should not be interpreted as exact limits.”

WEATHER FACILITIES

York Municipal Airport is equipped with a lighted wind cone, which provides pilots with information about wind velocity and direction. The segmented circle provides traffic pattern information to pilots. The lighted wind cone and segmented circle are located north of the apron and approximately 200 feet west of the parallel taxiway, as shown on **Exhibit C**.



Lighted Wind Cone and Segmented Circle

Many airports are equipped with automated weather observing systems (AWOS), which automatically record weather conditions, such as wind speed, wind gusts, wind direction, temperature, dew point, altimeter setting, and density altitude. This information is transmitted at regular intervals and is accessible to pilots. York Municipal Airport is equipped with an AWOS III P/T, which is located on the southwest side of the runway intersection approximately 900 feet west of the Runway 17-35 centerline, as shown on **Exhibit C**.

NAVIGATIONAL AIDS

Navigational aids are electronic devices that transmit radio frequencies, which pilots of properly equipped aircraft can translate into point-to-point guidance and position information. The types of electronic navigational aids available for aircraft flying to or from York Municipal Airport include the nondirectional beacon (NDB) and global positioning system (GPS).

An NDB is a radio transmitter that acts as a navigational aid. In contrast to other navigational aids – like the very high frequency omnidirectional range (VOR) and tactical air navigation aids (TACAN) – the signal transmitted from the NDB does not include inherent directional information. The NDB signal can be received at much greater distances at lower altitudes and it follows the curvature of the Earth to assist pilots. Pilots flying to or from York Municipal Airport can utilize the on-site York NDB, which is operational but used infrequently, as the RNAV GPS-based procedures at both ends provide significantly better minimums. The NDB at JYR is not federally owned; rather, this NAVAID is maintained by the State of Nebraska.

GPS is an additional navigational aid for pilots. GPS was initially developed by the United States Department of Defense for military navigation around the world. GPS differs from VOR in that it does not require pilots to navigate using a specific ground-based facility. GPS uses satellites placed in orbit around the earth that transmit electronic radio signals, which pilots of properly equipped aircraft can use to determine altitude, speed, and other navigational information. With GPS, pilots can navigate directly to any airport in the country and are not required to navigate using a ground-based navigational facility.

INSTRUMENT APPROACH PROCEDURES

Instrument approach procedures are a series of predetermined maneuvers established by the FAA using electronic navigational aids that assist pilots in locating and landing at an airport during low visibility and cloud ceiling conditions. The capability of an instrument approach is defined by the visibility and cloud ceiling minimums associated with that approach. Visibility minimums define the horizontal distance that a pilot must be able to see in order to complete the approach. Cloud ceilings define the lowest level a cloud layer (defined in feet above the ground) can be situated for the pilot to complete the approach. If the observed visibility or cloud ceilings are below the minimums prescribed for the approach, the pilot cannot complete the instrument approach.

The instrument approach procedures for York Municipal Airport are summarized on Table C. There are currently four published instrument approaches to the airport: area navigation (RNAV)-GPS approaches to Runway 17 and Runway 35 and NDB approaches to Runway 17 and Runway 35. Instrument approach procedures provide for visibility minimums as low as $\frac{3}{4}$ -mile and cloud ceilings of 250 feet. Each RNAV instrument approach has a localizer performance with vertical guidance (LPV) component that provides both course and glide path guidance.

Each approach also has circling minimums, which allow pilots to land on any active runway at the airport and provide flexibility for a pilot to land on the runway most closely aligned with the prevailing wind at the time. A circling approach will have higher visibility minimums than other straight-in instrument approaches in order to provide pilots with sufficient visibility and ground clearance to navigate visually from the approach to the desired runway end for landing.

TABLE 1D | Instrument Approach Procedures

	WEATHER MINIMUMS BY AIRCRAFT TYPE			
	Category A	Category B	Category C	Category D
RNAV (GPS) – Runway 17				
LP MDA	1,915' / ¾-mile			N/A
LNAV/VNAV DA	2,031' / 1¼-mile			N/A
LNAV MDA	2,000' / 1-mile			N/A
Circling	2,060' / 1-mile	2,180' / 1-mile	2,200' / 1½-mile	N/A
RNAV (GPS) – Runway 35				
LP MDA	1,920' / ¾-mile			N/A
LNAV/VNAV DA	2,004' / 1¼-mile			N/A
LNAV MDA	2,060' / 1-mile			N/A
Circling	2,060' / 1-mile	2,180' / 1-mile	2,200' / 1½-mile	N/A
NDB – Runway 17				
S-17	2,300' / 1-mile		2,300' / 1¾-mile	N/A
Circling	2,300' / 1-mile		2,300' / 1¾-mile	N/A
NDB – Runway 35				
S-35	2,420' / 1-mile	2,420' / 1¼-mile	2,420' / 2¼-mile	N/A
Circling	2,420' / 1-mile	2,420' / 1¼-mile	2,420' / 2¼-mile	N/A

xxx' / x-mile = decision altitude/visibility minimum

Aircraft categories are based on the approach speed of aircraft, which is determined as 1.3 times the stall speed in landing configuration, as follows:

- Category A: 0-90 knots (e.g., Cessna 172)
- Category B: 91-120 knots (e.g., Beechcraft King Air)
- Category C: 121-140 knots (e.g., Canadair Challenger, Boeing 737)
- Category D: 141-166 knots (e.g., Gulfstream IV, Boeing MD-88)
- Category E: Greater than 166 knots (e.g., certain large military or cargo aircraft)

Source: AirNav (<https://www.airnav.com/airport/JYR>)

LANDSIDE FACILITIES

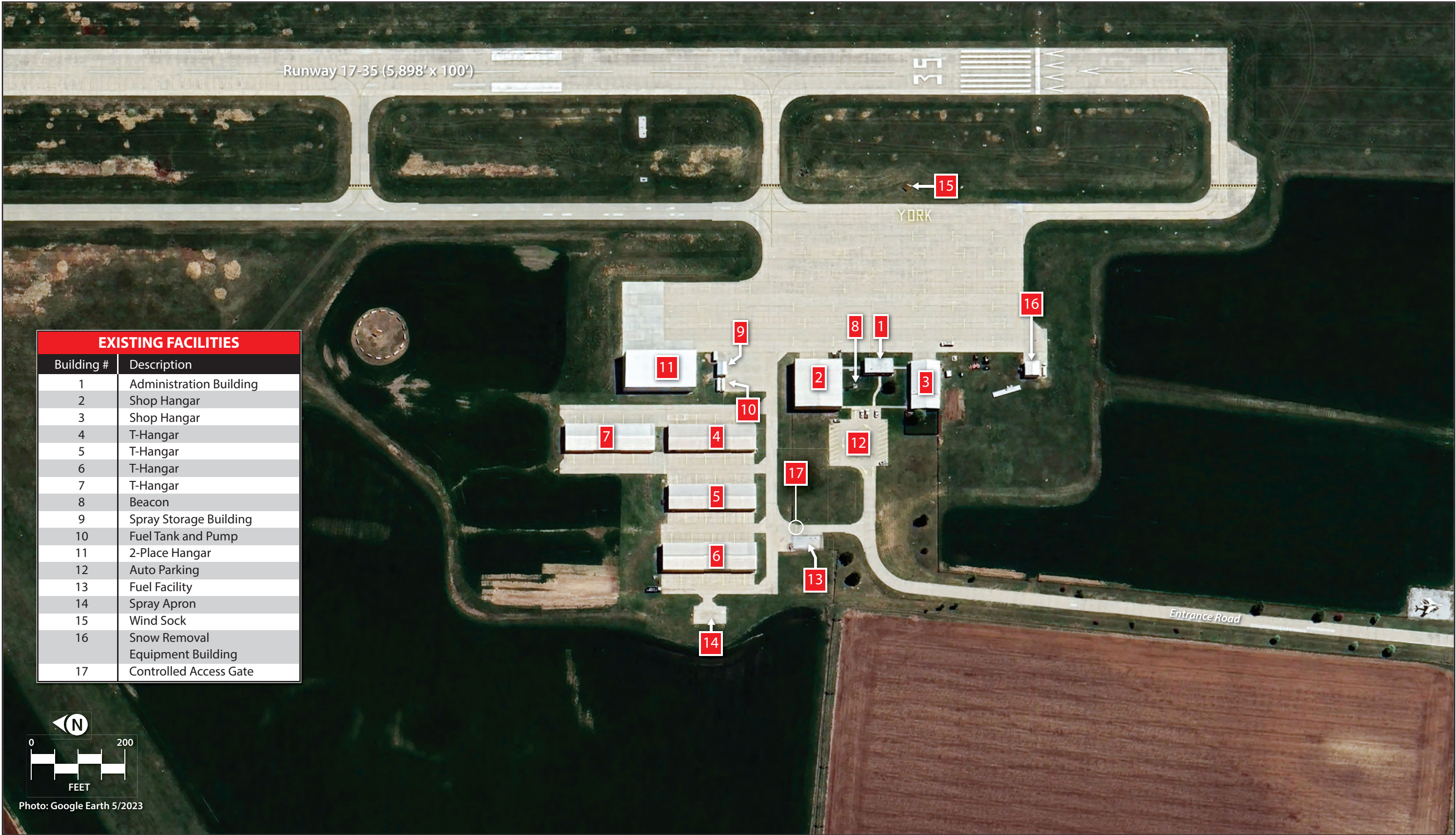
Landside facilities are the ground-based facilities that support aircraft and pilot/passenger handling functions. Landside facilities typically include the airport terminal building, aircraft storage hangars, aircraft parking aprons, and support facilities, such as fuel storage and roadway access. These facilities provide the essential interface between air and ground transportation modes. Landside facilities at JYR are identified on **Exhibit E**.

AIRPORT TERMINAL

York Municipal Airport has an airport administration/terminal building, which is located northwest of the parking apron and is accessed from South Hall Steet. The terminal building is approximately 2,000 square feet and has a pilots' lounge, public waiting area, restrooms, and offices for airport administration.



Airport Administration/Terminal Building



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AIRCRAFT PARKING APRON

The apron area includes space for tiedowns, aircraft parking, and taxilane access to hangar facilities. The apron is located directly east of the administration building and offers 48 marked aircraft parking spaces, totaling approximately 19,500 square yards.



Apron and Hangars

AIRCRAFT STORAGE

The airport has four T-hangar facilities, two maintenance hangars, and one box hangar. Maintenance hangars total 15,500 square feet and are occupied by businesses on the airfield. Box hangar space totals approximately 11,650 square feet. T-hangar space totals approximately 40,780 square feet, with 32 individual units. In all, York Municipal Airport has approximately 67,930 square feet of aircraft storage hangar capacity.

FUEL STORAGE FACILITIES

Located north of the airport administration building are two aboveground fuel storage tanks, one of which holds 10,000 gallons of 100LL AvGas; the other holds 10,000 gallons of Jet A fuel. Fuel on the airport is distributed through full-service fuel trucks. The airport serves 100LL AvGas from a 1,200-gallon truck and Jet A fuel from a 2,200-gallon truck. There are several privately owned and maintained aboveground fuel tanks on the property, as well.



Airport Fuel Truck

VEHICLE ACCESS AND PARKING

Vehicles can access the airport through the entrance via U.S. Route 34. Parking on the airport consists of 34 paved standard parking spots, which are located west of the airport administration building. This parking lot constitutes the only designated parking area at the airport and serves the general public, airport employees, and general aviation pilots.

AIRCRAFT RESCUE AND FIREFIGHTING (ARFF) FACILITIES

As a GA airport, York Municipal Airport is not required to have on-site ARFF equipment/facilities. The closest fire department is the York Fire Department, which is located two miles southeast of the airport.

AIRSPACE CHARACTERISTICS

The airspace within the National Airspace System (NAS) is divided into six different categories, or classes. The airspace classifications that comprise the NAS are presented on **Exhibit F**. These categories of airspace are Classes A, B, C, D, E, and G airspace. Each class has its own criteria that must be met in terms of required aircraft equipment, operating flight rules (visual or instrument flight rules), and procedures. Classes A, B, C, D, and E are considered controlled airspace, which requires pilot communication with the controlling agency prior to airspace entry and throughout operation within the designated airspace. Pilot communication procedures, required pilot ratings, and required minimum aircraft equipment vary, depending on the class of airspace and the type of flight rules in use.

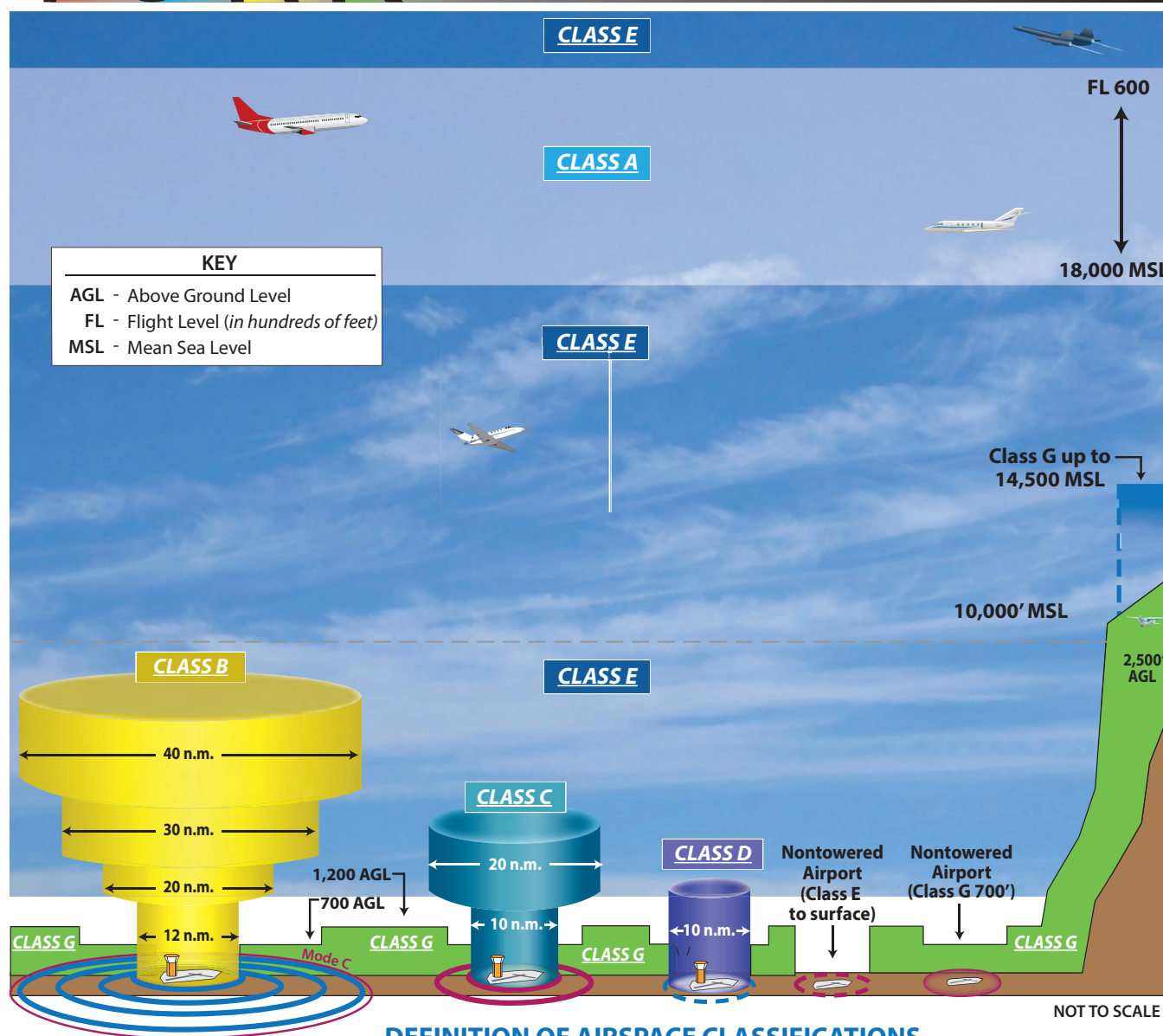
As shown on **Exhibit G**, York Municipal Airport is located within Class E airspace, which extends from 700 feet above ground level (AGL) up to 18,000 feet mean sea level (MSL). Class G airspace extends from the surface to the base of the overlying Class E airspace. In Class E airspace, aircraft conducting visual flights are not required to be in radio communication with air traffic control facilities. Class D airspace is controlled airspace that surrounds airports with airport traffic control towers. All aircraft operating within Classes A, B, C, and D airspace must be in contact with the air traffic control facility responsible for that airspace.

Exhibit G also depicts other airspace features within the vicinity of York Municipal Airport, including Victor airways, wind farms, military operations areas (MOAs), and military training routes (MTRs). No wilderness areas are present within the vicinity depicted on **Exhibit G**.

Victor airways are corridors of airspace that extend between VOR facilities. These corridors are eight miles wide and extend from 1,200 feet up to (but not including) 18,000 feet. Victor Airway V138 extends west to/from Central Nebraska Regional Airport, located approximately 33.7 nautical miles (nm) west of York Municipal Airport. Victor Airway V138 also extends east to/from Lincoln Airport, located approximately 38.9 nm east of York Municipal Airport.

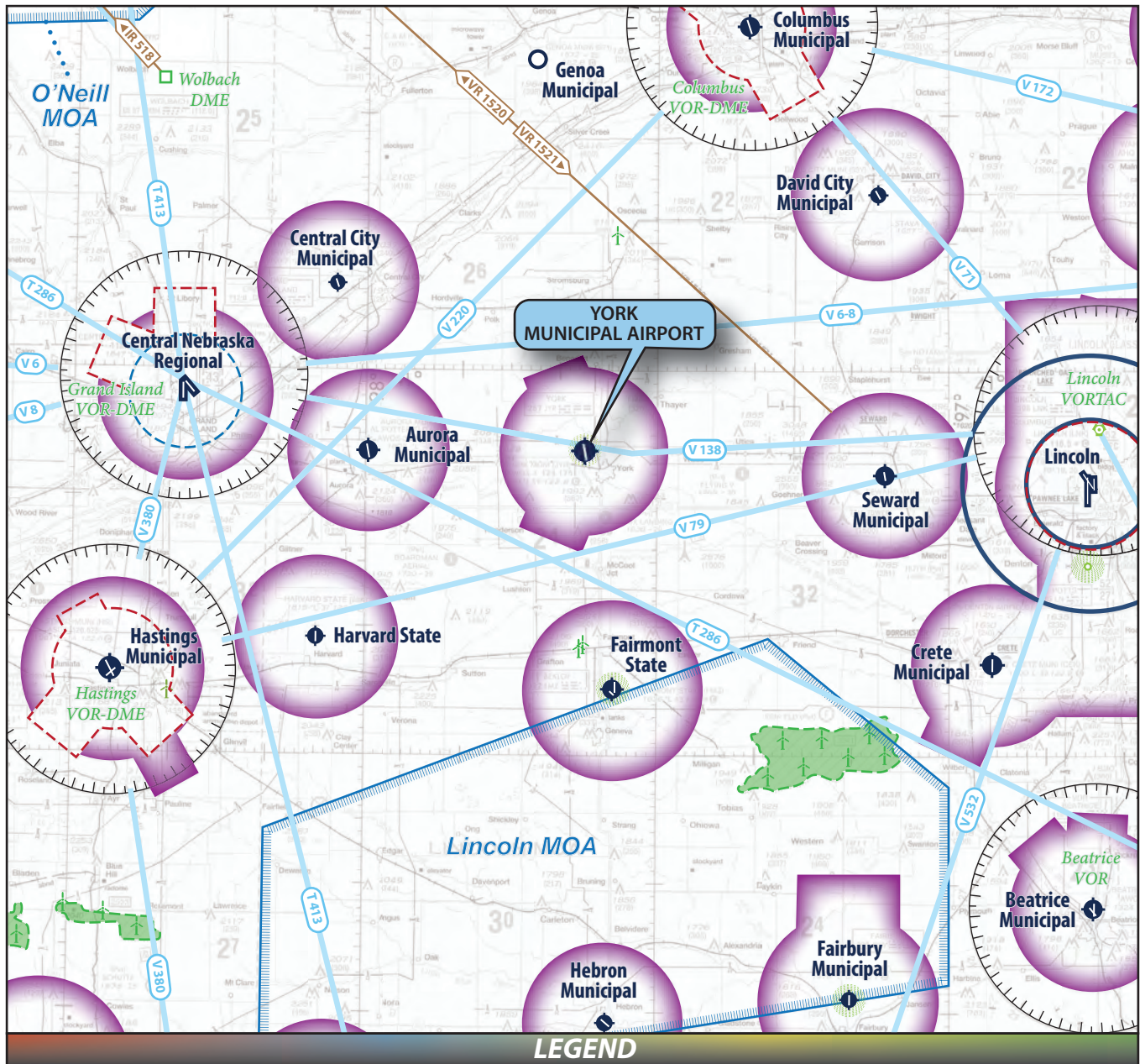
MOAs define airspace in which a high level of military activity is conducted and are intended to separate civil and military aircraft. Civilian air travel is not restricted in MOAs, but pilots are advised to exercise extreme caution when flying within an MOA when military activity is being conducted. The Lincoln MOA is located south of the airport and the O'Neill MOA is located northwest of the airport. The Lincoln MOA is operated at times that are issued by Notice to Air Missions (NOTAM), normally from 0900-1600 Tuesday - Sunday. The designated altitude for the Lincoln MOA is from 8,000 feet MSL up to (but not including) 18,000 feet MSL. The O'Neill MOA is operated from 0930-1145 and 1400-1600 Tuesday - Saturday and at other times by Department of Defense NOTAM. The designated altitude for the O'Neill MOA is from 500 feet AGL up to (but not including) 18,000 feet MSL.

Wind turbine farms and individual wind turbine obstructions have been identified primarily south of York Municipal Airport. Pilots must be aware of the locations of wind turbines, as the structures have the capacity to exceed 499 feet AGL and extend into Class E airspace, and the highest points of turbine blades are not typically lighted.



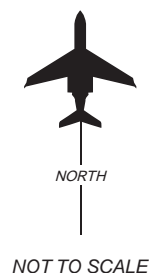
- CLASS A** Think A - Altitude. Airspace above 18,000 feet MSL up to and including FL 600. Instrument Flight Rule (IFR) flights only, ADS-B 1090 ES transponder required, ATC clearance required.
- CLASS B** Think B - Busy. Multi-layered airspace from the surface up to 10,000 feet MSL surrounding the nation's busiest airports. ADS-B 1090 ES transponder required, ATC clearance required.
- CLASS C** Think C - Mode C. Mode C transponder required. ATC communication required. Generally airspace from the surface to 4,000 feet AGL surrounding towered airports with service by radar approach control.
- CLASS D** Think D - Dialogue. Pilot must establish dialogue with tower. Generally airspace from the surface to minimum 2,500 feet AGL surrounding towered airports.
- CLASS E** Think E - Everywhere. Controlled airspace that is not designated as any other Class of airspace.
- CLASS G** Think G - Ground. Uncontrolled airspace. From surface to a 1,200 AGL (in mountainous areas 2,500 AGL) Exceptions: near airports it lowers to 700' AGL; some airports have Class E to the surface. Visual Flight Rules (VFR) minimums apply.

Source: www.faa.gov/regulations_policies/handbooks_manuals/aviation/phak/media/15_phak_ch15.pdf



- Airport with other than hard-surfaced runway
- Airport with hard-surfaced runways 1,500' to 8,069' in length
- Airports with hard-surfaced runways greater than 8,069' or some multiple runways less than 8,069'
- Non-Directional Radio Beacon (NDB)
- DME
- VORTAC
- Compass Rose
- Windfarm

- Class C Airspace
- Class D Airspace
- Class E Airspace with floor 700 ft. above surface that laterally abuts 1200 ft. or higher Class E airspace
- Class E Airspace (SFC)
- Victor Airways
- Military Training Route
- Military Operations Area (MOA)



Source: Omaha Sectional Chart, US Department of Commerce, National Oceanic and Atmospheric Administration, March 21, 2024

AIRPORT TRAFFIC CONTROL

There is no airport traffic control tower at York Municipal Airport; therefore, no formal terminal air traffic control services are available for aircraft landing at or departing from the airport. Aircraft operating in the airport vicinity are not required to file any type of flight plan or contact any air traffic control facility unless they are entering airspace in which contact is mandatory. The common traffic advisory frequency (CTAF) is used by pilots to obtain airport information and advise other aircraft of their intentions and positions in the traffic pattern.

York Municipal Airport is located within the jurisdiction of the Minneapolis Center Air Route Traffic Control Center (ARTCC). The Columbus Flight Service Station (FSS) provides additional weather data and other pertinent information to pilots on the ground and in the vicinity of the airport.

LOCAL OPERATING PROCEDURES

York Municipal Airport is situated at 1,669.7 feet MSL. The standard traffic pattern altitude is 1,000 feet above the elevation of the airport surface (2,669 feet MSL). Both Runway 17-35 and Runway 5-23 utilize a left-hand traffic pattern; as such, aircraft within the local traffic pattern make a series of left turns when maneuvering for landing procedures.

VICINITY AIRPORTS

Exhibit H outlines airports that are designated for public use within an approximately 30-nm radius of York Municipal Airport and offer the most competitive facilities. The five closest airports to JYR are publicly owned and designated for public use. These airports are included in the NPIAS and offer competitive facilities and services that influence and potentially limit the service area surrounding JYR.

SOCIOECONOMIC CHARACTERISTICS

The socioeconomic characteristics of a region play an important role in the planning process by providing an understanding of the growth dynamic within the study area. Socioeconomic data – including historical population, employment, and income – are collected and analyzed and will ultimately be used to determine aviation service level requirements. This data will also be used to develop aviation forecasts for York Municipal Airport. Aviation forecasts are typically related to the population base, the economic strength of the region, and the ability of the region to sustain a strong economic base over an extended period. Historical and forecast socioeconomic data for the region surrounding York Municipal Airport were obtained from the Woods & Poole Economics 2023 *Complete Economic and Demographic Data Source*. This information is derived from the U.S. Census Bureau and is an FAA-approved source of socioeconomic data. The socioeconomic data for York County and the State of Nebraska are presented on **Exhibit J**.

LAND USE

Land use regulations near airports are achieved through local government codes, city policies, and plans that include airport districts and planning areas. Regulations are used to avoid land use compatibility conflict around airports.

York Municipal Airport is surrounded almost entirely by aviation-related land uses or agricultural land uses with associated single-family dwelling units. Another notable land use is the municipal landfill that is located approximately one mile to the northeast of the airport. Existing land uses surrounding JYR are depicted on **Exhibit K**.

NOISE AND NOISE-COMPATIBLE LAND USE

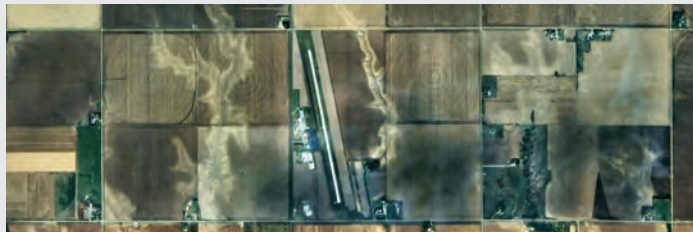
Federal land use compatibility guidelines are established under Title 14 Code of Federal Regulations (CFR) Part 150, *Airport Noise Compatibility Planning*. According to 14 CFR Part 150, residential land and schools are noise-sensitive land uses that are not considered compatible with a 65 decibel (dB) day-night average sound level (Ldn or DNL).⁵ Other noise-sensitive land uses (such as religious facilities, hospitals, or nursing homes), if located within a 65 dB DNL contour, are generally compatible when an interior noise level reduction of 25 dB is incorporated into the design and construction of structures. Special consideration should be given to noise-sensitive areas within *Department of Transportation Act* Section 4(f) properties where the land use compatibility guidelines in 14 CFR Part 150 do not account for the value, significance, and enjoyment of the area in question.⁶

Table 1E shows noise-sensitive land uses within two miles of the airport. The closest residential area is 0.15 miles west of the airport.

⁵ The DNL accounts for the increased sensitivity to noise at night (10:00 p.m. to 7:00 a.m.) and is the metric preferred by the FAA, the U.S. Environmental Protection Agency, and the U.S. Department of Housing and Urban Development as an appropriate measure of cumulative noise exposure.

⁶ Title 49 U.S. Code § 47141, Compatible Land Use Planning and Projects by State and Local Governments

AURORA MUNICIPAL (AUH)



Distance from JYR..... 16.85 nm
 NPIAS Classification General Aviation
 Based Aircraft 15
 Operations 20,550
 Longest Runway 4,301'
 Services: Hangars, Tiedowns, Fuel, Painting

YORK MUNICIPAL AIRPORT (JYR)



NPIAS Classification .. General Aviation
Operations..... 10,475
Based Aircraft 16
Longest Runway..... 5,898'

Services: Hangars, Fuel, Tiedowns, Airframe & Powerplant

SEWARD MUNICIPAL (SWT)



Distance from JYR..... 23.30 nm
 NPIAS Classification General Aviation
 Based Aircraft 44
 Operations 13,000
 Longest Runway 4,200'
 Services: ... Hangars, Fuel, Tiedowns, Airframe, Powerplant

FAIRMONT STATE (FMZ)



Distance from JYR..... 18.75 nm
 NPIAS Classification General Aviation
 Based Aircraft 21
 Operations 1,625
 Longest Runway 4,317'
 Services: Tiedowns, Fuel

CENTRAL CITY MUNICIPAL (07K)

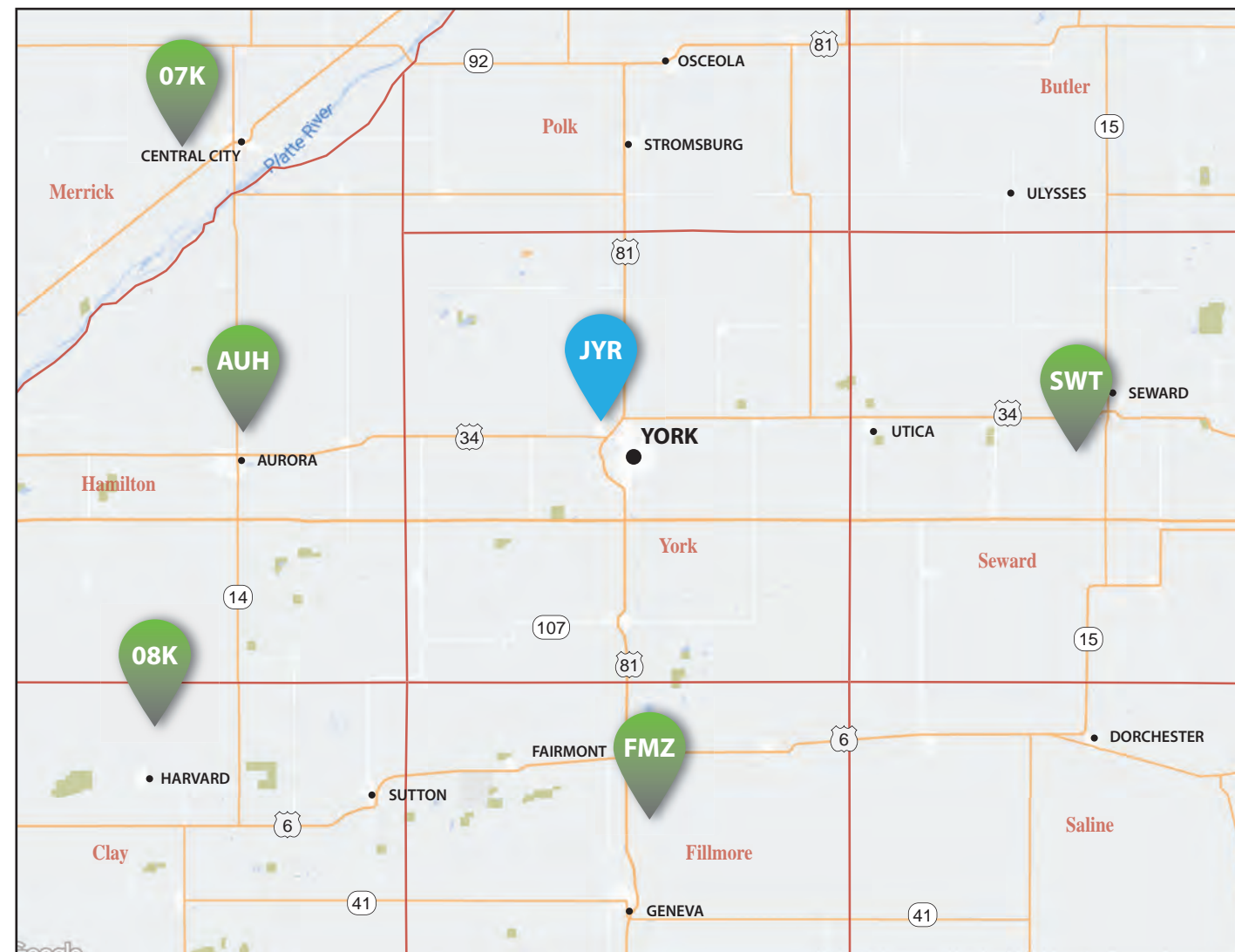


Distance from JYR..... 23.30 nm
 NPIAS Classification General Aviation
 Based Aircraft 20
 Operations 5,610
 Longest Runway 3,700'
 Services: ... Hangars, Fuel, Tiedowns, Airframe, Powerplant

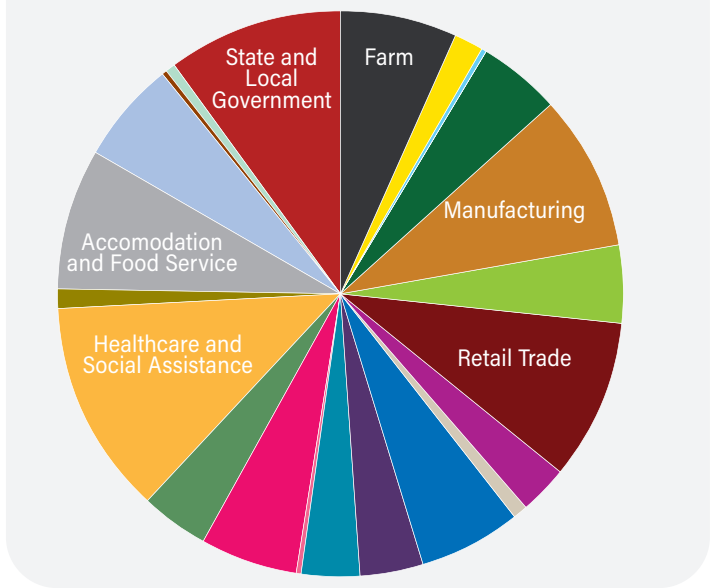
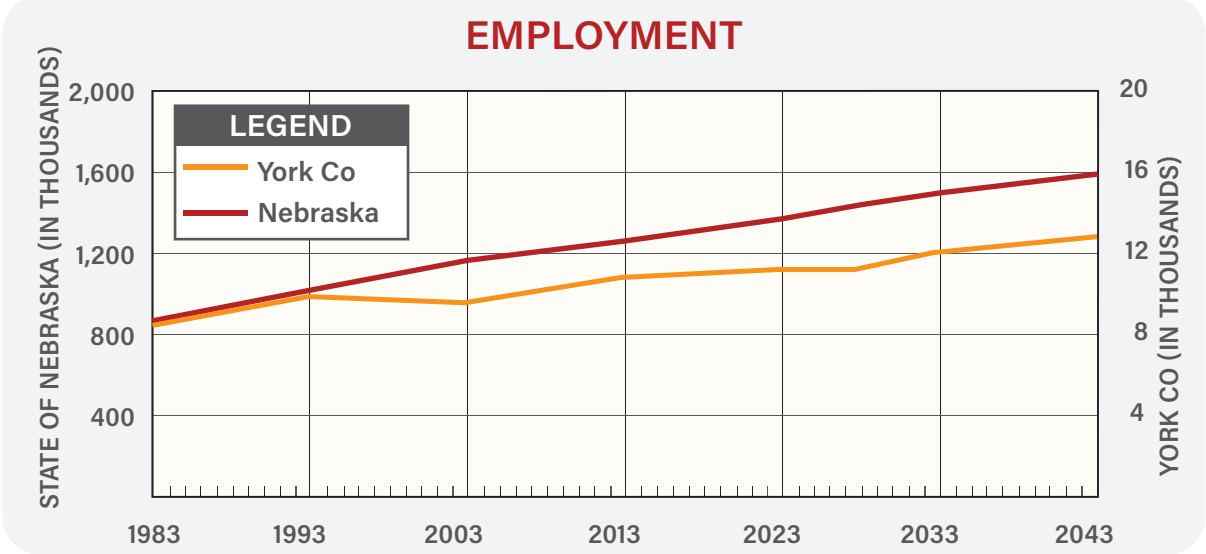
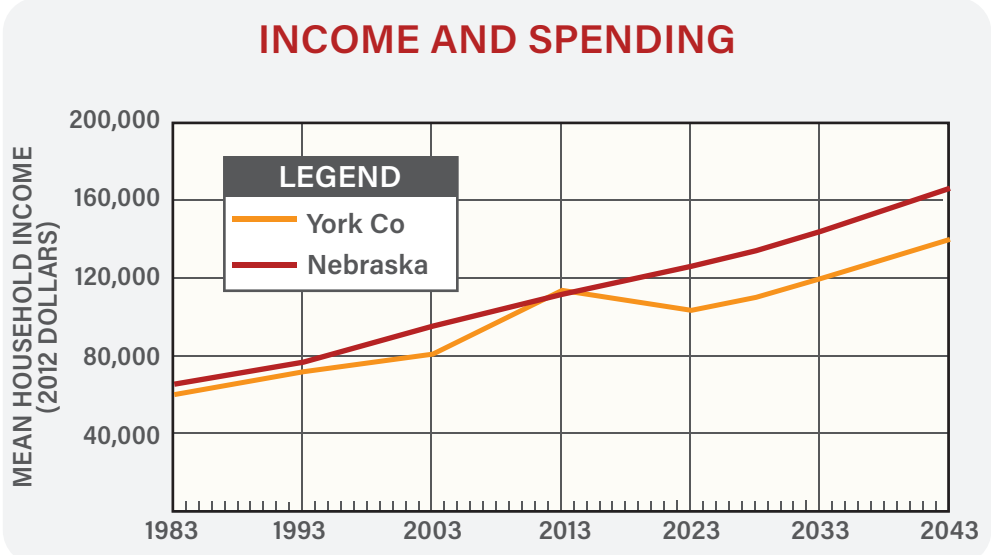
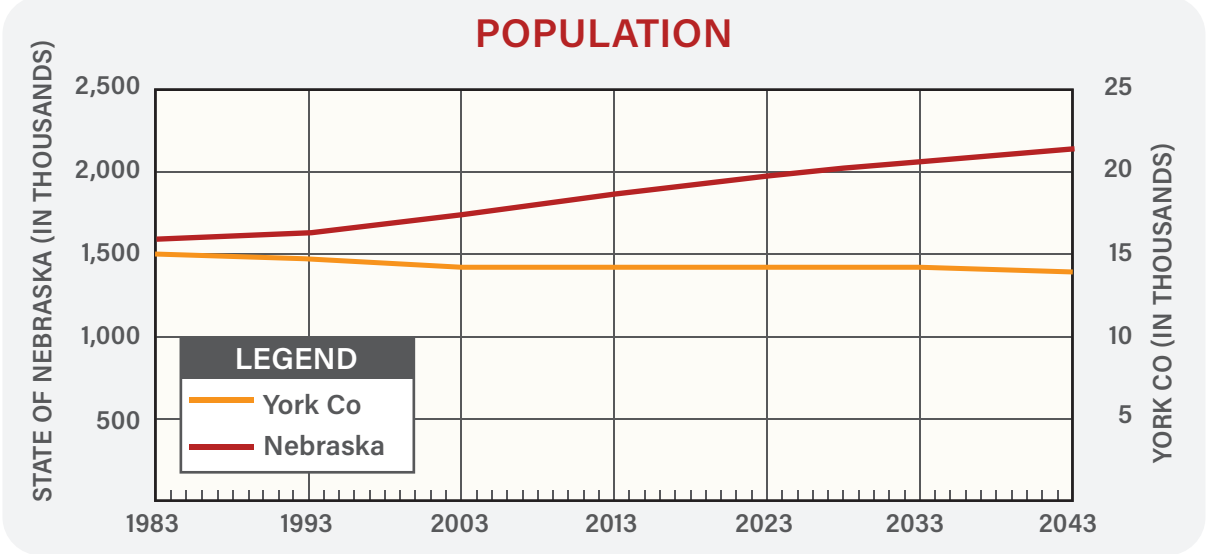
HARVARD STATE (08K)



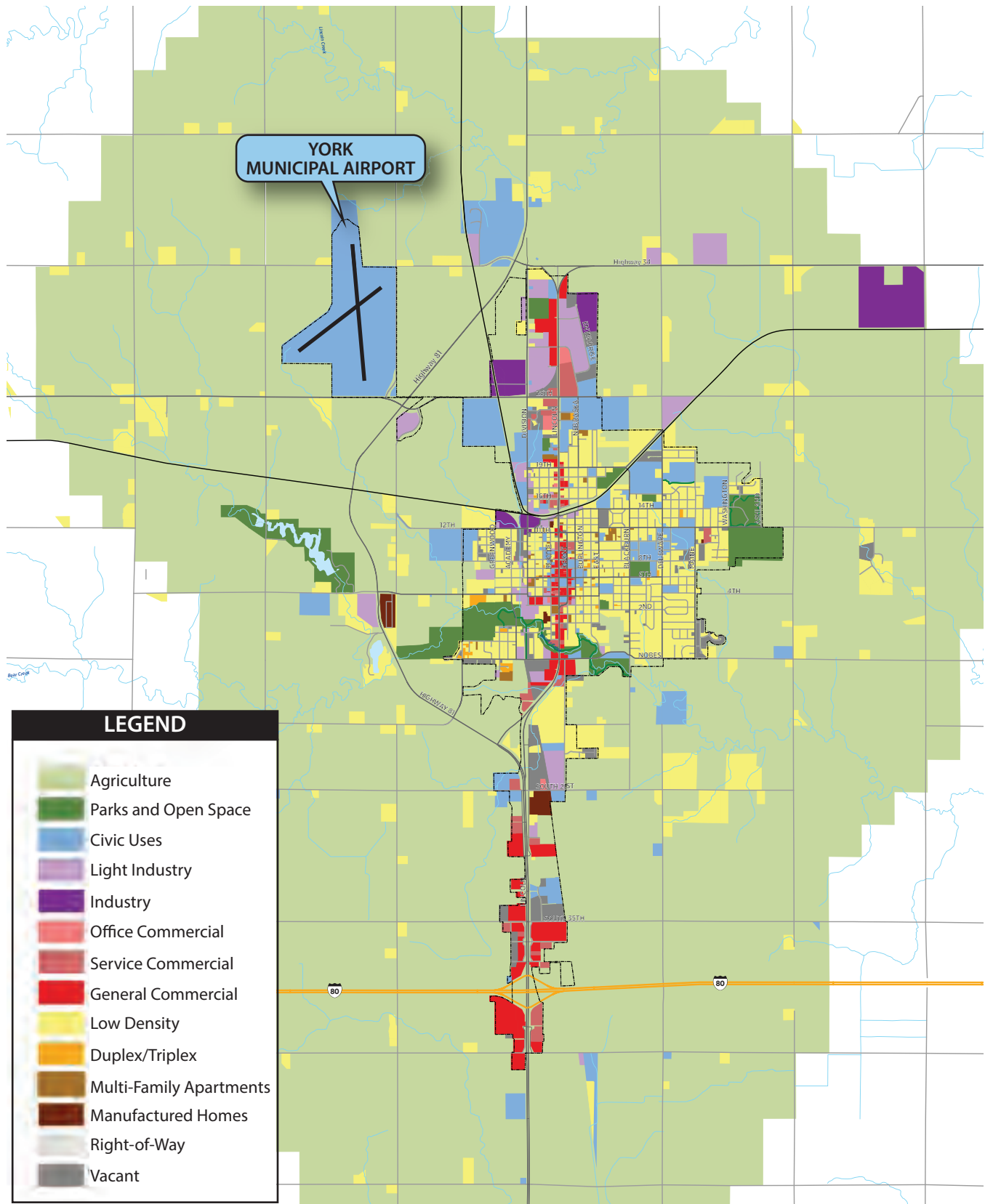
Distance from JYR..... 25.44 nm
 NPIAS Classification General Aviation
 Based Aircraft 11
 Operations 5,000
 Longest Runway 3,722'
 Services: Tiedowns, Fuel



Sources: www.airnav.com; NPIAS ; FAA Form 5010: Airport Master Record



Sources: Woods & Poole Complete Economic and Demographic Data Source (CEDDS) 2023; Nebraska Economic Development Commission Research Division



Source: York Comprehensive Plan (2017).

TABLE 1E | Noise-Sensitive Land Uses Within Two Miles of the Airport

Facility	Distance from Airport (Miles)	Direction from Airport
Schools		
Edison School	1.7	Southeast
Lincoln School	1.8	Southeast
York High School	2.0	Southeast
Places of Worship		
York Baptist	1.5	Southeast
New Life Church of the Nazarene	1.6	Southeast
First United Methodist Church	1.9	Southeast
Arbor Drive Community Church	2.0	Southeast
Parks		
Dog Park	1.3	Southeast
Bruce L Anderson Recreation Area and Recharge Lake	1.4	South
Medical Facilities		
York General Home Health	1.2	Southeast
York General West View Medical	1.2	Southeast
York General Hospital	1.4	Southeast

ENVIRONMENTAL OVERVIEW

Olsson completed a desktop environmental inventory in July 2024 to identify potential environmental constraints associated with potential development and to aid in the development of alternatives. The project area was defined as the airport boundary plus a 0.50-mile buffer. The FAA’s environmental guidelines list the following potential impact categories.

AIR QUALITY

The U.S. Environmental Protection Agency (EPA) has established air quality standards that define the maximum allowable concentrations of different air pollutants over specified short-term and long-term periods. Impacts on air quality from a project or action may be considered significant if they exceed any National Ambient Air Quality Standards (NAAQS 2024) thresholds during the analysis periods.

No nonattainment areas are designated in the state of Nebraska, according to the EPA; thus, no negative impacts on air quality are anticipated.⁷

BIOLOGICAL RESOURCES (INCLUDING FISH, WILDLIFE, AND PLANTS)

The U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) tool⁸ was used to generate an unofficial list of federally listed threatened and endangered species for the project. The unofficial IPaC species list contained the following species: northern long-eared bat (endangered), whooping crane (endangered), and monarch butterfly (candidate). No federally designated critical habitat is present within the project area, according to the unofficial IPaC species list.

⁷ U.S. EPA, Nonattainment Areas (www3.epa.gov/airquality/greenbook/mapnpoll.html)

⁸ USFWS IPaC (ipac.ecosphere.fws.gov)

Summer habitat for the endangered northern long-eared bat includes live trees and snags with peeling/sloughing bark, crevices, or cavities, while winter habitat is restricted to caves and mines. Habitat for the endangered whooping crane includes coastal marshes, lakes, open ponds, and wetlands that are covered intermittently with shallow water. The monarch butterfly is currently a candidate for listing under the *Endangered Species Act*. Habitat for the monarch butterfly includes areas with an abundance of milkweed and other pollinators.

Prior to development of a site that includes any of these habitats, an on-site habitat assessment should be conducted to determine if suitable habitat for federally listed species is present in the project area.

CLIMATE

The proposed development will not result in significant increases in aircraft operations; therefore, the proposed development will have no impact on climate. The state of Nebraska does not currently participate in the *U.S. State Climate Action Plan*.⁹

COASTAL RESOURCES

No coastal areas exist in the state of Nebraska.

DEPARTMENT OF TRANSPORTATION ACT, SECTION 4(F)

Section 4(f) protects the following basic types of properties:

- Publicly owned park and recreation areas that are open to the general public
- Publicly owned wildlife and waterfowl refuges
- Publicly or privately owned historic sites

The term *historic sites* includes prehistoric and historic districts, sites, buildings, structures, or objects that are listed in or are eligible for listing in the National Register of Historic Places (NRHP).¹⁰

According to the U.S. Geological Survey (USGS) Protected Areas Database of the United States (PAD-US), there are no public parks or other natural resources areas in the vicinity of the airport.¹¹ There are no Section 4(f) resources within one mile of the airport; thus, there will be no impacts to these resources due to the proposed projects.¹²

⁹ Center for Climate and Energy Solutions (www.c2es.org/content/state-climate-policy)

¹⁰ Federal Highway Administration, Section 4(f) Tutorial (www.environment.fhwa.dot.gov/env_topics/4f_tutorial/properties.aspx)

¹¹ USGS, Protected Areas Database (www.usgs.gov/programs/gap-analysis-project/science/pad-us-data-download)

¹² Google Earth Imagery, July 2024

PRIME FARMLANDS

The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey identified that approximately 77 percent of the project area is comprised of prime farmland soils.¹³ The NRCS should be consulted prior to the initiation of any projects that convert existing farmland (either directly or indirectly). If land acquisition is required, avigation easements should be acquired in lieu of fee purchases (wherever feasible) to minimize potential impacts. The easements will allow the land to be used for agricultural purposes, while limiting the height of human-made structures and natural objects.

HAZARDOUS MATERIALS, SOLID WASTE, AND POLLUTION PREVENTION

The PCE/TCE Northeast Contamination Site is a Superfund site located in York, Nebraska.¹⁴ The site is located approximately 0.75 miles east of the airport property line. The associated groundwater contaminant plume extends to the east/southeast through residential areas. Because the plume extends away from the airport, no impacts are anticipated.

There are no brownfield sites within two miles of the airport.

Nebraska's National Pollutant Discharge Elimination System (NPDES) regulations outline the requirements for municipal storm water management and establish requirements to protect the receiving waters. The regulations require best management practices (BMPs) to control and/or reduce the discharge of pollutants into the waters of the United States as much as possible. Permits are required for discharges from a point source into any waters of the state; therefore, prior to a construction project that will impact discharges, a permit should be obtained and BMPs should be followed.

The York County Solid Waste Center is located approximately 0.60 miles east of the airport property line. The York Area Solid Waste Agency is jointly owned by York County and the City of York.¹⁵ The city's Public Works Department operates the site. Site facilities include a landfill, a transfer station, an equipment storage building, and construction and demolition disposal. The disposal site serves the city (including the airport), the county, and some adjacent counties and communities.

In the short term, there will likely be temporary increases in solid waste production associated with construction activities. Wherever feasible, construction waste will be recycled, such as repurposing crushed concrete as a base course beneath new pavement. In addition, the York County Solid Waste Center can make provisions for no-charge concrete debris disposal at a different site. It is anticipated that solid waste will increase in line with aircraft activities.

¹³ USDA NRCS, Web Soil Survey (websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx)

¹⁴ U.S. EPA, Superfund Site (cumulis.epa.gov/supercpad/SiteProfiles/index.cfm?fuseaction=second.Cleanup&id=0706105#bkgground)

¹⁵ York Area Solid Waste Agency (www.cityofyork.net/vnews/display.v/ART/615f11d4a0e47)

HISTORICAL, ARCHITECTURAL, ARCHAEOLOGICAL, AND CULTURAL RESOURCES

There are no registered historic places within one mile of the airport area, according to the National Park Service's (NPS) NRHP interactive mapper.¹⁶ A cultural resources survey would provide additional information on potential archaeological or architectural resources within a project area. Archaeological field surveys may be required to determine the presence of previously unidentified historic properties or archaeological resources on the airport prior to undertaking planned improvements and landside developments.

According to the U.S. Department of Housing and Urban Development's (HUD) Tribal Directory Assessment Tool (TDAT), tribes with interest in the project area include the Apache Tribe of Oklahoma, the Cheyenne and Arapaho Tribes (Oklahoma), and the Pawnee Nation of Oklahoma.¹⁷

LAND USE

The land surrounding the airport is currently used for agricultural and rural residential purposes. No impact to land use is anticipated from airport developments or improvements.

NATURAL RESOURCES AND ENERGY SUPPLY

The net impact of the proposed projects on natural resources and energy supply will be negligible.

NOISE AND NOISE-COMPATIBLE LAND USE

The critical aircraft and number of operations are below the threshold that requires computer noise modeling. Noise-sensitive areas (such as residential areas, hospitals, and schools) are located more than 1.25 miles from the airport. Noise impacts are not anticipated to be significant.

SOCIOECONOMICS, ENVIRONMENTAL JUSTICE, AND CHILDREN'S ENVIRONMENTAL HEALTH AND SAFETY RISKS

According to the U.S. Environmental Protection Agency's (EPA) EJScreen tool and community report, the project area is comprised of 33 percent low-income populations and 10 percent minority populations.¹⁸ There are no limited English-speaking households or linguistically isolated households within the project area. Airport development is not anticipated to have disproportionately high or adverse human health or environmental effects on low-income, minority, or other environmental justice populations. No impacts related to environmental justice or children's environmental health and safety are anticipated.

¹⁶ NPS, National Register of Historic Places (www.nps.gov/maps/full.html?mapId=7ad17cc9-b808-4ff8-a2f9-a99909164466)

¹⁷ HUD, Tribal Directory Assessment Tool (egis.hud.gov/TDAT)

¹⁸ EPA, EJScreen Environmental Justice Screening and Mapping Tool (www.epa.gov/ejscreen)

VISUAL EFFECTS

Due to the airport's rural location, additional light emissions are not likely to affect nearby residences or other land uses that may be impacted by lighting.

WATER RESOURCES (INCLUDING WETLANDS, FLOODPLAINS, SURFACE WATERS, GROUNDWATER, AND WILD AND SCENIC RIVERS)

Wetlands, floodplains, surface waters, groundwater, and wild and scenic rivers play critical roles by supporting various needs like drinking water, recreation, industry, and ecological balance. They are connected in watersheds and are assessed under water resources. These resources are summarized below to assess and mitigate potential impacts at York Municipal Airport.

Wetlands

The USFWS National Wetland Inventory (NWI) map depicts two freshwater emergent wetlands, one freshwater pond, and two stream segments within the project boundaries.¹⁹ The largest wetland feature, a freshwater emergent wetland, is mapped directly east of the runway and encompasses a freshwater pond. The second freshwater emergent wetland is mapped directly west of the runway. The two stream segments are mapped in the extreme northeastern and southwestern corners of the project boundary.

A review of aerial imagery indicates that additional emergent wetland features are likely present throughout the project site. A wetland delineation should be performed during the growing season to confirm the presence or absence of wetlands and other waters. If delineated features are determined to be jurisdictional, a *Clean Water Act* Section 404 permit may be required. Depending on impact amounts, compensatory mitigation may also be required.

Areas immediately adjacent to the two stream segments mapped by the NWI in the northeastern and southwestern corners of the project site will qualify as riparian areas if the features are delineated as streams during the on-site delineation.

Floodplains

According to the Federal Emergency Management Agency's (FEMA) National Flood Hazard Layer (NFHL) viewer, no floodplains or regulatory floodways are present within the project area.²⁰ A floodplain permit and/or no-rise certification should not be required for any airport developments.

¹⁹ USFWS, National Wetlands Inventory (fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper)

²⁰ FEMA, National Flood Hazard Layer Viewer (arcgis.com)

Surface Waters

The National Water Information System was used to identify surface water bodies near JYR. These include Lincoln Creek (approximately one mile north of the airport), Beaver Creek (approximately two miles south), and the Brice L Anderson Recreation Area and Recharge Lake (approximately one mile south).²¹ There are five unnamed tributaries within one mile of the airport; one of these tributaries begins at the end of Runway 5. Improvements to Runway 5-23 could impact this surface water resource and should be studied further prior to any additional development.

Groundwater

The FAA sets criteria for assessing groundwater impacts and focuses on breaches of quality standards or contamination of aquifers that supply public water or pose health risks. The EPA designates an aquifer as a sole source aquifer (SSA) if it is the sole or principal source of drinking water for an area in which there is no alternative source that could economically supply those who depend on that aquifer; therefore, if contamination occurs, an alternative source would be extremely expensive.²² Designation of an SSA helps to protect drinking water supplies. There are no SSAs on or near airport property.

Wild and Scenic Rivers

No wild and scenic rivers are present on or near the airport property. Nebraska's only wild and scenic rivers are portions of the Niobrara River and the Missouri River.²³

²¹ USGS, National Water Dashboard (dashboard.waterdata.usgs.gov/app/nwd/en)

²² Wikipedia (en.wikipedia.org/wiki/Sole_Source_Aquifer)

²³ National Wild and Scenic Rivers System (www.rivers.gov/nebraska)