

**RESNET**<sup>®</sup>  
RESIDENTIAL ENERGY SERVICES NETWORK



# **ANSI/RESNET/ACCA 310-2020**

## **Standard for Grading the Installation of HVAC Systems**



June 23, 2020

**Residential Energy Services Network, Inc.**

**P.O. Box 4561**

**Oceanside, CA 92052-4561**

<http://resnet.us/>

**Air Conditioning Contractors of America**

**2800 Shirlington Road, Suite 300**

**Arlington, VA 22203**

[www.acca.org](http://www.acca.org)

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Thiel Butner\*  
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Brian Shanks\*  
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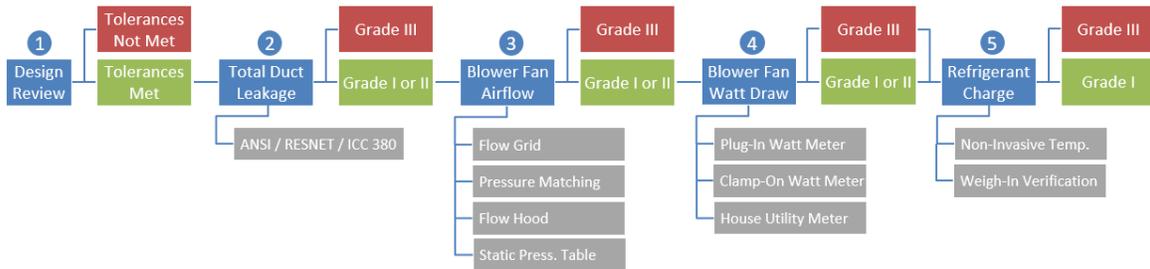
# ANSI/RESNET/ACCA 310-2020

## Standard for Grading the Installation of HVAC Systems

### Foreword (Informative)

This Standard provides a methodology for evaluating the installation quality of Unitary HVAC systems. It's comprised of five tasks - a design review, a total duct leakage test, a Blower Fan volumetric airflow test, a Blower Fan watt draw test, and a non-invasive evaluation of refrigerant charge. The five tasks are designed to be completed in sequence. With the completion of each task, the results are evaluated for compliance with specified thresholds. For Task 1, these thresholds are design tolerances. For Tasks 2 through 5, the thresholds are installation quality grades. Furthermore, for Tasks 1 through 3, specified thresholds must be satisfied or the subsequent tasks cannot be completed. A visual representation of the workflow and the diagnostic test methods is shown in Figure 1.

**Figure 1: Illustration of Workflow and Diagnostic Test Methods**



In this standard, the terms Townhouse, Dwelling Unit, and Sleeping Unit are interchangeable with the term Dwelling, except where specifically noted.

This Standard contains both normative requirements and informative supporting material. The normative requirements must be complied with to conform to the Standard. Informative materials only provide supportive content and are marked as such.

- 1. Purpose.** This standard establishes the procedures, tolerances, and record keeping practices for evaluating and grading elements of an HVAC System's design and installation. This standard is intended to support consistency in energy rating and labeling. It is intended for use by home energy raters, energy auditors, or HVAC contractors.
- 2. Scope.** This standard is applicable to Unitary HVAC Systems including air conditioners and heat pumps up to 65 kBtuh and furnaces up to 125 kBtuh in detached one- and two-family Dwellings, Townhouses, as well as in Dwelling Units and Sleeping Units that have their own HVAC system separate from other units.

### 3. Definitions.

**AHRI Reference Number** – The unique identifier assigned by the Air-Conditioning, Heating, & Refrigeration Institute (AHRI) to a specific piece of equipment or combination of equipment that it has certified.

**Air Conditioner** – A vapor-compression refrigeration device that transfers heat from a location being cooled to another location using the physical properties of an evaporating and condensing fluid known as a refrigerant.

**Architectural Option** – A modification to a portion of an Architectural Plan that may be optionally used.

**Architectural Plan** – An architectural drawing defining the room quantity, room type, and dimensions of a Dwelling.

**Authority Having Jurisdiction** – The agency or agent responsible for enforcing this standard.

**Bedroom** – For one- and two-family Dwellings and Townhouses, a room <sup>1</sup> or space 70 square feet of floor area or greater, with Egress Window or skylight, and doorway to the main body of the Dwelling Unit, that can be used for sleeping. For all other Dwelling Units, a room <sup>2</sup> or space that can be used for sleeping. For all Dwelling or Sleeping Units, the number of Bedrooms shall not be less than one.

**Blower Fan** – The fan inside the equipment of a Forced-Air HVAC System that forces the heated and/or cooled air to be distributed within a Dwelling.

**Boiler** – A space-heating appliance with a capacity up to 225 kBtuh in which liquid is heated by burning fuel or converting electrical energy.

**Climate Condition** – The classification of a climate, as defined by ACCA Manual S, into Condition A or B. Condition B represents climates for which the sensible heat ratio is  $\geq 0.95$  and the ratio of Heating Degree Days to Cooling Degree Days is  $\geq 2.0$  <sup>3</sup>. Climates that do not meet Condition B are considered to be Condition A.

**Condensing Temperature** – The refrigerant Saturation Temperature measured at the service valve at the condenser coil entrance.

**Condensing Temperature Over Ambient (CTOA)** – A constant value that represents the difference between the Condensing Temperature and the outdoor air used to cool the refrigerant in the condenser coil.

<sup>1</sup> (Informative Note) A "den," "library," "home office" or other similar rooms with a closet, Egress Window, doorway to the main body of the Dwelling Unit, and 70 square feet of floor area or greater are considered a Bedroom, but living rooms, foyers, and other rooms not intended for sleeping, are not. The number of rooms identified as Bedrooms is used to determine the number of occupants.

<sup>2</sup> (Informative Note) Informative Annex A of Standard ANSI/RESNET/ICC 380 contains a table that summarizes parts of a Dwelling Unit that are included in Conditioned Floor Area.

<sup>3</sup> (Informative Note) ACCA uses a base temperature of 65 °F (18 °C) for heating and 50 °F (10 °C) for cooling.

**Conditioned Floor Area (CFA)**<sup>4</sup> – The floor area of the Conditioned Space Volume within a building or Dwelling Unit, not including the floor area of attics, crawlspaces, and basements below air sealed and insulated floors. The following specific spaces are addressed to ensure consistent application of this definition:

- The floor area of a wall assembly that is adjacent to Conditioned Space Volume shall be included.
- The floor area of a basement shall be included if the party conducting the evaluation has either:
  - Obtained an ACCA Manual J, S, and either B or D report and verified that both the heating and cooling equipment and distribution system are designed to offset the entire design load of the volume, or,
  - Verified through visual inspection that both the heating and cooling equipment and distribution system serve the volume and, in the judgement of the party conducting evaluations, are capable of maintaining the heating and cooling temperatures specified by the Thermostat section in Table 4.2.2(1) in ANSI/RESNET/ICC 301.
- The floor area of a garage shall be excluded, even when it is conditioned.
- The floor area of a thermally isolated sunroom shall be excluded.
- The floor area of an attic shall be excluded, even when it is Conditioned Space Volume.
- The floor area of a crawlspace shall be excluded, even when it is Conditioned Space Volume.

**Conditioned Space Volume**<sup>4</sup> – The volume within a Dwelling Unit serviced by a space heating or cooling system designed to maintain space conditions at 78 °F (26 °C) for cooling and 68 °F (20 °C) for heating. The following specific spaces are addressed to ensure consistent application of this definition:

- If the volume both above and below a floor assembly meets this definition and is part of the Rated Dwelling Unit, then the volume of the floor assembly shall also be included. Otherwise the volume of the floor assembly shall be excluded.
  - Exception: The wall height shall extend from the finished floor to the bottom side of the floor decking above the Rated Dwelling Unit for non-top floor level Dwelling Units and to the exterior enclosure air barrier for top floor level Dwelling Units.
- If the volume of at least one of the spaces horizontally adjacent to a wall assembly meets this definition, and that volume is part of the Rated Dwelling Unit, then the volume of the wall assembly shall also be included. Otherwise, the volume of the wall assembly shall be excluded.
  - Exception: If the volume of one of the spaces horizontally adjacent to a wall assembly is a Dwelling Unit other than the Rated Dwelling Unit, then the volume of that wall assembly shall be evenly divided between both adjacent Dwelling Units.
- The volume of an attic that is not both air sealed and insulated at the roof deck shall be excluded.

<sup>4</sup> (Informative Note) Informative Annex A of Standard ANSI/RESNET/ICC 380 contains a table that summarizes parts of a Dwelling Unit that are included in Conditioned Floor Area.

- The volume of a vented crawlspace shall be excluded.
- The volume of a garage shall be excluded, even when it is conditioned.
- The volume of a thermally isolated sunroom shall be excluded.
- The volume of an attic that is both air sealed and insulated at the roof deck, the volume of an unvented crawlspace, and the volume of a basement shall only be included if the volume is contiguous with the Rated Dwelling Unit and the party conducting evaluations has either:
  - Obtained an ACCA Manual J, S, and either B or D report and verified that both the heating and cooling equipment and distribution system are designed to offset the entire design load of the volume, or,
  - Verified through visual inspection that both the heating and cooling equipment and distribution system serve the volume and, in the judgement of the party conducting evaluations, are capable of maintaining the heating and cooling temperatures specified by the Thermostat section in Table 4.2.2(1).
- The volume of a mechanical closet, regardless of access location, that is contiguous with the Rated Dwelling Unit shall be included if:
  - it is serviced by a space heating or cooling system designed to maintain space conditions at 78 °F (26 °C) for cooling and 68 °F (20 °C) for heating, and
  - it only includes equipment serving the Rated Dwelling Unit, and
  - the mechanical room is not intentionally air sealed from the Rated Dwelling Unit.

**Design Temperature Difference (DTD)** – A constant value that represents the difference between the evaporator coil refrigerant’s Saturation Temperature and the return air dry-bulb temperature within normal operating load conditions.

**Direct-Vent Appliance** – Appliances that are constructed and installed so that all air for combustion is derived from the outdoor atmosphere and all flue gases are discharged to the outdoor atmosphere.

**Dwelling** – Any building that contains one or two Dwelling Units used, intended, or designed to be built, used, rented, leased, let or hired out to be occupied, or that are occupied for living purposes.

**Dwelling Unit** – A single unit providing complete independent living facilities for one or more persons, including permanent provisions for living, sleeping, eating, cooking, and sanitation.

**Dwelling-Unit Mechanical Ventilation System** – A Ventilation system consisting of powered Ventilation equipment such as motor-driven fans and blowers and related mechanical components such as ducts, inlets, dampers, filters and associated control devices that provides Dwelling-Unit Ventilation at a known or measured airflow rate.

**Egress Window** – An operable window that provides for a means of escape and access for rescue in the event of an emergency and with the following attributes:

- Has a sill height of not more than 44 inches above the floor; and,
- Has a minimum net clear opening of 5.7 sq. ft.; and,
- Has a minimum net clear opening height of 24 in.; and,
- Has a minimum net clear opening width of 20 in.; and,

- Is operational from the inside of the room without the use of keys, tools or special knowledge.

**Forced-Air HVAC System** – A type of HVAC System that incorporates a Blower Fan to move conditioned air.

**Front Orientation** – The direction that the front door of a Dwelling is facing.

**Furnace** – A space-heating appliance in which air is heated by burning fuel or converting electrical energy.

**Heat Pump** – A vapor-compression refrigeration device that includes a reversing valve and optimized heat exchangers so that the direction of heat flow is reversed in order to transfer heat from one location to another using the physical properties of an evaporating and condensing fluid known as a refrigerant.

**HVAC System** – Cooling-only, heating-only, or combined cooling-heating equipment, including any supply and/or return distribution systems.

**Independent Verification Report** – A report provided by a party operating under a third-party quality control program.

**Mechanical Draft System** – A venting system designed to remove flue or vent gases by mechanical means, that consists of an induced-draft portion under nonpositive static pressure or a forced-draft portion under positive static pressure.

**Mini-Split Air Conditioner (MNAC)** – An Air Conditioner that has variable refrigerant flow and distributed refrigerant technology with a single outdoor unit serving a single indoor unit. The outdoor unit contains a single compressor or multiple compressors or a variable capacity compressor. The indoor unit has a coil, an air movement device<sup>5</sup> intended for single zone air distribution, and a temperature sensing control. The units are matched with a zone temperature control device.

**Mini-Split Heat Pump (MNHP)** – A Heat Pump that has variable refrigerant flow and distributed refrigerant technology with a single outdoor unit serving a single indoor unit. The outdoor unit contains a single compressor or multiple compressors or a variable capacity compressor. The indoor unit has a coil, an air movement device<sup>5</sup> intended for single zone air distribution, and a temperature sensing control. The units are matched with a zone temperature control device.

**Multi-Split Air Conditioner (MTAC)** – An Air Conditioner that has variable refrigerant flow and distributed refrigerant technology with the capability of serving multiple indoor units with a single outdoor unit. The outdoor unit contains a single compressor or multiple compressors or a variable capacity compressor. Each indoor unit has a coil, an air movement device<sup>5</sup> intended for single zone air distribution, and a temperature sensing control. The units are matched with a zone temperature control device.

<sup>5</sup> (Informative Note) The air movement device is typically ductless or supports duct systems ≤ 10 feet in length.

**Multi-Split Heat Pump (MTHP)** – A Heat Pump that has variable refrigerant flow and distributed refrigerant technology with the capability of serving multiple indoor units with a single outdoor unit. The outdoor unit contains a single compressor or multiple compressors or a variable capacity compressor. Each indoor unit has a coil, an air movement device<sup>5</sup> intended for single zone air distribution, and a temperature sensing control. The units are matched with a zone temperature control device.

**Natural Draft System** – A venting system designed to remove flue or vent gases under nonpositive static vent pressure entirely by natural draft.

**OEM Static Pressure Table** – Documentation produced by a Forced-Air HVAC System equipment manufacturer that indicates the Blower Fan airflow at specified fan-speed settings, static pressure values, and in some instances voltage.

**Other Equipment Type** – Any HVAC equipment type that is not an Air Conditioner, Boiler, Furnace, or Heat Pump.

**Other Motor Type** – Any Blower Fan motor type that is not a Permanent Split Capacitor (PSC) or Electronically Commutated Motor (ECM).

**Other Ventilation Standard** – Any ventilation standard that is not ASHRAE 62.2-2010, ASHRAE 62.2-20103, or ASHRAE 62.2-2016.

**Saturation Temperature** – The temperature at which the refrigerant undergoes a phase change in either the condenser or evaporator coils.

**Sleeping Unit** – A room or space in which people sleep, which can also include permanent provisions for living, eating, and either sanitation or kitchen facilities but not both. Such rooms and spaces that are also part of a Dwelling Unit are not Sleeping Units.

**Target Liquid Line Temperature** – The calculated target temperature of the liquid line.

**Target Subcooling** – The manufacturer prescribed subcooling for the equipment being tested.

**Target Suction Line Temperature** – The calculated target temperature of the suction line.

**Target Superheat** – The manufacturer prescribed superheat for the equipment being tested.

**Townhouse** – A single-family Dwelling Unit constructed in a group of three or more attached units in which each unit extends from the foundation to roof and with open space on at least two sides.

**Unconditioned Space Volume**<sup>6</sup> – The volume within a building or Dwelling Unit that is not Conditioned Space Volume but which contains heat sources or sinks that influence the temperature of the area or room. The following specific spaces are addressed to ensure consistent application of this definition:

<sup>6</sup> (Informative Note) Informative Annex A of Standard ANSI/RESNET/ICC 380 contains a table that summarizes parts of a Dwelling Unit that are included in Unconditioned Space Volume.

- If either one or both of the volumes above and below a floor assembly is Unconditioned Space Volume, then the volume of the floor assembly shall be included.
- If the volume of both of the spaces horizontally adjacent to a wall assembly are Unconditioned Space Volume, then the volume of the wall assembly shall be included.
- The volume of an attic that is not both air sealed and insulated at the roof deck shall be included.
- The volume of a vented crawlspace shall be included.
- The volume of a garage shall be included, even when it is conditioned.
- The volume of a thermally isolated sunroom shall be included.
- The volume of an attic that is both air sealed and insulated at the roof deck, the volume of an unvented crawlspace, and the volume of a basement shall be included unless it meets the definition of Conditioned Space Volume.

**Unitary** – One or more factory-made assemblies which normally may include an evaporator or cooling coil, a compressor and condenser combination, and may include a heating function. The equipment can be ducted or ductless; it can be a split-system or single package.

**Ventilation** – The process of providing outdoor air directly to a Dwelling by natural or mechanical means. Such air may or may not be conditioned.

#### **4. Task 1: Evaluation of the Design.**

4.1. **Overview.** This procedure shall be completed by first collecting the design information specified in Section 4.2, then verifying that all required information has been provided and falls within the tolerances specified in Section 4.3.

As an alternative to completing the procedures defined in Section 4.2 and 4.3, if an Independent Verification Report is obtained containing the design information specified in Section 4.2 and confirmation that all required information has been provided and falls within the tolerances specified in Section 4.3, and the report is approved for use by an entity adopting and requiring the use of this Standard, then the reported values shall be permitted to be used.

4.2. **Required Design Information.** The following design information shall be collected by the person completing the evaluation for the Dwelling.

4.2.1. Architectural design documentation, consisting of the following:

4.2.1.1. The Architectural Plan.

4.2.1.2. Any Architectural Options for the Plan.

4.2.2. HVAC design basis, consisting of the following:

4.2.2.1. The designer name.

4.2.2.2. The designer company.

4.2.2.3. The date of design.

4.2.2.4. The architectural scope of the HVAC design, consisting of the following:

4.2.2.4.1. If a Dwelling or Townhouse, or a Dwelling Unit or Sleeping Unit within:

4.2.2.4.1.1. The name of the Architectural Plan that the HVAC design is based on or the unique address of the building.

4.2.2.4.1.2. Any Architectural Option(s) used in the HVAC design, and a list of other Architectural Option(s), if any, that the design can be used with.

4.2.2.4.2. If a Dwelling Unit or Sleeping Unit not within a Dwelling or Townhouse:

4.2.2.4.2.1. A unique identifier for the building that the unit is within <sup>7</sup>.

4.2.2.4.2.2. The name of the Architectural Plan that the HVAC design is based on, and a list of other Architectural Plan(s), if any, that the design can be used with.

4.2.2.4.2.3. Any Architectural Option(s) used in the HVAC design, and a list of other Architectural Option(s), if any, that the design can be used with.

4.2.2.5. If a software program was used to complete the design, the software program name and version that was used.

4.2.3. Dwelling-Unit Mechanical Ventilation System design for each system that serves the Dwelling, consisting of the following:

4.2.3.1. A unique name or identifier for the system <sup>8</sup>.

4.2.3.2. The specified system type: supply, exhaust, balanced without recovery, ERV, HRV, ventilation dehumidifier, or other.

4.2.3.3. The specified control location for the system <sup>9</sup>.

4.2.3.4. For systems serving Dwelling Units or Sleeping Units not within a Dwelling or Townhouse:

4.2.3.4.1. The specified system manufacturer and model number.

4.2.3.4.2. The unit(s) served by the system.

4.2.3.5. The name of the Ventilation zone(s) <sup>10</sup> served by the system.

4.2.3.6. An overview of each Ventilation zone that the system serves, consisting of the following information.

4.2.3.6.1. The design basis for the Ventilation airflow rate and run-time for the Ventilation zone: ASHRAE 62.2-2010, ASHRAE 62.2-2013, or ASHRAE 62.2-2016, or Other Ventilation Standard.

4.2.3.6.2. The number of Bedrooms within the Ventilation zone.

4.2.3.6.3. The floor area of the Ventilation zone.

<sup>7</sup> (Informative Note) For example, the name of the development or the building's address.

<sup>8</sup> (Informative Note) For example, "Bath Fan 1", "ERV 1".

<sup>9</sup> (Informative Note) Examples of common locations include bathroom or utility room.

<sup>10</sup> (Informative Note) Examples of Ventilation zones include Whole Dwelling, Upper Level, Lower Level, Basement.

4.2.3.6.4. The design's Ventilation airflow rate, runtime per cycle, and cycle time for the Ventilation zone.

4.2.3.6.5. The design's time-averaged Ventilation airflow rate for the Ventilation zone, calculated using Equation 1.

$$\text{Time\_Averaged Vent Rate} = \text{Vent Rate} \times \frac{\text{Runtime Per Cycle}}{\text{Cycle Time}} \quad (1)$$

Where:

Time\_Averaged Vent Rate = The average Ventilation airflow rate.

Vent Rate = The design's Ventilation airflow rate reported in Section 4.2.3.6.4.

Runtime Per Cycle = The runtime per cycle reported in Section 4.2.3.6.4.

Cycle Time = The cycle time reported in Section 4.2.3.6.4.

4.2.4. Heat gain and heat loss loads for each heated or cooled zone in the Dwelling, consisting of the following:

4.2.4.1. The name of the heated or cooled zone <sup>11</sup>.

4.2.4.2. For Dwelling Units and Sleeping Units not within a Dwelling or Townhouse, the unit's location:

4.2.4.2.1. The top floor, mid-level floor, or bottom floor of the building, and,

4.2.4.2.2. Either a corner unit or middle unit that is between two other units.

4.2.4.3. The design basis for the heat gain and heat loss loads: ACCA Manual J v8, 2013; ACCA Manual J v8, 2016; 2017 ASHRAE Fundamentals; or per the Authority Having Jurisdiction.

4.2.4.4. Confirmation that the loads were calculated room-by-room.

Exception: For Dwelling Units and Sleeping Units not within a Dwelling or Townhouse, the loads shall be permitted to be calculated as a single block.

4.2.4.5. The indoor heating design temperature and indoor cooling design temperature used.

4.2.4.6. The outdoor heating design temperature, outdoor cooling design temperature, and the location and source of the outdoor conditions used <sup>12</sup>.

4.2.4.7. The number of occupants.

4.2.4.8. The total occupant internal gains.

4.2.4.9. The total non-occupant internal gains.

4.2.4.10. The Conditioned Floor Area.

4.2.4.11. The window area.

<sup>11</sup> (Informative Note) Examples of heated or cooled zones include Upper Level, Master Suite, Basement.

<sup>12</sup> (Normative Note) The location shall include the city or weather station and the state. The source shall be ACCA Manual J, ASHRAE Handbook of Fundamentals, or the Authority Having Jurisdiction.

- 4.2.4.12. The solar heat gain coefficient value used in the greatest amount of window area.
- 4.2.4.13. The nominal R-value of the insulation <sup>13</sup> used in the greatest amount of above-grade wall area.
- 4.2.4.14. The nominal R-value of the insulation used in the greatest amount of ceiling area.
- 4.2.4.15. The infiltration rate.
- 4.2.4.16. The time-averaged mechanical Ventilation airflow rate.
- 4.2.4.17. The calculated sensible, latent, and total heat gain at design conditions for one or more orientations.
- 4.2.4.18. If the heat gain has been provided for more than one orientation in Section 4.2.4.17, then the difference between the maximum and minimum total heat gain across the orientations specified.
- 4.2.4.19. The calculated total heat loss at design conditions.
- 4.2.5. Specifications for all HVAC Systems serving the Dwelling, consisting of the following for each HVAC System:
  - 4.2.5.1. A unique name or identifier for the HVAC system.
  - 4.2.5.2. The name of the heated or cooled zone(s) <sup>14</sup> that the HVAC system serves.
  - 4.2.5.3. An equipment overview, consisting of the following for each piece of equipment:
    - 4.2.5.3.1. The equipment type: Air Conditioner, Boiler, Furnace, Heat Pump, or Other Equipment Type.
    - 4.2.5.3.2. The equipment manufacturer(s) and model number(s) <sup>15</sup>.
    - 4.2.5.3.3. The AHRI Reference Number of the equipment.
 

Exception: If an AHRI Reference Number is not available, OEM-provided documentation shall be collected with the rated efficiency of the equipment. If the equipment contains multiple components, the rated efficiency shall reflect the specific combination of indoor and outdoor components, along with confirmation from the OEM that the two components are designed to be used together.
    - 4.2.5.3.4. If the equipment type is an Air Conditioner, Furnace, or Heat Pump, then the Blower Fan motor type: Permanent Split Capacitor (PSC), Electronically Commutated Motor (ECM), or Other Motor Type.

<sup>13</sup> (Informative Note) If both cavity and continuous insulation are used, the nominal R-value equals the sum of nominal R-value of the cavity and continuous insulation.

<sup>14</sup> (Informative Note) Examples of zones include Whole Dwelling, Upper Level, Lower Level, Basement.

<sup>15</sup> (Informative Note) For equipment types that include both an evaporator/fan-coil and a condenser, include the manufacturer and model number for both components.

- 4.2.5.3.5. If the equipment type is an Air Conditioner, Furnace, or Heat Pump, then the Blower Fan speed type: single-speed, two-speed, or variable-speed <sup>16</sup>.
- 4.2.5.3.6. If the equipment type is an Air Conditioner or Heat Pump, then the compressor speed type: single-speed, two-speed, or variable-speed.
- 4.2.5.3.7. If the equipment type is an Air Conditioner or Heat Pump, then whether it is also a Mini-Split Air Conditioner, Mini-Split Heat Pump, Multi-Split Air Conditioner, or Multi-Split Heat Pump.
- 4.2.5.3.8. If the equipment type is a Heat Pump, then the ratio of its maximum rated capacity relative to its minimum rated capacity.
- 4.2.5.3.9. If the equipment type is an Air Conditioner or Heat Pump, then:
  - 4.2.5.3.9.1. The metering device type: piston or capillary tube, Thermal Expansion Value (TXV), or Electronic Expansion Valve (EEV).
  - 4.2.5.3.9.2. If the metering device type in Section 4.2.5.3.9.1 is TXV or EEV, then the OEM-specified subcooling target at the service valve.
- 4.2.5.3.10. If the equipment type is an Air Conditioner or Heat Pump, then the equipment's rated cooling efficiency <sup>17</sup>.
- 4.2.5.3.11. If the equipment type is a Boiler, Furnace, or Heat Pump, then the equipment's rated heating efficiency.
- 4.2.5.3.12. If the equipment type is a Boiler or Furnace, then the heating capacity type: single-stage, two-stage, or modulating.
- 4.2.5.3.13. If the equipment type is a Boiler or Furnace, then the venting type, either Natural Draft System, Mechanical Draft System, or Direct-Vent Appliance.
- 4.2.5.4. The specified performance rating and metric <sup>18</sup> of each filter to be installed.
- 4.2.5.5. Duct system design elements, if a duct system will be installed, consisting of the following:
  - 4.2.5.5.1. The design Blower Fan airflow, expressed in cubic feet per minute or cubic meters per second of air with a density of 0.075 pounds per cubic feet (1.201 kg per cubic meter) <sup>19</sup>:

<sup>16</sup> (Informative Note) While equipment typically has multiple speed settings to select from during installation, this parameter is related to the number of operational speeds that the system is capable of. Single-speed indicates a system that operates at no more than one speed setting each for heating mode and cooling mode. Two-speed indicates a system that can operate at no more than two speeds each for heating mode and cooling mode. Variable-speed indicates a system that can operate at more than two speeds.

<sup>17</sup> (Informative Note) For example, if the metric for the rated efficiency of the equipment is SEER, then its SEER rating shall be reported; if the metric is EER, then its EER rating shall be reported; if both SEER and EEER, then both rated values shall be reported.

<sup>18</sup> (Informative Note) For example, MERV or FPR.

<sup>19</sup> (Informative Note) Airflow at this air density is often referred to as Standard CFM (SCFM) or Standard CMS (SCMS) and represents air at 68 °F, 50% relative humidity, and at a barometric pressure of 29.92" Hg.

4.2.5.5.1.1. In cooling mode if the equipment type is an Air Conditioner or Heat Pump.

4.2.5.5.1.2. In heating mode if the equipment type is a Furnace or Heat Pump.

4.2.5.5.2. The design Blower Fan speed setting <sup>20</sup>:

4.2.5.5.2.1. In cooling mode if the equipment type is an Air Conditioner or Heat Pump.

4.2.5.5.2.2. In heating mode if the equipment type is a Furnace or Heat Pump.

4.2.5.5.3. The design external static pressure <sup>21</sup>.

4.2.5.5.4. The individual room-by-room names and design airflows and the sum of the design airflows across all rooms.

**4.3. Evaluation of Design Information.** The design documentation collected in Section 4.2 shall be reviewed to verify that all required information has been provided. In addition, the Dwelling <sup>22</sup> shall be compared to the design documentation to verify that the following criteria have been met.

4.3.1. If a Dwelling or Townhouse, or Dwelling Unit or Sleeping Unit within, is to be rated, then the following criteria shall be met in addition to the criteria in Section 4.3.4:

4.3.1.1. The name of the Architectural Plan or unique address of the Dwelling matches that used in the HVAC design, as documented in Section 4.2.2.4.1.1.

4.3.1.2. Any Architectural Option(s) used in the Dwelling match those used in the HVAC design or are in the list of option(s) that the design can be used with, as documented in Section 4.2.2.4.1.2.

4.3.1.3. The Conditioned Floor Area of each zone in the Dwelling is between 300 square feet smaller and 100 square feet larger than the area in the HVAC design, as documented in Section 4.2.4.10.

4.3.1.4. The window area of each zone in the Dwelling is between 60 square feet smaller and 15 square feet larger than the area in the HVAC Design, as documented in Section 4.2.4.11, or for zones with > 500 square feet of window area, between 12% smaller and 3% larger.

4.3.1.5. The Front Orientation of the Dwelling matches one of the orientations included in the orientation-specific heat gains documented in Section 4.2.4.17.

4.3.1.6. The difference between the maximum and minimum total heat gain for each zone, as documented in Section 4.2.4.18, is  $\leq 6$  kBtuh.

<sup>20</sup> (Informative Note) This is the OEM setting that corresponds with the design Blower Fan airflow. Common examples include low, medium-low, medium, medium-high, and high, but also may be defined in terms of dip-switch settings or other classifications.

<sup>21</sup> (Informative Note) This is the sum of the supply-side and return-side static pressure, corresponding to the mode with the higher design Blower Fan airflow.

<sup>22</sup> (Normative Note) While an initial review may be completed prior to construction, ultimately the Dwelling as constructed shall be compared to the design documentation to verify that the criteria have been met.

- 4.3.1.7. The heating and cooling loads have been calculated room-by-room, as documented in Section 4.2.4.4.
- 4.3.2. If a Dwelling Unit or Sleeping Unit not within a Dwelling or Townhouse is to be rated, and the maximum total heat gain across orientations documented in Section 4.2.4.17 is  $\leq 18$  kBtuh and the total heat loss documented in Section 4.2.4.19 is  $\leq 35$  kBtuh, then the following criteria shall be met in addition to the criteria in Section 4.3.4:
- 4.3.2.1. The name of the unique identifier for the building that the unit is within matches that used in the HVAC design, as documented in Section 4.2.2.4.2.1.
- 4.3.2.2. The name of the Architectural Plan of the unit meets one of the following conditions:
- 4.3.2.2.1. Matches that used in the HVAC design, as documented in Section 4.2.2.4.2.2.
- 4.3.2.2.2. Is included in the list of Architectural Plans that the HVAC design can be used with, as documented in Section 4.2.2.4.2.2, and the Architectural Plan used in the HVAC design has the largest Conditioned Floor Area among the plans listed.
- 4.3.2.3. Any Architectural Option(s) used in the unit meets one of the following conditions:
- 4.3.2.3.1. Match those used in the HVAC design, as documented in Section 4.2.2.4.2.3.
- 4.3.2.3.2. Are included in the list of Architectural Options that the HVAC design can be used with, as documented in Section 4.2.2.4.2.3, and the Architectural Options used in the HVAC design have the largest Conditioned Floor Area among the options listed.
- 4.3.2.4. The window area of each zone in the Dwelling Unit or Sleeping Unit is less than or equal to the area in the HVAC Design, as documented in Section 4.2.4.11.
- 4.3.2.5. The location of the unit meets one of the following conditions:
- 4.3.2.5.1. Matches that used in the HVAC design, as documented in Section 4.2.4.2<sup>23</sup>.
- 4.3.2.5.2. The unit location, as documented in Section 4.2.4.2, is the top floor and a corner unit.
- 4.3.2.6. Orientation-specific total heat gains have been documented for all eight orientations in Section 4.2.4.17.
- 4.3.3. If a Dwelling Unit or Sleeping Unit not within a Dwelling or Townhouse is to be rated, and the maximum total heat gain across orientations documented in Section 4.2.4.17 is  $> 18$  kBtuh or the total heat loss documented in Section 4.2.4.19 is  $> 35$

<sup>23</sup> (Normative Note) The top floor, middle floor, or bottom floor and whether the unit is a corner unit or middle unit.

kBtuh, then the following criteria shall be met in addition to the criteria in Section 4.3.4:

- 4.3.3.1. The name of the unique identifier for the building that the unit is within matches that used in the HVAC design, as documented in Section 4.2.2.4.2.1.
  - 4.3.3.2. The name of the Architectural Plan of the unit matches that used in the HVAC design, as documented in Section 4.2.2.4.2.2.
  - 4.3.3.3. Any Architectural Option(s) used in the unit match those used in the HVAC design or are included in the list of Architectural Option(s) that the design can be used with, as documented in Section 4.2.2.4.2.3.
  - 4.3.3.4. The Conditioned Floor Area of each zone in the Dwelling Unit or Sleeping Unit is between 300 square feet smaller and 100 square feet larger than the area in the HVAC design, as documented in Section 4.2.4.10.
  - 4.3.3.5. The window area of each zone in the Dwelling Unit or Sleeping Unit is between 60 square feet smaller and 15 square feet larger than the area in the HVAC Design, as documented in Section 4.2.4.11, or for zones with > 500 square feet of window area, between 12% smaller and 3% larger.
  - 4.3.3.6. The Front Orientation of the Dwelling Unit or Sleeping Unit matches one of the orientations included in the orientation-specific heat gains documented in Section 4.2.4.17.
  - 4.3.3.7. The difference between the maximum and minimum total heat gain for each zone, as documented in Section 4.2.4.18, is  $\leq 6$  kBtuh.
- 4.3.4. For all Dwellings, Townhouses, Dwelling Units, and Sleeping Units, the following criteria shall be met:
- 4.3.5. The indoor design temperatures used in the loads, as documented in Section 4.2.4.5, equals 70 °F (21 °C) for the heating season and 75 °F (24 °C) for the cooling season.
  - 4.3.6. If the Dwelling is located in the U.S., then the cooling season and heating season outdoor design temperatures used in the loads, as documented in Section 4.2.4.6, shall not exceed the limits defined in Appendix A.
  - 4.3.7. The number of occupants in the Dwelling, which shall be calculated using Equation 2, are within  $\pm 2$  of the sum of the occupants used in the loads across all zones, as documented in Section 4.2.4.7.
$$\text{Occupants} = \text{Number of Bedrooms} + 1 \quad (2)$$
  - 4.3.8. The solar heat gain coefficient value used in the greatest amount of window area for each zone in the Dwelling is within  $\pm 0.1$  of the value used in the loads, as documented in Section 4.2.4.12.

- 4.3.9. The nominal R-value of the insulation <sup>24</sup> used in the greatest amount of above-grade wall area for each zone in the Dwelling is within  $\pm R-2$  of the value used in the loads, as documented in Section 4.2.4.13.
- 4.3.10. The nominal R-value of the insulation used in the greatest amount of ceiling area for each zone in the Dwelling is within  $\pm R-4$  of the value used in the loads, as documented in Section 4.2.4.14.
- 4.3.11. If the infiltration design value is quantitative, then the infiltration rate of the Dwelling is within  $\pm 2.0$  ACH50 of the value used in the loads for each zone, as documented in Section 4.2.4.15. If the infiltration design value is qualitative, then the infiltration rate of the Dwelling is within the tolerance specified in Table 1 for the qualitative cooling infiltration input used in the design.

**Table 1 – Infiltration Tolerance of Dwelling**

Qualitative Cooling Infiltration Input Used in Design	Infiltration Tolerance of Dwelling (ACH50)
Tight	0-4.0
Semi-Tight	1.0-5.0
Average	3.0-7.0
Semi-Leaky	7.0-11.0
Leaky	>11.0

- 4.3.12. The sum of the design’s time-averaged mechanical Ventilation airflow rates across all Ventilation zones, as documented in Section 4.2.3.6.5, equals the sum used in the loads across all heated and cooled zones, as documented in Section 4.2.4.16.
- 4.3.13. Each HVAC System in the Dwelling serves the heated or cooled zone(s) documented in Section 4.2.5.2 <sup>25</sup>.
- 4.3.14. Each HVAC System in the Dwelling matches the equipment type specified in Section 4.2.5.3.1.
- 4.3.15. The sum of the design airflows across all rooms reported in Section 4.2.5.5.4 equals the mode with the higher design Blower Fan airflow, as reported in Section 4.2.5.5.1.

## 5. Task 2: Evaluation of the Total Duct Leakage.

- 5.1. **Overview.** This procedure shall be completed by first meeting the prerequisites in Section 5.2, then measuring the total duct leakage per Section 5.3, and finally designating the total duct leakage grade per Section 5.4.

<sup>24</sup> (Informative Note) If both cavity and continuous insulation are used, the nominal R-value equals the sum of nominal R-value of the cavity and continuous insulation.

<sup>25</sup> (Informative Note) For example, if the design indicates that System A is intended to serve the “Upper Level” zone, then it shall be verified that System A does serve this zone.

As an alternative to measuring the total duct leakage per Section 5.3, if an Independent Verification Report is obtained containing the measured total duct leakage of the Forced-Air HVAC System under test, and the report is approved for use by an entity adopting and requiring the use of this Standard, then the reported value shall be permitted to be used.

If an Independent Verification Report is obtained, the reported value shall be used to designate the total duct leakage grade per Section 5.4.

All procedures shall be performed by parties with proper training and using appropriate safety equipment. Equipment manufacturers' operating instructions and safety instructions shall be followed.

**5.2. Prerequisites.** The HVAC design of the Dwelling shall have been evaluated in accordance with Section 4: all the required design documentation defined in Section 4.2 shall have been collected, and shall have been reviewed and verified to be in accordance with Section 4.3, or an Independent Verification Report obtained. If the design has not been evaluated, then the Forced-air HVAC System shall not be further evaluated using this standard, and Grade III shall be designated for total duct leakage, Blower Fan volumetric airflow, Blower Fan watt draw, and refrigerant charge.

**5.3. Procedure to Measure Total Duct Leakage.** The total duct leakage of the Forced-Air HVAC system under test shall be measured in accordance with ANSI/RESNET/ICC 380. The total duct leakage; time of test, either rough-in or final; and number of returns shall be recorded. Exception: If the total amount of supply ductwork or distribution building cavities does not exceed 10 ft. in length and is entirely in Conditioned Space Volume, then measurement of total duct leakage is not required <sup>26</sup>.

**5.4. Designating the Total Duct Leakage Grade**

5.4.1. Grade I shall be designated and recorded for total duct leakage if the Forced-Air HVAC System has a total amount of supply ductwork or distribution building cavities that does not exceed 10 ft. in length and is entirely in Conditioned Space Volume, or if the total leakage does not exceed the limits in Table 2a or Table 2b. As an alternative, if the total duct leakage does not exceed the limits specified within ANSI/ACCA 5 QI Section 5.1.1a, then Grade I shall also be designated.

**Table 2a – Duct Leakage Limits for Grade I (IP)**

<b>Time of Test</b>	<b># of Returns</b>	<b>Leakage Limit (CFM at 25 Pa)</b>
Rough-In	< 3	The greater of ≤ 4 per 100 ft <sup>2</sup> of CFA or ≤ 40
Rough-In	≥ 3	The greater of ≤ 6 per 100 ft <sup>2</sup> of CFA or ≤ 60
Final	< 3	The greater of ≤ 8 per 100 ft <sup>2</sup> of CFA or ≤ 80
Final	≥ 3	The greater of ≤ 12 per 100 ft <sup>2</sup> of CFA or ≤ 120

<sup>26</sup> (Informative Note) Systems that fall under this exception receive a Grade I designation per Section 5.4.

**Table 2b – Duct Leakage Limits for Grade I (SI)**

<b>Time of Test</b>	<b># of Returns</b>	<b>Leakage Limit (CMS at 0.001 IWC)</b>
Rough-In	< 3	The greater of $\leq 0.0019$ per $9.29 \text{ m}^2$ of CFA or $\leq 0.019$
Rough-In	$\geq 3$	The greater of $\leq 0.0028$ per $9.29 \text{ m}^2$ of CFA or $\leq 0.028$
Final	< 3	The greater of $\leq 0.0038$ per $9.29 \text{ m}^2$ of CFA or $\leq 0.038$
Final	$\geq 3$	The greater of $\leq 0.0057$ per $9.29 \text{ m}^2$ of CFA or $\leq 0.057$

5.4.2. Grade II shall be designated, and recorded, if the total leakage does not exceed the limits in Table 3a or Table 3b.

**Table 3a – Duct Leakage Limits for Grade II (IP)**

<b>Time of Test</b>	<b># of Returns</b>	<b>Leakage Limit (CFM at 25 Pa)</b>
Rough-In	< 3	The greater of $\leq 6$ per $100 \text{ ft}^2$ of CFA or $\leq 60$
Rough-In	$\geq 3$	The greater of $\leq 8$ per $100 \text{ ft}^2$ of CFA or $\leq 80$
Final	< 3	The greater of $\leq 10$ per $100 \text{ ft}^2$ of CFA or $\leq 100$
Final	$\geq 3$	The greater of $\leq 14$ per $100 \text{ ft}^2$ of CFA or $\leq 140$

**Table 3b – Duct Leakage Limits for Grade II (SI)**

<b>Time of Test</b>	<b># of Returns</b>	<b>Leakage Limit (CMS at 0.001 IWC)</b>
<b>Rough-In</b>	< 3	The greater of $\leq 0.0028$ per $9.29 \text{ m}^2$ of CFA or $\leq 0.028$
<b>Rough-In</b>	$\geq 3$	The greater of $\leq 0.0038$ per $9.29 \text{ m}^2$ of CFA or $\leq 0.038$
<b>Final</b>	< 3	The greater of $\leq 0.0047$ per $9.29 \text{ m}^2$ of CFA or $\leq 0.047$
<b>Final</b>	$\geq 3$	The greater of $\leq 0.0066$ per $9.29 \text{ m}^2$ of CFA or $\leq 0.066$

5.4.3. Unless the exception in Section 5.3 has been met, Grade III shall be designated and recorded if the total duct leakage has been measured and exceeds the limits in Section 5.4.2.

## 6. Task 3: Evaluation of the Blower Fan Volumetric Airflow.

**6.1. Overview.** This procedure shall be completed by first meeting the prerequisites in Section 6.2, then determining the applicable test method per Section 6.3, then preparing the Dwelling and Forced-Air HVAC System for testing per Section 6.4, then measuring the

Blower Fan volumetric airflow using Section 6.5, 6.6, 6.7, or 6.8, and finally designating the Blower Fan Volumetric Airflow grade per Section 6.9.

As an alternative to completing the procedures defined in Sections 6.5 through 6.8, if the installed equipment contains an on-board diagnostic system that is capable of reporting <sup>27</sup> the Blower Fan volumetric airflow and that is approved for use by an entity adopting and requiring the use of this Standard, then the reported value shall be permitted to be used.

As an alternative to completing the procedures defined in Sections 6.3 through 6.8, if an Independent Verification Report is obtained containing the measured Blower Fan volumetric airflow of the Forced-Air HVAC System under test, and the report is approved for use by an entity adopting and requiring the use of this Standard, then the reported value shall be permitted to be used.

If an on-board diagnostic system is used or Independent Verification Report is obtained, the reported value shall be used to designate the Blower Fan Volumetric Airflow grade per Section 6.9.

As an alternative to completing the procedures defined in Sections 6.5 through 6.8, the following are approved for use:

- Section 4.1.2 from ANSI/ACCA 5 QI,
- Section 8.6 from ASTM E1554-13,
- Normative Appendix A from ANSI/ASHRAE Standard 152-2004,
- Section RA3.3 from the 2016 Reference Appendices for the 2016 Building Energy Efficiency Standards of the California Energy Commission.

All procedures shall be performed by parties with proper training and using appropriate safety equipment. Equipment manufacturers' operating instructions and safety instructions shall be followed.

**6.2. Prerequisites.** Prior to evaluating the Blower Fan volumetric airflow, all the following requirements shall have been met.

6.2.1. The total duct leakage shall have been evaluated in accordance with Section 5, including all prerequisites in Section 5.2. If the total duct leakage has been designated Grade III, then the Forced-air HVAC System shall not be further evaluated using this standard, and Grade III shall be designated for Blower Fan volumetric airflow, Blower Fan watt draw, and refrigerant charge.

6.2.2. **Verification of HVAC Components.** If the following components are included in the required design documentation for the Forced-Air HVAC System under test, they shall be verified to be present. If these components are not operational at the time of inspection, then the Forced-air HVAC System shall not be further evaluated using this standard, and Grade III shall be designated for Blower Fan volumetric airflow, Blower Fan watt draw, and refrigerant charge. The additional requirements defined in Section 6.2.2.1 shall also be met.

<sup>27</sup> (Informative Note) That is to say, capable of transmitting the relevant parameter to the user (e.g., on a thermostat screen, mobile phone).

6.2.2.1. HVAC equipment. The specified manufacturer(s) and model number(s) of the equipment in the Forced-Air HVAC System under test matches the installed equipment or supplemental documentation has been collected as defined in Section 4.2.5 and verified in accordance with Section 4.3. If the installed equipment does not match the specified equipment in the original or supplemental documentation, then the Forced-air HVAC System shall not be further evaluated using this standard, and Grade III shall be designated for Blower Fan volumetric airflow, Blower Fan watt draw, and refrigerant charge.

6.2.2.2. Dwelling-Unit Mechanical Ventilation Systems integrated with the HVAC System.

6.2.2.3. Distribution systems, including supply registers and return grilles.

6.2.2.4. An air filter with the same performance rating and metric <sup>28</sup> as reported in Section 4.2.5.4. <sup>29</sup>

**6.3. Determination of Applicable Test Method.** The test procedure used to evaluate the airflow shall be selected according to Sections 6.3.1.1 through 6.3.1.3.

6.3.1.1. If the Forced-Air HVAC System has a total amount of supply ductwork or distribution building cavities that does not exceed 10 ft. in length and is entirely in Conditioned Space Volume, then measurement of the airflow shall be exempted and the volumetric airflow grade shall be designated in accordance with Section 6.9.

6.3.1.2. If the Forced-Air HVAC System does not meet the conditions in Section 6.3.1.1 and the total duct leakage has been designated Grade I, the airflow is permitted to be measured using either the Pressure Matching Method (Section 6.5), a Flow Grid (Section 6.6), a Flow Hood (Section 6.7), or the OEM Static Pressure Table Method (Section 6.8) <sup>30</sup>.

6.3.1.3. If the total duct leakage has been designated Grade II, the airflow is permitted to be measured using the Pressure Matching Method with Method 1 Installation (Section 6.5), a Flow Grid (Section 6.6), or the OEM Static Pressure Table Method (Section 6.8).

**6.4. Procedure to Prepare the Dwelling and Forced-Air HVAC System**

6.4.1. **Position of Dampers.** Dampers within the duct system of the Forced-Air HVAC System under test shall be treated as follows:

6.4.1.1. Ventilation Dampers.

6.4.1.1.1. Non-motorized dampers <sup>31</sup> that connect the Conditioned Space Volume <sup>32</sup> to the exterior or to Unconditioned Space Volume shall be left in their as-found positions.

<sup>28</sup> (Informative Note) Examples of performance ratings include MERV and FPR.

<sup>29</sup> (Informative Note) Use of a new clean filter is recommended to ensure maximum airflow.

<sup>30</sup> (Informative Note) Grade I total duct leakage is required to ensure that leakage in the return-side of the system is sufficiently small that it does not significantly impact the measured volumetric airflow of the Blower Fan.

<sup>31</sup> (Informative Note) For example, pressure-activated operable dampers, fixed dampers.

<sup>32</sup> (Informative Note) This includes space conditioning duct systems.

- 6.4.1.1.2. Motorized dampers that connect the Conditioned Space Volume <sup>32</sup> to the exterior or to Unconditioned Space Volume shall be placed in their closed positions and shall not be further sealed.
- 6.4.1.2. Balancing dampers shall be left in their as-found position.
- 6.4.2. **Position of Registers.** Supply registers shall be left in their as-found position.
- 6.4.3. **Ventilation Openings.** Non-dampered Ventilation openings within the duct system of Dwelling-Unit Mechanical Ventilation Systems, including Ventilation systems that use the Blower Fan of the Forced-Air HVAC System, shall not be sealed.
- 6.4.4. **Settings for Fans Other than the HVAC System Blower Fan.**
- 6.4.4.1. Any fans <sup>33</sup> that could change the pressure in either the Conditioned Space Volume or, if present, an Unconditioned Space Volume containing the Forced-Air HVAC System under test, shall be turned off.
- 6.4.4.2. If a Dwelling-Unit Mechanical Ventilation System contains a fan, other than the Blower Fan of the Forced-Air HVAC System under test <sup>34</sup>, that is interconnected with the Forced-Air HVAC System under test, it shall be turned off.
- 6.4.5. **Settings for HVAC System.** If the Forced-Air HVAC System contains an Air Conditioner, then the test shall be conducted according to Section 6.4.5.1. If the Forced-Air HVAC System contains a Heat Pump, then the test shall be conducted according to Section 6.4.5.1 if cooling mode is the higher design airflow as reported in Section 4.2.5.5.1, or the test shall be conducted according to Section 6.4.5.2 if heating mode is the higher design airflow as reported in Section 4.2.5.5.1.
- 6.4.5.1. Cooling Mode.
- 6.4.5.1.1. If the outdoor temperature is < 55 °F (13 °C), then power to the compressor shall be disconnected <sup>35</sup> for the duration of the test. If the Forced-Air HVAC System is capable of operating in heating mode and power to the compressor is not able to be disconnected then the test shall be conducted according to Section 6.4.5.2.
- 6.4.5.1.2. The thermostat shall be set to cooling mode and the setpoint temperature adjusted as low as possible <sup>36</sup>.
- 6.4.5.1.3. If the Forced-Air HVAC System serves multiple zones, as reported in Section 4.2.5.2, then manufacturer instructions shall be followed to ensure that all zones in the Forced-Air HVAC System are set to cooling mode, set to the set point required for testing, and are simultaneously calling for cooling.

<sup>33</sup> (Informative Note) For example, bathroom fans, clothes dryers, kitchen vent hood, attic fan, water heater power-venting fans, or other Forced-Air HVAC System.

<sup>34</sup> (Informative Note) For example, an inline fan, an ERV system, or an HRV system.

<sup>35</sup> (Informative Note) For example, by flipping the circuit breaker for the compressor or pulling its disconnect switch.

<sup>36</sup> (Informative Note) If the Blower Fan speed type is not single-speed, as reported in Section 4.2.5.3.5, then the system can operate at two or more speeds each for heating mode and cooling mode. Consult manufacturer instructions to ensure that the Blower Fan is operating at the highest design speed.

#### 6.4.5.2. Heating Mode.

6.4.5.2.1. If the outdoor temperature is  $> 60^{\circ}\text{F}$  ( $16^{\circ}\text{C}$ ), then power to the compressor shall be disconnected<sup>35</sup> for the duration of the test. If the Forced-Air HVAC System is capable of operating in cooling mode and power to the compressor is not able to be disconnected then the test shall be conducted according to Section 6.4.5.1.

6.4.5.2.2. The thermostat shall be set to heating mode and the setpoint temperature adjusted as high as possible<sup>36</sup>.

6.4.5.2.3. If the Forced-Air HVAC System serves multiple zones, as reported in Section 4.2.5.2, then manufacturer instructions shall be followed to ensure that all zones in the Forced-Air HVAC System are set to heating mode, set to the set point required for testing, and are simultaneously calling for heating.

### 6.5. Pressure Matching Method

**6.5.1. Equipment Needed.** The equipment listed in this section shall be observed to be in usable condition. In addition, if the manufacturer recommends calibration, then the equipment listed in this section shall be calibrated at the manufacturer's recommended interval.

6.5.1.1. Manometer. A device that measures pressure difference with an accuracy of  $\pm 1\%$  of the reading or  $\pm 0.25\text{ Pa}$  ( $0.0010\text{ IWC}$ ), whichever is greater.

6.5.1.2. Static Pressure Probe. A pressure measurement device capable of measuring the static pressure within a duct system.

6.5.1.3. Fan Flowmeter. A tool comprised of a variable speed fan and a Manometer that can convert fan pressure differentials into volumetric airflow. The fan shall be capable of moving air into the Forced-Air HVAC System to achieve or approach the pressure of its operating conditions, and measure volumetric airflow with an accuracy equal to or better than  $\pm 3\%$  of the measured flow +  $7\text{ CFM}$  ( $3.3\text{ L/s}$  or  $0.0033\text{ CMS}$ ).

6.5.1.4. Duct plugs, UL-181 listed tape, or other means of sealing duct holes as approved by the Authority Having Jurisdiction.

#### 6.5.2. Procedure to Conduct Pressure Matching Airflow Test

6.5.2.1. A test hole shall be created or located in the supply side of the Forced-Air HVAC System for the placement of the Static Pressure Probe. Moving in the direction of airflow the test hole shall be located after any heating and/or cooling equipment but before the first supply duct run. The test hole shall not be in flexible ductwork. If the test hole cannot be located or created in the supply side, then one of the other airflow test procedures shall be used if airflow is to be measured.

6.5.2.2. The Static Pressure Probe shall be inserted into the test hole, positioned according to its manufacturer's instructions, affixed in place so it will not move

during the test <sup>37</sup>, connected to the Manometer, and then the Manometer shall be turned on.

- 6.5.2.3. The Forced-Air HVAC System shall run for 10 minutes continuously.
- 6.5.2.4. The average pressure difference between the Static Pressure Probe and the space where the Forced-Air HVAC System is located,  $P_{sop}$ , shall be measured over at least a 10-second period. If a negative reading is found, another measurement location shall be created or located, or another procedure shall be selected if airflow is to be measured. If the values are fluctuating by more than 0.05 IWC (12.4 Pa), this turbulent condition shall be noted.
- 6.5.2.5. One of two methods shall be used to attach the Fan Flowmeter to the Forced-Air HVAC System. Section 6.5.2.5.1 is permitted to be used for all Forced-Air HVAC Systems. Section 6.5.2.5.2 is only permitted to be used for a Forced-Air HVAC System with a duct system that has a single return grille.
  - 6.5.2.5.1. Method 1 Installation: At the Blower Compartment. The Blower Fan shall be turned off, the blower access panel removed, and a temporary air barrier inserted between the return duct system and the Blower Fan inlet <sup>38</sup>. The temporary air barrier shall be taped or otherwise sealed. The Fan Flowmeter shall be attached to the blower compartment access, with the connection between the Fan Flowmeter and blower compartment temporarily sealed. If the Fan Flowmeter will pull air from outside the Conditioned Space Volume during the test, then doors or access panels between the Conditioned Space Volume and the Fan Flowmeter inlet shall be opened. The Blower Fan shall then be turned back on.
  - 6.5.2.5.2. Method 2 Installation: At the Return Grille. The Fan Flowmeter shall be attached to the return grille. The area of the return grille not covered by the connection to the Fan Flowmeter shall be temporarily sealed. Any filter in the return duct shall be removed.
- 6.5.2.6. The Fan Flowmeter shall be turned on and its airflow adjusted until the static pressure matches  $P_{sop}$ , or if  $P_{sop}$  cannot be reached, the Fan Flowmeter shall be adjusted to maximum airflow.
- 6.5.2.7. The average airflow through the Fan Flowmeter,  $Q_{test}$ , and the average coincident pressure difference,  $P_{test}$ , shall be measured over at least a 10-second period. For a Dwelling located at an elevation  $>2,500$  ft.,  $Q_{test}$  shall be corrected to equivalent airflow at sea level using the procedure specified by the Fan Flowmeter manufacturer.  $Q_{test}$  is also permitted to be corrected for elevations  $\leq 2,500$  ft and to equivalent airflow at 68 °F (21.1 °C) for a more accurate comparison to the design airflow.
- 6.5.2.8. The measured airflow,  $Q_{test}$ , and coincident plenum pressure,  $P_{test}$ , shall be used to determine the Blower Fan airflow at operating conditions,  $Q_{op}$ , using Equation 3 and recorded:

<sup>37</sup> (Informative Note) For example, using a magnetic mount.

<sup>38</sup> (Informative Note) For example, blocked at the filter slot

$$Q_{op} = Q_{test} \times \left( \frac{P_{sop}}{P_{test}} \right)^{0.5} \quad (3)$$

Where:

Qop = The Blower Fan airflow at operating conditions.

Qtest = The Fan Flowmeter airflow measured in Section 6.5.2.7.

Psop = The pressure in the supply side during operation measured in Section 6.5.2.4.

Ptest = The pressure in the supply side during testing measured in Section 6.5.2.7.

6.5.2.9. The Fan Flowmeter shall be turned off and removed; the air barrier removed, if inserted; the blower access panel replaced, if removed; and the supply side test hole shall be sealed using equipment in Section 6.5.1.4.

6.5.2.10. If the procedure to measure Blower Fan watt draw in Section 7 or to evaluate refrigerant charge in Section 8 will not be conducted, then power to the compressor shall be restored, if disconnected for the test, and the thermostat(s) mode(s) and set point(s) shall be returned to their original setting.

## 6.6. Flow Grid

**6.6.1. Equipment Needed.** The equipment listed in this section shall be observed to be in usable condition. In addition, if the manufacturer recommends calibration, then the equipment listed in this section shall be calibrated at the manufacturer's recommended interval.

6.6.1.1. Manometer. A device that measures pressure difference with an accuracy of  $\pm 1\%$  of the reading or  $\pm 0.25$  Pa (0.0010 IWC), whichever is greater.

6.6.1.2. Static Pressure Probe. A pressure measurement device capable of measuring the static pressure within a duct system.

6.6.1.3. Flow Grid. A flow measurement device designed to temporarily replace the filter in the Forced-Air HVAC System and capable of measuring the volumetric airflow through it with an accuracy equal to or better than  $\pm 7\%$  of the measured flow.

6.6.1.4. Duct plugs, UL-181 listed tape, or other means of sealing duct holes as approved by the Authority Having Jurisdiction.

### 6.6.2. Procedure to Conduct Flow Grid Airflow Test

6.6.2.1. A test hole shall be created or located in the supply side of the Forced-Air HVAC System for the placement of the Static Pressure Probe. Moving in the direction of airflow the test hole shall be located after any heating and/or cooling equipment but before the first supply duct run. The test hole shall not be in flexible ductwork. If the test hole cannot be located or created in the supply side, then one of the other airflow test procedures shall be used if airflow is to be measured.

6.6.2.2. The Static Pressure Probe shall be inserted into the test hole, positioned according to its manufacturer's instructions, affixed in place so it will not move

during the test <sup>39</sup>, connected to the Manometer, and then the Manometer shall be turned on.

6.6.2.3. The Forced-Air HVAC System shall run for 10 minutes continuously.

6.6.2.4. The average pressure difference between the Static Pressure Probe and the space where the Forced-Air HVAC System is located,  $P_{sop}$ , shall be measured over at least a 10-second period. If a negative reading is found, another measurement location shall be created or located, or another procedure shall be selected if airflow is to be measured. If the values are fluctuating by more than 0.05 IWC (12.4 Pa), this turbulent condition shall be noted.

6.6.2.5. All filters shall be removed. Flow plate(s) shall be located so that all of the Blower Fan airflow will flow through them <sup>40</sup>. If multiple locations are required <sup>41</sup>, multiple flow plates shall be used so that simultaneous measurements are taken, representing total system airflow. The flow plate(s) shall be temporarily sealed in place so that air must go through, rather than around, the plate(s). Flow Grid manufacturer instructions shall be followed to ensure proper setup.

6.6.2.6. The average static pressure at the test hole,  $P_{test}$ , shall be measured over at least a 10-second period.

6.6.2.7. Using the pressure reading from the flow plate, the average airflow through the Flow Grid,  $Q_{test}$ , shall be measured over at least a 10-second period. If multiple Flow Grids are used,  $Q_{test}$  shall be the sum of the flows through each of the Flow Grids. For a Dwelling located at an elevation  $>2,500$  ft.,  $Q_{test}$  shall be corrected to equivalent airflow at sea level using the procedure specified by the Flow Grid manufacturer.  $Q_{test}$  is also permitted to be corrected for elevations  $\leq 2,500$  ft and to equivalent airflow at 68 °F (21.1 °C) for a more accurate comparison to the design airflow.

6.6.2.8. The measured airflow,  $Q_{test}$ , and coincident plenum pressure,  $P_{test}$ , shall be used to determine the Blower Fan airflow at operating conditions,  $Q_{op}$ , using Equation 4 and recorded:

$$Q_{op} = Q_{test} \times \left( \frac{P_{sop}}{P_{test}} \right)^{0.5} \quad (4)$$

Where:

$Q_{op}$  = The Blower Fan airflow at operating conditions.

$Q_{test}$  = The Flow Grid airflow measured in Section 6.6.2.7.

$P_{sop}$  = The pressure in the supply side during operation measured in Section 6.6.2.4.

<sup>39</sup> (Informative Note) For example, using a magnetic mount.

<sup>40</sup> (Informative Note) For example, a single flow plate at a filter slot located at the air handler, a single flow plate at a return grille for a Forced-Air HVAC System with a single return, or a flow plate at each return grille for a Forced-Air HVAC System with multiple returns.

<sup>41</sup> (Informative Note) For example, a system with multiple return grilles, with a filter at each grille.

P<sub>test</sub> = The pressure in the supply side during testing measured in Section 6.6.2.6.

6.6.2.9. The Flow Grid shall be removed and the filter replaced; and the supply side test hole shall be sealed using equipment in Section 6.6.1.4.

6.6.2.10. If the procedure to measure Blower Fan watt draw in Section 7 or to evaluate refrigerant charge in Section 8 will not be conducted, then power to the compressor shall be restored, if disconnected for the test, and the thermostat(s) mode(s) and set point(s) shall be returned to their original setting.

## 6.7. Flow Hood

6.7.1. **Equipment Needed.** The equipment listed in this section shall be observed to be in usable condition. In addition, if the manufacturer recommends calibration, then the equipment listed in this section shall be calibrated at the manufacturer's recommended interval.

6.7.1.1. Flow Hood. A device consisting of a flow capture element capable of creating an airtight perimeter seal around the return grille, and an airflow meter capable of measuring the volumetric airflow through the flow capture element with an airflow range that that encompasses the design Blower Fan airflow, as reported in Section 4.2.5.5.1, at an accuracy equal to or better than  $\pm 3\%$  of the measured flow + 7 CFM (3.3 L/s or 0.0033 CMS).

### 6.7.2. Procedure to Conduct Flow Hood Airflow Test

6.7.2.1. The Forced-Air HVAC System shall run for 10 minutes continuously, after which the following procedure shall be completed for each return grille in the Forced-Air HVAC System:

6.7.2.1.1. The flow capture element of the Flow Hood shall be placed over each return grille of the Forced-Air HVAC System, ensuring that a tight perimeter seal has been created and that the flow capture area is at least as large as the return grille in all dimensions. If the flow capture area is smaller than the return grille in any dimension, then a larger flow capture element shall be used or another procedure shall be selected if airflow is to be measured.

6.7.2.1.2. The Flow Hood shall be turned on and the average airflow through the airflow meter, Q<sub>test</sub>, shall be measured over at least a 10-second period. Manufacturer instructions to correct for the impacts of back-pressure within the Flow Hood shall be followed <sup>42</sup>.

6.7.2.1.3. For a Dwelling located at an elevation >2,500 ft., Q<sub>test</sub> shall be corrected to equivalent airflow at sea level using the procedure specified by the airflow measurement device manufacturer. Q<sub>test</sub> is also permitted to be corrected for elevations  $\leq 2,500$  ft and to equivalent airflow at 68 °F (21.1 °C) for a more accurate comparison to the design airflow.

<sup>42</sup> (Informative Note) For example, measuring the airflow twice, once with a pressure relief flap closed and then again with the flap open. Other manufacturers may indicate that back-pressure is measured and automatically compensated for within the measurement tool.

- 6.7.2.2. If only one return grille is present in the Forced-Air HVAC System, Qop shall equal Qtest. If multiple return grilles are present in the Forced-Air HVAC System, Qop shall be the sum of Qtest for each of the return grilles. Qop shall be recorded.
- 6.7.2.3. If the procedure to measure Blower Fan watt draw in Section 7 or to evaluate refrigerant charge in Section 8 will not be conducted, then power to the compressor shall be restored, if disconnected for the test, and the thermostat(s) mode(s) and set point(s) shall be returned to their original setting.

## **6.8. OEM Static Pressure Table Method**

6.8.1. **Equipment Needed.** The equipment listed in this section shall be observed to be in usable condition. In addition, if the manufacturer recommends calibration, then the equipment listed in this section shall be calibrated at the manufacturer's recommended interval.

- 6.8.1.1. Manometer. A device that measures pressure difference with an accuracy of  $\pm 1\%$  of the reading or  $\pm 0.25$  Pa (0.0010 IWC), whichever is greater.
- 6.8.1.2. Static Pressure Probe. A pressure measurement device capable of measuring the static pressure within a duct system.
- 6.8.1.3. Duct plugs, UL-181 listed tape, or other means of sealing duct holes as approved by the Authority Having Jurisdiction.

### **6.8.2. Documentation Needed**

6.8.2.1. The OEM Static Pressure Table shall be obtained for the manufacturer, model number(s), and configuration of the installed equipment <sup>43</sup>.

### **6.8.3. Procedure to Conduct OEM Static Pressure Airflow Test**

6.8.3.1. If the Blower Fan motor type, as reported in Section 4.2.5.3.4, is ECM or Other Motor Type, then the elevation of the system shall be verified to be  $\leq 2,500$  ft or one of the other airflow test procedures shall be used.

Exception: The OEM provides instructions to adjust the OEM Static Pressure Table to account for the system's elevation <sup>44</sup>.

6.8.3.2. The fan-speed setting of the Blower Fan shall be observed and recorded for the mode that the test will be conducted in <sup>45</sup>. The setting shall be verified to match one of the settings listed on the OEM Static Pressure Table.

6.8.3.3. A test hole shall be located or created in the return-side of the Forced-Air HVAC system for the placement of the Static Pressure Probe. Moving in the direction of airflow, the return-side test hole shall be located after the filter but

<sup>43</sup> (Informative Note) For example, furnace, fan-coil, and/or condenser manufacturer and model number(s); direction of airflow such as upflow or downflow; operating voltage; and the presence of integral electric heating elements, as applicable.

<sup>44</sup> (Informative Note) For example, provides air density correction factors that correspond to the system's elevation.

<sup>45</sup> (Informative Note) For example, if the test will be conducted in cooling mode, the fan-speed setting for cooling mode shall be recorded. The fan-speed setting (e.g., low, medium, high) may be indicated in a variety of ways, such as a speed tap on the motor, a wire color, or a dip-switch setting.

before the Blower Fan. The test hole shall not be in flexible ductwork. If the test hole cannot be located or created in the return side, then one of the other airflow test procedures shall be used if airflow is to be measured.

- 6.8.3.4. A test hole shall be located or created in the supply-side of the Forced-Air HVAC System for the placement of the Static Pressure Probe. For Furnaces, moving in the direction of airflow the supply-side test hole shall be located after the Furnace but before the evaporator coil, if a coil is present. For Heat Pumps, moving in the direction of airflow the test hole shall be located after the fan-coil but before the presence of any other components not accounted for in the OEM Static Pressure Table <sup>46</sup>. The test hole shall not be in flexible ductwork. If the test hole cannot be located or created in the supply side, then one of the other airflow test procedures shall be used if airflow is to be measured.
- 6.8.3.5. The Static Pressure Probe shall be inserted into the supply-side test hole, positioned according to its manufacturer's instructions, affixed in place so it will not move during the test <sup>47</sup>, connected to the Manometer, and then the Manometer shall be turned on.
- 6.8.3.6. The Forced-Air HVAC System shall run for 10 minutes continuously.
- 6.8.3.7. The average pressure difference between the Static Pressure Probe in the supply-side of the Forced-Air HVAC System and the space where the system is located,  $P_{sop}$ , shall be measured over at least a 10-second period <sup>48</sup>. If a negative reading is found, another measurement location shall be created or located, or another procedure shall be selected if airflow is to be measured. If the values are fluctuating by more than 0.05 IWC (12.4 Pa), this turbulent condition shall be noted.
- 6.8.3.8. The Static Pressure Probe shall be removed from the supply-side test hole and inserted into the return-side test hole, positioned according to its manufacturer's instructions, and affixed in place so it will not move during the test <sup>49</sup>.
- 6.8.3.9. The average pressure difference between the Static Pressure Probe in the return-side of the Forced-Air HVAC System and the space where the system is located,  $P_{rop}$ , shall be measured over at least a 10-second period <sup>50</sup>. If a positive reading is found, another measurement location shall be created or located, or another procedure shall be selected if airflow is to be measured. If the values are fluctuating by more than 0.05 IWC (12.4 Pa), this turbulent condition shall be noted.
- 6.8.3.10. If the elevation of the system is  $> 2,500$  ft. (762 m), then an elevation adjustment factor,  $padj$ , shall be calculated using Equation 5a or 5b. For elevations  $\leq 2,500$  ft,  $padj$  is also permitted to be calculated using Equation 5a or 5b or shall equal 1:

<sup>46</sup> (Informative Note) For example, if the OEM Static Pressure Table accounts for the impact of a supplemental electric heater or states that the impact is negligible, then the hole would be located after this element. In contrast, if the table does not account for the impact, then the hole would be located before this element.

<sup>47</sup> (Informative Note) For example, using a magnetic mount.

<sup>48</sup> (Informative Note) Also known as supply External Static Pressure (e.g., +0.32 IWC)

<sup>49</sup> (Informative Note) For example, using a magnetic mount.

<sup>50</sup> (Informative Note) Also known as return External Static Pressure (e.g., -0.18 IWC)

$$\rho_{adj} = \frac{0.07517}{0.07517 * (1 - (0.0035666 * E)/528)^{5.2553}} \quad (5a)$$

Where:

$\rho_{adj}$  = The density adjustment factor for the elevation of the system.

E = Elevation above sea level (ft.).

$$\rho_{adj} = \frac{1.2041}{1.2041 * (1 - (0.0065 * E)/293)^{5.2553}} \quad (5b)$$

Where:

$\rho_{adj}$  = The density adjustment factor for the elevation of the system.

E = Elevation above sea level (m).

6.8.3.11. The total operational pressure of the system,  $P_{top}$ , shall be calculated in IWC or Pa using Equation 6 and recorded <sup>51</sup>:

$$P_{top} = \rho_{adj} * (|P_{sop}| + |P_{prop}|) - P_{filter} \quad (6)$$

Where:

$P_{top}$  = The total operational pressure of the system.

$\rho_{adj}$  = The density adjustment factor, per Equation 5a or 5b.

$P_{sop}$  = The supply-side operational pressure of the system.

$P_{prop}$  = The return-side operational pressure of the system.

$P_{filter}$  = The filter adjustment factor. If the OEM Static Pressure Table indicates that its airflow values were generated using equipment with a filter in place, then  $P_{filter}$  shall equal 0.1 IWC (24.9 Pa). Alternatively, if the OEM Static Pressure Table indicates the actual pressure drop of the filter that was used to generate its airflow values, then  $P_{filter}$  shall equal this value. If the OEM Static Pressure Table either indicates that a filter was not in place when generating its values or is ambiguous about the presence of a filter, then  $P_{filter}$  shall equal 0.

6.8.3.12. The Blower Fan airflow at operating conditions,  $Q_{op}$ , shall be determined by looking up the airflow value on the OEM Static Pressure Table that is associated with the observed fan-speed setting and measured  $P_{top}$  and recorded. If  $P_{top}$  does not match any of the listed values on the Blower Table, interpolation between two listed values shall be used to determine  $Q_{op}$ . Extrapolation beyond listed values on the Blower Table shall not be used.

6.8.3.13. The supply side and return side test holes shall be sealed using equipment in Section 6.8.1.3.

<sup>51</sup> (Informative Note) For properly designed systems, common values of total External Static Pressure range from 0.3-0.5 for fan-coil systems and Furnace systems without cooling and from 0.5-0.8 IWC for Furnaces with coils.

6.8.3.14. If the procedure to measure Blower Fan watt draw in Section 7 or to evaluate refrigerant charge in Section 8 will not be conducted, then power to the compressor shall be restored, if disconnected for the test, and the thermostat(s) mode(s) and set point(s) shall be returned to their original setting.

**6.9. Designating the Blower Fan Volumetric Airflow Grade**

6.9.1.  $F_{AF}$ , the deviation between the design-specified and field-measured Blower Fan volumetric airflow shall be calculated using Equation 7.

$$F_{AF} = \frac{(Q_{op} - Q_{design})}{Q_{design}} \tag{7}$$

Where:

$F_{AF}$  = The percent deviation between the design-specified and field-measured Blower Fan volumetric airflow.

$Q_{op}$  = The Blower Fan volumetric airflow at operating conditions, as field-measured per Section 6.5, 6.6, 6.7, or 6.8.

$Q_{design}$  = The design-specified Blower Fan volumetric airflow, per Section 4.2.5.5.1, for the test mode, heating or cooling, determined in Section 6.4.5.

Exception: For a Forced-Air HVAC System that has a total amount of supply ductwork or distribution building cavities  $\leq 10$  ft. in length and is entirely in Conditioned Space Volume,  $F_{AF}$  shall equal zero.

6.9.2. The Blower Fan volumetric airflow grade shall be designated according to the ranges in Table 4, and recorded.

**Table 4 – Grade Designations for Blower Fan Volumetric Airflow**

Grade Designation	$F_{AF}$ Range		
I	$\leq 0$ and $> -15\%$	or	$\geq 0$ and $< +15\%$
II	$\leq -15\%$ and $> -25\%$	or	$\geq +15\%$ and $< +25\%$
III	$\leq -25\%$	or	$\geq +25\%$

**7. Task 4: Evaluation of the Blower Fan Watt Draw.**

7.1. **Overview.** This procedure shall be completed by first meeting the prerequisites in Section 7.2, then preparing the Dwelling and Forced-Air HVAC System for testing, per Section 7.3, and then measuring Blower Fan watt draw using Section 7.4, 7.5, 7.6, or 7.7. Finally, the Blower Fan watt draw grade shall be designated per Section 7.8.

As an alternative to completing the procedures defined in Sections 7.4 through 7.7, if the installed equipment contains an on-board diagnostic system that is capable of reporting <sup>52</sup>

<sup>52</sup> (Informative Note) That is to say, capable of transmitting the relevant parameter to the user (e.g., on a thermostat screen, mobile phone).

the Blower Fan watt draw and that is approved for use by an entity adopting and requiring the use of this Standard, then the reported value shall be permitted to be used.

As an alternative to completing the procedures defined in Sections 7.3 through 7.7, if an Independent Verification Report is obtained containing the measured Blower Fan watt draw of the Forced-Air HVAC System under test, and the report is approved for use by an entity adopting and requiring the use of this Standard, then the reported value shall be permitted to be used.

If an on-board diagnostic system is used or Independent Verification Report is obtained, the reported value shall be used to designate the Blower Fan watt draw grade per Section 7.8.

All procedures shall be performed by parties with proper training and using appropriate safety equipment. Equipment manufacturers' operating instructions and safety instructions shall be followed.

**7.2. Prerequisites.** Prior to evaluating the Blower Fan watt draw, the Blower Fan volumetric airflow shall have been evaluated in accordance with Section 6, including all prerequisites in Section 6.2. In addition, the Blower Fan volumetric airflow shall have been designated Grade I or II, per Section 6.9. If the Blower Fan volumetric airflow has not been evaluated or has been designated Grade III, then Grade III shall be designated for Blower Fan watt draw.

### **7.3. Procedure to Prepare the Dwelling and Forced-Air HVAC System <sup>53</sup>**

**7.3.1. Independent Verification Report.** If an Independent Verification Report was used to determine the Blower Fan volumetric airflow, then the procedure to prepare the Dwelling and Forced-Air HVAC System for testing defined in Section 6.4 shall be completed.

**7.3.2. Settings for HVAC System.** If the Forced-Air HVAC System contains an Air Conditioner, then the test shall be conducted according to Section 7.3.2.1. If the Forced-Air HVAC System contains a Heat Pump, then the test shall be conducted according to Section 7.3.2.1 if cooling mode is the higher design airflow as reported in Section 4.2.5.5.1, or the test shall be conducted according to Section 7.3.2.2 if heating mode is the higher design airflow as reported in Section 4.2.5.5.1.

#### **7.3.2.1. Cooling Mode.**

**7.3.2.1.1.** If the outdoor temperature is  $< 55$  °F (13 °C), then power to the compressor shall be disconnected <sup>54</sup> for the duration of the test. If the Forced-Air HVAC System is capable of operating in heating mode and power to the compressor is not able to be disconnected then the test shall be conducted according to Section 7.3.2.2.

<sup>53</sup> (Informative Note) The procedure for preparing the HVAC settings differs from the one used in the Evaluation of Blower Fan Volumetric Airflow.

<sup>54</sup> (Informative Note) For example, by flipping the circuit breaker for the compressor or pulling its disconnect switch.

7.3.2.1.2. The thermostat shall be set to cooling mode and the setpoint temperature adjusted as low as possible <sup>55</sup>.

7.3.2.1.3. If the Forced-Air HVAC System serves multiple zones, as reported in Section 4.2.5.2, then manufacturer instructions shall be followed to ensure that all zones in the Forced-Air HVAC System are set to cooling mode, set to the set point required for testing, and are simultaneously calling for cooling.

#### 7.3.2.2. Heating Mode.

7.3.2.2.1. If the outdoor temperature is  $> 60$  °F (16 °C), then power to the compressor shall be disconnected <sup>54</sup> for the duration of the test. If the Forced-Air HVAC System is capable of operating in cooling mode and power to the compressor is not able to be disconnected then the test shall be conducted according to Section 7.3.2.1.

7.3.2.2.2. The thermostat shall be set to heating mode and the setpoint temperature adjusted as high as possible <sup>55</sup>.

7.3.2.2.3. If the Forced-Air HVAC System serves multiple zones, as reported in Section 4.2.5.2, then manufacturer instructions shall be followed to ensure that all zones in the Forced-Air HVAC System are set to heating mode, set to the set point required for testing, and are simultaneously calling for heating.

### 7.4. Portable Plug-In Watt Meter

7.4.1. **Equipment Needed.** The equipment listed in this section shall be observed to be in usable condition.

7.4.1.1. Portable Plug-In Watt Meter. The apparatus for measuring the Blower Fan watt draw shall consist of a wattmeter capable of plugging into a standard electrical receptacle and that itself contains a receptacle for plugging devices into to measure their watt draw. The Meter shall have a true power measurement system (i.e., sensor plus data acquisition system) having an accuracy of  $\pm 2\%$  of reading or  $\pm 10$  watts, whichever is greater.

#### 7.4.2. Procedure to Measure Blower Fan Watt Draw

7.4.2.1. The equipment containing the Blower Fan shall be plugged into the Portable Plug-In Watt Meter and the Portable Plug-In Watt Meter turned on.

7.4.2.2. The Forced-Air HVAC System shall run for 10 minutes continuously before completing Section 7.4.2.3 and beyond. The 10-minute period is permitted to include the time the Forced-Air HVAC System was running while conducting the procedure for evaluating the Blower Fan volumetric airflow in Section 6.

7.4.2.3. The average watt draw of the Blower Fan,  $W_{fan}$ , displayed on the Portable Plug-In Watt Meter shall be measured over at least a 10-second period and recorded.

<sup>55</sup> (Informative Note) If the Blower Fan speed type is not single-speed, as reported in Section 4.2.5.3.5, then the system can operate at two or more speeds each for heating mode and cooling mode. Consult manufacturer instructions to ensure that the Blower Fan is operating at the highest design speed.

7.4.2.4. The Portable Plug-In Watt Meter shall be removed, and the equipment with the Blower Fan plugged back into the receptacle.

7.4.2.5. If the procedure to evaluate refrigerant charge in Section 8 will not be conducted, then power to the compressor shall be restored, if disconnected for the test, and the thermostat(s) mode(s) and set point(s) shall be returned to their original setting.

## **7.5. Clamp-On Watt Meter**

7.5.1. **Equipment Needed.** The equipment listed in this section shall be observed to be in usable condition. In addition, if the manufacturer recommends calibration, then the equipment listed in this section shall be calibrated at the manufacturer's recommended interval.

7.5.1.1. **Clamp-On Watt Meter.** The apparatus shall consist of a clamp capable of being placed around an electrical wire to measure current combined with leads capable of simultaneously measuring voltage, allowing for the measurement of the Blower Fan watt draw <sup>56</sup>. The Meter shall have a true power measurement system (i.e., sensor plus data acquisition system) having an accuracy of  $\pm 2\%$  of reading or  $\pm 10$  watts, whichever is greater.

### **7.5.2. Procedure to Measure Blower Fan Watt Draw**

7.5.2.1. This procedure shall be performed by parties with the proper training and using appropriate safety equipment. The Clamp-On Watt Meter manufacturer's operating instructions and safety instructions shall be followed.

7.5.2.2. The Blower Fan watt draw shall be measured at one of the following locations. If neither location is available, then a different procedure shall be selected.

7.5.2.2.1. At the Service Disconnect.

7.5.2.2.2. At the Forced-Air HVAC System. This location is permitted to be used if an access panel(s) provides access to the electrical supply wiring, and the Blower Fan compartment remains closed. If this location is used, the access panel shall be removed <sup>57</sup>. If the Blower Fan is not capable of operating with the access panels removed, then a different procedure shall be selected if Blower Fan watt draw is to be measured.

7.5.2.3. The Forced-Air HVAC System shall run for 10 minutes continuously before completing Section 7.5.2.4 and beyond. The 10-minute period is permitted to include the time the Forced-Air HVAC System was running while conducting the procedure for evaluating the Blower Fan volumetric airflow in Section 6.

7.5.2.4. The nameplate voltage for the equipment with the Blower Fan shall be determined. If the nameplate voltage is between 110 V and 120 V, then Section

<sup>56</sup> (Informative Note) Some multimeters may be capable of meeting these requirements (i.e., capable of simultaneously measuring voltage and current and calculating Blower Fan watt draw).

<sup>57</sup> (Informative Note) The party conducting the test shall obtain required licensing, if any, prior to removing the panel. If required licensing has not been obtained, an alternate test method shall be selected.

7.5.2.4.1 shall be followed. If the nameplate voltage is between 200 V and 240 V, then Section 7.5.2.4.2 shall be followed.

7.5.2.4.1. Equipment with a nameplate voltage between 110 V and 120 V.

7.5.2.4.1.1. The clamp of the Clamp-On Watt Meter shall be placed around the wire <sup>58</sup> supplying power to the equipment with the Blower Fan.

7.5.2.4.1.2. The leads capable of measuring voltage shall be connected to the Clamp-On Watt Meter. The negative lead shall be placed in contact with the grounding wire <sup>59</sup>. The positive lead shall be placed in contact with the connection <sup>60</sup> between the electrical power supply wire and the equipment's power supply wire <sup>58</sup>.

7.5.2.4.1.3. The average watt draw of the Blower Fan, Wfan, displayed on the Clamp-On Watt Meter shall be measured over at least a 10-second period and recorded.

7.5.2.4.2. Equipment with a nameplate voltage between 200 V and 240 V.

7.5.2.4.2.1. The clamp of the Clamp-On Watt Meter shall be placed around either of the two wires <sup>61</sup> supplying power to the equipment with the Blower Fan.

7.5.2.4.2.2. The leads capable of measuring voltage shall be connected to the Clamp-On Watt Meter. The negative lead shall be placed in contact with the connection between the first electrical power supply wire and the equipment's power supply wire <sup>61</sup>. The positive lead shall be placed in contact with the connection between the second electrical power supply wire and the equipment's power supply wire <sup>61</sup>.

7.5.2.4.2.3. The average watt draw of the Blower Fan, Wfan, displayed on the Clamp-On Watt Meter shall be measured over at least a 10-second period and recorded.

7.5.2.4.3. The Clamp-On Watt Meter shall be removed and the access panel(s) replaced or service disconnect panel closed.

7.5.2.5. If the procedure to evaluate refrigerant charge in Section 8 will not be conducted, then power to the compressor shall be restored, if disconnected for the test, and the thermostat(s) mode(s) and set point(s) shall be returned to their original setting.

## 7.6. Analog Utility Revenue Meter

**7.6.1. Equipment Needed.** The equipment listed in this section shall be observed to be in usable condition.

<sup>58</sup> (Informative Note) Typically black in color.

<sup>59</sup> (Informative Note) Typically green in color.

<sup>60</sup> (Informative Note) Wire nuts are commonly used for this connection, in which case the lead can be inserted into the wire nut.

<sup>61</sup> (Informative Note) Typically either red or black in color, and may be referred to as "L1" and "L2".

7.6.1.1. Analog Utility Revenue Meter. An analog utility revenue meter that shall have a documented Kh factor and the ability to view the revolutions of the meter wheel.

7.6.1.2. Stopwatch. A stopwatch that provides measurements in units of seconds.

### **7.6.2. Procedure to Measure Blower Fan Watt Draw**

7.6.2.1. The Forced-Air HVAC System shall run for 10 minutes continuously before completing Section 7.6.2.2 and beyond. The 10-minute period is permitted to include the time the Forced-Air HVAC System was running while conducting the procedure for evaluating the Blower Fan volumetric airflow in Section 6.

7.6.2.2. Every circuit breaker shall be turned off except the one exclusively serving the equipment with the Blower Fan.

7.6.2.3. The Kh factor on the revenue meter shall be recorded.

7.6.2.4. The number of full revolutions of the meter wheel shall be counted over a period exceeding 90 seconds and both the number of revolutions, Nrev, and time period, Trev, recorded.

7.6.2.5. The watt draw of the Blower Fan, Wfan, shall be calculated using Equation 8 and recorded:

$$Wfan = \frac{(Kh \times Nrev \times 3600)}{Trev} \quad (8)$$

Where:

Wfan = The watt draw of the Blower Fan at operating conditions.

Kh = The conversion factor between revolutions and watts, for the meter under test.

Nrev = The number of full revolutions observed in Section 7.6.2.4.

Trev = The duration of the observation in Section 7.6.2.4, in seconds.

7.6.2.6. The circuit breakers shall be returned to their original position.

7.6.2.7. If the procedure to evaluate refrigerant charge in Section 8 will not be conducted, then power to the compressor shall be restored, if disconnected for the test, and the thermostat(s) mode(s) and set point(s) shall be returned to their original setting.

### **7.7. Digital Utility Revenue Meter**

**7.7.1. Equipment Needed.** The equipment listed in this section shall be observed to be in usable condition.

7.7.1.1. Digital Utility Revenue Meter. A digital utility revenue meter capable of direct digital display of the Blower Fan watt draw.

### **7.7.2. Procedure to Measure Blower Fan Watt Draw**

7.7.2.1. The Forced-Air HVAC System shall run for 10 minutes continuously before completing Section 7.7.2.2 and beyond. The 10-minute period is permitted to include the time the Forced-Air HVAC System was running while conducting the procedure for evaluating the Blower Fan volumetric airflow in Section 6.

- 7.7.2.2. Every circuit breaker shall be turned off except the one exclusively serving the equipment with the Blower Fan.
- 7.7.2.3. Wfan shall be read from the Digital Utility Revenue Meter, and recorded.
- 7.7.2.4. The circuit breakers shall be returned to their original position.
- 7.7.2.5. If the procedure to evaluate refrigerant charge in Section 8 will not be conducted, then power to the compressor shall be restored, if disconnected for the test, and the thermostat(s) mode(s) and set point(s) shall be returned to their original setting.

**7.8. Designating the Blower Fan Watt Draw Grade**

7.8.1. Blower Fan Efficiency shall be calculated using Equation 9:

$$Blower\ Fan\ Efficiency = \frac{Wfan}{Qop} \tag{9}$$

Where:

Blower Fan Efficiency = The ratio of field-measured Blower Fan watt draw and field-measured Blower Fan volumetric airflow.

Wfan = The Blower Fan watt draw at operating conditions, as field-measured per Section 7.4, 7.5, 7.6, or 7.7.

Qop = The Blower Fan volumetric airflow at operating conditions, as field-measured per Section 6.5, 6.6, 6.7, or 6.8.

7.8.2. The Blower Fan watt draw grade shall be designated according to the ranges in Table 5, and recorded.

**Table 5 – Grade Designations for Blower Fan Watt Draw**

Grade Designation	Blower Fan Efficiency (Watts/CFM)
I	≤ 0.45
II	> 0.45 and ≤ 0.58
III	> 0.58

**8. Task 5: Evaluation of the Refrigerant Charge.**

8.1. **Overview.** This procedure shall be completed by first meeting the prerequisites in Section 8.2. Then the applicable test methods shall be determined using Section 8.3 <sup>62</sup> and

<sup>62</sup> (Informative Note) The Weigh-In Method requires the collection of documentation about the refrigerant system from the party responsible for charging the system. Charging of the system will likely occur prior to the arrival of the party conducting the test. Therefore, if the party conducting the test believes that the outdoor temperatures might only permit the use of the Weigh-In Method, they may wish to request the required documentation for this method prior to arriving on site.

the refrigerant charge evaluated using an applicable test method, either Section 8.4 or 8.5. Finally, the refrigerant charge grade shall be designated per Section 8.6.

As an alternative to completing the procedures defined in Sections 8.3 through 8.5, if the installed equipment contains an on-board diagnostic system that is capable of reporting <sup>63</sup> either the temperatures defined in this section or the superheat or subcooling of the system, and that is approved for use by an entity adopting and requiring the use of this Standard, then the reported values shall be permitted to be used.

As an alternative to completing the procedures defined in Sections 8.3 through 8.5, if an Independent Verification Report is obtained containing either the temperatures defined in this section or the superheat or subcooling of the system of the Forced-Air HVAC System under test, and the report is approved for use by an entity adopting and requiring the use of this Standard, then the reported value shall be permitted to be used.

If an on-board diagnostic system is used or Independent Verification Report is obtained, the reported value shall be used to designate the refrigerant charge grade per Section 8.6.

All procedures shall be performed by parties with proper training and using appropriate safety equipment. Equipment manufacturers' operating instructions and safety instructions shall be followed.

## **8.2. Prerequisites**

8.2.1. Prior to evaluating the refrigerant charge, the Blower Fan volumetric airflow shall have been designated Grade I or II, per Section 6.9. If the Blower Fan volumetric airflow has not been evaluated or has been designated Grade III, then the Forced-air HVAC System shall not be further evaluated using this standard, and Grade III shall be designated for refrigerant charge.

## **8.3. Determination of Applicable Test Methods**

**8.3.1. Equipment Needed.** The equipment listed in this section shall be observed to be in usable condition.

8.3.1.1. Digital Thermometer. A device that can measure dry-bulb air temperature with an accuracy of  $\pm 1.8$  °F (1.0 °C).

### **8.3.2. Procedure to Determine Applicable Test Methods.**

8.3.2.1. The Weigh-In Method, per Section 8.5, is permitted to be used under all conditions. The Non-Invasive Procedure, per Section 8.4, is permitted to be used only when the outdoor air dry-bulb temperature has been measured in accordance with Section 8.3.2.1.1 and all of the conditions in Sections 8.3.2.1.2 through 8.3.2.1.4 are met.

8.3.2.1.1. The Digital Thermometer shall be shielded from direct sun and the average outdoor air dry-bulb-temperature shall be measured over at least a 10-second period where the outdoor air enters the condensing unit.

<sup>63</sup> (Informative Note) That is to say, capable of transmitting the relevant parameter to the user (e.g., on a thermostat screen, mobile phone).

- 8.3.2.1.2. The Forced-Air HVAC System is not a Mini-Split Air Conditioner, Mini-Split Heat Pump, Multi-Split Air Conditioner, or a Multi-Split Heat Pump.
- 8.3.2.1.3. The equipment's rated cooling efficiency is known.
- 8.3.2.1.4. The outdoor air dry-bulb temperature measured in Section 8.3.2.1.1 meets the following applicable condition:
  - 8.3.2.1.4.1. For equipment with a rated cooling efficiency < 17 SEER, the temperature is between 70 °F (20 °C) and 115 °F (46 °C).
  - 8.3.2.1.4.2. For all other equipment, the temperature is between 75 °F (24 °C) and 115 °F (46 °C).

## **8.4. Non-Invasive Method**

### **8.4.1. Procedure to Prepare the Dwelling and Forced-Air HVAC System <sup>64</sup>**

- 8.4.1.1. If an Independent Verification Report was used to determine the Blower Fan volumetric airflow, then the procedure to prepare the Dwelling and Forced-Air HVAC System for testing defined in Section 6.4 shall be completed.
- 8.4.1.2. **Settings for HVAC System.**
  - 8.4.1.2.1. The thermostat shall be set to cooling mode and the setpoint temperature adjusted as low as possible <sup>65</sup>.
  - 8.4.1.2.2. If the Forced-Air HVAC System serves multiple zones, as reported in Section 4.2.5.2, then manufacturer instructions shall be followed to ensure that all zones in the Forced-Air HVAC System are set to cooling mode, set to the set point required for testing, and are simultaneously calling for cooling.
- 8.4.1.3. **Position of Dampers.** Dampers within the duct system of the Forced-Air HVAC System under test shall be treated as follows:
  - 8.4.1.3.1. Ventilation Dampers.
    - 8.4.1.3.1.1. Non-motorized dampers <sup>66</sup> that connect the Conditioned Space Volume <sup>67</sup> to the exterior or to Unconditioned Space Volume shall be placed in their closed position during the test and shall not be further sealed. If running the Forced-Air HVAC System causes the non-motorized dampers to open after being placed in their closed position, then the Ventilation openings shall be temporarily sealed. If the Ventilation openings are not accessible, or cannot be temporarily sealed, then the Forced-air HVAC System shall not be further evaluated using this standard, and Grade III shall be designated for refrigerant charge.

<sup>64</sup> (Informative Note) The procedure for preparing the HVAC settings, damper position, and ventilation openings differs from the one used in the Evaluation of Blower Fan Volumetric Airflow.

<sup>65</sup> (Informative Note) If the Blower Fan speed type is not single-speed, as reported in Section 4.2.5.3.5, then the system can operate at two or more speeds each for heating mode and cooling mode. Consult manufacturer instructions to ensure that the Blower Fan is operating at the highest design speed.

<sup>66</sup> (Informative Note) For example, pressure-activated operable dampers, fixed dampers.

<sup>67</sup> (Informative Note) This includes space conditioning duct systems.

8.4.1.3.1.2. Motorized dampers that connect the Conditioned Space Volume<sup>67</sup> to the exterior or to Unconditioned Space Volume shall be placed in their closed positions and shall not be further sealed.

8.4.1.3.2. All balancing dampers shall be left in their as-found position.

8.4.1.4. **Ventilation Openings.** Non-dampered Ventilation openings within the duct system of Dwelling-Unit Mechanical Ventilation Systems, including Ventilation systems that use the Blower Fan of the Forced-Air HVAC System, shall be temporarily sealed. If the non-dampered Ventilation openings are not accessible, or cannot be temporarily sealed, then the Forced-air HVAC System shall not be further evaluated using this standard, and Grade III shall be designated for refrigerant charge.

**8.4.2. Equipment Needed.** The equipment listed in this section shall be observed to be in usable condition.

8.4.2.1. Digital Thermometer. A device that can measure dry-bulb air temperature with an accuracy of  $\pm 1.8$  °F (1.0 °C).

8.4.2.2. Digital Hygrometer. A device that can measure wet-bulb air temperature with an accuracy of  $\pm 2.0$  °F (1.1 °C) or calculate wet-bulb air temperature using measurements of Relative Humidity (RH) with an accuracy of  $\pm (1.8\% \text{ RH} + 3.0\%$  of the measured value) at 77 °F (25 °C) and dry-bulb air temperature with an accuracy of  $\pm 2.0$  °F (1.1 °C).

8.4.2.3. Digital Pipe Temperature Probe. A device that can attach to<sup>68</sup> and measure temperatures of pipes and refrigerant lines between -4 °F (-20 °C) and 185 °F (85 °C) with an accuracy of  $\pm 2.3$  °F (1.3 °C).

**8.4.3. Procedure to Evaluate the Refrigerant Charge.**

8.4.3.1. Before proceeding past Section 8.4.3.6, the Forced-Air HVAC System shall run for 15 minutes continuously<sup>69</sup>.

8.4.3.2. The location for measuring the return air temperature shall meet the conditions of Section 8.4.3.2.1. Exception: if a hole cannot be located or created that meets the conditions of Section 8.4.3.2.1, the conditions of Section 8.4.3.2.2 shall be met.

8.4.3.2.1. The location shall be a test hole in the return side of the Forced-Air HVAC System out of line of sight of the evaporator coil<sup>70</sup>.

8.4.3.2.2. The location shall be the return grille closest to the Forced-Air HVAC System.

<sup>68</sup> (Informative Note) For example, using a clamp, strap, or equivalent device.

<sup>69</sup> (Informative Note) The 15-minute period is permitted to include the time the Forced-Air HVAC System was running while conducting the procedure for evaluating the Blower Fan volumetric airflow in Section 6 and the procedure for evaluating the Blower Fan watt draw in Section 7, as long as power to the compressor was not disconnected.

<sup>70</sup> (Informative Note) Return air temperature is measured out of line of sight of the evaporator coil to prevent radiant heat transfer from the coil from impacting the measured temperature.

- 8.4.3.3. Using the Digital Thermometer, the average return air dry-bulb temperature ( $T_{\text{return air, db}}$ ), and average return air wet-bulb temperature shall be measured over at least a 10-second period at the location determined in Section 8.4.3.2 and recorded.
- 8.4.3.4. If the temperatures were measured using a test hole, then the test hole shall be sealed to prevent leakage after measurements have been completed.
- 8.4.3.5. The return air temperatures measured in Section 8.4.3.3 shall be evaluated for compliance with the following conditions. The following two conditions shall be met, or the Forced-air HVAC System shall not be further evaluated using this standard, and Grade III shall be designated for refrigerant charge <sup>71</sup>:
- 8.4.3.5.1. Return air dry-bulb temperature is between 70 °F (21 °C) and 80 °F (27 °C), and,
- 8.4.3.5.2. Return air wet-bulb temperature is  $\geq 50$  °F (10 °C).
- 8.4.3.6. The following average temperatures shall be measured over at least a 10-second period each and recorded. All three temperatures shall be measured within a five-minute period that begins no more than five minutes after the measurements taken in Section 8.4.3.3 <sup>72</sup>.
- 8.4.3.6.1. Using the Digital Thermometer, the outdoor air dry-bulb temperature ( $T_{\text{outdoor air}}$ ) shall be measured where the outdoor air stream enters the condensing unit and with the Digital Thermometer shaded from direct sun. If the outdoor dry-bulb temperature does not meet the requirements in Section 8.3.2.1.4, then refrigerant charge shall not be evaluated using the non-invasive method.
- 8.4.3.6.2. Using the Digital Pipe Temperature Probe with the sensor in contact at the 2:00 or 10:00 o'clock position on the refrigerant line, the suction line <sup>73</sup> temperature ( $T_{\text{suction line, measured}}$ ) shall be measured at the condensing unit within 6 inches of the service valve.
- 8.4.3.6.3. Using the Digital Pipe Temperature Probe with the sensor in contact with the refrigerant line, the liquid line <sup>74</sup> temperature ( $T_{\text{liquid line, measured}}$ ) shall be measured at the condensing unit within 6 inches of the service valve.
- 8.4.3.7. The thermostat(s) mode(s) and set point(s) shall be returned to their original setting, the dampers returned to their original as-found positions, and the Ventilation openings unsealed, if temporarily sealed.
- 8.4.3.8. Determining the Design Temperature Difference (DTD).

<sup>71</sup> (Informative Note) If these conditions could be achieved by allowing the system to run longer, that is permitted.

<sup>72</sup> (Informative Note) This time period means that the final measurement taken in Section 8.4.3.3 must be no more than ten minutes after the measurements taken in Section 8.4.3.2.3.

<sup>73</sup> (Informative Note) The suction line is the larger of the two refrigerant lines and leads from the evaporator to the condenser in a split system air conditioner or heat pump. This line is insulated since it carries refrigerant at a low temperature, and insulation may need to be removed and replaced to measure the line temperature.

<sup>74</sup> (Informative Note) The liquid line is the smaller of the two refrigerant lines and leads from the condenser to the evaporator in a split system air conditioner or heat pump. The refrigerant in this line is in a liquid state and is at an elevated temperature. This line should not be insulated.

8.4.3.8.1. The normalized Blower Fan airflow shall be calculated using Equation 10.

$$Q_{norm} = \frac{Q_{design}}{\text{Maximum Total Heat Gain}} \times 12,000 \quad (10)$$

Where:

$Q_{norm}$  = The normalized Blower Fan airflow.

$Q_{design}$  = The design-specified Blower Fan volumetric airflow, per Section 4.2.5.5.1, for cooling mode.

Maximum Total Heat Gain = The maximum total heat gain among the specified orientations, as reported in Section 4.2.4.17.

8.4.3.8.2. The default value for DTD shall be assigned using  $Q_{norm}$ , per Section 8.4.3.8.1, and the criteria in Table 6.

**Table 6 – Default DTD Values**

$Q_{norm}$	Default DTD Value ( $DTD_{Def}$ )
< 375	40 °F (22 °C)
$\geq 375$ and $\leq 425$	35 °F (19 °C)
> 425	30 °F (17 °C)

8.4.3.8.3. If the party responsible for conducting the start-up of the Forced-Air HVAC System under test has provided the return air dry-bulb temperature and the suction line Saturation Temperature at the time of start-up, then the site-specific DTD shall be calculated using Equation 11 <sup>75</sup>.

$$DTD_{Site} = T_{return\ air,db,install} - T_{suction,saturation,install} \quad (11)$$

Where:

$DTD_{Site}$  = The site-specific DTD of the installed equipment.

$T_{returnair,db,install}$  = The return air temperature measured by the contractor at the time of installation.

$T_{suction,saturation,install}$  = The suction line Saturation Temperature measured by the contractor at the time of installation.

8.4.3.8.4. If  $DTD_{Site}$ , per Section 8.4.3.8.3, is within  $\pm 3$  °F (2 °C) of  $DTD_{Def}$ , per Section 8.4.3.8.2, then DTD shall equal  $DTD_{Site}$ . If not, or if  $DTD_{Site}$  has not been calculated, then DTD shall equal  $DTD_{Def}$ .

8.4.3.9. If the metering device type is piston or capillary tube, per Section 4.2.5.3.9.1, then this Section shall be completed.

<sup>75</sup> (Informative Note) The use of the site-specific DTD, per Section 8.4.3.7.3, may result in a more accurate assessment of the DifferenceDTD than the use of the default DTD value.

8.4.3.9.1. The Target Superheat shall be determined from the manufacturer-supplied superheat chart for the equipment under test, or Table B1 in Appendix B <sup>76</sup>, using the return air wet-bulb temperature measured in Section 8.4.3.3 and the outdoor air dry-bulb temperature measured in Section 8.4.3.6.1.

8.4.3.9.2. The minimum liquid line temperature shall be calculated using Equation 12.

$$T_{liquid\ line,min} = T_{outdoor\ air} + T_{liquid\ line,min,constant} \quad (12)$$

Where:

$T_{liquidline,min}$  = The minimum allowable liquid line temperature.

$T_{outdoor\ air}$  = The outdoor air temperature, measured in Section 8.4.3.6.1.

$T_{liquidline,min,constant}$  = 3 °F (2 °C).

8.4.3.9.3. The maximum liquid line temperature shall be calculated using Equation 13.

$$T_{liquid\ line,max} = T_{outdoor\ air} + T_{liquid\ line,max,constant} \quad (13)$$

Where:

$T_{liquidline,max}$  = The maximum allowable liquid line temperature.

$T_{outdoor\ air}$  = The outdoor air temperature, measured in Section 8.4.3.6.1.

$T_{liquidline,max,constant}$  = 12 °F (7 °C).

8.4.3.9.4. If the measured liquid line temperature, per Section 8.4.3.6.3, is  $< T_{liquid\ line,\ min}$  or  $> T_{liquid\ line,\ max}$ , then the Forced-air HVAC System shall not be further evaluated using this standard, and Grade III shall be designated for refrigerant charge.

8.4.3.9.5. The Target Suction Line Temperature shall be calculated using Equation 14.

$$T_{suction\ line,target} = T_{return\ air,db} - DTD + Target\ Superheat \quad (14)$$

Where:

$T_{suctionline,target}$  = The Target Suction Line Temperature.

$T_{returnair,db}$  = The return air dry-bulb temperature, measured in Section 8.4.3.3.

DTD = The Design Temperature Difference of the installed equipment, per Section 8.4.3.8.4.

Target Superheat = The Target Superheat determined in Section 8.4.3.9.1.

<sup>76</sup> (Informative Note) If a dash mark is read from the table in Table B1, the Target Superheat is less than 5 °F and the test cannot be performed under these conditions. Typically this indicates that the outdoor conditions are too hot and the indoor conditions are too cold, and can be resolved by increasing the indoor temperature or testing at another time.

8.4.3.9.6. The difference between the measured suction line temperature and the Target Suction Line Temperature shall be calculated using Equation 15 and recorded.

$$Difference_{DTD} = T_{suction\ line,target} - T_{suction\ line,measured} \quad (15)$$

Where:

Difference<sub>DTD</sub> = The difference between the measured suction line temperature and the Target Suction Line Temperature.

T<sub>suctionline,target</sub> = The Target Suction Line Temperature, determined using Equation 14.

T<sub>suctionline,measured</sub> = The suction line temperature measured in Section 8.4.3.6.2.

8.4.3.10. If the metering device type is TXV or EEV, per Section 4.2.5.3.9.1, then this Section shall be completed.

8.4.3.10.1. The Target Subcooling shall equal the value specified in Section 4.2.5.3.9.2.

8.4.3.10.2. Determining the Condensing Temperature Over Ambient (CTOA).

8.4.3.10.2.1. The default value for CTOA shall be assigned using the SEER reported in Section 4.2.5.3.10 and the criteria in Table 7.

**Table 7 – Default CTOA Values**

Reported SEER	Default CTOA Value (CTOA <sub>Def</sub> )
≤ 9	30 °F (16.7 °C)
> 9 and ≤ 12	25 °F (13.9 °C)
> 12 and ≤ 16	20 °F (11.1 °C)
> 16	15 °F (8.3 °C)

8.4.3.10.2.2. If the party responsible for conducting the start-up of the Forced-Air HVAC System under test has provided the outdoor air dry-bulb temperature and the liquid line Condensing Temperature at the time of start-up, then the site-specific CTOA shall be calculated using Equation 16 <sup>77</sup>.

$$CTOA_{Site} = T_{condensing,install} - T_{outdoor\ air,install} \quad (16)$$

Where:

CTOA<sub>Site</sub> = The Condensing Temperature Over Ambient of the installed equipment.

<sup>77</sup> (Informative Note) The use of the site-specific CTOA, per Section 8.4.3.9.2.2, may result in a more accurate assessment of the Difference<sub>CTOA</sub> than the use of the default CTOA value.

$T_{condensing,install}$  = The liquid line Condensing Temperature measured by the contractor at the time of installation.

$T_{outdoorair,install}$  = The outdoor air temperature measured by the contractor at the time of installation.

8.4.3.10.2.3. If  $CTOA_{Site}$ , per Section 8.4.3.10.2.2, is within  $\pm 3$  °F (2 °C) of  $CTOA_{Def}$ , per Section 8.4.3.10.2.1, then CTOA shall equal  $CTOA_{Site}$ . If not, or if  $CTOA_{Site}$  has not been calculated, then CTOA shall equal  $CTOA_{Def}$ .

8.4.3.10.3. The minimum suction line temperature shall be calculated using Equation 17.

$$T_{suction\ line,min} = T_{return\ air,db} - DTD + T_{suction\ line,min,constant} \quad (17)$$

Where:

$T_{suctionline,min}$  = The minimum allowable suction line temperature.

$T_{returnair,db}$  = The return air dry-bulb temperature, measured in Section 8.4.3.3.

DTD = The Design Temperature Difference of the installed equipment, per Section 8.4.3.8.4.

$T_{suctionline,min,constant}$  = 3 °F (2 °C).

8.4.3.10.4. The maximum suction line temperature shall be calculated using Equation 18.

$$T_{suction\ line,max} = T_{return\ air,db} - DTD + T_{suction\ line,max,constant} \quad (18)$$

Where:

$T_{suctionline,max}$  = The maximum allowable suction line temperature.

$T_{returnair,db}$  = The return air dry-bulb temperature, measured in Section 8.4.3.3.

DTD = The Design Temperature Difference of the installed equipment, per Section 8.4.3.8.4.

$T_{suctionline,max,constant}$  = 26 °F (14 °C).

8.4.3.10.5. If the measured suction line temperature, per Section 8.4.3.6.2, is  $> 65$  °F (18 °C),  $< T_{suction\ line,\ min}$ , or  $> T_{suction\ line,\ max}$ , then the Forced-air HVAC System shall not be further evaluated using this standard, and Grade III shall be designated for refrigerant charge.

8.4.3.10.6. The Target Liquid Line temperature shall be calculated using Equation 19.

$$T_{liquid\ line,target} = T_{outdoor\ air} + CTOA - Target\ Subcooling \quad (19)$$

Where

$T_{liquidline,target}$  = The Target Liquid Line temperature

$T_{outdoorair}$  = The outdoor air temperature, measured in Section 8.4.3.6.1

CTOA = The Condensing Temperature Over Ambient of the installed equipment, per Section 8.4.3.10.2.3

Target Subcooling = The Target Subcooling determined in Section 8.4.3.10.1

8.4.3.10.7. The difference between the measured liquid line temperature and the Target Liquid Line temperature shall be calculated using Equation 20 and recorded.

$$\text{Difference}_{CTOA} = T_{\text{liquid line,target}} - T_{\text{liquid line,measured}} \quad (20)$$

DifferenceCTOA = The difference between the measured liquid line temperature and the Target Liquid Line temperature.

Tliquidline,target = The Target Liquid Line temperature, determined using Equation 19

Tliquidline,measured = The liquid line temperature measured in Section 8.4.3.6.3

## 8.5. Weigh-In Method

**8.5.1. Equipment Needed.** The equipment listed in this section shall be observed to be in usable condition. The equipment in Section 8.5.1.2 is permitted, but not required, to be used.

8.5.1.1. Measuring Tape. A device that can determine length with an accuracy of  $\pm 1/16$  inch (1.6 mm).

8.5.1.2. Pipe Caliper. A device for the purpose of measuring pipe diameter to an accuracy of  $\pm 1/8$ ", either directly or with a conversion scale printed on the device.

### 8.5.2. Documentation Needed

8.5.2.1. The following documentation about the refrigerant system of the Forced-Air HVAC System under test shall be collected from the party responsible for charging the system.

8.5.2.1.1. The total weight of refrigerant added to or removed from the system, an indication of whether the refrigerant was added or was removed, and an indication of whether the factory-supplied refrigerant was first removed <sup>78</sup>.

8.5.2.1.2. One or more photographs showing the scale displaying the total weight of refrigerant added or removed from the system indicated per Section 8.5.2.1.1. The photographs shall be timestamped and geotagged to indicate the location of the Forced-Air HVAC System under test.

8.5.2.1.3. The total length of the liquid line <sup>79</sup>.

8.5.2.1.4. The outside diameter of the liquid line.

<sup>78</sup> (Informative Note) An indication of whether refrigerant was added or removed may be indicated by the phrase "10 Oz. Added" or "10 Oz. Removed." An indication of whether the factory-supplied refrigerant was first removed may be indicated by the phrase "Factory-supplied charge not removed" or "Factory-supplied charge removed."

<sup>79</sup> (Informative Note) The liquid line is the smaller of the two refrigerant lines and leads from the condenser to the evaporator in a split system air conditioner or heat pump. The refrigerant in this line is in a liquid state and is at an elevated temperature. This line should not be insulated.

8.5.2.1.5. The length of liquid line accounted for in the factory-supplied charge <sup>80</sup>.

8.5.2.1.6. The weight of the factory-supplied refrigerant <sup>81</sup>.

8.5.2.1.7. The weight of the refrigerant added to the system for specific components, <sup>82</sup> other than the incremental length of the liquid line.

### 8.5.3. Procedure to Evaluate the Refrigerant Charge

8.5.3.1. Using the Measuring Tape, the total length <sup>83</sup> of the liquid line shall be measured to the nearest foot (0.3 meters) <sup>79</sup>, and recorded. If the refrigerant line has been pre-marked to indicate line lengths, then the markings are permitted to be used in lieu of the Measuring Tape.

8.5.3.2. The Delta Line Length shall be calculated using Equation 21.

$$L_{\text{delta}} = L_{\text{measured}} - L_{\text{default}} \quad (21)$$

Where:

$L_{\text{delta}}$  = The difference in line length between the measured liquid line length and the liquid line length accounted for by the factory-supplied charge.

$L_{\text{measured}}$  = The liquid line length measured in Section 8.5.3.1.

$L_{\text{default}}$  = The liquid line length accounted for by the factory-supplied charge, from Section 8.5.2.1.5.

8.5.3.3. The outer diameter of the liquid line shall be determined and recorded in accordance with Section 8.5.3.3.1 or 8.5.3.3.2.

8.5.3.3.1. Using the Measuring Tape, the circumference of the liquid line shall be measured to the nearest 1/16<sup>th</sup> of an inch (1.6 mm) and divided by 3.14.

8.5.3.3.2. Using the Pipe Caliper, the diameter of the liquid line shall be measured to the nearest 1/8".

8.5.3.4. The weight of the refrigerant required for the incremental liquid line length,  $W_{\text{length\_ant}}$ , shall be determined from Table C1 in Appendix C using  $L_{\text{delta}}$ , from Equation 21, and the outside diameter of the liquid line, from Section 8.5.3.3.

8.5.3.5. The total anticipated refrigerant weight shall be calculated using Equation 22 and recorded.

$$W_{\text{tot\_ant}} = W_{\text{length\_ant}} + W_{\text{component\_rep}} + W_{\text{factory\_rep}} \quad (22)$$

Where:

<sup>80</sup> (Informative Note) Systems typically come charged from the factory to account for a default length of refrigerant line, often 15 feet. Manufacturer instructions will direct installers to add or remove refrigerant if the actual line length is longer or shorter than this default length.

<sup>81</sup> (Informative Note) The factory-supplied charge is typically indicated on the condenser nameplate.

<sup>82</sup> (Informative Note) For correct charge, additional refrigerant may be required if the system was fully evacuated, or there are additional components installed (e.g., filter drier).

<sup>83</sup> (Informative Note) For Multi-splits, the total length of the liquid line includes the refrigerant lines going to all indoor sections.

$W_{tot\_ant}$  = The total anticipated weight of refrigerant.

$W_{length\_ant}$  = The anticipated weight of the refrigerant required for the incremental liquid line length determined in Section 8.5.3.4.

$W_{component\_rep}$  = The reported weight of refrigerant added to the system for specific components, other than the incremental length of the liquid line, from Section 8.5.2.1.7.

$W_{factory\_rep}$  = The reported weight of factory-supplied refrigerant from Section 8.5.2.1.6.

8.5.3.6. The total reported refrigerant weight,  $W_{tot\_rep}$ , shall equal the value reported in Section 8.5.2.1.1 if the factory-supplied refrigerant was first removed, or shall be calculated using Equation 23 if not.

$$W_{tot\_rep} = W_{length\_rep} + W_{component\_rep} + W_{factory\_rep} \quad (23)$$

Where:

$W_{tot\_rep}$  = The total reported weight of refrigerant.

$W_{length\_rep}$  = The reported weight of the refrigerant added or removed for the incremental liquid line length, as reported in Section 8.5.2.1.1.

$W_{component\_rep}$  = The reported weight of refrigerant added to the system for specific components, other than the incremental length of the liquid line from Section 8.5.2.1.7.

$W_{factory\_rep}$  = The reported weight of factory-supplied refrigerant from Section 8.5.2.1.6.

8.5.3.7. The deviation between the total anticipated and total reported refrigerant weight shall be calculated using Equation 24 and recorded.

$$W_{dev} = \frac{W_{tot\_rep} - W_{tot\_ant}}{W_{tot\_ant}} \quad (24)$$

Where:

$W_{dev}$  = The percent deviation between the total anticipated and total reported refrigerant weight.

$W_{tot\_rep}$  = The total reported weight of refrigerant, from Section 8.5.3.6.

$W_{tot\_ant}$  = The total anticipated weight of refrigerant, from Section 8.5.3.5.

## 8.6. Designating the Refrigerant Charge Grade

8.6.1. If the superheat or subcooling of the Forced-Air HVAC System under test was reported using an on-board diagnostic system or through an Independent Verification Report, then Grade I shall be designated if the superheat or subcooling deviation is within the limits specified within ANSI/ACCA 5 QI Section 4.3.1, which are  $\pm 3$  °F (2 °C) for subcooling and  $\pm 5$  °F (3 °C) for superheat.

8.6.2. If refrigerant charge was evaluated using the non-invasive method, per Section 8.4, the grade shall be designated based on the following and recorded.

8.6.2.1. If the metering device type is piston or capillary tube, per Section 4.2.5.3.9.1, then the grade for refrigerant charge shall be designated according to the ranges in Table 8, using DifferenceDTD from Equation 15.

**Table 8 – Piston or Capillary Tube Metering Device  
Grade Designations for Refrigerant Charge**

Grade Designation	DifferenceDTD Range
I	> -8 °F (4 °C)
III	≤ -8 °F (4 °C)

8.6.2.2. If the metering device type is TXV or EEV, per Section 4.2.5.3.9.1, then the grade for refrigerant charge shall be designated according to the ranges in Table 9, using DifferenceCTOA from Equation 20.

**Table 9 – TXV or EEV Metering Device  
Grade Designations for Refrigerant Charge**

Grade Designation	DifferenceCTOA Range
I	> -6 °F (3 °C)
III	≤ -6 °F (3 °C)

8.6.3. If refrigerant charge was evaluated using the Weigh-In Method, per Section 8.5, the grade for refrigerant charge shall be designated based on the following and recorded.

8.6.3.1. Grade I shall be designated when both of the following criteria are met.

8.6.3.1.1. The absolute value of the percent deviation between the total anticipated and total reported refrigerant weight, per Equation 24, is ≤ 5%.

8.6.3.1.2. In the judgement of the party conducting the evaluation, the location of the geotagged photo provided in Section 8.5.2.1.2 matches the location of the Forced-Air HVAC System under test.

8.6.3.2. Grade III shall be designated when the criteria in Section 8.6.3.1 are not met.

## 9. References.

ANSI/ACCA 1-2016, Manual D Residential Duct Systems.” Air Conditioning Contractors of America, Arlington, VA.

ANSI/ACCA 5 QI-2015, “HVAC Quality Installation Specification.” Air Conditioning Contractors of America, Arlington, VA.

ACCA, “Manual B Balancing and Testing Air and Hydronic Systems.” Air Conditioning Contractors of America, Arlington, VA.

ACCA, "Manual J Residential Load Calculation," 8th Edition. Air Conditioning Contractors of America, Arlington, VA.

ACCA, "Manual S Residential Heating and Cooling Equipment Selection." Air Conditioning Contractors of America, Arlington, VA.

ASHRAE Handbook of Fundamentals, 2013. American Society of Heating Refrigerating and Air Conditioning Engineers, Atlanta, GA.

ASHRAE Handbook of Fundamentals, 2017. American Society of Heating Refrigerating and Air Conditioning Engineers, Atlanta, GA.

ANSI/ASHRAE 152-2004, "Method of Test for Determining the Design and Seasonal Efficiencies of Residential Thermal Distribution Systems." American Society of Heating, Refrigerating and Air Conditioning Engineers, Atlanta, GA

ANSI/ASHRAE 62.2-2010, "Ventilation and Acceptable Indoor Air Quality in Low Rise Buildings." American Society of Heating, Refrigerating, and Air Conditioning Engineers, Atlanta, GA, 2013.

ANSI/ASHRAE 62.2-2013, "Ventilation and Acceptable Indoor Air Quality in Low Rise Buildings." American Society of Heating, Refrigerating, and Air Conditioning Engineers, Atlanta, GA, 2013.

ANSI/ASHRAE 62.2-2016, "Ventilation and Acceptable Indoor Air Quality in Low Rise Buildings." American Society of Heating, Refrigerating, and Air Conditioning Engineers, Atlanta, GA, 2016.

ANSI/RESNET/ICC 380-2019, "Standard for Testing Airtightness of Building Enclosures, Airtightness of Heating and Cooling Air Distribution Systems, and Airflow of Mechanical Ventilation Systems" and ANSI approved Addenda. Residential Energy Services Network, Oceanside, CA.

ASTM E1554-13, "Standard Test Methods for Determining Air Leakage of Air Distribution Systems by Fan Pressurization." ASTM International, West Conshohocken, PA. 2018.

CEC-400-2015-038-CMF, "2016 Reference Appendices for the 2016 Building Energy Efficiency Standards of the California Energy Commission." California Energy Commission, Sacramento, CA.

UL 181-2013, "Standard for Factory-Made Air Ducts and Air Connectors." Underwriters' Laboratories, Northbrook, IL.

## Appendix A (Normative) - Design Temperature Limits by State and County, and U.S. Territory

**Table A-1: Cooling and Heating Design Temperature Limits by State and County, and U.S. Territory <sup>1</sup>**

State	County	1.0% Cooling Temp. (°F)	99.0% Heating Temp. (°F)	HDD / CDD Ratio	Weather Station(s) Selected for Cooling Temperature	Weather Station(s) Selected for Heating Temperature	Weather Station(s) Selected for HDD/CDD Ratio
<b>Alabama</b>							
Alabama	Autauga	96	24	0.5	MAXWELL AFB AL (A)	SELMA 13 WNW AL (A)	CLANTON 2 NE AL (A)
Alabama	Baldwin	93	29	0.3	Mobile City Office Alabama (M)	Mobile City Office Alabama (M)	FAIRHOPE 3 NE AL (A)
Alabama	Barbour	97	27	0.4	WEEDON FIELD AL (A)	TROY MUNICIPAL AL (A)	TROY MUNICIPAL AL (A)
Alabama	Bibb	95	24	0.5	TUSCALOOSA REGIONAL AL (A)	SELMA 13 WNW AL (A)	CLANTON 2 NE AL (A)
Alabama	Blount	94	21	0.7	BIRMINGHAM SHUTTLES AL (A)	CULLMAN 3 ENE AL (A)	CULLMAN 3 ENE AL (A)
Alabama	Bullock	97	27	0.4	WEEDON FIELD AL (A)	TROY MUNICIPAL AL (A)	AUBURN UNIVERSITY R AL (A)
Alabama	Butler	97	27	0.3	SOUTH ALABAMA REGIO AL (A)	MIDDLETON FIELD AL (A)	MIDDLETON FIELD AL (A)
Alabama	Calhoun	94	21	0.8	Talladega Alabama (M)	GADSDEN 19 N AL (A)	GADSDEN 19 N AL (A)
Alabama	Chambers	95	22	0.6	COLUMBUS AP GA (A)	Alexander City Alabama (M)	La Grange Georgia (M)
Alabama	Cherokee	94	18	0.8	RICHARD B RUSSELL R GA (A)	VALLEY HEAD 1 SSW AL (A)	VALLEY HEAD 1 SSW AL (A)
Alabama	Chilton	96	24	0.5	MAXWELL AFB AL (A)	CLANTON 2 NE AL (A)	CLANTON 2 NE AL (A)
Alabama	Choctaw	94	26	0.4	Meridian Key Field Mississippi (M)	Meridian Key Field Mississippi (M)	KEY FIELD MS (A)
Alabama	Clarke	95	25	0.4	MIDDLETON FIELD AL (A); SELMA 13 WNW AL (A); Selma-Craig Air Force Base Alabama (M)	MIDDLETON FIELD AL (A); SELMA 13 WNW AL (A); Selma-Craig Air Force Base Alabama (M)	MIDDLETON FIELD AL (A); SELMA 13 WNW AL (A); Selma-Craig Air Force Base Alabama (M)
Alabama	Clay	94	22	0.7	Talladega Alabama (M)	Talladega Alabama (M)	Talladega Alabama (M)
Alabama	Cleburne	94	22	0.7	Talladega Alabama (M)	Talladega Alabama (M)	Talladega Alabama (M)
Alabama	Coffee	97	27	0.4	SOUTH ALABAMA REGIO AL (A)	TROY MUNICIPAL AL (A)	TROY MUNICIPAL AL (A)

<sup>1</sup> (Informative Note) This Appendix utilizes the 1% cooling and 99% heating design temperatures and HDD/CDD ratios in the ASHRAE 2017 Handbook of Fundamentals and Manual J Design Conditions 8th Edition. ASHRAE weather stations are indicated with the label “(A)”, while Manual J weather stations are indicated with the label “(M)”. The cooling and heating limits and ratios were defined for each location using the following logic:

- If one or more weather stations were located either within the county / territory or within a 40 mile radius from the county / territory’s geographic center, then the highest cooling, lowest heating design temperature, and the highest HDD/CDD ratio was selected from among these weather stations.
- If no weather stations were located either within the county / territory or within a 40 mile radius from the county / territory’s geographic center, then the cooling and heating design temperatures and HDD/CDD ratios of the nearest three weather stations were averaged and assigned to the entire county / territory, and all three weather stations were listed.
- If the selected or averaged cooling design temperature limit for a county / territory was < 80 °F, then the county / territory was assigned a value of 80 °F, and the weather station (or stations) that would have been selected was marked with an asterisk.
- Cooling design temperatures were rounded up to the nearest integer (e.g., 90.2 °F rounded up to 91 °F), and heating design temperatures were rounded down to the nearest integer (e.g., 14.8 °F rounded down to 14 °F).

State	County	1.0% Cooling Temp. (°F)	99.0% Heating Temp. (°F)	HDD / CDD Ratio	Weather Station(s) Selected for Cooling Temperature	Weather Station(s) Selected for Heating Temperature	Weather Station(s) Selected for HDD/CDD Ratio
Alabama	Colbert	94	20	0.7	Florence Airport Alabama (M)	RUSSELLVILLE 4 SSE AL (A)	RUSSELLVILLE 4 SSE AL (A)
Alabama	Conecuh	97	27	0.3	SOUTH ALABAMA REGIO AL (A)	MIDDLETON FIELD AL (A)	MIDDLETON FIELD AL (A)
Alabama	Coosa	96	22	0.7	MAXWELL AFB AL (A)	Talladega Alabama (M)	Talladega Alabama (M)
Alabama	Covington	97	27	0.3	SOUTH ALABAMA REGIO AL (A)	BOB SIKES AP FL (A)	MIDDLETON FIELD AL (A)
Alabama	Crenshaw	97	27	0.4	SOUTH ALABAMA REGIO AL (A)	Montgomery Dannelly Field Alabama (M)	TROY MUNICIPAL AL (A)
Alabama	Cullman	93	16	0.8	Decatur Alabama (M)	Decatur Alabama (M)	Decatur Alabama (M)
Alabama	Dale	94	27	0.4	Ozark Fort Rucker Alabama (M)	TROY MUNICIPAL AL (A)	TROY MUNICIPAL AL (A)
Alabama	Dallas	95	24	0.5	Selma-Craig Air Force Base Alabama (M)	SELMA 13 WNW AL (A)	SELMA 13 WNW AL (A)
Alabama	DeKalb	94	18	0.8	RICHARD B RUSSELL R GA (A)	VALLEY HEAD 1 SSW AL (A)	VALLEY HEAD 1 SSW AL (A)
Alabama	Elmore	96	22	0.6	MAXWELL AFB AL (A)	Alexander City Alabama (M)	Alexander City Alabama (M)
Alabama	Escambia	95	27	0.3	WHITING FIELD NAS S FL (A)	MIDDLETON FIELD AL (A)	MIDDLETON FIELD AL (A)
Alabama	Etowah	93	21	0.8	ANNISTON METROPOLIT AL (A)	GADSDEN 19 N AL (A)	GADSDEN 19 N AL (A)
Alabama	Fayette	95	25	0.5	TUSCALOOSA REGIONAL AL (A)	COLUMBUS AFB MS (A)	COLUMBUS AFB MS (A)
Alabama	Franklin	94	20	0.7	Florence Airport Alabama (M)	RUSSELLVILLE 4 SSE AL (A)	RUSSELLVILLE 4 SSE AL (A)
Alabama	Geneva	97	29	0.3	SOUTH ALABAMA REGIO AL (A)	CAIRNS AAF AL (A)	CAIRNS AAF AL (A)
Alabama	Greene	95	25	0.4	Meridian NAAS Mississippi (M)	Tuscaloosa Municipal Airport Alabama (M)	GAINESVILLE 2 NE AL (A)
Alabama	Hale	95	24	0.5	TUSCALOOSA REGIONAL AL (A)	SELMA 13 WNW AL (A)	SELMA 13 WNW AL (A)
Alabama	Henry	97	27	0.3	WEEDON FIELD AL (A)	WEEDON FIELD AL (A)	WEEDON FIELD AL (A)
Alabama	Houston	95	29	0.3	MARIANNA MUNICIPAL FL (A)	CAIRNS AAF AL (A)	CAIRNS AAF AL (A)
Alabama	Jackson	93	18	0.8	MADISON COUNTY EXEC AL (A)	VALLEY HEAD 1 SSW AL (A)	VALLEY HEAD 1 SSW AL (A)
Alabama	Jefferson	94	24	0.5	BIRMINGHAM SHUTTLES AL (A)	Birmingham-Shuttlesworth International Airport Alabama (M)	Birmingham-Shuttlesworth International Airport Alabama (M)
Alabama	Lamar	95	24	0.5	COLUMBUS AFB MS (A)	GOLDEN TRIANGLE REG MS (A)	Golden Triangle Regional Airport Mississippi (M)
Alabama	Lauderdale	94	20	0.7	Florence Airport Alabama (M)	RUSSELLVILLE 4 SSE AL (A)	RUSSELLVILLE 4 SSE AL (A)
Alabama	Lawrence	94	16	0.8	Florence Airport Alabama (M)	Decatur Alabama (M)	Decatur Alabama (M)
Alabama	Lee	95	23	0.6	LAWSON AAF GA (A)	La Grange Georgia (M)	La Grange Georgia (M)
Alabama	Limestone	94	16	0.8	Florence Airport Alabama (M)	Decatur Alabama (M)	Decatur Alabama (M)
Alabama	Lowndes	96	25	0.4	MAXWELL AFB AL (A)	SELMA 6 SSE AL (A)	SELMA 6 SSE AL (A)
Alabama	Macon	96	27	0.4	MAXWELL AFB AL (A)	AUBURN UNIVERSITY R AL (A)	AUBURN UNIVERSITY R AL (A)
Alabama	Madison	93	16	0.8	Decatur Alabama (M)	Decatur Alabama (M)	Decatur Alabama (M)
Alabama	Marengo	94	24	0.5	SELMA 13 WNW AL (A)	SELMA 13 WNW AL (A)	SELMA 13 WNW AL (A)

State	County	1.0% Cooling Temp. (°F)	99.0% Heating Temp. (°F)	HDD / CDD Ratio	Weather Station(s) Selected for Cooling Temperature	Weather Station(s) Selected for Heating Temperature	Weather Station(s) Selected for HDD/CDD Ratio
Alabama	Marion	91	20	0.7	RUSSELLVILLE 4 SSE AL (A)	RUSSELLVILLE 4 SSE AL (A)	RUSSELLVILLE 4 SSE AL (A)
Alabama	Marshall	93	20	0.8	HUNTSVILLE INTL AL (A)	SCOTTSBORO 2 NE AL (A)	GADSDEN 19 N AL (A)
Alabama	Mobile	93	29	0.3	Mobile City Office Alabama (M)	Mobile City Office Alabama (M)	FAIRHOPE 3 NE AL (A)
Alabama	Monroe	94	27	0.3	MIDDLETON FIELD AL (A)	MIDDLETON FIELD AL (A)	MIDDLETON FIELD AL (A)
Alabama	Montgomery	96	27	0.4	MAXWELL AFB AL (A)	Montgomery Dannelly Field Alabama (M)	TROY MUNICIPAL AL (A)
Alabama	Morgan	93	16	0.8	Decatur Alabama (M)	Decatur Alabama (M)	Decatur Alabama (M)
Alabama	Perry	95	24	0.5	Selma-Craig Air Force Base Alabama (M)	SELMA 13 WNW AL (A)	SELMA 13 WNW AL (A)
Alabama	Pickens	95	24	0.5	TUSCALOOSA REGIONAL AL (A)	GOLDEN TRIANGLE REG MS (A)	Golden Triangle Regional Airport Mississippi (M)
Alabama	Pike	94	27	0.4	Ozark Fort Rucker Alabama (M)	TROY MUNICIPAL AL (A)	TROY MUNICIPAL AL (A)
Alabama	Randolph	94	22	0.7	Talladega Alabama (M)	Talladega Alabama (M)	Talladega Alabama (M)
Alabama	Russell	97	24	0.4	WEEDON FIELD AL (A)	Columbus Lawson Air Force Base Georgia (M)	AUBURN UNIVERSITY R AL (A)
Alabama	Shelby	94	22	0.7	Talladega Alabama (M)	Talladega Alabama (M)	Talladega Alabama (M)
Alabama	St. Clair	94	22	0.7	Talladega Alabama (M)	Talladega Alabama (M)	Talladega Alabama (M)
Alabama	Sumter	95	26	0.4	Meridian NAAS Mississippi (M)	Meridian Key Field Mississippi (M)	GAINESVILLE 2 NE AL (A)
Alabama	Talladega	94	22	0.7	Talladega Alabama (M)	Talladega Alabama (M)	Talladega Alabama (M)
Alabama	Tallapoosa	94	22	0.6	THOMAS C RUSSELL FI AL (A)	Alexander City Alabama (M)	Alexander City Alabama (M)
Alabama	Tuscaloosa	95	25	0.5	TUSCALOOSA REGIONAL AL (A)	Tuscaloosa Municipal Airport Alabama (M)	Centreville Alabama (M)
Alabama	Walker	94	24	0.5	BIRMINGHAM SHUTTLES AL (A)	Birmingham-Shuttlesworth International Airport Alabama (M)	Birmingham-Shuttlesworth International Airport Alabama (M)
Alabama	Washington	93	30	0.2	Mobile Regional Airport Alabama (M); MOBILE REGIONAL AL (A); Mobile City Office Alabama (M)	Mobile Regional Airport Alabama (M); MOBILE REGIONAL AL (A); Mobile City Office Alabama (M)	Mobile Regional Airport Alabama (M); MOBILE REGIONAL AL (A); Mobile City Office Alabama (M)
Alabama	Wilcox	95	24	0.5	Selma-Craig Air Force Base Alabama (M)	SELMA 13 WNW AL (A)	SELMA 13 WNW AL (A)
Alabama	Winston	93	16	0.8	Decatur Alabama (M)	Decatur Alabama (M)	Decatur Alabama (M)
<b>Alaska</b>							
Alaska	Aleutians East	80	9	67	SAND POINT AP AK* (A)	NELSON LAGOON AP AK (A)	Cold Bay Airport Alaska (M)
Alaska	Anchorage Municipality	80	-14	35.5	Palmer Municipal Airport Alaska* (M)	BRYANT AAF AK (A)	PORTAGE GLACIER AK (A)
Alaska	Bethel	80	-33	67.9	SLEETMUTE AP AK* (A)	SLEETMUTE AP AK (A)	AKIAK AK (A)
Alaska	Bristol Bay	80	-20	24.0	KING SALMON AP AK* (A)	KING SALMON AP AK (A)	King Salmon Airport Alaska (M)
Alaska	Denali	80	-36	35.0	McKinley Park Alaska* (M)	MCKINLEY NATL PARK AK (A)	McKinley Park Alaska (M)
Alaska	Dillingham	80	-15	38.9	DILLINGHAM AP AK* (A)	DILLINGHAM AP AK (A)	TOGIAC AP AK (A)

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Alaska	Fairbanks North Star	80	-40	14.4	EIELSON AFB AK* (A)	Fairbanks Eielson Air Force Base Alaska (M)	FAIRBANKS 11 NE AK (A)
Alaska	Haines	80	4	12.0	HAINES AK* (A)	HAINES AK (A)	SKAGWAY AP AK (A)
Alaska	Hoonah-Angoon	80	5	16.7	HOONAH SEAPLANE BAS AK* (A)	GUSTAVUS AK (A)	GUSTAVUS AK (A)
Alaska	Juneau	80	8	13.1	JUNEAU INTL AK* (A)	Juneau International Airport Alaska (M)	JUNEAU INTL AK (A)
Alaska	Kenai Peninsula	80	-19	29.8	Soldotna Alaska* (M)	Soldotna Alaska (M)	DRIFT RIVER AK (A)
Alaska	Ketchikan Gateway	80	18	8.6	ANNETTE ISLAND AP AK* (A)	KETCHIKAN INTL AK (A)	KETCHIKAN INTL AK (A)
Alaska	Kodiak Island	80	12	31.4	Kodiak Airport Alaska* (M)	KODIAK AP AK (A)	EAST AMATULI LIGHT AK (A)
Alaska	Lake and Peninsula	80	-20	48.5	KING SALMON AP AK* (A)	KING SALMON AP AK (A)	PORT HEIDEN AP AK (A)
Alaska	Matanuska-Susitna	80	-19	74.4	Talkeetna State Airport Alaska* (M)	Talkeetna State Airport Alaska (M)	SKELTON AP AK (A)
Alaska	Nome	80	-29	245.0	KOYUK ALFRED ADAMS AK* (A)	Shishmaref Alaska (M)	Tin City Air Force Station Alaska (M)
Alaska	North Slope	80	-42	1461.2	ANAKTUVUK PASS AP AK* (A)	NUIQSUT AP AK (A)	BARROW 4 ENE AK (A)
Alaska	Northwest Arctic	80	-38	74.9	Ambler Alaska* (M)	Ambler Alaska (M)	DEERING AP AK (A)
Alaska	Petersburg	80	12	15.6	Kake Seaplane Base Alaska* (M)	Petersburg Alaska (M)	KAKE AP AK (A)
Alaska	Prince of Wales-Hyder	80	20	10.1	ANNETTE ISLAND AP AK* (A)	Klawock Alaska (M)	KLAWOOCK AP AK (A)
Alaska	Sitka	80	16	18.6	Sitka Japonski Airport Alaska* (M)	SITKA 1 NE AK (A)	SITKA 1 NE AK (A)
Alaska	Skagway Municipality	80	4	12.0	HAINES AK* (A)	HAINES AK (A)	SKAGWAY AP AK (A)
Alaska	Southeast Fairbanks	80	-46	23.0	EAGLE AP AK* (A)	Northway Airport Alaska (M)	Northway Airport Alaska (M)
Alaska	Valdez-Cordova	80	-34	36.0	GULKANA AP AK* (A)	GULKANA AP AK (A)	MIDDLE ROCK LIGHT AK (A)
Alaska	Wade Hampton	80	-31	70.0	RUSSIAN MISSION AP AK* (A)	RUSSIAN MISSION AP AK (A)	Hooper Bay Alaska (M)
Alaska	Wrangell	80	15	10.4	Wrangell Alaska* (M)	Wrangell Alaska (M)	WRANGELL AP AK (A)
Alaska	Yakutat	80	6	26.0	YAKUTAT AP AK* (A)	Yakutat State Airport Alaska (M)	Yakutat State Airport Alaska (M)
Alaska	Yukon-Koyukuk	80	-45	23.0	Nenana Municipal Airport Alaska* (M)	BETTLES AP AK (A)	Indian Mtn. Air Force Station Alaska (M)
<b>Arizona</b>							
Arizona	Apache	97	-13	6.8	Dinnehotso Arizona (M)	Maverick Arizona (M)	Alpine Arizona (M)
Arizona	Cochise	103	16	1.7	Cascabel Arizona (M)	Portal Arizona (M)	Portal Arizona (M)
Arizona	Coconino	110	-3	6.8	Phantom Ranch Arizona (M)	Ft Valley Arizona (M)	Ft Valley Arizona (M)
Arizona	Gila	108	11	1.6	Winkelman Arizona (M)	Pleasant Valley Ranger Station Arizona (M)	Pleasant Valley Ranger Station Arizona (M)
Arizona	Graham	105	8	1.9	Ft Thomas Arizona (M)	Black River Pumps Arizona (M)	Black River Pumps Arizona (M)
Arizona	Greenlee	104	-13	2.0	Clifton Arizona (M)	Maverick Arizona (M)	Blue Arizona (M)
Arizona	La Paz	112	25	0.2	Blythe City Office California (M)	Salome Arizona (M)	Bouse Arizona (M)

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Arizona	Maricopa	111	24	0.4	Gila Bend Arizona (M)	Harquahala Arizona (M)	Agulia Arizona (M)
Arizona	Mohave	116	8	1.4	Willow Beach Arizona (M)	Colorado City Arizona (M)	Pipe Springs National Monument Arizona (M)
Arizona	Navajo	97	-7	2.9	Leupp Arizona (M)	Pinedale Arizona (M)	Heber Ranger Station Arizona (M)
Arizona	Pima	109	22	1.3	Santa Rosa School Arizona (M)	Kitt Peak Arizona (M)	Kitt Peak Arizona (M)
Arizona	Pinal	110	25	0.6	Casa Grande National Monument Arizona (M)	Willow Spring Ranch Arizona (M)	Oracle Arizona (M)
Arizona	Santa Cruz	106	19	0.9	Sahuarita Arizona (M)	San Rafael Ranch Arizona (M)	Canelo Arizona (M)
Arizona	Yavapai	107	11	1.8	Childs Arizona (M)	Groom Creek Arizona (M)	Walnut Creek Arizona (M)
Arizona	Yuma	112	27	0.2	Dateland Ranch Arizona (M)	Tacha Arizona (M)	Tacha Arizona (M)
<b>Arkansas</b>							
Arkansas	Arkansas	96	25	0.6	GRIDER FIELD AR (A)	Pine Bluff Airport Arkansas (M)	Stuttgart Arkansas (M)
Arkansas	Ashley	97	24	0.5	MONTICELLO MUNICIPA AR (A)	MONROE 26 N LA (A)	MONROE 26 N LA (A)
Arkansas	Baxter	94	17	0.8	Flippin Arkansas (M)	MARION COUNTY REGIO AR (A)	MARION COUNTY REGIO AR (A)
Arkansas	Benton	98	15	1.0	GROVE MUNICIPAL OK (A)	Fayetteville Drake Field Arkansas (M)	Bentonville Arkansas (M)
Arkansas	Boone	94	16	0.9	Flippin Arkansas (M)	Harrison Airport Arkansas (M)	BOONE COUNTY REGION AR (A)
Arkansas	Bradley	97	23	0.5	MONTICELLO MUNICIPA AR (A)	Camden Arkansas (M)	Camden Arkansas (M)
Arkansas	Calhoun	96	23	0.5	Camden Arkansas (M)	Camden Arkansas (M)	Camden Arkansas (M)
Arkansas	Carroll	93	15	1.0	BENTONVILLE MUNICIP AR (A)	ROGERS MUNICIPAL AR (A)	Bentonville Arkansas (M)
Arkansas	Chicot	97	20	0.5	MONTICELLO MUNICIPA AR (A)	Greenville Air Force Base Mississippi (M)	Greenville Air Force Base Mississippi (M)
Arkansas	Clark	97	23	0.6	Hot Springs Arkansas (M)	Hot Springs Arkansas (M)	Hot Springs Arkansas (M)
Arkansas	Clay	95	16	0.9	Blytheville Air Force Base Arkansas (M)	Siloam Spring Arkansas (M)	Siloam Spring Arkansas (M)
Arkansas	Cleburne	97	17	0.9	SEARCY MUNICIPAL AR (A)	BATESVILLE 8 WNW AR (A)	BATESVILLE 8 WNW AR (A)
Arkansas	Cleveland	97	25	0.5	MONTICELLO MUNICIPA AR (A)	Pine Bluff Airport Arkansas (M)	GRIDER FIELD AR (A)
Arkansas	Columbia	96	23	0.5	Camden Arkansas (M)	Camden Arkansas (M)	Camden Arkansas (M)
Arkansas	Conway	97	20	0.6	LITTLE ROCK AFB AR (A)	Little Rock Air Force Base Arkansas (M)	RUSSELLVILLE REGION AR (A)
Arkansas	Craighead	97	17	0.8	NEWPORT MUNICIPAL AR (A)	Eaker Air Force Base Arkansas (M)	Walnut Ridge Arkansas (M)
Arkansas	Crawford	98	15	0.9	FORT SMITH REGIONAL AR (A)	Fayetteville Drake Field Arkansas (M)	DRAKE FIELD AR (A)
Arkansas	Crittenden	97	20	0.6	MILLINGTON MUNICIPA TN (A)	Millington Municipal Airport Tennessee (M)	WEST MEMPHIS MUNICI AR (A)
Arkansas	Cross	97	19	0.7	NEWPORT MUNICIPAL AR (A)	Jonesboro Municipal Airport Arkansas (M)	Jonesboro Municipal Airport Arkansas (M)
Arkansas	Dallas	96	23	0.5	Camden Arkansas (M)	Camden Arkansas (M)	Camden Arkansas (M)

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Arkansas	Desha	97	20	0.5	MONTICELLO MUNICIPA AR (A)	Greenville Air Force Base Mississippi (M)	Greenville Air Force Base Mississippi (M)
Arkansas	Drew	97	26	0.4	MONTICELLO MUNICIPA AR (A)	MONTICELLO MUNICIPA AR (A)	MONTICELLO MUNICIPA AR (A)
Arkansas	Faulkner	97	20	0.7	LITTLE ROCK AFB AR (A)	Little Rock Air Force Base Arkansas (M)	SEARCY MUNICIPAL AR (A)
Arkansas	Franklin	98	15	0.9	FORT SMITH REGIONAL AR (A)	Fayetteville Drake Field Arkansas (M)	DRAKE FIELD AR (A)
Arkansas	Fulton	95	14	1.0	BATESVILLE 8 WNW AR (A)	WEST PLAINS MUNICIP MO (A)	WEST PLAINS MUNICIP MO (A)
Arkansas	Garland	97	21	0.6	Hot Springs Arkansas (M)	MOUNT IDA AR (A)	MOUNT IDA AR (A)
Arkansas	Grant	97	22	0.6	Hot Springs Arkansas (M)	Little Rock Adams Field Arkansas (M)	NORTH LITTLE ROCK M AR (A)
Arkansas	Greene	95	16	0.9	Blytheville Air Force Base Arkansas (M)	Siloam Spring Arkansas (M)	Siloam Spring Arkansas (M)
Arkansas	Hempstead	97	26	0.4	TEXARKANA REGIONAL AR (A)	Texarkana Webb Field Arkansas (M)	TEXARKANA REGIONAL AR (A)
Arkansas	Hot Spring	97	21	0.6	Hot Springs Arkansas (M)	MOUNT IDA AR (A)	MOUNT IDA AR (A)
Arkansas	Howard	100	21	0.6	MENA INTERMOUNTAIN AR (A)	MOUNT IDA AR (A)	MOUNT IDA AR (A)
Arkansas	Independence	97	17	0.9	NEWPORT MUNICIPAL AR (A)	BATESVILLE 8 WNW AR (A)	BATESVILLE 8 WNW AR (A)
Arkansas	Izard	95	17	0.9	BATESVILLE REGIONAL AR (A)	BATESVILLE 8 WNW AR (A)	BATESVILLE 8 WNW AR (A)
Arkansas	Jackson	97	17	0.9	NEWPORT MUNICIPAL AR (A)	BATESVILLE 8 WNW AR (A)	BATESVILLE 8 WNW AR (A)
Arkansas	Jefferson	96	22	0.6	CLINTON NATL AR (A)	Little Rock Adams Field Arkansas (M)	Stuttgart Arkansas (M)
Arkansas	Johnson	97	21	0.6	RUSSELLVILLE REGION AR (A)	RUSSELLVILLE REGION AR (A)	RUSSELLVILLE REGION AR (A)
Arkansas	Lafayette	97	26	0.4	TEXARKANA REGIONAL AR (A)	Texarkana Webb Field Arkansas (M)	TEXARKANA REGIONAL AR (A)
Arkansas	Lawrence	97	16	0.9	NEWPORT MUNICIPAL AR (A)	Siloam Spring Arkansas (M)	Siloam Spring Arkansas (M)
Arkansas	Lee	96	22	0.6	TUNICA MUNICIPAL MS (A)	WEST MEMPHIS MUNICI AR (A)	WEST MEMPHIS MUNICI AR (A)
Arkansas	Lincoln	97	25	0.6	MONTICELLO MUNICIPA AR (A)	Pine Bluff Airport Arkansas (M)	Stuttgart Arkansas (M)
Arkansas	Little River	98	23	0.5	MC CURTAIN COUNTY R OK (A)	J LYNN HELMS SEVIER AR (A)	J LYNN HELMS SEVIER AR (A)
Arkansas	Logan	98	20	0.6	FORT SMITH REGIONAL AR (A)	Fort Smith Regional Airport Arkansas (M)	RUSSELLVILLE REGION AR (A)
Arkansas	Lonoke	97	20	0.7	LITTLE ROCK AFB AR (A)	Little Rock Air Force Base Arkansas (M)	SEARCY MUNICIPAL AR (A)
Arkansas	Madison	94	15	1.0	NORTHWEST ARKANSAS AR (A)	Fayetteville Drake Field Arkansas (M)	Bentonville Arkansas (M)
Arkansas	Marion	94	16	0.9	Flippin Arkansas (M)	Harrison Airport Arkansas (M)	BOONE COUNTY REGION AR (A)
Arkansas	Miller	97	26	0.4	TEXARKANA REGIONAL AR (A)	Texarkana Webb Field Arkansas (M)	TEXARKANA REGIONAL AR (A)
Arkansas	Mississippi	97	17	0.7	MILLINGTON MUNICIPA TN (A)	Eaker Air Force Base Arkansas (M)	Dyersburg Municipal Airport Tennessee (M)
Arkansas	Monroe	95	25	0.6	STUTTGART MUNICIPAL AR (A)	Stuttgart Arkansas (M)	Stuttgart Arkansas (M)
Arkansas	Montgomery	100	21	0.6	MENA INTERMOUNTAIN AR (A)	MOUNT IDA AR (A)	MOUNT IDA AR (A)

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Arkansas	Nevada	96	23	0.5	Camden Arkansas (M)	Camden Arkansas (M)	Camden Arkansas (M)
Arkansas	Newton	93	16	0.9	BOONE COUNTY REGION AR (A)	Harrison Airport Arkansas (M)	BOONE COUNTY REGION AR (A)
Arkansas	Ouachita	96	23	0.5	Camden Arkansas (M)	Camden Arkansas (M)	Camden Arkansas (M)
Arkansas	Perry	97	21	0.6	Hot Springs Arkansas (M)	RUSSELLVILLE REGION AR (A)	RUSSELLVILLE REGION AR (A)
Arkansas	Phillips	96	19	0.6	TUNICA MUNICIPAL MS (A)	Clarksdale Mississippi (M)	TUNICA MUNICIPAL MS (A)
Arkansas	Pike	97	21	0.6	HOT SPRINGS MEMORIA AR (A)	MOUNT IDA AR (A)	MOUNT IDA AR (A)
Arkansas	Poinsett	97	19	0.8	NEWPORT MUNICIPAL AR (A)	Walnut Ridge Arkansas (M)	Walnut Ridge Arkansas (M)
Arkansas	Polk	100	21	0.6	MENA INTERMOUNTAIN AR (A)	MOUNT IDA AR (A)	MOUNT IDA AR (A)
Arkansas	Pope	97	21	0.6	RUSSELLVILLE REGION AR (A)	RUSSELLVILLE REGION AR (A)	RUSSELLVILLE REGION AR (A)
Arkansas	Prairie	97	20	0.7	LITTLE ROCK AFB AR (A)	Little Rock Air Force Base Arkansas (M)	SEARCY MUNICIPAL AR (A)
Arkansas	Pulaski	97	20	0.6	LITTLE ROCK AFB AR (A)	Little Rock Air Force Base Arkansas (M)	NORTH LITTLE ROCK M AR (A)
Arkansas	Randolph	93	16	0.9	Walnut Ridge Arkansas (M)	Siloam Spring Arkansas (M)	Siloam Spring Arkansas (M)
Arkansas	Saline	97	20	0.6	Hot Springs Arkansas (M)	Little Rock Air Force Base Arkansas (M)	NORTH LITTLE ROCK M AR (A)
Arkansas	Scott	100	20	0.6	ROBERT S KERR AP OK (A)	Fort Smith Regional Airport Arkansas (M)	MOUNT IDA AR (A)
Arkansas	Searcy	94	16	0.9	Flippin Arkansas (M)	Harrison Airport Arkansas (M)	BOONE COUNTY REGION AR (A)
Arkansas	Sebastian	100	20	0.6	ROBERT S KERR AP OK (A)	Fort Smith Regional Airport Arkansas (M)	SALLISAW MUNICIPAL OK (A)
Arkansas	Sevier	100	23	0.5	MENA INTERMOUNTAIN AR (A)	J LYNN HELMS SEVIER AR (A)	J LYNN HELMS SEVIER AR (A)
Arkansas	Sharp	95	16	0.9	BATESVILLE REGIONAL AR (A)	Siloam Spring Arkansas (M)	Siloam Spring Arkansas (M)
Arkansas	St. Francis	96	22	0.6	TUNICA MUNICIPAL MS (A)	WEST MEMPHIS MUNICI AR (A)	WEST MEMPHIS MUNICI AR (A)
Arkansas	Stone	95	17	0.9	BATESVILLE REGIONAL AR (A)	BATESVILLE 8 WNW AR (A)	BATESVILLE 8 WNW AR (A)
Arkansas	Union	96	23	0.5	Camden Arkansas (M)	Camden Arkansas (M)	Camden Arkansas (M)
Arkansas	Van Buren	97	21	0.6	RUSSELLVILLE REGION AR (A)	RUSSELLVILLE REGION AR (A)	RUSSELLVILLE REGION AR (A)
Arkansas	Washington	94	15	1.0	NORTHWEST ARKANSAS AR (A)	Fayetteville Drake Field Arkansas (M)	Bentonville Arkansas (M)
Arkansas	White	97	17	0.9	LITTLE ROCK AFB AR (A)	BATESVILLE 8 WNW AR (A)	BATESVILLE 8 WNW AR (A)
Arkansas	Woodruff	97	20	0.7	NEWPORT MUNICIPAL AR (A)	SEARCY MUNICIPAL AR (A)	NEWPORT MUNICIPAL AR (A)
Arkansas	Yell	97	21	0.6	Hot Springs Arkansas (M)	RUSSELLVILLE REGION AR (A)	RUSSELLVILLE REGION AR (A)
<b>California</b>							
California	Alameda	97	27	2.1	Concord California (M)	Concord California (M)	SAN FRANCISCO CA (A)
California	Alpine	96	-12	11.5	Tiger Creek Power House California (M)	Bridgeport California (M)	Twin Lakes California (M)
California	Amador	103	4	11.5	Rocklin California (M)	Twin Lakes California (M)	Twin Lakes California (M)

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California	Butte	102	13	2.4	Oroville Ranger Station California (M)	Quincy California (M)	Quincy California (M)
California	Calaveras	102	21	2.9	Camp Pardee California (M)	Cherry Valley Dam California (M)	Calaveras Big Trees California (M)
California	Colusa	101	26	1.2	Orland California (M)	Clearlake Highlands California (M)	Clearlake Highlands California (M)
California	Contra Costa	99	27	2.1	NUT TREE AP CA (A)	Concord California (M)	SAN FRANCISCO CA (A)
California	Del Norte	96	27	4.1	Idlewild California (M)	Elk Valley California (M)	DEL NORTE COUNTY AP CA (A)
California	El Dorado	103	0	11.5	Rocklin California (M)	Squaw Valley California (M)	Twin Lakes California (M)
California	Fresno	104	16	5.7	Friant Gov Camp California (M)	Huntington Lake California (M)	Huntington Lake California (M)
California	Glenn	102	28	0.9	RED BLUFF MUNICIPAL CA (A)	East Park Res California (M)	East Park Res California (M)
California	Humboldt	97	24	5.5	Big Bar Ranger Station California (M)	Forest Glen California (M)	BLUNTS REEF BUOY 46 CA (A)
California	Imperial	110	33	0.1	El Centro Airport California (M)	Brawley 2 SW California (M)	Imperial City Office California (M)
California	Inyo	118	8	1.2	Death Valley California (M)	Deer Springs Clg California (M)	Bishop Airport California (M)
California	Kern	108	21	1.7	China Lake California (M)	Posey 3 E California (M)	Glennville California (M)
California	Kings	102	28	0.6	Corcoran California (M)	Delano California (M)	Hanford California (M)
California	Lake	101	26	1.9	Enterprise California (M)	Clearlake Highlands California (M)	Willits California (M)
California	Lassen	94	-4	5.8	Susanville Airport California (M)	Termo California (M)	Termo California (M)
California	Los Angeles	102	14	1.1	Hillcrest Center California (M)	Mount Baldy Notch California (M)	Mount Wilson California (M)
California	Madera	104	16	5.7	Friant Gov Camp California (M)	Huntington Lake California (M)	Huntington Lake California (M)
California	Marin	97	27	2.9	St. Helena California (M)	Concord California (M)	SAN FRANCISCO BUOY CA (A)
California	Mariposa	100	19	4.1	CASTLE AFB CA (A)	YOSEMITE VILLAGE 12 CA (A)	South Entr Yosemite California (M)
California	Mendocino	101	26	5.7	Enterprise California (M)	Covelo California (M)	POINT ARENA CA (A)
California	Merced	100	29	0.7	Madera California (M)	MERCED 23 WSW CA (A)	MERCED 23 WSW CA (A)
California	Modoc	95	0	5.4	Alturas Ranger Station California (M)	Alturas Ranger Station California (M)	Jess Valley California (M)
California	Mono	88	-13	18.9	Mono Lake California (M)	Bodie California (M)	Bodie California (M)
California	Monterey	93	24	1.5	Pinnacles NM California (M)	Priest Valley California (M)	Point Piedras California (M)
California	Napa	100	26	1.2	Woodland California (M)	Clearlake Highlands California (M)	Clearlake Highlands California (M)
California	Nevada	100	-10	8.1	Dobbins California (M)	Boca California (M)	Donner Mem St. Pk California (M)
California	Orange	103	29	0.4	Loma Linda California (M)	Eisinore California (M)	CAMP PENDLETON MCAS CA (A)
California	Placer	103	0	8.1	Rocklin California (M)	Squaw Valley California (M)	Donner Mem St. Pk California (M)
California	Plumas	97	0	5.3	Quincy California (M)	Sierraville Ranger Station California (M)	Portola California (M)
California	Riverside	112	11	2.2	Palm Desert California (M)	Mount San Jacinto California (M)	Idyllwild California (M)

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California	Sacramento	103	29	0.8	Rocklin California (M)	Rocklin California (M)	Placerville California (M)
California	San Benito	93	24	1.3	Pinnacles NM California (M)	Priest Valley California (M)	Priest Valley California (M)
California	San Bernardino	112	7	4.3	Baker California (M)	Big Bear Lake California (M)	Big Bear Lake California (M)
California	San Diego	105	23	1.1	Borrego Desert Pk California (M)	Palomar Obsy California (M)	Palomar Obsy California (M)
California	San Francisco	88	32	2.9	Kentfield California (M)	Novato California (M)	SAN FRANCISCO BUOY CA (A)
California	San Joaquin	102	28	0.9	Camp Pardee California (M)	Knights Ferry California (M)	Mount Diablo California (M)
California	San Luis Obispo	99	23	1.6	Camp Roberts California (M)	Paso Robles City Office California (M)	SAN SIMEON PT PIEDR CA (A)
California	San Mateo	96	29	2.9	Alamo California (M)	Orinda California (M)	SAN FRANCISCO BUOY CA (A)
California	Santa Barbara	93	24	2.0	Cuyama California (M)	Cuyama California (M)	Cuyama California (M)
California	Santa Clara	97	27	1.7	Newman California (M)	Mount Hamilton California (M)	San Gregorio 2 SE California (M)
California	Santa Cruz	90	27	1.9	Gilroy California (M)	Mount Hamilton California (M)	Half Moon Bay California (M)
California	Shasta	102	8	6.2	Redding Municipal Airport California (M)	Manzanita Lake California (M)	Mineral California (M)
California	Sierra	100	-10	8.1	Dobbins California (M)	Boca California (M)	Donner Mem St. Pk California (M)
California	Siskiyou	96	0	4.4	Happy Camp Ranger Station California (M)	Mount Hebron Ranger Station California (M)	Tulelake California (M)
California	Solano	100	27	1.1	Woodland California (M)	Concord California (M)	Napa Co. Airport California (M)
California	Sonoma	97	26	2.6	St. Helena California (M)	Clearlake Highlands California (M)	Fort Ross California (M)
California	Stanislaus	100	27	1.5	CASTLE AFB CA (A)	Mount Hamilton California (M)	Mount Hamilton California (M)
California	Sutter	103	28	1.5	Rocklin California (M)	Brooks Ranch California (M)	Grass Valley California (M)
California	Tehama	102	14	6.2	Redding Municipal Airport California (M)	Mineral California (M)	Mineral California (M)
California	Trinity	100	22	1.9	Whiskeytown Res California (M)	Weaverville Ranger Station California (M)	Cecilville California (M)
California	Tulare	102	7	8.7	Lemoncove California (M)	Lodgepole California (M)	Lodgepole California (M)
California	Tuolumne	99	19	2.9	Sonora Ranger Station California (M)	YOSEMITE VILLAGE 12 CA (A)	Calaveras Big Trees California (M)
California	Ventura	100	28	1.1	Dry Canyon Res California (M)	SANDBERG CA (A)	Sandberg California (M)
California	Yolo	103	28	1.1	Rocklin California (M)	Brooks Ranch California (M)	Napa Co. Airport California (M)
California	Yuba	103	16	3.7	Rocklin California (M)	Lake Spaulding California (M)	Lake Spaulding California (M)
<b>Colorado</b>							
Colorado	Adams	93	3	2.4	DENVER INTL CO (A)	Denver Stapleton International Airport Colorado (M)	Denver Centennial Airport Colorado (M)
Colorado	Alamosa	84	-10	6.0	SAN LUIS VALLEY REG CO (A)	Alamosa San Luis Valley Regional Airport Colorado (M)	Alamosa San Luis Valley Regional Airport Colorado (M)
Colorado	Arapahoe	93	3	4.0	DENVER INTL CO (A)	Denver Stapleton International Airport Colorado (M)	ELBERT MONUMENT AWO CO (A)

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Colorado	Archuleta	88	4	3.3	DURANGO-LA PLATA CO CO (A)	DURANGO-LA PLATA CO CO (A)	Durango-La Plata C. Airport Colorado (M)
Colorado	Baca	96	9	1.4	COMANCHE NATL GRASS CO (A)	COMANCHE NATL GRASS CO (A)	COMANCHE NATL GRASS CO (A)
Colorado	Bent	99	5	1.4	LAMAR MUNICIPAL CO (A)	LAMAR MUNICIPAL CO (A)	LAMAR MUNICIPAL CO (A)
Colorado	Boulder	92	-2	29.4	DENVER STAPLETON CO (A)	BOULDER 14 W CO (A)	BOULDER 14 W CO (A)
Colorado	Broomfield	93	-2	29.4	GREELEY-WELD COUNTY CO (A)	BOULDER 14 W CO (A)	BOULDER 14 W CO (A)
Colorado	Chaffee	82	-14	29.1	GUNNISON-CRESTED BU CO (A)	Leadville Colorado (M)	Leadville Colorado (M)
Colorado	Cheyenne	95	5	1.9	KIT CARSON COUNTY A CO (A)	KIT CARSON COUNTY A CO (A)	KIT CARSON COUNTY A CO (A)
Colorado	Clear Creek	91	-2	29.4	Boulder Colorado (M)	BOULDER 14 W CO (A)	BOULDER 14 W CO (A)
Colorado	Conejos	84	-10	6.0	SAN LUIS VALLEY REG CO (A)	Alamosa San Luis Valley Regional Airport Colorado (M)	Alamosa San Luis Valley Regional Airport Colorado (M)
Colorado	Costilla	84	-10	6.0	SAN LUIS VALLEY REG CO (A)	Alamosa San Luis Valley Regional Airport Colorado (M)	Alamosa San Luis Valley Regional Airport Colorado (M)
Colorado	Crowley	98	3	1.7	LA JUNTA MUNICIPAL CO (A)	LA JUNTA 17 WSW CO (A)	Pueblo Memorial Airport Colorado (M)
Colorado	Custer	94	5	1.8	Pueblo Memorial Airport Colorado (M); PUEBLO MEMORIAL CO (A); BUTTS AAF CO (A)	Pueblo Memorial Airport Colorado (M); PUEBLO MEMORIAL CO (A); BUTTS AAF CO (A)	Pueblo Memorial Airport Colorado (M); PUEBLO MEMORIAL CO (A); BUTTS AAF CO (A)
Colorado	Delta	95	4	5.7	Grand Junction Walker Field Colorado (M)	MONTROSE 11 ENE CO (A)	MONTROSE 11 ENE CO (A)
Colorado	Denver	93	-2	29.4	DENVER INTL CO (A)	BOULDER 14 W CO (A)	BOULDER 14 W CO (A)
Colorado	Dolores	92	5	6.6	CORTEZ MUNICIPAL CO (A)	TELLURIDE REGIONAL CO (A)	TELLURIDE REGIONAL CO (A)
Colorado	Douglas	93	3	4.0	DENVER INTL CO (A)	Denver Stapleton International Airport Colorado (M)	ELBERT MONUMENT AWO CO (A)
Colorado	Eagle	88	-14	29.1	Colorado Springs Municipal Airport Colorado (M)	Leadville Colorado (M)	Leadville Colorado (M)
Colorado	El Paso	96	3	4.0	Pueblo Memorial Airport Colorado (M)	ELBERT MONUMENT AWO CO (A)	ELBERT MONUMENT AWO CO (A)
Colorado	Elbert	91	1	4.0	LIMON MUNICIPAL CO (A)	Limon Colorado (M)	ELBERT MONUMENT AWO CO (A)
Colorado	Fremont	91	6	2.1	BUTTS AAF CO (A)	BUTTS AAF CO (A)	BUTTS AAF CO (A)
Colorado	Garfield	93	-5	4.2	Rifle Garfield Co. Regional Airport Colorado (M)	MEEKER AP CO (A)	MEEKER AP CO (A)
Colorado	Gilpin	92	-2	29.4	DENVER STAPLETON CO (A)	BOULDER 14 W CO (A)	BOULDER 14 W CO (A)
Colorado	Grand	84	-13	29.4	MCELROY AIRFIELD CO (A)	MCELROY AIRFIELD CO (A)	BOULDER 14 W CO (A)
Colorado	Gunnison	82	-11	9.0	Aspen Pitkin Co. SAWRanger Station Colorado (M)	Gunnison Co. Colorado (M)	Gunnison Co. Colorado (M)
Colorado	Hinsdale	80	5	6.6	TELLURIDE REGIONAL CO* (A)	TELLURIDE REGIONAL CO (A)	TELLURIDE REGIONAL CO (A)
Colorado	Huerfano	93	7	1.7	Trinidad Las Animas Co. Airport Colorado (M); PERRY STOKES AP CO (A); Pueblo Memorial Airport Colorado (M)	Trinidad Las Animas Co. Airport Colorado (M); PERRY STOKES AP CO (A); Pueblo Memorial Airport Colorado (M)	Trinidad Las Animas Co. Airport Colorado (M); PERRY STOKES AP CO (A); Pueblo Memorial Airport Colorado (M)

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Colorado	Jackson	85	-4	5.5	MCELROY AIRFIELD CO (A); YAMPA VALLEY REGION CO (A); Hayden Yampa Valley Regional Airport Colorado (M)	MCELROY AIRFIELD CO (A); YAMPA VALLEY REGION CO (A); Hayden Yampa Valley Regional Airport Colorado (M)	MCELROY AIRFIELD CO (A); YAMPA VALLEY REGION CO (A); Hayden Yampa Valley Regional Airport Colorado (M)
Colorado	Jefferson	93	-2	29.4	DENVER INTL CO (A)	BOULDER 14 W CO (A)	BOULDER 14 W CO (A)
Colorado	Kiowa	99	5	1.4	LAMAR MUNICIPAL CO (A)	LAMAR MUNICIPAL CO (A)	LAMAR MUNICIPAL CO (A)
Colorado	Kit Carson	95	5	1.9	KIT CARSON COUNTY A CO (A)	KIT CARSON COUNTY A CO (A)	KIT CARSON COUNTY A CO (A)
Colorado	La Plata	88	4	3.3	DURANGO-LA PLATA CO CO (A)	DURANGO-LA PLATA CO CO (A)	Durango-La Plata C. Airport Colorado (M)
Colorado	Lake	82	-14	29.1	Aspen Pitkin Co. SAWRanger Station Colorado (M)	Leadville Colorado (M)	Leadville Colorado (M)
Colorado	Larimer	91	1	2.9	Fort Collins Colorado (M)	NUNN 7 NNE CO (A)	NUNN 7 NNE CO (A)
Colorado	Las Animas	98	3	1.8	LA JUNTA 17 WSW CO (A)	LA JUNTA 17 WSW CO (A)	Trinidad Las Animas Co. Airport Colorado (M)
Colorado	Lincoln	91	1	3.0	LIMON MUNICIPAL CO (A)	Limon Colorado (M)	LIMON MUNICIPAL CO (A)
Colorado	Logan	94	-2	2.6	SIDNEY MUNICIPAL NE (A)	Sterling Colorado (M)	Sidney Municipal Airport Nebraska (M)
Colorado	Mesa	96	9	1.5	GRAND JUNCTION REGI CO (A)	GRAND JUNCTION REGI CO (A)	GRAND JUNCTION REGI CO (A)
Colorado	Mineral	85	5	4.4	TELLURIDE REGIONAL CO (A); Durango-La Plata C. Airport Colorado (M); DURANGO-LA PLATA CO CO (A)	TELLURIDE REGIONAL CO (A); Durango-La Plata C. Airport Colorado (M); DURANGO-LA PLATA CO CO (A)	TELLURIDE REGIONAL CO (A); Durango-La Plata C. Airport Colorado (M); DURANGO-LA PLATA CO CO (A)
Colorado	Moffat	91	-9	5.7	DINOSAUR 2 E CO (A)	Craig Creig-Moffit Field Colorado (M)	Craig Creig-Moffit Field Colorado (M)
Colorado	Montezuma	96	6	3.1	Teec Nos Pos Arizona (M)	Teec Nos Pos Arizona (M)	CORTEZ 8 SE CO (A)
Colorado	Montrose	92	4	6.6	MONTROSE REGIONAL CO (A)	MONTROSE 11 ENE CO (A)	TELLURIDE REGIONAL CO (A)
Colorado	Morgan	93	3	2.1	COLORADO PLAINS REG CO (A)	Akron Washington Co. Airport Colorado (M)	Akron Washington Co. Airport Colorado (M)
Colorado	Otero	98	3	1.6	LA JUNTA MUNICIPAL CO (A)	LA JUNTA 17 WSW CO (A)	LA JUNTA 17 WSW CO (A)
Colorado	Ouray	92	4	6.6	MONTROSE REGIONAL CO (A)	MONTROSE 11 ENE CO (A)	TELLURIDE REGIONAL CO (A)
Colorado	Park	81	-14	29.1	Leadville Colorado (M)	Leadville Colorado (M)	Leadville Colorado (M)
Colorado	Phillips	97	4	1.8	IMPERIAL MUNICIPAL NE (A)	IMPERIAL MUNICIPAL NE (A)	IMPERIAL MUNICIPAL NE (A)
Colorado	Pitkin	88	-14	29.1	Colorado Springs Municipal Airport Colorado (M)	Leadville Colorado (M)	Leadville Colorado (M)
Colorado	Prowers	99	5	1.4	LAMAR MUNICIPAL CO (A)	LAMAR MUNICIPAL CO (A)	LAMAR MUNICIPAL CO (A)
Colorado	Pueblo	96	5	2.1	Pueblo Memorial Airport Colorado (M)	Pueblo Memorial Airport Colorado (M)	BUTTS AAF CO (A)
Colorado	Rio Blanco	89	-5	4.2	MEEKER AP CO (A)	MEEKER AP CO (A)	MEEKER AP CO (A)
Colorado	Rio Grande	84	-10	6.0	SAN LUIS VALLEY REG CO (A)	Alamosa San Luis Valley Regional Airport Colorado (M)	Alamosa San Luis Valley Regional Airport Colorado (M)
Colorado	Routt	89	-9	5.7	CRAIG-MOFFAT COUNTY CO (A)	Craig Creig-Moffit Field Colorado (M)	Craig Creig-Moffit Field Colorado (M)

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Colorado	Saguache	83	-11	6.7	Alamosa San Luis Valley Regional Airport Colorado (M); SAN LUIS VALLEY REG CO (A); GUNNISON-CRESTED BU CO (A)	Alamosa San Luis Valley Regional Airport Colorado (M); SAN LUIS VALLEY REG CO (A); GUNNISON-CRESTED BU CO (A)	Alamosa San Luis Valley Regional Airport Colorado (M); SAN LUIS VALLEY REG CO (A); GUNNISON-CRESTED BU CO (A)
Colorado	San Juan	80	5	6.6	TELLURIDE REGIONAL CO* (A)	TELLURIDE REGIONAL CO (A)	TELLURIDE REGIONAL CO (A)
Colorado	San Miguel	80	5	6.6	TELLURIDE REGIONAL CO* (A)	TELLURIDE REGIONAL CO (A)	TELLURIDE REGIONAL CO (A)
Colorado	Sedgwick	94	0	2.6	SEARLE FIELD NE (A)	Sidney Municipal Airport Nebraska (M)	Sidney Municipal Airport Nebraska (M)
Colorado	Summit	84	-14	29.1	MCELROY AIRFIELD CO (A)	Leadville Colorado (M)	Leadville Colorado (M)
Colorado	Teller	91	3	4.0	BUTTS AAF CO (A)	ELBERT MONUMENT AWO CO (A)	ELBERT MONUMENT AWO CO (A)
Colorado	Washington	93	3	2.1	COLORADO PLAINS REG CO (A)	Akron Washington Co. Airport Colorado (M)	Akron Washington Co. Airport Colorado (M)
Colorado	Weld	93	0	2.9	GREELEY-WELD COUNTY CO (A)	GREELEY-WELD COUNTY CO (A)	NUNN 7 NNE CO (A)
Colorado	Yuma	93	4	2.0	COLORADO PLAINS REG CO (A); Akron Washington Co. Airport Colorado (M); KIT CARSON COUNTY A CO (A)	COLORADO PLAINS REG CO (A); Akron Washington Co. Airport Colorado (M); KIT CARSON COUNTY A CO (A)	COLORADO PLAINS REG CO (A); Akron Washington Co. Airport Colorado (M); KIT CARSON COUNTY A CO (A)
<b>Connecticut</b>							
Connecticut	Fairfield	89	2	2.7	Poughkeepsie Dutchess Co. Airport New York (M)	Waterbury Connecticut (M)	Oxford Connecticut (M)
Connecticut	Hartford	89	0	2.9	BRADLEY INTL CT (A)	Springfield Westover Air Force Base Massachusetts (M)	Springfield Westover Air Force Base Massachusetts (M)
Connecticut	Litchfield	89	2	2.7	Poughkeepsie Dutchess Co. Airport New York (M)	Waterbury Connecticut (M)	Oxford Connecticut (M)
Connecticut	Middlesex	89	2	2.7	BRADLEY INTL CT (A)	Waterbury Connecticut (M)	Oxford Connecticut (M)
Connecticut	New Haven	89	2	2.7	HARTFORD-BRAINARD A CT (A)	Waterbury Connecticut (M)	Oxford Connecticut (M)
Connecticut	New London	89	7	2.5	HARTFORD-BRAINARD A CT (A)	Norwich Connecticut (M)	KINGSTON 1 W RI (A)
Connecticut	Tolland	89	0	2.9	BRADLEY INTL CT (A)	Springfield Westover Air Force Base Massachusetts (M)	Springfield Westover Air Force Base Massachusetts (M)
Connecticut	Windham	89	0	2.9	BRADLEY INTL CT (A)	Springfield Westover Air Force Base Massachusetts (M)	Springfield Westover Air Force Base Massachusetts (M)
<b>Delaware</b>							
Delaware	Kent	91	11	1.4	DELAWARE COASTAL AP DE (A)	Vineland New Jersey (M)	Vineland New Jersey (M)
Delaware	New Castle	91	11	1.7	Philadelphia International Airport Pennsylvania (M)	Vineland New Jersey (M)	AVONDALE 2 N PA (A)
Delaware	Sussex	91	18	1.3	SALISBURY-OCEAN CIT MD (A)	Salisbury Wicomico Co. Airport Maryland (M)	Cape May Co. Airport New Jersey (M)
<b>District of Columbia</b>							
District of Columbia	District of Columbia	94	14	1.6	DAVISON AAF VA (A)	Sterling Virginia (M)	Sterling Virginia (M)
<b>Florida</b>							
Florida	Alachua	93	33	0.2	GAINESVILLE REGIONA FL (A)	Gainesville Regional Airport Florida (M)	GAINESVILLE REGIONA FL (A)

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Florida	Baker	94	32	0.2	Jacksonville Cecil Field Florida (M)	JACKSONVILLE INTL FL (A)	Jacksonville International Airport Florida (M)
Florida	Bay	92	35	0.2	PANAMA CITY BAY COU FL (A)	TYNDALL AFB FL (A)	TYNDALL AFB FL (A)
Florida	Bradford	94	33	0.2	Jacksonville Cecil Field Florida (M)	Gainesville Regional Airport Florida (M)	CECIL FIELD FL (A)
Florida	Brevard	93	40	0.1	ORLANDO INTL FL (A)	TITUSVILLE 7 E FL (A)	TITUSVILLE 7 E FL (A)
Florida	Broward	92	44	0.0	MIAMI EXECUTIVE FL (A)	Belle Glade Florida (M)	Belle Glade Florida (M)
Florida	Calhoun	95	30	0.2	MARIANNA MUNICIPAL FL (A)	MARIANNA MUNICIPAL FL (A)	MARIANNA MUNICIPAL FL (A)
Florida	Charlotte	93	42	0.1	Fort Myers Page Field Florida (M)	PUNTA GORDA AP FL (A)	Venice Pier Florida (M)
Florida	Citrus	92	33	0.1	Ocala Muni Florida (M)	HERNANDO COUNTY AP FL (A)	TAYLOR FIELD FL (A)
Florida	Clay	94	32	0.2	Jacksonville Cecil Field Florida (M)	JACKSONVILLE INTL FL (A)	Jacksonville International Airport Florida (M)
Florida	Collier	93	44	0.0	Southwest Florida (Lat: 26.5;Long: 81.8) Florida (M)	EVERGLADES CITY 5 N FL (A)	SOUTHWEST FLORIDA I FL (A)
Florida	Columbia	93	33	0.2	GAINESVILLE REGIONA FL (A); Gainesville Regional Airport Florida (M); Jacksonville Cecil Field Florida (M)	GAINESVILLE REGIONA FL (A); Gainesville Regional Airport Florida (M); Jacksonville Cecil Field Florida (M)	GAINESVILLE REGIONA FL (A); Gainesville Regional Airport Florida (M); Jacksonville Cecil Field Florida (M)
Florida	DeSoto	93	42	0.0	PUNTA GORDA AP FL (A)	PUNTA GORDA AP FL (A)	PUNTA GORDA AP FL (A)
Florida	Dixie	93	30	0.2	CROSS CITY AP FL (A)	CROSS CITY AP FL (A)	KEATON BEACH FL (A)
Florida	Duval	94	32	0.2	Jacksonville Cecil Field Florida (M)	JACKSONVILLE INTL FL (A)	BRUNSWICK 23 S GA (A)
Florida	Escambia	95	29	0.3	WHITING FIELD NAS S FL (A)	FAIRHOPE 3 NE AL (A)	FAIRHOPE 3 NE AL (A)
Florida	Flagler	91	36	0.2	Daytona Beach International Airport Florida (M)	ST AUGUSTINE AP FL (A)	St Augsutine Airport Florida (M)
Florida	Franklin	91	35	0.2	APALACHICOLA REGION FL (A)	APALACHICOLA REGION FL (A)	CAPE SAN BLAS FL (A)
Florida	Gadsden	97	29	0.2	DECATUR COUNTY INDU GA (A)	Tallahassee Regional Airport Florida (M)	MARIANNA MUNICIPAL FL (A)
Florida	Gilchrist	93	30	0.2	CROSS CITY AP FL (A)	CROSS CITY AP FL (A)	CROSS CITY AP FL (A)
Florida	Glades	91	44	0.0	Belle Glade Florida (M)	Belle Glade Florida (M)	Belle Glade Florida (M)
Florida	Gulf	92	35	0.2	PANAMA CITY BAY COU FL (A)	APALACHICOLA REGION FL (A)	CAPE SAN BLAS FL (A)
Florida	Hamilton	95	30	0.2	VALDOSTA REGIONAL GA (A)	VALDOSTA REGIONAL GA (A)	Valdosta Regional Airport Georgia (M)
Florida	Hardee	93	41	0.1	WINTER HAVEN MUNICI FL (A)	Lakeland City Office Florida (M)	WINTER HAVEN MUNICI FL (A)
Florida	Hendry	93	44	0.0	SOUTHWEST FLORIDA I FL (A)	Belle Glade Florida (M)	Belle Glade Florida (M)
Florida	Hernando	95	33	0.1	VANDENBERG AP FL (A)	HERNANDO COUNTY AP FL (A)	HERNANDO COUNTY AP FL (A)
Florida	Highlands	92	42	0.1	PUNTA GORDA AP FL (A); WINTER HAVEN MUNICI FL (A); VERO BEACH REGIONAL FL (A)	PUNTA GORDA AP FL (A); WINTER HAVEN MUNICI FL (A); VERO BEACH REGIONAL FL (A)	PUNTA GORDA AP FL (A); WINTER HAVEN MUNICI FL (A); VERO BEACH REGIONAL FL (A)
Florida	Hillsborough	95	33	0.1	VANDENBERG AP FL (A)	HERNANDO COUNTY AP FL (A)	HERNANDO COUNTY AP FL (A)
Florida	Holmes	95	29	0.3	FLORALA MUNICIPAL AL (A)	CAIRNS AAF AL (A)	CAIRNS AAF AL (A)

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Florida	Indian River	91	41	0.1	Melbourne Regional Airport Florida (M)	ST LUCIE COUNTY INT FL (A)	Fort Pierce Florida (M)
Florida	Jackson	97	30	0.3	DECATUR COUNTY INDU GA (A)	MARIANNA MUNICIPAL FL (A)	DOTHAN REGIONAL AL (A)
Florida	Jefferson	95	29	0.2	TALLAHASSEE REGIONA FL (A)	Tallahassee Regional Airport Florida (M)	Tallahassee Regional Airport Florida (M)
Florida	Lafayette	93	30	0.2	PERRY FOLEY AP FL (A)	CROSS CITY AP FL (A)	KEATON BEACH FL (A)
Florida	Lake	93	34	0.1	Orlando Executive Airport Florida (M)	Ocala Muni Florida (M)	Ocala Muni Florida (M)
Florida	Lee	93	42	0.0	Fort Myers Page Field Florida (M)	PUNTA GORDA AP FL (A)	PUNTA GORDA AP FL (A)
Florida	Leon	95	29	0.2	TALLAHASSEE REGIONA FL (A)	Tallahassee Regional Airport Florida (M)	Tallahassee Regional Airport Florida (M)
Florida	Levy	93	30	0.2	CROSS CITY AP FL (A)	CROSS CITY AP FL (A)	CROSS CITY AP FL (A)
Florida	Liberty	95	29	0.2	TALLAHASSEE REGIONA FL (A)	Tallahassee Regional Airport Florida (M)	Tallahassee Regional Airport Florida (M)
Florida	Madison	95	30	0.2	VALDOSTA REGIONAL GA (A)	VALDOSTA REGIONAL GA (A)	Valdosta Regional Airport Georgia (M)
Florida	Manatee	95	37	0.1	VANDENBERG AP FL (A)	VANDENBERG AP FL (A)	VANDENBERG AP FL (A)
Florida	Marion	93	33	0.2	LEESBURG INTL FL (A)	Gainesville Regional Airport Florida (M)	GAINESVILLE REGIONA FL (A)
Florida	Martin	91	41	0.1	Belle Glade Florida (M)	ST LUCIE COUNTY INT FL (A)	Fort Pierce Florida (M)
Florida	Miami-Dade	92	48	0.0	MIAMI EXECUTIVE FL (A)	Miami Beach City Office Florida (M)	Miami / Kendall-Tamiami Airport Florida (M)
Florida	Monroe	93	44	0.0	EVERGLADES CITY 5 N FL (A)	EVERGLADES CITY 5 N FL (A)	EVERGLADES CITY 5 N FL (A)
Florida	Nassau	94	32	0.2	Jaksonville Cecil Field Florida (M)	JACKSONVILLE INTL FL (A)	BRUNSWICK 23 S GA (A)
Florida	Okaloosa	95	27	0.3	WHITING FIELD NAS S FL (A)	BOB SIKES AP FL (A)	Crestview Bob Sikes Airport Florida (M)
Florida	Okeechobee	91	41	0.1	Vero Beach Municipal Airport Florida (M)	ST LUCIE COUNTY INT FL (A)	Fort Pierce Florida (M)
Florida	Orange	93	38	0.1	Orlando Executive Airport Florida (M)	Sanford Florida (M)	Sanford Florida (M)
Florida	Osceola	93	41	0.1	Orlando Executive Airport Florida (M)	WINTER HAVEN MUNICI FL (A)	Orlando International Airport Florida (M)
Florida	Palm Beach	91	44	0.0	Belle Glade Florida (M)	Belle Glade Florida (M)	Belle Glade Florida (M)
Florida	Pasco	95	33	0.1	VANDENBERG AP FL (A)	HERNANDO COUNTY AP FL (A)	HERNANDO COUNTY AP FL (A)
Florida	Pinellas	95	37	0.1	VANDENBERG AP FL (A)	VANDENBERG AP FL (A)	ARIPEKA FL (A)
Florida	Polk	95	37	0.1	VANDENBERG AP FL (A)	VANDENBERG AP FL (A)	VANDENBERG AP FL (A)
Florida	Putnam	93	33	0.2	GAINESVILLE REGIONA FL (A)	Gainesville Regional Airport Florida (M)	GAINESVILLE REGIONA FL (A)
Florida	Santa Rosa	95	27	0.3	WHITING FIELD NAS S FL (A)	BOB SIKES AP FL (A)	Crestview Bob Sikes Airport Florida (M)
Florida	Sarasota	93	42	0.1	PUNTA GORDA AP FL (A)	PUNTA GORDA AP FL (A)	Venice Pier Florida (M)
Florida	Seminole	93	38	0.1	Orlando Executive Airport Florida (M)	Sanford Florida (M)	Sanford Florida (M)

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Florida	St. Johns	94	34	0.2	Jacksonville Cecil Field Florida (M)	Jacksonville Cecil Field Florida (M)	Jacksonville Craig Municipal Airport Florida (M)
Florida	St. Lucie	91	41	0.1	Vero Beach Municipal Airport Florida (M)	ST LUCIE COUNTY INT FL (A)	Fort Pierce Florida (M)
Florida	Sumter	93	33	0.1	LEESBURG INTL FL (A)	HERNANDO COUNTY AP FL (A)	TAYLOR FIELD FL (A)
Florida	Suwannee	93	30	0.2	PERRY FOLEY AP FL (A)	CROSS CITY AP FL (A)	PERRY FOLEY AP FL (A)
Florida	Taylor	93	30	0.2	PERRY FOLEY AP FL (A)	PERRY FOLEY AP FL (A)	KEATON BEACH FL (A)
Florida	Union	94	33	0.2	Jacksonville Cecil Field Florida (M)	Gainesville Regional Airport Florida (M)	CECIL FIELD FL (A)
Florida	Volusia	93	38	0.1	Orlando Executive Airport Florida (M)	Sanford Florida (M)	Sanford Florida (M)
Florida	Wakulla	95	29	0.2	TALLAHASSEE REGIONA FL (A)	Tallahassee Regional Airport Florida (M)	Tallahassee Regional Airport Florida (M)
Florida	Walton	95	27	0.3	FLORALA MUNICIPAL AL (A)	BOB SIKES AP FL (A)	Crestview Bob Sikes Airport Florida (M)
Florida	Washington	95	30	0.2	MARIANNA MUNICIPAL FL (A)	MARIANNA MUNICIPAL FL (A)	MARIANNA MUNICIPAL FL (A)
<b>Georgia</b>							
Georgia	Appling	96	29	0.3	DOUGLAS MUNICIPAL GA (A)	BACON COUNTY AP GA (A)	BACON COUNTY AP GA (A)
Georgia	Atkinson	96	29	0.3	DOUGLAS MUNICIPAL GA (A)	BACON COUNTY AP GA (A)	BACON COUNTY AP GA (A)
Georgia	Bacon	96	29	0.3	DOUGLAS MUNICIPAL GA (A)	BACON COUNTY AP GA (A)	BACON COUNTY AP GA (A)
Georgia	Baker	97	27	0.3	DECATUR COUNTY INDU GA (A)	NEWTON 8 W GA (A)	NEWTON 8 W GA (A)
Georgia	Baldwin	96	27	0.4	DUBLIN MUNICIPAL GA (A)	Macon Middle GA. Regional Airport Georgia (M)	GREENE COUNTY REGIO GA (A)
Georgia	Banks	94	26	0.6	ATHENS BEN EPPS AP GA (A)	Athens Ben Epps Airport Georgia (M)	LEE GILMER MEMORIAL GA (A)
Georgia	Barrow	94	25	0.6	ATHENS BEN EPPS AP GA (A)	DEKALB-PEACHTREE AP GA (A)	LEE GILMER MEMORIAL GA (A)
Georgia	Bartow	94	22	0.7	RICHARD B RUSSELL R GA (A)	Rome R. B. Russell Airport Georgia (M)	Dalton Georgia (M)
Georgia	Ben Hill	96	32	0.2	DOUGLAS MUNICIPAL GA (A)	DOUGLAS MUNICIPAL GA (A)	DOUGLAS MUNICIPAL GA (A)
Georgia	Berrien	96	30	0.3	DOUGLAS MUNICIPAL GA (A)	Moultrie Georgia (M)	Moultrie Georgia (M)
Georgia	Bibb	96	27	0.4	BALDWIN COUNTY AP GA (A)	Macon Middle GA. Regional Airport Georgia (M)	THOMASTON-UPSON CO GA (A)
Georgia	Bleckley	96	25	0.4	DUBLIN MUNICIPAL GA (A)	Dublin Georgia (M)	MIDDLE GEORGIA REGI GA (A)
Georgia	Brantley	95	29	0.3	WAYCROSS-WARE COUNT GA (A)	BACON COUNTY AP GA (A)	BACON COUNTY AP GA (A)
Georgia	Brooks	95	30	0.3	MOULTRIE MUNICIPAL GA (A)	Moultrie Georgia (M)	Moultrie Georgia (M)
Georgia	Bryan	97	29	0.3	STATESBORO-BULLOCK GA (A)	STATESBORO-BULLOCK GA (A)	STATESBORO-BULLOCK GA (A)
Georgia	Bulloch	97	29	0.3	STATESBORO-BULLOCK GA (A)	PLANTATION AIRPARK GA (A)	PLANTATION AIRPARK GA (A)
Georgia	Burke	95	26	0.4	Augusta Bush Field Georgia (M)	Augusta Bush Field Georgia (M)	Augusta Bush Field Georgia (M)
Georgia	Butts	94	22	0.7	THOMASTON-UPSON CO GA (A)	Griffin Georgia (M)	Atlanta Nexrad (33.37N 84.55 W) Georgia (M)

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Georgia	Calhoun	97	27	0.3	DECATUR COUNTY INDU GA (A)	NEWTON 8 W GA (A)	NEWTON 8 W GA (A)
Georgia	Camden	94	31	0.2	BRUNSWICK GOLDEN IS GA (A)	BRUNSWICK GOLDEN IS GA (A)	Brunswick Malcolm Mckinnon Airport Georgia (M)
Georgia	Candler	97	29	0.3	STATESBORO-BULLOCK GA (A)	PLANTATION AIRPARK GA (A)	PLANTATION AIRPARK GA (A)
Georgia	Carroll	93	20	0.7	LAGRANGE-CALLAWAY A GA (A)	NEWNAN-COWETA COUNT GA (A)	NEWNAN-COWETA COUNT GA (A)
Georgia	Catoosa	94	18	0.8	RICHARD B RUSSELL R GA (A)	VALLEY HEAD 1 SSW AL (A)	VALLEY HEAD 1 SSW AL (A)
Georgia	Charlton	95	31	0.2	WAYCROSS-WARE COUNT GA (A)	Waycross Ware Co. Airport Georgia (M)	Waycross Ware Co. Airport Georgia (M)
Georgia	Chatham	95	29	0.3	WRIGHT AAF GA (A)	WRIGHT AAF GA (A)	Savannah International Airport Georgia (M)
Georgia	Chattahoochee	97	24	0.4	WEEDON FIELD AL (A)	Columbus Lawson Air Force Base Georgia (M)	Americus Georgia (M)
Georgia	Chattooga	94	18	0.8	RICHARD B RUSSELL R GA (A)	VALLEY HEAD 1 SSW AL (A)	VALLEY HEAD 1 SSW AL (A)
Georgia	Cherokee	94	22	0.7	RICHARD B RUSSELL R GA (A)	Rome R. B. Russell Airport Georgia (M)	DALTON MUNICIPAL GA (A)
Georgia	Clarke	95	26	0.6	GREENE COUNTY REGIO GA (A)	Athens Ben Epps Airport Georgia (M)	LEE GILMER MEMORIAL GA (A)
Georgia	Clay	97	27	0.3	WEEDON FIELD AL (A)	NEWTON 8 W GA (A)	NEWTON 8 W GA (A)
Georgia	Clayton	92	20	0.7	Atlanta Hartsfield International Airport Georgia (M)	NEWNAN-COWETA COUNT GA (A)	NEWNAN-COWETA COUNT GA (A)
Georgia	Clinch	96	30	0.2	DOUGLAS MUNICIPAL GA (A)	VALDOSTA REGIONAL GA (A)	Waycross Ware Co. Airport Georgia (M)
Georgia	Cobb	92	23	0.7	Atlanta Hartsfield International Airport Georgia (M)	Atlanta Nexrad (33.37N 84.55 W) Georgia (M)	Atlanta Nexrad (33.37N 84.55 W) Georgia (M)
Georgia	Coffee	96	29	0.3	DOUGLAS MUNICIPAL GA (A)	BACON COUNTY AP GA (A)	BACON COUNTY AP GA (A)
Georgia	Colquitt	95	29	0.3	Albany Dougherty Co. Airport Georgia (M)	NEWTON 11 SW GA (A)	NEWTON 11 SW GA (A)
Georgia	Columbia	95	26	0.5	Augusta Bush Field Georgia (M)	Augusta Bush Field Georgia (M)	THOMSON-MCDUFFIE CO GA (A)
Georgia	Cook	95	30	0.3	MOULTRIE MUNICIPAL GA (A)	Moultrie Georgia (M)	Moultrie Georgia (M)
Georgia	Coweta	93	20	0.7	LAGRANGE-CALLAWAY A GA (A)	NEWNAN-COWETA COUNT GA (A)	NEWNAN-COWETA COUNT GA (A)
Georgia	Crawford	95	27	0.4	Warner Robins Air Force Base Georgia (M)	Macon Middle GA. Regional Airport Georgia (M)	THOMASTON-UPSON CO GA (A)
Georgia	Crisp	95	25	0.4	Albany Dougherty Co. Airport Georgia (M)	Americus Georgia (M)	Americus Georgia (M)
Georgia	Dade	93	18	0.8	Rome R. B. Russell Airport Georgia (M)	VALLEY HEAD 1 SSW AL (A)	VALLEY HEAD 1 SSW AL (A)
Georgia	Dawson	91	25	0.6	Dobbins Air Force Base Marietta Georgia (M)	Dobbins Air Force Base Marietta Georgia (M)	CHEROKEE COUNTY REG GA (A)
Georgia	Decatur	97	27	0.3	DECATUR COUNTY INDU GA (A)	NEWTON 8 W GA (A)	NEWTON 8 W GA (A)
Georgia	DeKalb	93	22	0.7	WINDER-BORROW AP GA (A)	Griffin Georgia (M)	Atlanta Nexrad (33.37N 84.55 W) Georgia (M)
Georgia	Dodge	96	25	0.4	DUBLIN MUNICIPAL GA (A)	Dublin Georgia (M)	Dublin Georgia (M)

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Georgia	Dooley	95	25	0.4	Warner Robins Air Force Base Georgia (M)	Americus Georgia (M)	Americus Georgia (M)
Georgia	Dougherty	95	25	0.4	Albany Dougherty Co. Airport Georgia (M)	Americus Georgia (M)	Americus Georgia (M)
Georgia	Douglas	92	20	0.7	Atlanta Hartsfield International Airport Georgia (M)	NEWNAN-COWETA COUNT GA (A)	NEWNAN-COWETA COUNT GA (A)
Georgia	Early	97	27	0.3	DECATUR COUNTY INDU GA (A)	NEWTON 8 W GA (A)	NEWTON 8 W GA (A)
Georgia	Echols	95	30	0.2	VALDOSTA REGIONAL GA (A)	VALDOSTA REGIONAL GA (A)	Valdosta Regional Airport Georgia (M)
Georgia	Effingham	97	29	0.3	STATESBORO-BULLOCK GA (A)	PLANTATION AIRPARK GA (A)	PLANTATION AIRPARK GA (A)
Georgia	Elbert	95	22	0.7	GREENE COUNTY REGIO GA (A)	Greenwood South Carolina (M)	Greenwood South Carolina (M)
Georgia	Emanuel	97	25	0.4	STATESBORO-BULLOCK GA (A)	Dublin Georgia (M)	Dublin Georgia (M)
Georgia	Evans	97	29	0.3	STATESBORO-BULLOCK GA (A)	PLANTATION AIRPARK GA (A)	PLANTATION AIRPARK GA (A)
Georgia	Fannin	93	19	0.9	Dalton Georgia (M)	WESTERN CAROLINA RE NC (A)	WESTERN CAROLINA RE NC (A)
Georgia	Fayette	94	20	0.7	THOMASTON-UPSON CO GA (A)	NEWNAN-COWETA COUNT GA (A)	NEWNAN-COWETA COUNT GA (A)
Georgia	Floyd	94	18	0.8	RICHARD B RUSSELL R GA (A)	VALLEY HEAD 1 SSW AL (A)	VALLEY HEAD 1 SSW AL (A)
Georgia	Forsyth	93	24	0.6	WINDER-BORROW AP GA (A)	DOBBINS AFB GA (A)	CHEROKEE COUNTY REG GA (A)
Georgia	Franklin	94	25	0.6	ATHENS BEN EPPS AP GA (A)	ANDERSON REGIONAL SC (A)	LEE GILMER MEMORIAL GA (A)
Georgia	Fulton	92	20	0.7	Atlanta Hartsfield International Airport Georgia (M)	NEWNAN-COWETA COUNT GA (A)	NEWNAN-COWETA COUNT GA (A)
Georgia	Gilmer	93	22	0.7	Dalton Georgia (M)	Dalton Georgia (M)	Dalton Georgia (M)
Georgia	GlascocK	96	26	0.5	BALDWIN COUNTY AP GA (A)	Augusta Bush Field Georgia (M)	THOMSON-MCDUFFIE CO GA (A)
Georgia	Glynn	94	31	0.2	BRUNSWICK GOLDEN IS GA (A)	BRUNSWICK GOLDEN IS GA (A)	Brunswick Malcolm Mckinnon Airport Georgia (M)
Georgia	Gordon	94	22	0.7	RICHARD B RUSSELL R GA (A)	Rome R. B. Russell Airport Georgia (M)	Dalton Georgia (M)
Georgia	Grady	97	27	0.3	DECATUR COUNTY INDU GA (A)	NEWTON 8 W GA (A)	NEWTON 8 W GA (A)
Georgia	Greene	96	26	0.5	BALDWIN COUNTY AP GA (A)	Athens Ben Epps Airport Georgia (M)	WATKINSVILLE 5 SSE GA (A)
Georgia	Gwinnett	93	24	0.6	WINDER-BORROW AP GA (A)	DOBBINS AFB GA (A)	CHEROKEE COUNTY REG GA (A)
Georgia	Habersham	93	26	0.6	OCCONEE COUNTY REGI SC (A)	LEE GILMER MEMORIAL GA (A)	LEE GILMER MEMORIAL GA (A)
Georgia	Hall	94	25	0.6	ATHENS BEN EPPS AP GA (A)	CHEROKEE COUNTY REG GA (A)	CHEROKEE COUNTY REG GA (A)
Georgia	Hancock	96	26	0.5	BALDWIN COUNTY AP GA (A)	THOMSON-MCDUFFIE CO GA (A)	THOMSON-MCDUFFIE CO GA (A)
Georgia	Haralson	94	22	0.6	RICHARD B RUSSELL R GA (A)	Rome R. B. Russell Airport Georgia (M)	CARTERSVILLE AP GA (A)
Georgia	Harris	95	23	0.6	LAWSON AAF GA (A)	La Grange Georgia (M)	La Grange Georgia (M)
Georgia	Hart	94	25	0.6	ATHENS BEN EPPS AP GA (A)	ANDERSON REGIONAL SC (A)	Anderson County Airport South Carolina (M)

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Georgia	Heard	93	20	0.7	LAGRANGE-CALLAWAY A GA (A)	NEWNAN-COWETA COUNT GA (A)	NEWNAN-COWETA COUNT GA (A)
Georgia	Henry	94	20	0.7	THOMASTON-UPSON CO GA (A)	NEWNAN-COWETA COUNT GA (A)	NEWNAN-COWETA COUNT GA (A)
Georgia	Houston	95	27	0.4	Warner Robins Air Force Base Georgia (M)	Macon Middle GA. Regional Airport Georgia (M)	MIDDLE GEORGIA REGI GA (A)
Georgia	Irwin	96	32	0.2	DOUGLAS MUNICIPAL GA (A)	DOUGLAS MUNICIPAL GA (A)	DOUGLAS MUNICIPAL GA (A)
Georgia	Jackson	94	26	0.6	ATHENS BEN EPPS AP GA (A)	Athens Ben Epps Airport Georgia (M)	LEE GILMER MEMORIAL GA (A)
Georgia	Jasper	96	22	0.5	BALDWIN COUNTY AP GA (A)	Griffin Georgia (M)	WATKINSVILLE 5 SSE GA (A)
Georgia	Jeff Davis	96	29	0.3	DOUGLAS MUNICIPAL GA (A)	BACON COUNTY AP GA (A)	BACON COUNTY AP GA (A)
Georgia	Jefferson	95	26	0.5	Augusta Bush Field Georgia (M)	Augusta Bush Field Georgia (M)	THOMSON-MCDUFFIE CO GA (A)
Georgia	Jenkins	97	26	0.4	STATESBORO-BULLOCK GA (A)	AUGUSTA REGIONAL GA (A)	AUGUSTA REGIONAL GA (A)
Georgia	Johnson	96	25	0.4	DUBLIN MUNICIPAL GA (A)	Dublin Georgia (M)	Dublin Georgia (M)
Georgia	Jones	96	27	0.4	BALDWIN COUNTY AP GA (A)	Macon Middle GA. Regional Airport Georgia (M)	MIDDLE GEORGIA REGI GA (A)
Georgia	Lamar	95	20	0.7	MIDDLE GEORGIA REGI GA (A)	NEWNAN-COWETA COUNT GA (A)	NEWNAN-COWETA COUNT GA (A)
Georgia	Lanier	96	30	0.2	DOUGLAS MUNICIPAL GA (A)	VALDOSTA REGIONAL GA (A)	Valdosta Regional Airport Georgia (M)
Georgia	Laurens	96	25	0.4	DUBLIN MUNICIPAL GA (A)	Dublin Georgia (M)	Dublin Georgia (M)
Georgia	Lee	95	25	0.4	Albany Dougherty Co. Airport Georgia (M)	Americus Georgia (M)	Americus Georgia (M)
Georgia	Liberty	95	29	0.3	WRIGHT AAF GA (A)	WRIGHT AAF GA (A)	Savannah International Airport Georgia (M)
Georgia	Lincoln	95	22	0.7	Augusta Bush Field Georgia (M)	Greenwood South Carolina (M)	Greenwood South Carolina (M)
Georgia	Long	95	29	0.3	WRIGHT AAF GA (A)	WRIGHT AAF GA (A)	WRIGHT AAF GA (A)
Georgia	Lowndes	95	30	0.3	MOULTRIE MUNICIPAL GA (A)	Moultrie Georgia (M)	Moultrie Georgia (M)
Georgia	Lumpkin	91	25	0.6	CHEROKEE COUNTY REG GA (A)	CHEROKEE COUNTY REG GA (A)	CHEROKEE COUNTY REG GA (A)
Georgia	Macon	95	25	0.4	Warner Robins Air Force Base Georgia (M)	Americus Georgia (M)	Americus Georgia (M)
Georgia	Madison	95	25	0.6	GREENE COUNTY REGIO GA (A)	ANDERSON REGIONAL SC (A)	LEE GILMER MEMORIAL GA (A)
Georgia	Marion	95	24	0.4	LAWSON AAF GA (A)	Columbus Lawson Air Force Base Georgia (M)	Americus Georgia (M)
Georgia	McDuffie	95	26	0.5	Augusta Bush Field Georgia (M)	Augusta Bush Field Georgia (M)	THOMSON-MCDUFFIE CO GA (A)
Georgia	McIntosh	95	29	0.3	WRIGHT AAF GA (A)	WRIGHT AAF GA (A)	WRIGHT AAF GA (A)
Georgia	Meriwether	95	20	0.7	COLUMBUS AP GA (A)	NEWNAN-COWETA COUNT GA (A)	NEWNAN-COWETA COUNT GA (A)
Georgia	Miller	97	27	0.3	DECATUR COUNTY INDU GA (A)	NEWTON 8 W GA (A)	NEWTON 8 W GA (A)
Georgia	Mitchell	97	27	0.3	DECATUR COUNTY INDU GA (A)	NEWTON 8 W GA (A)	NEWTON 8 W GA (A)

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Georgia	Monroe	95	22	0.5	Warner Robins Air Force Base Georgia (M)	Griffin Georgia (M)	Griffin Georgia (M)
Georgia	Montgomery	96	25	0.4	DUBLIN MUNICIPAL GA (A)	Dublin Georgia (M)	Dublin Georgia (M)
Georgia	Morgan	96	26	0.5	BALDWIN COUNTY AP GA (A)	Athens Ben Epps Airport Georgia (M)	WATKINSVILLE 5 SSE GA (A)
Georgia	Murray	94	22	0.7	RICHARD B RUSSELL R GA (A)	Chattanooga Lovell Field Airport Tennessee (M)	Dalton Georgia (M)
Georgia	Muscogee	95	23	0.6	LAWSON AAF GA (A)	La Grange Georgia (M)	La Grange Georgia (M)
Georgia	Newton	93	22	0.6	WINDER-BORROW AP GA (A)	Griffin Georgia (M)	DEKALB-PEACHTREE AP GA (A)
Georgia	Oconee	95	26	0.6	GREENE COUNTY REGIO GA (A)	Athens Ben Epps Airport Georgia (M)	LEE GILMER MEMORIAL GA (A)
Georgia	Oglethorpe	95	26	0.5	GREENE COUNTY REGIO GA (A)	Athens Ben Epps Airport Georgia (M)	WATKINSVILLE 5 SSE GA (A)
Georgia	Paulding	94	22	0.6	RICHARD B RUSSELL R GA (A)	Rome R. B. Russell Airport Georgia (M)	CARTERSVILLE AP GA (A)
Georgia	Peach	95	27	0.4	Warner Robins Air Force Base Georgia (M)	Macon Middle GA. Regional Airport Georgia (M)	THOMASTON-UPSON CO GA (A)
Georgia	Pickens	94	22	0.7	RICHARD B RUSSELL R GA (A)	Rome R. B. Russell Airport Georgia (M)	Dalton Georgia (M)
Georgia	Pierce	96	29	0.3	DOUGLAS MUNICIPAL GA (A)	BACON COUNTY AP GA (A)	BACON COUNTY AP GA (A)
Georgia	Pike	94	20	0.7	THOMASTON-UPSON CO GA (A)	NEWNAN-COWETA COUNT GA (A)	NEWNAN-COWETA COUNT GA (A)
Georgia	Polk	94	22	0.6	RICHARD B RUSSELL R GA (A)	Rome R. B. Russell Airport Georgia (M)	CARTERSVILLE AP GA (A)
Georgia	Pulaski	96	25	0.4	DUBLIN MUNICIPAL GA (A)	Dublin Georgia (M)	MIDDLE GEORGIA REGI GA (A)
Georgia	Putnam	96	26	0.5	BALDWIN COUNTY AP GA (A)	WATKINSVILLE 5 SSE GA (A)	WATKINSVILLE 5 SSE GA (A)
Georgia	Quitman	97	24	0.4	WEEDON FIELD AL (A)	Columbus Lawson Air Force Base Georgia (M)	LAWSON AAF GA (A)
Georgia	Rabun	93	18	1.1	OCCONEE COUNTY REGI SC (A)	MACON COUNTY AP NC (A)	MACON COUNTY AP NC (A)
Georgia	Randolph	97	25	0.4	WEEDON FIELD AL (A)	Americus Georgia (M)	Americus Georgia (M)
Georgia	Richmond	95	26	0.5	Augusta Bush Field Georgia (M)	Augusta Bush Field Georgia (M)	THOMSON-MCDUFFIE CO GA (A)
Georgia	Rockdale	93	22	0.7	WINDER-BORROW AP GA (A)	Griffin Georgia (M)	Atlanta Nexrad (33.37N 84.55 W) Georgia (M)
Georgia	Schley	95	24	0.4	LAWSON AAF GA (A)	Columbus Lawson Air Force Base Georgia (M)	Americus Georgia (M)
Georgia	Screven	97	29	0.3	STATESBORO-BULLOCK GA (A)	PLANTATION AIRPARK GA (A)	PLANTATION AIRPARK GA (A)
Georgia	Seminole	97	27	0.3	DECATUR COUNTY INDU GA (A)	NEWTON 8 W GA (A)	NEWTON 8 W GA (A)
Georgia	Spalding	94	20	0.7	THOMASTON-UPSON CO GA (A)	NEWNAN-COWETA COUNT GA (A)	NEWNAN-COWETA COUNT GA (A)
Georgia	Stephens	93	25	0.6	Anderson County Airport South Carolina (M)	ANDERSON REGIONAL SC (A)	LEE GILMER MEMORIAL GA (A)
Georgia	Stewart	97	24	0.4	WEEDON FIELD AL (A)	Columbus Lawson Air Force Base Georgia (M)	Americus Georgia (M)

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Georgia	Sumter	95	25	0.4	Albany Dougherty Co. Airport Georgia (M)	Americus Georgia (M)	Americus Georgia (M)
Georgia	Talbot	95	23	0.6	LAWSON AAF GA (A)	La Grange Georgia (M)	La Grange Georgia (M)
Georgia	Taliaferro	96	26	0.5	BALDWIN COUNTY AP GA (A)	Athens Ben Epps Airport Georgia (M)	WATKINSVILLE 5 SSE GA (A)
Georgia	Tattnall	97	29	0.3	STATESBORO-BULLOCK GA (A)	STATESBORO-BULLOCK GA (A)	STATESBORO-BULLOCK GA (A)
Georgia	Taylor	95	25	0.4	Warner Robins Air Force Base Georgia (M)	Americus Georgia (M)	Americus Georgia (M)
Georgia	Telfair	96	29	0.3	DOUGLAS MUNICIPAL GA (A)	BACON COUNTY AP GA (A)	BACON COUNTY AP GA (A)
Georgia	Terrell	95	25	0.4	Albany Dougherty Co. Airport Georgia (M)	Americus Georgia (M)	Americus Georgia (M)
Georgia	Thomas	95	29	0.3	MOULTRIE MUNICIPAL GA (A)	NEWTON 11 SW GA (A)	NEWTON 11 SW GA (A)
Georgia	Tift	96	29	0.3	DOUGLAS MUNICIPAL GA (A)	SW GEORGIA REGIONAL GA (A)	Moultrie Georgia (M)
Georgia	Toombs	95	32	0.3	VIDALIA REGIONAL GA (A)	VIDALIA REGIONAL GA (A)	VIDALIA REGIONAL GA (A)
Georgia	Towns	89	18	1.1	WESTERN CAROLINA RE NC (A)	MACON COUNTY AP NC (A)	MACON COUNTY AP NC (A)
Georgia	Treutlen	96	25	0.4	DUBLIN MUNICIPAL GA (A)	Dublin Georgia (M)	Dublin Georgia (M)
Georgia	Troup	95	20	0.7	COLUMBUS AP GA (A)	NEWNAN-COWETA COUNT GA (A)	NEWNAN-COWETA COUNT GA (A)
Georgia	Turner	95	29	0.3	Albany Dougherty Co. Airport Georgia (M)	SW GEORGIA REGIONAL GA (A)	Moultrie Georgia (M)
Georgia	Twiggs	96	25	0.4	DUBLIN MUNICIPAL GA (A)	Dublin Georgia (M)	MIDDLE GEORGIA REGI GA (A)
Georgia	Union	90	19	0.9	Gainesville Lee Gilmer Airport Georgia (M)	WESTERN CAROLINA RE NC (A)	WESTERN CAROLINA RE NC (A)
Georgia	Upson	95	22	0.7	MIDDLE GEORGIA REGI GA (A)	Griffin Georgia (M)	Atlanta Nexrad (33.37N 84.55 W) Georgia (M)
Georgia	Walker	94	18	0.8	RICHARD B RUSSELL R GA (A)	VALLEY HEAD 1 SSW AL (A)	VALLEY HEAD 1 SSW AL (A)
Georgia	Walton	95	25	0.6	GREENE COUNTY REGIO GA (A)	DEKALB-PEACHTREE AP GA (A)	LEE GILMER MEMORIAL GA (A)
Georgia	Ware	96	29	0.3	DOUGLAS MUNICIPAL GA (A)	BACON COUNTY AP GA (A)	BACON COUNTY AP GA (A)
Georgia	Warren	96	26	0.5	BALDWIN COUNTY AP GA (A)	THOMSON-MCDUFFIE CO GA (A)	THOMSON-MCDUFFIE CO GA (A)
Georgia	Washington	96	25	0.4	DUBLIN MUNICIPAL GA (A)	Dublin Georgia (M)	Dublin Georgia (M)
Georgia	Wayne	95	29	0.3	WAYCROSS-WARE COUNT GA (A)	BACON COUNTY AP GA (A)	BACON COUNTY AP GA (A)
Georgia	Webster	97	24	0.4	WEEDON FIELD AL (A)	Columbus Lawson Air Force Base Georgia (M)	Americus Georgia (M)
Georgia	Wheeler	96	25	0.4	DUBLIN MUNICIPAL GA (A)	Dublin Georgia (M)	Dublin Georgia (M)
Georgia	White	91	19	0.9	LEE GILMER MEMORIAL GA (A)	WESTERN CAROLINA RE NC (A)	WESTERN CAROLINA RE NC (A)
Georgia	Whitfield	94	22	0.7	RICHARD B RUSSELL R GA (A)	Chattanooga Lovell Field Airport Tennessee (M)	Dalton Georgia (M)
Georgia	Wilcox	95	27	0.4	Warner Robins Air Force Base Georgia (M); ROBINS AFB GA (A); Americus Georgia (M)	Warner Robins Air Force Base Georgia (M); ROBINS AFB GA (A); Americus Georgia (M)	Warner Robins Air Force Base Georgia (M); ROBINS AFB GA (A); Americus Georgia (M)

State	County	1.0% Cooling Temp. (°F)	99.0% Heating Temp. (°F)	HDD / CDD Ratio	Weather Station(s) Selected for Cooling Temperature	Weather Station(s) Selected for Heating Temperature	Weather Station(s) Selected for HDD/CDD Ratio
Georgia	Wilkes	95	26	0.5	GREENE COUNTY REGIO GA (A)	Athens Ben Epps Airport Georgia (M)	WATKINSVILLE 5 SSE GA (A)
Georgia	Wilkinson	96	25	0.4	DUBLIN MUNICIPAL GA (A)	Dublin Georgia (M)	MIDDLE GEORGIA REGI GA (A)
Georgia	Worth	95	29	0.3	Albany Dougherty Co. Airport Georgia (M)	SW GEORGIA REGIONAL GA (A)	Moultrie Georgia (M)
<b>Guam</b>							
Guam	N/A	89	74	0	GUAM INTL (A)	ANDERSEN AFB (A)	GUAM INTL (A)
<b>Hawaii</b>							
Hawaii	Hawaii	87	31	56.6	Keahol-Kona International Airport Hawaii (M)	MAUNA LOA 5 NNE HI (A)	MAUNA LOA 5 NNE HI (A)
Hawaii	Honolulu	90	59	0.0	Barbers Point Naval Air Station Hawaii (M)	Wahaiwa Hawaii (M)	Barbers Point Naval Air Station Hawaii (M)
Hawaii	Kalawao	86	59	0.0	Molokai Hawaii (M)	LANAI HI (A)	LANAI HI (A)
Hawaii	Kauai	85	62	0.0	LIHUE HI (A)	Lihue Airport Hawaii (M)	Lihue Airport Hawaii (M)
Hawaii	Maui	89	59	0.0	KAHULUI HI (A)	LANAI HI (A)	LANAI HI (A)
<b>Idaho</b>							
Idaho	Ada	97	9	2.8	MOUNTAIN HOME AFB ID (A)	Mountain Home Air Force Base Idaho (M)	MURPHY 10 W ID (A)
Idaho	Adams	84	-2	9.2	MCCALL MUNICIPAL ID (A)	Mccall Airport Idaho (M)	Mccall Airport Idaho (M)
Idaho	Bannock	92	1	3.2	POCATELLO REGIONAL ID (A)	Pocatello Regional Airport Idaho (M)	Pocatello Regional Airport Idaho (M)
Idaho	Bear Lake	89	-5	5.8	Logan-Cache Airport Utah (M); LOGAN-CACHE AP UT (A); Big Piney Marbleton Airport Wyoming (M)	Logan-Cache Airport Utah (M); LOGAN-CACHE AP UT (A); Big Piney Marbleton Airport Wyoming (M)	Logan-Cache Airport Utah (M); LOGAN-CACHE AP UT (A); Big Piney Marbleton Airport Wyoming (M)
Idaho	Benewah	90	0	3.8	Pullman-Moscow Regional Airport Washington (M)	Moscow Idaho (M)	Coeur D'Alene Idaho (M)
Idaho	Bingham	92	-2	4.1	POCATELLO REGIONAL ID (A)	Idaho Falls Fanning Field Idaho (M)	Idaho Falls Fanning Field Idaho (M)
Idaho	Blaine	87	2	4.2	ARCO 17 SW ID (A)	ARCO 17 SW ID (A)	ARCO 17 SW ID (A)
Idaho	Boise	96	11	1.9	BOISE AP ID (A)	Boise Air Terminal Idaho (M)	Boise Air Terminal Idaho (M)
Idaho	Bonner	89	10	4.6	COEUR D'ALENE AP ID (A)	COEUR D'ALENE AP ID (M)	SANDPOINT AP ID (A)
Idaho	Bonneville	90	-2	4.4	IDAHO FALLS REGIONA ID (A)	Idaho Falls Fanning Field Idaho (M)	REXBURG-MADISON COU ID (A)
Idaho	Boundary	86	10	4.6	SANDPOINT AP ID (A)	SANDPOINT AP ID (A)	SANDPOINT AP ID (A)
Idaho	Butte	87	2	4.2	ARCO 17 SW ID (A)	ARCO 17 SW ID (A)	ARCO 17 SW ID (A)
Idaho	Camas	90	3	6.8	STANLEY RANGER STAT ID (A); JEROME COUNTY AP ID (A); MOUNTAIN HOME AFB ID (A)	STANLEY RANGER STAT ID (A); JEROME COUNTY AP ID (A); MOUNTAIN HOME AFB ID (A)	STANLEY RANGER STAT ID (A); JEROME COUNTY AP ID (A); MOUNTAIN HOME AFB ID (A)
Idaho	Canyon	96	11	2.8	BOISE AP ID (A)	Boise Air Terminal Idaho (M)	MURPHY 10 W ID (A)

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Idaho	Caribou	91	1	3.4	POCATELLO REGIONAL ID (A); Pocatello Regional Airport Idaho (M); IDAHO FALLS REGIONA ID (A)	POCATELLO REGIONAL ID (A); Pocatello Regional Airport Idaho (M); IDAHO FALLS REGIONA ID (A)	POCATELLO REGIONAL ID (A); Pocatello Regional Airport Idaho (M); IDAHO FALLS REGIONA ID (A)
Idaho	Cassia	91	6	2.6	Burley Municipal Airport Idaho (M)	Burley Municipal Airport Idaho (M)	Burley Municipal Airport Idaho (M)
Idaho	Clark	89	-2	4.2	REXBURG-MADISON COU ID (A); Idaho Falls Fanning Field Idaho (M); IDAHO FALLS REGIONA ID (A)	REXBURG-MADISON COU ID (A); Idaho Falls Fanning Field Idaho (M); IDAHO FALLS REGIONA ID (A)	REXBURG-MADISON COU ID (A); Idaho Falls Fanning Field Idaho (M); IDAHO FALLS REGIONA ID (A)
Idaho	Clearwater	93	15	3.4	Kamiah Idaho (M)	Kamiah Idaho (M)	Kamiah Idaho (M)
Idaho	Custer	90	-11	15.9	CHALLIS AMOS ID (A)	STANLEY RANGER STAT ID (A)	STANLEY RANGER STAT ID (A)
Idaho	Elmore	97	9	2.0	MOUNTAIN HOME AFB ID (A)	Mountain Home Air Force Base Idaho (M)	Mountain Home Air Force Base Idaho (M)
Idaho	Franklin	93	0	3.2	LOGAN-CACHE AP UT (A)	Logan-Cache Airport Utah (M)	Logan-Cache Airport Utah (M)
Idaho	Fremont	89	-2	4.4	REXBURG-MADISON COU ID (A)	REXBURG-MADISON COU ID (A)	REXBURG-MADISON COU ID (A)
Idaho	Gem	96	11	2.1	BOISE AP ID (A)	Boise Air Terminal Idaho (M)	Caldwell Idaho (M)
Idaho	Gooding	95	2	2.5	Twin Falls Airport Idaho (M)	Twin Falls Airport Idaho (M)	Twin Falls Airport Idaho (M)
Idaho	Idaho	93	15	3.4	Kamiah Idaho (M)	Kamiah Idaho (M)	Kamiah Idaho (M)
Idaho	Jefferson	90	-2	4.4	IDAHO FALLS REGIONA ID (A)	Idaho Falls Fanning Field Idaho (M)	REXBURG-MADISON COU ID (A)
Idaho	Jerome	95	2	2.6	Twin Falls Airport Idaho (M)	Twin Falls Airport Idaho (M)	Burley Municipal Airport Idaho (M)
Idaho	Kootenai	91	8	4.2	Spokane Felts Field Municipal Airport Washington (M)	DEER PARK AP WA (A)	DEER PARK AP WA (A)
Idaho	Latah	95	0	3.6	LEWISTON-NEZ PERCE ID (A)	Moscow Idaho (M)	Moscow Idaho (M)
Idaho	Lemhi	90	-6	4.9	CHALLIS AMOS ID (A)	Challis Idaho (M)	Salmon Lemhi Co Airport Idaho (M)
Idaho	Lewis	95	15	3.4	LEWISTON-NEZ PERCE ID (A)	Kamiah Idaho (M)	Kamiah Idaho (M)
Idaho	Lincoln	95	2	2.6	Twin Falls Airport Idaho (M)	Twin Falls Airport Idaho (M)	Burley Municipal Airport Idaho (M)
Idaho	Madison	90	-2	4.4	IDAHO FALLS REGIONA ID (A)	Idaho Falls Fanning Field Idaho (M)	REXBURG-MADISON COU ID (A)
Idaho	Minidoka	91	6	2.6	Burley Municipal Airport Idaho (M)	Burley Municipal Airport Idaho (M)	Burley Municipal Airport Idaho (M)
Idaho	Nez Perce	95	0	3.6	LEWISTON-NEZ PERCE ID (A)	Moscow Idaho (M)	Moscow Idaho (M)
Idaho	Oneida	92	6	2.7	BRIGHAM CITY 28 WNW UT (A)	BRIGHAM CITY 28 WNW UT (A)	BRIGHAM CITY 28 WNW UT (A)
Idaho	Owyhee	97	9	2.8	MOUNTAIN HOME AFB ID (A)	Mountain Home Air Force Base Idaho (M)	MURPHY 10 W ID (A)
Idaho	Payette	96	13	2.1	BOISE AP ID (A)	ONTARIO MUNICIPAL OR (A)	Caldwell Idaho (M)
Idaho	Power	92	1	3.2	POCATELLO REGIONAL ID (A)	Pocatello Regional Airport Idaho (M)	Pocatello Regional Airport Idaho (M)
Idaho	Shoshone	85	3	10.6	MULLAN AWR ID (A)	MULLAN PASS ID (A)	MULLAN PASS ID (A)
Idaho	Teton	89	-11	12.3	REXBURG-MADISON COU ID (A)	MOOSE 1 NNE WY (A)	JACKSON HOLE AP WY (A)
Idaho	Twin Falls	95	2	2.5	Twin Falls Airport Idaho (M)	Twin Falls Airport Idaho (M)	Twin Falls Airport Idaho (M)

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Idaho	Valley	84	-2	9.2	MCCALL MUNICIPAL ID (A)	Mccall Airport Idaho (M)	Mccall Airport Idaho (M)
Idaho	Washington	96	13	1.8	ONTARIO MUNICIPAL OR (A)	ONTARIO MUNICIPAL OR (A)	ONTARIO MUNICIPAL OR (A)
<b>Illinois</b>							
Illinois	Adams	93	3	1.6	Hannibal Missouri (M)	Hannibal Missouri (M)	Hannibal Missouri (M)
Illinois	Alexander	95	7	1.3	Sikeston Missouri (M)	Carbondale Illinois (M)	Carbondale Illinois (M)
Illinois	Bond	93	4	1.5	Belleville Scott Air Force Base Illinois (M)	Greenville Illinois (M)	Greenville Illinois (M)
Illinois	Boone	90	-3	2.9	Beloit Wisconsin (M)	Beloit Wisconsin (M)	BURLINGTON MUNICIPAL WI (A)
Illinois	Brown	93	0	2.0	Hannibal Missouri (M)	Macomb Illinois (M)	Macomb Illinois (M)
Illinois	Bureau	91	-2	2.6	LaSalle Peru Illinois (M)	Dixon Illinois (M)	Dixon Illinois (M)
Illinois	Calhoun	94	8	1.4	St. Louis City Office Missouri (M)	St. Louis City Office Missouri (M)	PITTSFIELD-PENSTONE IL (A)
Illinois	Carroll	90	-4	2.8	Dixon Illinois (M)	Freeport Illinois (M)	Freeport Illinois (M)
Illinois	Cass	91	5	1.5	Springfield Capital Airport Illinois (M)	Springfield Capital Airport Illinois (M)	Springfield Capital Airport Illinois (M)
Illinois	Champaign	92	1	1.8	Champaign Urbana Illinois (M)	Rantoul Chanute Air Force Base Illinois (M)	CHAMPAIGN 9 SW IL (A)
Illinois	Christian	92	5	1.6	TAYLORVILLE MUNICIPAL IL (A)	Springfield Capital Airport Illinois (M)	Decatur Illinois (M)
Illinois	Clark	92	7	1.6	ROBINSON MUNICIPAL IL (A)	Terre Haute International Airport Indiana (M)	EDGAR COUNTY AP IL (A)
Illinois	Clay	93	9	1.3	CENTRALIA MUNICIPAL IL (A)	EFFINGHAM COUNTY ME IL (A)	EFFINGHAM COUNTY ME IL (A)
Illinois	Clinton	93	4	1.5	Belleville Scott Air Force Base Illinois (M)	Greenville Illinois (M)	Greenville Illinois (M)
Illinois	Coles	91	3	1.8	EFFINGHAM COUNTY ME IL (A)	CHAMPAIGN 9 SW IL (A)	CHAMPAIGN 9 SW IL (A)
Illinois	Cook	91	-3	2.7	Chicago City Office Illinois (M)	Waukegan Illinois (M)	Waukegan Illinois (M)
Illinois	Crawford	93	6	1.5	OLNEY-NOBLE AP IL (A)	Vincennes Indiana (M)	Vincennes Indiana (M)
Illinois	Cumberland	93	8	1.4	OLNEY-NOBLE AP IL (A)	COLES COUNTY MEMORI IL (A)	COLES COUNTY MEMORI IL (A)
Illinois	De Witt	92	-2	1.8	Champaign Urbana Illinois (M)	Bloomington Illinois (M)	CHAMPAIGN 9 SW IL (A)
Illinois	DeKalb	90	-2	2.6	Dixon Illinois (M)	Dixon Illinois (M)	Dixon Illinois (M)
Illinois	Douglas	92	1	1.8	Champaign Urbana Illinois (M)	Rantoul Chanute Air Force Base Illinois (M)	CHAMPAIGN 9 SW IL (A)
Illinois	DuPage	91	-3	2.7	Chicago City Office Illinois (M)	Waukegan Illinois (M)	Waukegan Illinois (M)
Illinois	Edgar	92	1	1.8	Champaign Urbana Illinois (M)	Danville Illinois (M)	Champaign Urbana Illinois (M)
Illinois	Edwards	93	6	1.5	OLNEY-NOBLE AP IL (A)	Vincennes Indiana (M)	Vincennes Indiana (M)
Illinois	Effingham	93	8	1.4	OLNEY-NOBLE AP IL (A)	COLES COUNTY MEMORI IL (A)	COLES COUNTY MEMORI IL (A)
Illinois	Fayette	93	4	1.5	CENTRALIA MUNICIPAL IL (A)	Greenville Illinois (M)	Greenville Illinois (M)

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Illinois	Ford	92	1	1.8	Champaign Urbana Illinois (M)	Rantoul Chanute Air Force Base Illinois (M)	CHAMPAIGN 9 SW IL (A)
Illinois	Franklin	93	7	1.3	Carbondale Illinois (M)	Carbondale Illinois (M)	Carbondale Illinois (M)
Illinois	Fulton	92	-2	2.0	Macomb Illinois (M)	Galesburg Illinois (M)	Macomb Illinois (M)
Illinois	Gallatin	92	14	1.1	CARMI MUNICIPAL IL (A)	HENDERSON CITY-COUN KY (A)	CARMI MUNICIPAL IL (A)
Illinois	Greene	93	8	1.4	ST CHARLES CO SMART MO (A)	JACKSONVILLE MUNICI IL (A)	JACKSONVILLE MUNICI IL (A)
Illinois	Grundy	91	-2	2.2	LaSalle Peru Illinois (M)	LaSalle Peru Illinois (M)	AURORA MUNICIPAL IL (A)
Illinois	Hamilton	92	11	1.3	CARMI MUNICIPAL IL (A)	Mount Vernon Illinois (M)	Mount Vernon Illinois (M)
Illinois	Hancock	92	0	2.0	Macomb Illinois (M)	Macomb Illinois (M)	Macomb Illinois (M)
Illinois	Hardin	92	14	1.1	CARMI MUNICIPAL IL (A)	HENDERSON CITY-COUN KY (A)	CARMI MUNICIPAL IL (A)
Illinois	Henderson	92	-2	2.0	Macomb Illinois (M)	Galesburg Illinois (M)	Macomb Illinois (M)
Illinois	Henry	91	-2	2.2	Moline Quad City International Airport Illinois (M)	Galesburg Illinois (M)	Sterling Rockfalls Illinois (M)
Illinois	Iroquois	91	1	2.0	Rantoul Chanute Air Force Base Illinois (M)	Rantoul Chanute Air Force Base Illinois (M)	Kankakee Illinois (M)
Illinois	Jackson	93	7	1.3	Carbondale Illinois (M)	Carbondale Illinois (M)	Carbondale Illinois (M)
Illinois	Jasper	93	8	1.4	OLNEY-NOBLE AP IL (A)	COLES COUNTY MEMORI IL (A)	COLES COUNTY MEMORI IL (A)
Illinois	Jefferson	93	11	1.3	CENTRALIA MUNICIPAL IL (A)	Mount Vernon Illinois (M)	Mount Vernon Illinois (M)
Illinois	Jersey	94	2	1.4	St. Louis City Office Missouri (M)	St. Joseph Airport Missouri (M)	St. Joseph Airport Missouri (M)
Illinois	Jo Daviess	90	-4	2.8	TRI-TOWNSHIP AP IL (A)	Freeport Illinois (M)	Freeport Illinois (M)
Illinois	Johnson	95	7	1.3	CAIRO REGIONAL IL (A)	Carbondale Illinois (M)	Carbondale Illinois (M)
Illinois	Kane	91	-2	2.5	GLENVIEW NAS IL (A)	Rockford Greater Rockford Airport Illinois (M)	Elgin Illinois (M)
Illinois	Kankakee	91	0	2.2	GREATER KANKAKEE AP IL (A)	Joliet Illinois (M)	Joliet Illinois (M)
Illinois	Kendall	90	-2	2.5	Joliet Illinois (M)	ROCHELLE MUNICIPAL IL (A)	Elgin Illinois (M)
Illinois	Knox	91	-2	2.0	Moline Quad City International Airport Illinois (M)	Galesburg Illinois (M)	Galesburg Illinois (M)
Illinois	Lake	91	-3	2.8	Chicago City Office Illinois (M)	Waukegan Illinois (M)	Racine Wisconsin (M)
Illinois	LaSalle	91	-2	2.5	LaSalle Peru Illinois (M)	LaSalle Peru Illinois (M)	SHABBONA 5 NNE IL (A)
Illinois	Lawrence	93	6	1.5	OLNEY-NOBLE AP IL (A)	Vincennes Indiana (M)	Vincennes Indiana (M)
Illinois	Lee	91	-2	2.6	LaSalle Peru Illinois (M)	Dixon Illinois (M)	Dixon Illinois (M)
Illinois	Livingston	91	-2	2.1	PONTIAC MUNICIPAL IL (A)	Bloomington Illinois (M)	MARSEILLES IL (A)
Illinois	Logan	91	-2	1.8	Springfield Capital Airport Illinois (M)	Bloomington Illinois (M)	Bloomington Illinois (M)
Illinois	Macon	92	3	1.8	TAYLORVILLE MUNICIP IL (A)	CHAMPAIGN 9 SW IL (A)	CHAMPAIGN 9 SW IL (A)
Illinois	Macoupin	93	4	1.5	ST CHARLES CO SMART MO (A)	Greenville Illinois (M)	Greenville Illinois (M)

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Illinois	Madison	94	2	1.5	St. Louis City Office Missouri (M)	St. Joseph Airport Missouri (M)	Greenville Illinois (M)
Illinois	Marion	93	4	1.5	CENTRALIA MUNICIPAL IL (A)	Greenville Illinois (M)	Greenville Illinois (M)
Illinois	Marshall	91	-2	2.1	LaSalle Peru Illinois (M)	LaSalle Peru Illinois (M)	LaSalle Peru Illinois (M)
Illinois	Mason	91	2	1.7	Springfield Capital Airport Illinois (M)	Peoria Greater Peoria Airport Illinois (M)	Peoria Greater Peoria Airport Illinois (M)
Illinois	Massac	95	15	0.9	CAIRO REGIONAL IL (A)	Paducah Barkley Regional Airport Kentucky (M)	METROPOLIS MUNICIPA IL (A)
Illinois	McDonough	92	-2	2.0	Macomb Illinois (M)	Galesburg Illinois (M)	Macomb Illinois (M)
Illinois	McHenry	91	-3	2.9	GLENVIEW NAS IL (A)	Beloit Wisconsin (M)	BURLINGTON MUNICIPA WI (A)
Illinois	McLean	91	-2	1.8	Rantoul Chanute Air Force Base Illinois (M)	Bloomington Illinois (M)	CHAMPAIGN 9 SW IL (A)
Illinois	Menard	91	5	1.5	Springfield Capital Airport Illinois (M)	Springfield Capital Airport Illinois (M)	LOGAN COUNTY AP IL (A)
Illinois	Mercer	92	-2	2.0	MUSCATINE MUNICIPIA IA (A)	Galesburg Illinois (M)	DAVENPORT MUNICIPAL IA (A)
Illinois	Monroe	94	2	1.4	St. Louis City Office Missouri (M)	St. Joseph Airport Missouri (M)	Farmington Airport Missouri (M)
Illinois	Montgomery	92	4	1.5	Greenville Illinois (M)	Greenville Illinois (M)	Greenville Illinois (M)
Illinois	Morgan	91	5	1.5	Springfield Capital Airport Illinois (M)	Springfield Capital Airport Illinois (M)	Springfield Capital Airport Illinois (M)
Illinois	Moultrie	92	2	1.8	Champaign Urbana Illinois (M)	Champaign Urbana Illinois (M)	CHAMPAIGN 9 SW IL (A)
Illinois	Ogle	90	-4	2.8	Dixon Illinois (M)	Freeport Illinois (M)	Freeport Illinois (M)
Illinois	Peoria	91	-2	2.0	Galesburg Illinois (M)	Galesburg Illinois (M)	Galesburg Illinois (M)
Illinois	Perry	93	7	1.3	Carbondale Illinois (M)	Carbondale Illinois (M)	Carbondale Illinois (M)
Illinois	Piatt	92	-2	1.8	Champaign Urbana Illinois (M)	Bloomington Illinois (M)	CHAMPAIGN 9 SW IL (A)
Illinois	Pike	93	3	1.6	Hannibal Missouri (M)	Hannibal Missouri (M)	Hannibal Missouri (M)
Illinois	Pope	93	15	1.0	BARKLEY REGIONAL KY (A)	Paducah Barkley Regional Airport Kentucky (M)	HARRISBURG-RALEIGH IL (A)
Illinois	Pulaski	95	7	1.3	Sikeston Missouri (M)	Carbondale Illinois (M)	Carbondale Illinois (M)
Illinois	Putnam	91	-2	2.1	LaSalle Peru Illinois (M)	LaSalle Peru Illinois (M)	LaSalle Peru Illinois (M)
Illinois	Randolph	93	8	1.4	Farmington Airport Missouri (M)	Farmington Airport Missouri (M)	Farmington Airport Missouri (M)
Illinois	Richland	93	6	1.5	OLNEY-NOBLE AP IL (A)	Vincennes Indiana (M)	Vincennes Indiana (M)
Illinois	Rock Island	92	-2	2.2	MUSCATINE MUNICIPIA IA (A)	Galesburg Illinois (M)	CLINTON MUNICIPAL IA (A)
Illinois	Saline	93	7	1.3	Carbondale Illinois (M)	Carbondale Illinois (M)	Carbondale Illinois (M)
Illinois	Sangamon	92	5	1.6	TAYLORVILLE MUNICIP IL (A)	Springfield Capital Airport Illinois (M)	Decatur Illinois (M)
Illinois	Schuyler	92	0	2.0	Macomb Illinois (M)	Macomb Illinois (M)	Macomb Illinois (M)
Illinois	Scott	91	8	1.4	PITTSFIELD-PENSTONE IL (A)	JACKSONVILLE MUNICI IL (A)	JACKSONVILLE MUNICI IL (A)
Illinois	Shelby	92	5	1.6	TAYLORVILLE MUNICIP IL (A)	Decatur Illinois (M)	Decatur Illinois (M)

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Illinois	St. Clair	94	2	1.4	St. Louis City Office Missouri (M)	St. Joseph Airport Missouri (M)	St. Joseph Airport Missouri (M)
Illinois	Stark	91	-2	2.1	Galesburg Illinois (M)	Galesburg Illinois (M)	LaSalle Peru Illinois (M)
Illinois	Stephenson	90	-4	2.8	Dixon Illinois (M)	Freeport Illinois (M)	Freeport Illinois (M)
Illinois	Tazewell	91	-2	1.8	LOGAN COUNTY AP IL (A)	Bloomington Illinois (M)	Bloomington Illinois (M)
Illinois	Union	95	7	1.3	CAIRO REGIONAL IL (A)	Carbondale Illinois (M)	Carbondale Illinois (M)
Illinois	Vermilion	92	1	1.8	Champaign Urbana Illinois (M)	Rantoul Chanute Air Force Base Illinois (M)	CHAMPAIGN 9 SW IL (A)
Illinois	Wabash	93	6	1.5	OLNEY-NOBLE AP IL (A)	Vincennes Indiana (M)	Vincennes Indiana (M)
Illinois	Warren	92	-2	2.0	Macomb Illinois (M)	Galesburg Illinois (M)	Macomb Illinois (M)
Illinois	Washington	93	4	1.5	Belleville Scott Air Force Base Illinois (M)	Greenville Illinois (M)	Greenville Illinois (M)
Illinois	Wayne	93	10	1.3	CENTRALIA MUNICIPAL IL (A)	OLNEY-NOBLE AP IL (A)	Mount Vernon Illinois (M)
Illinois	White	92	11	1.2	Evansville Regional Airport Indiana (M)	MOUNT VERNON OUTLAN IL (A)	MOUNT VERNON OUTLAN IL (A)
Illinois	Whiteside	91	-2	2.6	Moline Quad City International Airport Illinois (M)	Dixon Illinois (M)	Dixon Illinois (M)
Illinois	Will	91	0	2.3	Chicago City Office Illinois (M)	Marseilles Island Illinois (M)	West Chicago Du Page Airport Illinois (M)
Illinois	Williamson	93	7	1.3	Carbondale Illinois (M)	Carbondale Illinois (M)	Carbondale Illinois (M)
Illinois	Winnebago	90	-4	2.8	Dixon Illinois (M)	Freeport Illinois (M)	Freeport Illinois (M)
Illinois	Woodford	91	-2	2.1	LaSalle Peru Illinois (M)	LaSalle Peru Illinois (M)	LaSalle Peru Illinois (M)
<b>Indiana</b>							
Indiana	Adams	89	1	2.0	Huntington Indiana (M)	Huntington Indiana (M)	Huntington Indiana (M)
Indiana	Allen	91	1	2.1	Defiance Ohio (M)	Huntington Indiana (M)	Defiance Ohio (M)
Indiana	Bartholomew	92	3	1.6	Bloomington Indiana (M)	Shelbyville Indiana (M)	Shelbyville Indiana (M)
Indiana	Benton	90	1	1.6	Danville Illinois (M)	Danville Illinois (M)	Lafayette Purdue Univ Airport Indiana (M)
Indiana	Blackford	92	0	2.0	Anderson Indiana (M)	Marion Indiana (M)	Marion Indiana (M)
Indiana	Boone	91	0	2.2	Crawfordsville Indiana (M)	Kokoma Indiana (M)	Kokoma Indiana (M)
Indiana	Brown	92	3	1.6	Bloomington Indiana (M)	Shelbyville Indiana (M)	Shelbyville Indiana (M)
Indiana	Carroll	90	-1	2.2	Lafayette Purdue Univ Airport Indiana (M)	Peru Bunker Hill Air Force Base Indiana (M)	Kokoma Indiana (M)
Indiana	Cass	90	-1	2.2	Lafayette Purdue Univ Airport Indiana (M)	Peru Bunker Hill Air Force Base Indiana (M)	Kokoma Indiana (M)
Indiana	Clark	93	10	1.0	Jeffersonville Indiana (M)	Jeffersonville Indiana (M)	Jeffersonville Indiana (M)
Indiana	Clay	92	5	1.6	Bloomington Indiana (M)	Bloomington Indiana (M)	EDGAR COUNTY AP IL (A)
Indiana	Clinton	91	-1	2.2	Crawfordsville Indiana (M)	Peru Bunker Hill Air Force Base Indiana (M)	Kokoma Indiana (M)

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Indiana	Crawford	93	5	1.5	Jeffersonville Indiana (M)	Bedford Indiana (M)	Bedford Indiana (M)
Indiana	Daviess	92	5	1.5	Vincennes Indiana (M)	Bedford Indiana (M)	Bedford Indiana (M)
Indiana	Dearborn	91	5	1.7	BUTLER COUNTY REGIO OH (A)	Hamilton Ohio (M)	Middletown Ohio (M)
Indiana	Decatur	92	3	1.6	Columbus Bakalar Air Force Base Indiana (M)	Shelbyville Indiana (M)	Shelbyville Indiana (M)
Indiana	DeKalb	91	4	2.2	Defiance Ohio (M)	Fort Wayne International Airport Indiana (M)	KIRSCH MUNICIPAL MI (A)
Indiana	Delaware	92	0	2.0	Anderson Indiana (M)	Marion Indiana (M)	Marion Indiana (M)
Indiana	Dubois	92	5	1.5	Bedford Indiana (M)	Bedford Indiana (M)	Bedford Indiana (M)
Indiana	Elkhart	89	1	2.2	Goshen Airport Indiana (M)	Goshen Airport Indiana (M)	THREE RIVERS MUNICI MI (A)
Indiana	Fayette	91	2	2.0	Shelbyville Indiana (M)	Muncie Indiana (M)	Richmond Airport Indiana (M)
Indiana	Floyd	93	10	1.1	Jeffersonville Indiana (M)	Jeffersonville Indiana (M)	GODMAN AAF KY (A)
Indiana	Fountain	91	1	2.1	Crawfordsville Indiana (M)	Danville Illinois (M)	Crawfordsville Indiana (M)
Indiana	Franklin	91	2	2.0	Shelbyville Indiana (M)	Richmond Airport Indiana (M)	Richmond Airport Indiana (M)
Indiana	Fulton	90	-1	2.2	Kokoma Indiana (M)	Peru Bunker Hill Air Force Base Indiana (M)	Kokoma Indiana (M)
Indiana	Gibson	92	6	1.5	Evansville Regional Airport Indiana (M)	Vincennes Indiana (M)	Vincennes Indiana (M)
Indiana	Grant	92	-1	2.2	Anderson Indiana (M)	Peru Bunker Hill Air Force Base Indiana (M)	Kokoma Indiana (M)
Indiana	Greene	92	5	1.5	Vincennes Indiana (M)	Bloomington Indiana (M)	Bloomington Indiana (M)
Indiana	Hamilton	92	0	2.2	Anderson Indiana (M)	Kokoma Indiana (M)	Kokoma Indiana (M)
Indiana	Hancock	92	2	1.9	Columbus Bakalar Air Force Base Indiana (M)	Muncie Indiana (M)	Muncie Indiana (M)
Indiana	Harrison	93	10	1.1	Jeffersonville Indiana (M)	Jeffersonville Indiana (M)	GODMAN AAF KY (A)
Indiana	Hendricks	92	3	2.1	Columbus Bakalar Air Force Base Indiana (M)	Crawfordsville Indiana (M)	Crawfordsville Indiana (M)
Indiana	Henry	92	2	2.0	Anderson Indiana (M)	Muncie Indiana (M)	Richmond Airport Indiana (M)
Indiana	Howard	92	-1	2.2	Anderson Indiana (M)	Peru Bunker Hill Air Force Base Indiana (M)	Kokoma Indiana (M)
Indiana	Huntington	90	-1	2.0	Marion Indiana (M)	Peru Bunker Hill Air Force Base Indiana (M)	Peru Grissom Air Force Base Indiana (M)
Indiana	Jackson	92	5	1.5	Bloomington Indiana (M)	Bloomington Indiana (M)	Bloomington Indiana (M)
Indiana	Jasper	91	1	2.2	GREATER KANKAKEE AP IL (A)	Kankakee Illinois (M)	Hobart Indiana (M)
Indiana	Jay	90	0	2.0	Marion Indiana (M)	Marion Indiana (M)	Marion Indiana (M)
Indiana	Jefferson	93	10	1.0	Jeffersonville Indiana (M)	Jeffersonville Indiana (M)	Jeffersonville Indiana (M)
Indiana	Jennings	92	3	1.6	Columbus Bakalar Air Force Base Indiana (M)	Shelbyville Indiana (M)	Shelbyville Indiana (M)
Indiana	Johnson	92	3	1.6	Bloomington Indiana (M)	Shelbyville Indiana (M)	Shelbyville Indiana (M)

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Indiana	Knox	92	6	1.5	Vincennes Indiana (M)	Vincennes Indiana (M)	Vincennes Indiana (M)
Indiana	Kosciusko	89	1	2.1	Goshen Airport Indiana (M)	Goshen Airport Indiana (M)	GOSHEN MUNICIPAL IN (A)
Indiana	LaGrange	89	1	2.2	Goshen Airport Indiana (M)	Goshen Airport Indiana (M)	THREE RIVERS MUNICI MI (A)
Indiana	Lake	91	0	2.2	Chicago City Office Illinois (M)	Joliet Illinois (M)	Hobart Indiana (M)
Indiana	LaPorte	90	2	2.2	Valparaiso Indiana (M)	Hobart Indiana (M)	Hobart Indiana (M)
Indiana	Lawrence	92	5	1.5	Bloomington Indiana (M)	Bloomington Indiana (M)	Bloomington Indiana (M)
Indiana	Madison	92	0	2.2	Anderson Indiana (M)	Kokoma Indiana (M)	Kokoma Indiana (M)
Indiana	Marion	92	3	1.6	Columbus Bakalar Air Force Base Indiana (M)	Shelbyville Indiana (M)	Shelbyville Indiana (M)
Indiana	Marshall	90	1	2.1	LaPorte Indiana (M)	Goshen Airport Indiana (M)	LaPorte Indiana (M)
Indiana	Martin	92	5	1.5	Vincennes Indiana (M)	Bloomington Indiana (M)	Bloomington Indiana (M)
Indiana	Miami	90	-1	2.2	Kokoma Indiana (M)	Peru Bunker Hill Air Force Base Indiana (M)	Kokoma Indiana (M)
Indiana	Monroe	92	5	1.5	Bloomington Indiana (M)	Bloomington Indiana (M)	Bloomington Indiana (M)
Indiana	Montgomery	91	1	2.1	Crawfordsville Indiana (M)	Danville Illinois (M)	Crawfordsville Indiana (M)
Indiana	Morgan	92	3	1.6	Bloomington Indiana (M)	Shelbyville Indiana (M)	Shelbyville Indiana (M)
Indiana	Newton	91	1	2.1	GREATER KANKAKEE AP IL (A)	Kankakee Illinois (M)	Valparaiso Indiana (M)
Indiana	Noble	89	1	2.2	Goshen Airport Indiana (M)	Goshen Airport Indiana (M)	THREE RIVERS MUNICI MI (A)
Indiana	Ohio	91	5	1.4	BUTLER COUNTY REGIO OH (A)	Hamilton Ohio (M)	BUTLER COUNTY REGIO OH (A)
Indiana	Orange	92	5	1.5	Bedford Indiana (M)	Bedford Indiana (M)	Bedford Indiana (M)
Indiana	Owen	92	5	1.5	Bloomington Indiana (M)	Bloomington Indiana (M)	Bloomington Indiana (M)
Indiana	Parke	91	1	2.1	Crawfordsville Indiana (M)	Danville Illinois (M)	Crawfordsville Indiana (M)
Indiana	Perry	94	10	1.2	Owensboro Kentucky (M)	Owensboro Kentucky (M)	Huntingburg Indiana (M)
Indiana	Pike	92	6	1.5	Evansville Regional Airport Indiana (M)	Vincennes Indiana (M)	Vincennes Indiana (M)
Indiana	Porter	91	2	2.2	Chicago City Office Illinois (M)	Chicago City Office Illinois (M)	Hobart Indiana (M)
Indiana	Posey	92	12	1.1	Evansville Regional Airport Indiana (M)	Evansville Regional Airport Indiana (M)	FAIRFIELD MUNICIPAL IL (A)
Indiana	Pulaski	90	-1	2.1	Valparaiso Indiana (M)	Peru Bunker Hill Air Force Base Indiana (M)	Valparaiso Indiana (M)
Indiana	Putnam	92	3	2.1	Bloomington Indiana (M)	Crawfordsville Indiana (M)	Crawfordsville Indiana (M)
Indiana	Randolph	92	2	2.0	Anderson Indiana (M)	Muncie Indiana (M)	Richmond Airport Indiana (M)
Indiana	Ripley	89	7	1.4	CINCINNATI NORTHERN KY (A)	Covington Airport Kentucky (M)	Cincinnati Northern KY Airport Kentucky (M)
Indiana	Rush	92	2	2.0	Columbus Bakalar Air Force Base Indiana (M)	Muncie Indiana (M)	Richmond Airport Indiana (M)
Indiana	Scott	93	10	1.0	Jeffersonville Indiana (M)	Jeffersonville Indiana (M)	Jeffersonville Indiana (M)

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Indiana	Shelby	92	3	1.6	Columbus Bakalar Air Force Base Indiana (M)	Shelbyville Indiana (M)	Shelbyville Indiana (M)
Indiana	Spencer	94	10	1.2	Owensboro Kentucky (M)	Owensboro Kentucky (M)	Huntingburg Indiana (M)
Indiana	St. Joseph	90	1	2.4	LaPorte Indiana (M)	Goshen Airport Indiana (M)	Benton Harbor South West Michigan Regional Airport Michigan (M)
Indiana	Starke	90	2	2.2	Valparaiso Indiana (M)	Hobart Indiana (M)	Hobart Indiana (M)
Indiana	Steuben	89	5	2.3	DEFIANCE MEMORIAL OH (A)	BRANCH COUNTY MEMOR MI (A)	HILLSDALE MUNICIPAL MI (A)
Indiana	Sullivan	92	6	1.5	Vincennes Indiana (M)	Vincennes Indiana (M)	Vincennes Indiana (M)
Indiana	Switzerland	91	7	1.4	CINCINNATI MUNICIPA OH (A)	Covington Airport Kentucky (M)	Cincinnati Northern KY Airport Kentucky (M)
Indiana	Tippecanoe	91	3	2.1	Crawfordsville Indiana (M)	Crawfordsville Indiana (M)	Crawfordsville Indiana (M)
Indiana	Tipton	92	-1	2.2	Anderson Indiana (M)	Peru Bunker Hill Air Force Base Indiana (M)	Kokoma Indiana (M)
Indiana	Union	91	2	2.0	MIDDLETOWN REGIONAL OH (A)	Richmond Airport Indiana (M)	Richmond Airport Indiana (M)
Indiana	Vanderburgh	94	10	1.2	Owensboro Kentucky (M)	Owensboro Kentucky (M)	Huntingburg Indiana (M)
Indiana	Vermillion	91	1	2.1	Crawfordsville Indiana (M)	Danville Illinois (M)	Crawfordsville Indiana (M)
Indiana	Vigo	92	7	1.6	ROBINSON MUNICIPAL IL (A)	Terre Haute International Airport Indiana (M)	EDGAR COUNTY AP IL (A)
Indiana	Wabash	90	-1	2.2	Kokoma Indiana (M)	Peru Bunker Hill Air Force Base Indiana (M)	Kokoma Indiana (M)
Indiana	Warren	91	1	2.1	Crawfordsville Indiana (M)	Danville Illinois (M)	Crawfordsville Indiana (M)
Indiana	Warrick	94	10	1.2	Owensboro Kentucky (M)	Owensboro Kentucky (M)	Huntingburg Indiana (M)
Indiana	Washington	93	5	1.5	Jeffersonville Indiana (M)	Bedford Indiana (M)	Bedford Indiana (M)
Indiana	Wayne	92	2	2.0	Anderson Indiana (M)	Muncie Indiana (M)	Richmond Airport Indiana (M)
Indiana	Wells	90	0	2.0	Marion Indiana (M)	Marion Indiana (M)	Marion Indiana (M)
Indiana	White	90	-1	2.0	Lafayette Purdue Univ Airport Indiana (M)	Peru Bunker Hill Air Force Base Indiana (M)	Peru Grissom Air Force Base Indiana (M)
Indiana	Whitley	89	1	2.1	Goshen Airport Indiana (M)	Goshen Airport Indiana (M)	GOSHEN MUNICIPAL IN (A)
<b>Iowa</b>							
Iowa	Adair	91	0	2.2	Atlantic Iowa (M)	ATLANTIC MUNICIPAL IA (A)	AUDUBON COUNTY AP IA (A)
Iowa	Adams	93	0	2.0	RED OAK MUNICIPAL IA (A)	ATLANTIC MUNICIPAL IA (A)	ATLANTIC MUNICIPAL IA (A)
Iowa	Allamakee	90	-4	2.4	BOSCOBEL AP WI (A)	DECORAH MUNICIPAL IA (A)	DECORAH MUNICIPAL IA (A)
Iowa	Appanoose	91	0	1.8	Chariton Iowa (M)	Ottumwa Industrial Airport Iowa (M)	OTTUMWA REGIONAL IA (A)
Iowa	Audubon	91	-2	2.2	Atlantic Iowa (M)	CARROLL AP IA (A)	AUDUBON COUNTY AP IA (A)
Iowa	Benton	91	-6	2.6	VINTON VETERANS MEM IA (A)	Waterloo Municipal Airport Iowa (M)	INDEPENDENCE MUNICI IA (A)
Iowa	Black Hawk	91	-6	2.6	VINTON VETERANS MEM IA (A)	Waterloo Municipal Airport Iowa (M)	INDEPENDENCE MUNICI IA (A)

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Iowa	Boone	91	-6	2.5	Webster City Iowa (M)	Fort Dodge Iowa (M)	Fort Dodge Iowa (M)
Iowa	Bremer	89	-6	2.6	Waterloo Municipal Airport Iowa (M)	Waterloo Municipal Airport Iowa (M)	INDEPENDENCE MUNICI IA (A)
Iowa	Buchanan	91	-6	2.6	VINTON VETERANS MEM IA (A)	Waterloo Municipal Airport Iowa (M)	INDEPENDENCE MUNICI IA (A)
Iowa	Buena Vista	90	-8	2.7	CHEROKEE MUNICIPAL IA (A)	Spencer Iowa (M)	Spencer Iowa (M)
Iowa	Butler	89	-7	2.8	Waterloo Municipal Airport Iowa (M)	MASON CITY MUNICIPA IA (A)	MASON CITY MUNICIPA IA (A)
Iowa	Calhoun	91	-6	2.5	Carroll Iowa (M)	Fort Dodge Iowa (M)	Fort Dodge Iowa (M)
Iowa	Carroll	91	-2	2.2	Carroll Iowa (M)	CARROLL AP IA (A)	AUDUBON COUNTY AP IA (A)
Iowa	Cass	93	-1	2.2	RED OAK MUNICIPAL IA (A)	HARLAN MUNICIPAL IA (A)	AUDUBON COUNTY AP IA (A)
Iowa	Cedar	92	-6	2.3	MUSCATINE MUNICIPIA IA (A)	Iowa City Iowa (M)	MONTICELLO REGIONAL IA (A)
Iowa	Cerro Gordo	90	-8	2.8	Clarion Iowa (M)	Mason City Municipal Airport Iowa (M)	MASON CITY MUNICIPA IA (A)
Iowa	Cherokee	91	-8	2.7	LE MARS MUNICIPAL IA (A)	Spencer Iowa (M)	Spencer Iowa (M)
Iowa	Chickasaw	89	-6	2.5	Waterloo Municipal Airport Iowa (M)	Waterloo Municipal Airport Iowa (M)	NORTHEAST IOWA REGI IA (A)
Iowa	Clarke	92	-2	2.0	Lamoni Iowa (M)	Des Moines International Airport Iowa (M)	Lamoni Iowa (M)
Iowa	Clay	90	-8	2.8	CHEROKEE MUNICIPAL IA (A)	Spencer Iowa (M)	ESTHERVILLE MUNICIP IA (A)
Iowa	Clayton	90	-4	2.4	BOSCOBEL AP WI (A)	DECORAH MUNICIPAL IA (A)	DECORAH MUNICIPAL IA (A)
Iowa	Clinton	91	-4	2.6	Moline Quad City International Airport Illinois (M)	MONTICELLO REGIONAL IA (A)	DUBUQUE REGIONAL IA (A)
Iowa	Crawford	91	-4	2.2	Carroll Iowa (M)	STORM LAKE MUNICIPA IA (A)	AUDUBON COUNTY AP IA (A)
Iowa	Dallas	91	-2	2.1	Ankeny Regional Airport Iowa (M)	Des Moines International Airport Iowa (M)	AMES MUNICIPAL IA (A)
Iowa	Davis	91	0	1.8	Fair Field Municipal Airport Iowa (M)	Ottumwa Industrial Airport Iowa (M)	OTTUMWA REGIONAL IA (A)
Iowa	Decatur	93	0	2.0	SPICKARD MO (A)	Lamoni Iowa (M)	Lamoni Iowa (M)
Iowa	Delaware	91	-5	2.6	VINTON VETERANS MEM IA (A)	INDEPENDENCE MUNICI IA (A)	DUBUQUE REGIONAL IA (A)
Iowa	Des Moines	92	1	1.8	MUSCATINE MUNICIPIA IA (A)	Burlington Municipal Airport Iowa (M)	GALESBURG MUNICIPAL IL (A)
Iowa	Dickinson	90	-8	3.2	SHELDON MUNICIPAL IA (A)	Spencer Iowa (M)	Worthington Minnesota (M)
Iowa	Dubuque	89	-4	2.6	MONTICELLO REGIONAL IA (A)	MONTICELLO REGIONAL IA (A)	DUBUQUE REGIONAL IA (A)
Iowa	Emmet	89	-8	2.9	Spencer Iowa (M)	Spencer Iowa (M)	Fairmont Municipal Airport Minnesota (M)
Iowa	Fayette	89	-6	2.6	Waterloo Municipal Airport Iowa (M)	Waterloo Municipal Airport Iowa (M)	INDEPENDENCE MUNICI IA (A)
Iowa	Floyd	89	-8	2.8	Waterloo Municipal Airport Iowa (M)	Mason City Municipal Airport Iowa (M)	MASON CITY MUNICIPA IA (A)
Iowa	Franklin	91	-8	2.8	Webster City Iowa (M)	Mason City Municipal Airport Iowa (M)	MASON CITY MUNICIPA IA (A)

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Iowa	Fremont	93	-3	1.8	SHENANDOAH MUNICIPIA IA (A)	Council Bluffs Iowa (M)	Council Bluffs Iowa (M)
Iowa	Greene	91	-6	2.5	Carroll Iowa (M)	Fort Dodge Iowa (M)	Fort Dodge Iowa (M)
Iowa	Grundy	89	-6	2.4	Waterloo Municipal Airport Iowa (M)	Waterloo Municipal Airport Iowa (M)	Waterloo Municipal Airport Iowa (M)
Iowa	Guthrie	91	-2	2.2	Atlantic Iowa (M)	CARROLL AP IA (A)	AUDUBON COUNTY AP IA (A)
Iowa	Hamilton	91	-6	2.5	Webster City Iowa (M)	Fort Dodge Iowa (M)	Fort Dodge Iowa (M)
Iowa	Hancock	90	-8	2.8	Clarion Iowa (M)	Mason City Municipal Airport Iowa (M)	MASON CITY MUNICIPIA IA (A)
Iowa	Hardin	91	-5	2.3	Webster City Iowa (M)	CLARION MUNICIPAL IA (A)	CLARION MUNICIPAL IA (A)
Iowa	Harrison	92	-3	2.0	Omaha Eppley Airfield Nebraska (M)	Council Bluffs Iowa (M)	HARLAN MUNICIPAL IA (A)
Iowa	Henry	92	1	1.7	MUSCATINE MUNICIPIA IA (A)	Burlington Municipal Airport Iowa (M)	MOUNT PLEASANT MUNI IA (A)
Iowa	Howard	88	-9	3.3	Charles City Iowa (M)	Rochester International Airport Minnesota (M)	Rochester International Airport Minnesota (M)
Iowa	Humboldt	91	-6	2.5	Webster City Iowa (M)	Fort Dodge Iowa (M)	Fort Dodge Iowa (M)
Iowa	Ida	91	-4	2.2	Carroll Iowa (M)	STORM LAKE MUNICIPIA IA (A)	CHEROKEE MUNICIPAL IA (A)
Iowa	Iowa	91	-6	2.3	Washington Iowa (M)	Iowa City Iowa (M)	THE EASTERN IOWA AP IA (A)
Iowa	Jackson	90	-4	2.6	TRI-TOWNSHIP AP IL (A)	MONTICELLO REGIONAL IA (A)	DUBUQUE REGIONAL IA (A)
Iowa	Jasper	91	-5	2.3	Ankeny Regional Airport Iowa (M)	Newton Iowa (M)	MARSHALLTOWN MUNICI IA (A)
Iowa	Jefferson	91	0	1.8	Fair Field Municipal Airport Iowa (M)	Ottumwa Industrial Airport Iowa (M)	OTTUMWA REGIONAL IA (A)
Iowa	Johnson	92	-6	2.3	MUSCATINE MUNICIPIA IA (A)	Iowa City Iowa (M)	THE EASTERN IOWA AP IA (A)
Iowa	Jones	89	-6	2.6	Cedar Rapids Municipal Airport Iowa (M)	Iowa City Iowa (M)	DUBUQUE REGIONAL IA (A)
Iowa	Keokuk	91	0	1.9	Fair Field Municipal Airport Iowa (M)	Ottumwa Industrial Airport Iowa (M)	IOWA CITY MUNICIPAL IA (A)
Iowa	Kossuth	89	-7	2.9	ALGONA MUNICIPAL IA (A)	ESTHERVILLE MUNICIP IA (A)	Fairmont Municipal Airport Minnesota (M)
Iowa	Lee	91	1	1.7	Fair Field Municipal Airport Iowa (M)	Burlington Municipal Airport Iowa (M)	MOUNT PLEASANT MUNI IA (A)
Iowa	Linn	91	-6	2.6	VINTON VETERANS MEM IA (A)	Iowa City Iowa (M)	INDEPENDENCE MUNICI IA (A)
Iowa	Louisa	92	-6	1.9	MUSCATINE MUNICIPIA IA (A)	Iowa City Iowa (M)	IOWA CITY MUNICIPAL IA (A)
Iowa	Lucas	91	-2	2.0	Chariton Iowa (M)	Des Moines International Airport Iowa (M)	DES MOINES 17 E IA (A)
Iowa	Lyon	90	-21	5.0	ORANGE CITY MUNICIP IA (A)	SIOUX FALLS CLIMATE SD (A)	SIOUX FALLS CLIMATE SD (A)
Iowa	Madison	91	-2	1.9	Creston Iowa (M)	Des Moines International Airport Iowa (M)	CRESTON MUNICIPAL IA (A)
Iowa	Mahaska	91	-5	2.0	Newton Iowa (M)	Newton Iowa (M)	Newton Iowa (M)
Iowa	Marion	91	-5	2.0	Ankeny Regional Airport Iowa (M)	Newton Iowa (M)	Newton Iowa (M)

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Iowa	Marshall	91	-5	2.3	Ankeny Regional Airport Iowa (M)	Newton Iowa (M)	MARSHALLTOWN MUNICI IA (A)
Iowa	Mills	93	-3	2.0	SHENANDOAH MUNICIPA IA (A)	Council Bluffs Iowa (M)	ATLANTIC MUNICIPAL IA (A)
Iowa	Mitchell	88	-8	3.0	Mason City Municipal Airport Iowa (M)	Mason City Municipal Airport Iowa (M)	Austin Municipal Airport Minnesota (M)
Iowa	Monona	92	-4	2.1	TEKAMAH MUNICIPAL NE (A)	Sioux City Sioux Gateway Airport Iowa (M)	Sioux City Sioux Gateway Airport Iowa (M)
Iowa	Monroe	91	0	1.8	Chariton Iowa (M)	Ottumwa Industrial Airport Iowa (M)	OTTUMWA REGIONAL IA (A)
Iowa	Montgomery	93	-1	2.0	SHENANDOAH MUNICIPA IA (A)	HARLAN MUNICIPAL IA (A)	HARLAN MUNICIPAL IA (A)
Iowa	Muscatine	92	-6	2.0	MUSCATINE MUNICIPIA IA (A)	Iowa City Iowa (M)	DAVENPORT MUNICIPAL IA (A)
Iowa	O'Brien	91	-8	3.2	LE MARS MUNICIPAL IA (A)	Spencer Iowa (M)	Worthington Minnesota (M)
Iowa	Osceola	90	-8	3.2	ORANGE CITY MUNICIP IA (A)	Spencer Iowa (M)	Worthington Minnesota (M)
Iowa	Page	93	1	1.7	SHENANDOAH MUNICIPA IA (A)	SCHENCK FIELD IA (A)	SCHENCK FIELD IA (A)
Iowa	Palo Alto	89	-8	2.8	Spencer Iowa (M)	Spencer Iowa (M)	ESTHERVILLE MUNICIP IA (A)
Iowa	Plymouth	91	-5	2.5	LE MARS MUNICIPAL IA (A)	SHELDON MUNICIPAL IA (A)	SHELDON MUNICIPAL IA (A)
Iowa	Pocahontas	90	-8	2.7	Storm Lake Iowa (M)	Spencer Iowa (M)	Spencer Iowa (M)
Iowa	Polk	91	-5	2.1	Ankeny Regional Airport Iowa (M)	Newton Iowa (M)	AMES MUNICIPAL IA (A)
Iowa	Pottawattamie	93	-3	2.0	RED OAK MUNICIPAL IA (A)	Council Bluffs Iowa (M)	HARLAN MUNICIPAL IA (A)
Iowa	Poweshiek	91	-5	2.3	Newton Iowa (M)	Newton Iowa (M)	MARSHALLTOWN MUNICI IA (A)
Iowa	Ringgold	92	0	2.0	Lamoni Iowa (M)	Lamoni Iowa (M)	Lamoni Iowa (M)
Iowa	Sac	91	-4	2.2	Carroll Iowa (M)	STORM LAKE MUNICIPA IA (A)	CHEROKEE MUNICIPAL IA (A)
Iowa	Scott	92	-2	2.2	MUSCATINE MUNICIPIA IA (A)	DAVENPORT MUNICIPAL IA (A)	CLINTON MUNICIPAL IA (A)
Iowa	Shelby	92	-2	2.2	Omaha Eppley Airfield Nebraska (M)	CARROLL AP IA (A)	AUDUBON COUNTY AP IA (A)
Iowa	Sioux	91	-7	2.9	LE MARS MUNICIPAL IA (A)	LUVERNE MUNICIPAL MN (A)	LUVERNE MUNICIPAL MN (A)
Iowa	Story	91	-5	2.3	Webster City Iowa (M)	Newton Iowa (M)	MARSHALLTOWN MUNICI IA (A)
Iowa	Tama	91	-6	2.6	Newton Iowa (M)	Waterloo Municipal Airport Iowa (M)	INDEPENDENCE MUNICI IA (A)
Iowa	Taylor	93	0	1.9	SHENANDOAH MUNICIPA IA (A)	CRESTON MUNICIPAL IA (A)	CRESTON MUNICIPAL IA (A)
Iowa	Union	92	0	2.0	Lamoni Iowa (M)	Lamoni Iowa (M)	Lamoni Iowa (M)
Iowa	Van Buren	91	0	1.8	Fair Field Municipal Airport Iowa (M)	Ottumwa Industrial Airport Iowa (M)	OTTUMWA REGIONAL IA (A)
Iowa	Wapello	91	0	1.8	Fair Field Municipal Airport Iowa (M)	Ottumwa Industrial Airport Iowa (M)	OTTUMWA REGIONAL IA (A)
Iowa	Warren	91	-5	2.0	Ankeny Regional Airport Iowa (M)	Newton Iowa (M)	Newton Iowa (M)
Iowa	Washington	92	-6	2.3	MUSCATINE MUNICIPIA IA (A)	Iowa City Iowa (M)	THE EASTERN IOWA AP IA (A)
Iowa	Wayne	93	0	2.0	SPICKARD MO (A)	Lamoni Iowa (M)	Lamoni Iowa (M)

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Iowa	Webster	91	-6	2.5	Webster City Iowa (M)	Fort Dodge Iowa (M)	Fort Dodge Iowa (M)
Iowa	Winnebago	89	-8	2.9	ALGONA MUNICIPAL IA (A)	Mason City Municipal Airport Iowa (M)	Fairmont Municipal Airport Minnesota (M)
Iowa	Winneshiek	87	-6	2.9	DECORAH MUNICIPAL IA (A)	FILLMORE COUNTY AP MN (A)	FILLMORE COUNTY AP MN (A)
Iowa	Woodbury	91	-4	2.2	LE MARS MUNICIPAL IA (A)	Sioux City Sioux Gateway Airport Iowa (M)	CHEROKEE MUNICIPAL IA (A)
Iowa	Worth	88	-8	3.0	Mason City Municipal Airport Iowa (M)	Mason City Municipal Airport Iowa (M)	Austin Municipal Airport Minnesota (M)
Iowa	Wright	91	-8	2.8	Webster City Iowa (M)	Mason City Municipal Airport Iowa (M)	MASON CITY MUNICIPAL IA (A)
<b>Kansas</b>							
Kansas	Allen	97	12	1.0	Parsons Tri City Airport Kansas (M)	Chanute Martin Johnson Airport Kansas (M)	Chanute Martin Johnson Airport Kansas (M)
Kansas	Anderson	96	12	1.0	CHANUTE MARTIN JOHN KS (A)	Chanute Martin Johnson Airport Kansas (M)	Chanute Martin Johnson Airport Kansas (M)
Kansas	Atchison	96	2	1.4	LAWRENCE MUNICIPAL KS (A)	Atchison Kansas (M)	Atchison Kansas (M)
Kansas	Barber	101	11	1.1	ALVA MUNICIPAL OK (A)	PRATT INDUSTRIAL AP KS (A)	PRATT INDUSTRIAL AP KS (A)
Kansas	Barton	99	5	1.4	Hays Municipal Airport Kansas (M)	Russell Municipal Airport Kansas (M)	Hays Municipal Airport Kansas (M)
Kansas	Bourbon	96	11	1.1	CHANUTE MARTIN JOHN KS (A)	JOPLIN 24 N MO (A)	JOPLIN 24 N MO (A)
Kansas	Brown	93	2	1.4	Atchison Kansas (M)	Atchison Kansas (M)	BRENNER FIELD NE (A)
Kansas	Butler	99	7	1.3	Winfield Kansas (M)	El Dorado Kansas (M)	Newton Kansas (M)
Kansas	Chase	98	5	1.3	El Dorado Kansas (M)	Emporia Kansas (M)	Emporia Kansas (M)
Kansas	Chautauqua	98	10	0.9	Bartlesville Oklahoma (M)	Bartlesville Oklahoma (M)	BARTLESVILLE MUNICI OK (A)
Kansas	Cherokee	98	11	1.1	COFFEYVILLE MUNICIP KS (A)	JOPLIN 24 N MO (A)	JOPLIN 24 N MO (A)
Kansas	Cheyenne	95	4	1.8	Goodland Renner Field Kansas (M)	Goodland Renner Field Kansas (M)	Goodland Renner Field Kansas (M)
Kansas	Clark	98	8	1.2	DODGE CITY REGIONAL KS (A)	Dodge City Regional Airport Kansas (M)	Dodge City Regional Airport Kansas (M)
Kansas	Clay	97	5	1.4	Manhattan Regional Airport Kansas (M)	Concordia Blosser Municipal Airport Kansas (M)	Concordia Blosser Municipal Airport Kansas (M)
Kansas	Cloud	96	5	1.4	Concordia Blosser Municipal Airport Kansas (M)	Concordia Blosser Municipal Airport Kansas (M)	Concordia Blosser Municipal Airport Kansas (M)
Kansas	Coffey	97	5	1.3	Emporia Kansas (M)	Emporia Kansas (M)	Emporia Kansas (M)
Kansas	Comanche	100	12	0.9	Medicine Lodge ASOS Kansas (M)	Medicine Lodge ASOS Kansas (M)	MEDICINE LODGE KS (A)
Kansas	Cowley	99	12	1.0	Winfield Kansas (M)	McConnell Air Force Base Kansas (M)	McConnell Air Force Base Kansas (M)
Kansas	Crawford	97	11	1.1	Parsons Tri City Airport Kansas (M)	JOPLIN 24 N MO (A)	JOPLIN 24 N MO (A)
Kansas	Decatur	99	5	1.6	Mc Cook Municipal Airport Nebraska (M)	MCCOOK REGIONAL NE (A)	MCCOOK REGIONAL NE (A)
Kansas	Dickinson	99	6	1.3	SALINA MUNICIPAL KS (A)	Ft Riley Kansas (M)	MANHATTAN REGIONAL KS (A)
Kansas	Doniphan	93	2	1.4	Atchison Kansas (M)	Atchison Kansas (M)	BRENNER FIELD NE (A)

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Kansas	Douglas	96	7	1.3	LAWRENCE MUNICIPAL KS (A)	Topeka Forbes Field Kansas (M)	Topeka Forbes Field Kansas (M)
Kansas	Edwards	99	8	1.2	PRATT INDUSTRIAL AP KS (A)	Dodge City Regional Airport Kansas (M)	Dodge City Regional Airport Kansas (M)
Kansas	Elk	98	11	1.0	Parsons Tri City Airport Kansas (M); TRI-CITY AP KS (A); El Dorado Kansas (M)	Parsons Tri City Airport Kansas (M); TRI-CITY AP KS (A); El Dorado Kansas (M)	Parsons Tri City Airport Kansas (M); TRI-CITY AP KS (A); El Dorado Kansas (M)
Kansas	Ellis	99	5	1.4	Hays Municipal Airport Kansas (M)	Russell Municipal Airport Kansas (M)	Hays Municipal Airport Kansas (M)
Kansas	Ellsworth	99	5	1.3	SALINA MUNICIPAL KS (A)	Russell Municipal Airport Kansas (M)	Russell Municipal Airport Kansas (M)
Kansas	Finney	97	6	1.3	Garden City Municipal Airport Kansas (M)	Garden City Municipal Airport Kansas (M)	Garden City Municipal Airport Kansas (M)
Kansas	Ford	98	8	1.2	DODGE CITY REGIONAL KS (A)	Dodge City Regional Airport Kansas (M)	Dodge City Regional Airport Kansas (M)
Kansas	Franklin	96	7	1.3	LAWRENCE MUNICIPAL KS (A)	Topeka Forbes Field Kansas (M)	Topeka Forbes Field Kansas (M)
Kansas	Geary	97	6	1.3	Manhattan Regional Airport Kansas (M)	Ft Riley Kansas (M)	MANHATTAN REGIONAL KS (A)
Kansas	Gove	98	6	1.4	OAKLEY 19 SSW KS (A)	OAKLEY 19 SSW KS (A)	OAKLEY 19 SSW KS (A)
Kansas	Graham	99	7	1.4	Hill City Municipal Airport Kansas (M)	Hill City Municipal Airport Kansas (M)	HILL CITY MUNICIPAL KS (A)
Kansas	Grant	99	11	1.2	LIBERAL MID-AMERICA KS (A)	LIBERAL MID-AMERICA KS (A)	Liberal Municipal Airport Kansas (M)
Kansas	Gray	98	6	1.3	DODGE CITY REGIONAL KS (A)	Garden City Municipal Airport Kansas (M)	Garden City Municipal Airport Kansas (M)
Kansas	Greeley	98	6	1.4	OAKLEY 19 SSW KS (A); LAMAR MUNICIPAL CO (A); Lamar Municipal Airport Colorado (M)	OAKLEY 19 SSW KS (A); LAMAR MUNICIPAL CO (A); Lamar Municipal Airport Colorado (M)	OAKLEY 19 SSW KS (A); LAMAR MUNICIPAL CO (A); Lamar Municipal Airport Colorado (M)
Kansas	Greenwood	98	5	1.3	El Dorado Kansas (M)	Emporia Kansas (M)	Emporia Kansas (M)
Kansas	Hamilton	98	6	1.4	LAMAR MUNICIPAL CO (A); Lamar Municipal Airport Colorado (M); Garden City Municipal Airport Kansas (M)	LAMAR MUNICIPAL CO (A); Lamar Municipal Airport Colorado (M); Garden City Municipal Airport Kansas (M)	LAMAR MUNICIPAL CO (A); Lamar Municipal Airport Colorado (M); Garden City Municipal Airport Kansas (M)
Kansas	Harper	100	12	0.9	Medicine Lodge ASOS Kansas (M)	Medicine Lodge ASOS Kansas (M)	MEDICINE LODGE KS (A)
Kansas	Harvey	99	7	1.3	Hutchinson Airport Kansas (M)	El Dorado Kansas (M)	Hutchinson Airport Kansas (M)
Kansas	Haskell	99	6	1.3	LIBERAL MID-AMERICA KS (A)	Garden City Municipal Airport Kansas (M)	Garden City Municipal Airport Kansas (M)
Kansas	Hodgeman	98	8	1.2	DODGE CITY REGIONAL KS (A)	Dodge City Regional Airport Kansas (M)	Dodge City Regional Airport Kansas (M)
Kansas	Jackson	95	2	1.4	PHILIP BILLARD MUNI KS (A)	Atchison Kansas (M)	Atchison Kansas (M)
Kansas	Jefferson	96	2	1.4	LAWRENCE MUNICIPAL KS (A)	Atchison Kansas (M)	Atchison Kansas (M)
Kansas	Jewell	96	5	1.4	Concordia Blosser Municipal Airport Kansas (M)	Concordia Blosser Municipal Airport Kansas (M)	Concordia Blosser Municipal Airport Kansas (M)
Kansas	Johnson	96	5	1.3	LAWRENCE MUNICIPAL KS (A)	Kansas City International Airport Missouri (M)	Kansas City International Airport Missouri (M)
Kansas	Kearny	97	6	1.3	Garden City Municipal Airport Kansas (M)	Garden City Municipal Airport Kansas (M)	Garden City Municipal Airport Kansas (M)

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Kansas	Kingman	100	8	1.3	Medicine Lodge ASOS Kansas (M)	Hutchinson Airport Kansas (M)	Hutchinson Airport Kansas (M)
Kansas	Kiowa	99	8	1.2	PRATT INDUSTRIAL AP KS (A)	Dodge City Regional Airport Kansas (M)	Dodge City Regional Airport Kansas (M)
Kansas	Labette	98	12	1.0	COFFEYVILLE MUNICIP KS (A)	Chanute Martin Johnson Airport Kansas (M)	Chanute Martin Johnson Airport Kansas (M)
Kansas	Lane	98	6	1.4	OAKLEY 19 SSW KS (A)	OAKLEY 19 SSW KS (A)	OAKLEY 19 SSW KS (A)
Kansas	Leavenworth	96	2	1.4	LAWRENCE MUNICIPAL KS (A)	Atchison Kansas (M)	Atchison Kansas (M)
Kansas	Lincoln	99	5	1.3	SALINA MUNICIPAL KS (A)	Russell Municipal Airport Kansas (M)	Russell Municipal Airport Kansas (M)
Kansas	Linn	94	9	1.2	NEW CENTURY AIRCENT KS (A); Olathe Johnson Co. Airport Kansas (M); JOHNSON COUNTY EXEC KS (A)	NEW CENTURY AIRCENT KS (A); Olathe Johnson Co. Airport Kansas (M); JOHNSON COUNTY EXEC KS (A)	NEW CENTURY AIRCENT KS (A); Olathe Johnson Co. Airport Kansas (M); JOHNSON COUNTY EXEC KS (A)
Kansas	Logan	98	6	1.4	OAKLEY 19 SSW KS (A)	OAKLEY 19 SSW KS (A)	OAKLEY 19 SSW KS (A)
Kansas	Lyon	97	5	1.3	Emporia Kansas (M)	Emporia Kansas (M)	Emporia Kansas (M)
Kansas	Marion	98	7	1.3	El Dorado Kansas (M)	El Dorado Kansas (M)	Newton Kansas (M)
Kansas	Marshall	94	3	1.6	BEATRICE MUNICIPAL NE (A)	Beatrice Municipal Airport Nebraska (M)	BEATRICE MUNICIPAL NE (A)
Kansas	McPherson	99	7	1.3	Hutchinson Airport Kansas (M)	Salina Municipal Airport Kansas (M)	Hutchinson Airport Kansas (M)
Kansas	Meade	99	11	1.2	LIBERAL MID-AMERICA KS (A)	LIBERAL MID-AMERICA KS (A)	Liberal Municipal Airport Kansas (M)
Kansas	Miami	96	8	1.2	LAWRENCE MUNICIPAL KS (A)	LAWRENCE MUNICIPAL KS (A)	LAWRENCE MUNICIPAL KS (A)
Kansas	Mitchell	96	5	1.4	Concordia Blosser Municipal Airport Kansas (M)	Concordia Blosser Municipal Airport Kansas (M)	Concordia Blosser Municipal Airport Kansas (M)
Kansas	Montgomery	98	10	1.0	Bartlesville Oklahoma (M)	Bartlesville Oklahoma (M)	Chanute Martin Johnson Airport Kansas (M)
Kansas	Morris	97	5	1.3	Manhattan Regional Airport Kansas (M)	Emporia Kansas (M)	Emporia Kansas (M)
Kansas	Morton	100	11	1.1	GUYMON MUNICIPAL OK (A)	ELKHART-MORTON COUN KS (A)	Elkhart Kansas (M)
Kansas	Nemaha	93	3	1.4	BRENNER FIELD NE (A)	BRENNER FIELD NE (A)	BRENNER FIELD NE (A)
Kansas	Neosho	98	12	1.0	COFFEYVILLE MUNICIP KS (A)	Chanute Martin Johnson Airport Kansas (M)	Chanute Martin Johnson Airport Kansas (M)
Kansas	Ness	99	8	1.3	Hays Municipal Airport Kansas (M); HAYS REGIONAL KS (A); DODGE CITY REGIONAL KS (A)	Hays Municipal Airport Kansas (M); HAYS REGIONAL KS (A); DODGE CITY REGIONAL KS (A)	Hays Municipal Airport Kansas (M); HAYS REGIONAL KS (A); DODGE CITY REGIONAL KS (A)
Kansas	Norton	99	7	1.4	Hill City Municipal Airport Kansas (M)	Hill City Municipal Airport Kansas (M)	HILL CITY MUNICIPAL KS (A)
Kansas	Osage	97	5	1.3	Emporia Kansas (M)	Emporia Kansas (M)	Emporia Kansas (M)
Kansas	Osborne	98	5	1.3	RUSSELL MUNICIPAL KS (A)	Russell Municipal Airport Kansas (M)	Russell Municipal Airport Kansas (M)
Kansas	Ottawa	99	5	1.4	SALINA MUNICIPAL KS (A)	Concordia Blosser Municipal Airport Kansas (M)	Concordia Blosser Municipal Airport Kansas (M)
Kansas	Pawnee	98	8	1.3	GREAT BEND MUNICIPA KS (A)	GREAT BEND MUNICIPA KS (A)	Great Bend Kansas (M)

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Kansas	Phillips	99	7	1.4	Hill City Municipal Airport Kansas (M)	Hill City Municipal Airport Kansas (M)	HILL CITY MUNICIPAL KS (A)
Kansas	Pottawatomie	97	6	1.3	Manhattan Regional Airport Kansas (M)	Ft Riley Kansas (M)	MANHATTAN REGIONAL KS (A)
Kansas	Pratt	100	11	1.1	Medicine Lodge ASOS Kansas (M)	PRATT INDUSTRIAL AP KS (A)	PRATT INDUSTRIAL AP KS (A)
Kansas	Rawlins	99	5	1.6	Mc Cook Municipal Airport Nebraska (M)	MCCOOK REGIONAL NE (A)	MCCOOK REGIONAL NE (A)
Kansas	Reno	99	8	1.3	Hutchinson Airport Kansas (M)	Hutchinson Airport Kansas (M)	Hutchinson Airport Kansas (M)
Kansas	Republic	96	5	1.5	Concordia Blosser Municipal Airport Kansas (M)	Concordia Blosser Municipal Airport Kansas (M)	HEBRON MUNICIPAL NE (A)
Kansas	Rice	99	8	1.3	Hutchinson Airport Kansas (M)	Hutchinson Airport Kansas (M)	Hutchinson Airport Kansas (M)
Kansas	Riley	97	6	1.3	Manhattan Regional Airport Kansas (M)	Ft Riley Kansas (M)	MANHATTAN REGIONAL KS (A)
Kansas	Rooks	99	7	1.4	Hill City Municipal Airport Kansas (M)	Hill City Municipal Airport Kansas (M)	Hays Municipal Airport Kansas (M)
Kansas	Rush	99	5	1.4	Hays Municipal Airport Kansas (M)	Russell Municipal Airport Kansas (M)	Hays Municipal Airport Kansas (M)
Kansas	Russell	99	5	1.4	Hays Municipal Airport Kansas (M)	Russell Municipal Airport Kansas (M)	Hays Municipal Airport Kansas (M)
Kansas	Saline	99	7	1.1	SALINA MUNICIPAL KS (A)	Salina Municipal Airport Kansas (M)	Salina Municipal Airport Kansas (M)
Kansas	Scott	98	6	1.4	OAKLEY 19 SSW KS (A)	Garden City Municipal Airport Kansas (M)	OAKLEY 19 SSW KS (A)
Kansas	Sedgwick	99	7	1.3	Hutchinson Airport Kansas (M)	El Dorado Kansas (M)	Hutchinson Airport Kansas (M)
Kansas	Seward	99	11	1.2	LIBERAL MID-AMERICA KS (A)	LIBERAL MID-AMERICA KS (A)	Liberal Municipal Airport Kansas (M)
Kansas	Shawnee	96	7	1.3	LAWRENCE MUNICIPAL KS (A)	Topeka Forbes Field Kansas (M)	Topeka Forbes Field Kansas (M)
Kansas	Sheridan	99	7	1.4	Hill City Municipal Airport Kansas (M)	Hill City Municipal Airport Kansas (M)	HILL CITY MUNICIPAL KS (A)
Kansas	Sherman	95	4	1.9	Goodland Renner Field Kansas (M)	Goodland Renner Field Kansas (M)	KIT CARSON COUNTY A CO (A)
Kansas	Smith	92	4	1.7	BREWSTER FIELD NE (A); Holdrege Brewster Field Airport Nebraska (M); HASTINGS MUNICIPAL NE (A)	BREWSTER FIELD NE (A); Holdrege Brewster Field Airport Nebraska (M); HASTINGS MUNICIPAL NE (A)	BREWSTER FIELD NE (A); Holdrege Brewster Field Airport Nebraska (M); HASTINGS MUNICIPAL NE (A)
Kansas	Stafford	99	8	1.3	PRATT INDUSTRIAL AP KS (A)	GREAT BEND MUNICIPA KS (A)	Great Bend Kansas (M)
Kansas	Stanton	98	11	1.1	ELKHART-MORTON COUN KS (A)	ELKHART-MORTON COUN KS (A)	Elkhart Kansas (M)
Kansas	Stevens	100	11	1.2	GUYMON MUNICIPAL OK (A)	LIBERAL MID-AMERICA KS (A)	Liberal Municipal Airport Kansas (M)
Kansas	Sumner	99	11	1.0	Winfield Kansas (M)	Wichita Mid-Continent Airport Kansas (M)	Wichita Mid-Continent Airport Kansas (M)
Kansas	Thomas	98	4	1.8	OAKLEY 19 SSW KS (A)	Goodland Renner Field Kansas (M)	Goodland Renner Field Kansas (M)
Kansas	Trego	99	7	1.4	Hill City Municipal Airport Kansas (M)	Hill City Municipal Airport Kansas (M)	Hays Municipal Airport Kansas (M)
Kansas	Wabaunsee	97	5	1.3	Manhattan Regional Airport Kansas (M)	Emporia Kansas (M)	Emporia Kansas (M)

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Kansas	Wallace	95	4	1.9	Goodland Renner Field Kansas (M)	Goodland Renner Field Kansas (M)	KIT CARSON COUNTY A CO (A)
Kansas	Washington	96	5	1.5	Concordia Blosser Municipal Airport Kansas (M)	Concordia Blosser Municipal Airport Kansas (M)	HEBRON MUNICIPAL NE (A)
Kansas	Wichita	98	6	1.4	OAKLEY 19 SSW KS (A)	OAKLEY 19 SSW KS (A)	OAKLEY 19 SSW KS (A)
Kansas	Wilson	98	12	1.0	COFFEYVILLE MUNICIP KS (A)	Chanute Martin Johnson Airport Kansas (M)	Chanute Martin Johnson Airport Kansas (M)
Kansas	Woodson	96	9	1.1	EMPORIA MUNICIPAL KS (A)	EMPORIA MUNICIPAL KS (A)	EMPORIA MUNICIPAL KS (A)
Kansas	Wyandotte	96	2	1.4	LAWRENCE MUNICIPAL KS (A)	Atchison Kansas (M)	Atchison Kansas (M)
<b>Kentucky</b>							
Kentucky	Adair	92	18	0.9	Somerset Kentucky (M)	LAKE CUMBERLAND REG KY (A)	LAKE CUMBERLAND REG KY (A)
Kentucky	Allen	92	15	1.0	BOWLING GREEN AP KY (A)	Bowling Green Warren Co. Airport Kentucky (M)	Bowling Green Warren Co. Airport Kentucky (M)
Kentucky	Anderson	92	13	1.2	BOWMAN FIELD KY (A)	Lexington Bluegrass Airport Kentucky (M)	VERSAILLES 3 NNW KY (A)
Kentucky	Ballard	95	14	1.0	Sikeston Missouri (M)	Cape Girardeau Municipal Airport Missouri (M)	CAPE GIRARDEAU REGI MO (A)
Kentucky	Barren	92	15	1.0	BOWLING GREEN AP KY (A)	Bowling Green Warren Co. Airport Kentucky (M)	Bowling Green Warren Co. Airport Kentucky (M)
Kentucky	Bath	88	15	1.1	Jackson Julian Carroll Airport Kentucky (M); JULIAN CARROLL AP KY (A); BLUE GRASS AP KY (A)	Jackson Julian Carroll Airport Kentucky (M); JULIAN CARROLL AP KY (A); BLUE GRASS AP KY (A)	Jackson Julian Carroll Airport Kentucky (M); JULIAN CARROLL AP KY (A); BLUE GRASS AP KY (A)
Kentucky	Bell	92	9	1.2	Corbin Airport Kentucky (M)	Corbin Airport Kentucky (M)	Corbin Airport Kentucky (M)
Kentucky	Boone	91	5	1.4	BUTLER COUNTY REGIO OH (A)	Hamilton Ohio (M)	BUTLER COUNTY REGIO OH (A)
Kentucky	Bourbon	90	13	1.2	Capital City Airport Kentucky (M)	Lexington Bluegrass Airport Kentucky (M)	VERSAILLES 3 NNW KY (A)
Kentucky	Boyd	92	10	1.6	Portsmouth Ohio (M)	Portsmouth Ohio (M)	Ashland Kentucky (M)
Kentucky	Boyle	92	13	1.2	Somerset Kentucky (M)	Lexington Bluegrass Airport Kentucky (M)	VERSAILLES 3 NNW KY (A)
Kentucky	Bracken	91	7	1.4	CINCINNATI MUNICIPA OH (A)	Covington Airport Kentucky (M)	Cincinnati Northern KY Airport Kentucky (M)
Kentucky	Breathitt	88	15	1.1	JULIAN CARROLL AP KY (A)	Jackson Julian Carroll Airport Kentucky (M)	Jackson Julian Carroll Airport Kentucky (M)
Kentucky	Breckinridge	94	10	1.1	Owensboro Kentucky (M)	Owensboro Kentucky (M)	GODMAN AAF KY (A)
Kentucky	Bullitt	93	10	1.1	Jeffersonville Indiana (M)	Jeffersonville Indiana (M)	GODMAN AAF KY (A)
Kentucky	Butler	92	15	1.0	BOWLING GREEN AP KY (A)	Bowling Green Warren Co. Airport Kentucky (M)	Bowling Green Warren Co. Airport Kentucky (M)
Kentucky	Caldwell	93	10	1.0	Madisonville Kentucky (M)	Madisonville Kentucky (M)	Hopkinsville Campbell Air Force Base Kentucky (M)
Kentucky	Calloway	93	15	0.9	BARKLEY REGIONAL KY (A); Paducah Barkley Regional Airport Kentucky (M); Hopkinsville Campbell Air Force Base Kentucky (M)	BARKLEY REGIONAL KY (A); Paducah Barkley Regional Airport Kentucky (M); Hopkinsville Campbell Air Force Base Kentucky (M)	BARKLEY REGIONAL KY (A); Paducah Barkley Regional Airport Kentucky (M); Hopkinsville Campbell Air Force Base Kentucky (M)

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Kentucky	Campbell	91	5	1.7	BUTLER COUNTY REGIO OH (A)	Hamilton Ohio (M)	Middletown Ohio (M)
Kentucky	Carlisle	95	15	1.0	Sikeston Missouri (M)	Sikeston Missouri (M)	Sikeston Missouri (M)
Kentucky	Carroll	90	7	1.4	Capital City Airport Kentucky (M)	Covington Airport Kentucky (M)	Cincinnati Northern KY Airport Kentucky (M)
Kentucky	Carter	92	10	1.6	Portsmouth Ohio (M)	Portsmouth Ohio (M)	Ashland Kentucky (M)
Kentucky	Casey	92	18	0.9	Somerset Kentucky (M)	LAKE CUMBERLAND REG KY (A)	LAKE CUMBERLAND REG KY (A)
Kentucky	Christian	93	10	1.0	Madisonville Kentucky (M)	Madisonville Kentucky (M)	Hopkinsville Campbell Air Force Base Kentucky (M)
Kentucky	Clark	90	13	1.2	BLUE GRASS AP KY (A)	Lexington Bluegrass Airport Kentucky (M)	VERSAILLES 3 NNW KY (A)
Kentucky	Clay	92	9	1.2	Corbin Airport Kentucky (M)	Corbin Airport Kentucky (M)	Corbin Airport Kentucky (M)
Kentucky	Clinton	92	18	0.9	Somerset Kentucky (M)	LAKE CUMBERLAND REG KY (A)	LAKE CUMBERLAND REG KY (A)
Kentucky	Crittenden	93	10	1.1	Madisonville Kentucky (M)	Madisonville Kentucky (M)	HENDERSON CITY-COUN KY (A)
Kentucky	Cumberland	90	17	1.0	LAKE CUMBERLAND REG KY (A); Somerset Kentucky (M); CROSSVILLE 7 NW TN (A)	LAKE CUMBERLAND REG KY (A); Somerset Kentucky (M); CROSSVILLE 7 NW TN (A)	LAKE CUMBERLAND REG KY (A); Somerset Kentucky (M); CROSSVILLE 7 NW TN (A)
Kentucky	Daviess	94	10	1.2	Owensboro Kentucky (M)	Madisonville Kentucky (M)	Huntingburg Indiana (M)
Kentucky	Edmonson	92	15	1.0	BOWLING GREEN AP KY (A)	Bowling Green Warren Co. Airport Kentucky (M)	Bowling Green Warren Co. Airport Kentucky (M)
Kentucky	Elliott	91	10	1.6	Ashland Kentucky (M)	Ashland Kentucky (M)	Ashland Kentucky (M)
Kentucky	Estill	88	15	1.1	JULIAN CARROLL AP KY (A)	Jackson Julian Carroll Airport Kentucky (M)	Jackson Julian Carroll Airport Kentucky (M)
Kentucky	Fayette	90	13	1.2	Capital City Airport Kentucky (M)	Lexington Bluegrass Airport Kentucky (M)	VERSAILLES 3 NNW KY (A)
Kentucky	Fleming	91	12	1.3	Portsmouth Ohio (M); BLUE GRASS AP KY (A); Lexington Bluegrass Airport Kentucky (M)	Portsmouth Ohio (M); BLUE GRASS AP KY (A); Lexington Bluegrass Airport Kentucky (M)	Portsmouth Ohio (M); BLUE GRASS AP KY (A); Lexington Bluegrass Airport Kentucky (M)
Kentucky	Floyd	88	15	1.1	JULIAN CARROLL AP KY (A)	Jackson Julian Carroll Airport Kentucky (M)	Jackson Julian Carroll Airport Kentucky (M)
Kentucky	Franklin	90	13	1.2	Capital City Airport Kentucky (M)	Lexington Bluegrass Airport Kentucky (M)	VERSAILLES 3 NNW KY (A)
Kentucky	Fulton	95	15	1.0	Sikeston Missouri (M)	Sikeston Missouri (M)	Sikeston Missouri (M)
Kentucky	Gallatin	91	7	1.4	CINCINNATI MUNICIPA OH (A)	Covington Airport Kentucky (M)	Cincinnati Northern KY Airport Kentucky (M)
Kentucky	Garrard	92	13	1.2	Somerset Kentucky (M)	Lexington Bluegrass Airport Kentucky (M)	VERSAILLES 3 NNW KY (A)
Kentucky	Grant	91	7	1.4	CINCINNATI MUNICIPA OH (A)	Covington Airport Kentucky (M)	Cincinnati Northern KY Airport Kentucky (M)
Kentucky	Graves	95	15	0.9	CAIRO REGIONAL IL (A)	Paducah Barkley Regional Airport Kentucky (M)	METROPOLIS MUNICIPA IL (A)
Kentucky	Grayson	92	14	1.1	BOWLING GREEN AP KY (A)	Fort Knox Kentucky (M)	GODMAN AAF KY (A)
Kentucky	Green	89	15	0.9	BOWLING GREEN 21 NN KY (A)	BOWLING GREEN 21 NN KY (A)	BOWLING GREEN 21 NN KY (A)
Kentucky	Greenup	92	10	1.6	Portsmouth Ohio (M)	Portsmouth Ohio (M)	Ashland Kentucky (M)

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Kentucky	Hancock	94	10	1.2	Owensboro Kentucky (M)	Owensboro Kentucky (M)	Huntingburg Indiana (M)
Kentucky	Hardin	92	14	1.1	LOUISVILLE INTL KY (A)	Fort Knox Kentucky (M)	GODMAN AAF KY (A)
Kentucky	Harlan	92	12	1.5	MIDDLESBORO-BELL CO KY (A)	Wise Lonesome Pine Airport Virginia (M)	Wise Lonesome Pine Airport Virginia (M)
Kentucky	Harrison	90	13	1.2	Capital City Airport Kentucky (M)	Lexington Bluegrass Airport Kentucky (M)	VERSAILLES 3 NNW KY (A)
Kentucky	Hart	92	15	1.0	BOWLING GREEN AP KY (A)	Bowling Green Warren Co. Airport Kentucky (M)	Bowling Green Warren Co. Airport Kentucky (M)
Kentucky	Henderson	94	10	1.1	Owensboro Kentucky (M)	Madisonville Kentucky (M)	CARMI MUNICIPAL IL (A)
Kentucky	Henry	93	10	1.2	Jeffersonville Indiana (M)	Jeffersonville Indiana (M)	VERSAILLES 3 NNW KY (A)
Kentucky	Hickman	95	15	1.0	Sikeston Missouri (M)	Sikeston Missouri (M)	Sikeston Missouri (M)
Kentucky	Hopkins	94	10	1.1	Owensboro Kentucky (M)	Madisonville Kentucky (M)	HENDERSON CITY-COUN KY (A)
Kentucky	Jackson	92	9	1.2	Somerset Kentucky (M)	Corbin Airport Kentucky (M)	Corbin Airport Kentucky (M)
Kentucky	Jefferson	93	10	1.1	Jeffersonville Indiana (M)	Jeffersonville Indiana (M)	GODMAN AAF KY (A)
Kentucky	Jessamine	90	13	1.2	Capital City Airport Kentucky (M)	Lexington Bluegrass Airport Kentucky (M)	VERSAILLES 3 NNW KY (A)
Kentucky	Johnson	90	15	1.1	HUNTINGTON TRI-STAT WV (A)	Jackson Julian Carroll Airport Kentucky (M)	Huntington Tri-State Airport West Virginia (M)
Kentucky	Kenton	91	5	1.4	BUTLER COUNTY REGIO OH (A)	Hamilton Ohio (M)	BUTLER COUNTY REGIO OH (A)
Kentucky	Knott	88	12	1.5	JULIAN CARROLL AP KY (A)	Wise Lonesome Pine Airport Virginia (M)	Wise Lonesome Pine Airport Virginia (M)
Kentucky	Knox	92	9	1.2	Corbin Airport Kentucky (M)	Corbin Airport Kentucky (M)	Corbin Airport Kentucky (M)
Kentucky	Larue	91	14	1.1	Fort Knox Kentucky (M)	Fort Knox Kentucky (M)	GODMAN AAF KY (A)
Kentucky	Laurel	92	9	1.2	Somerset Kentucky (M)	Corbin Airport Kentucky (M)	Corbin Airport Kentucky (M)
Kentucky	Lawrence	91	10	1.6	Ashland Kentucky (M)	Ashland Kentucky (M)	Ashland Kentucky (M)
Kentucky	Lee	88	15	1.1	JULIAN CARROLL AP KY (A)	Jackson Julian Carroll Airport Kentucky (M)	Jackson Julian Carroll Airport Kentucky (M)
Kentucky	Leslie	92	9	1.2	Corbin Airport Kentucky (M)	Corbin Airport Kentucky (M)	Corbin Airport Kentucky (M)
Kentucky	Letcher	84	12	1.5	LONESOME PINE AP VA (A)	Wise Lonesome Pine Airport Virginia (M)	Wise Lonesome Pine Airport Virginia (M)
Kentucky	Lewis	92	10	1.5	Portsmouth Ohio (M)	Portsmouth Ohio (M)	Portsmouth Ohio (M)
Kentucky	Lincoln	92	18	0.9	Somerset Kentucky (M)	LAKE CUMBERLAND REG KY (A)	LAKE CUMBERLAND REG KY (A)
Kentucky	Livingston	93	15	0.9	BARKLEY REGIONAL KY (A)	Paducah Barkley Regional Airport Kentucky (M)	METROPOLIS MUNICIPA IL (A)
Kentucky	Logan	93	12	1.0	Hopkinsville Campbell Air Force Base Kentucky (M)	Clarksville Tennessee (M)	Hopkinsville Campbell Air Force Base Kentucky (M)
Kentucky	Lyon	93	10	0.9	Madisonville Kentucky (M)	Madisonville Kentucky (M)	METROPOLIS MUNICIPA IL (A)
Kentucky	Madison	90	13	1.2	BLUE GRASS AP KY (A)	Lexington Bluegrass Airport Kentucky (M)	VERSAILLES 3 NNW KY (A)

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Kentucky	Magoffin	88	15	1.1	JULIAN CARROLL AP KY (A)	Jackson Julian Carroll Airport Kentucky (M)	Jackson Julian Carroll Airport Kentucky (M)
Kentucky	Marion	90	13	1.1	GODMAN AAF KY (A); Fort Knox Kentucky (M); VERSAILLES 3 NNW KY (A)	GODMAN AAF KY (A); Fort Knox Kentucky (M); VERSAILLES 3 NNW KY (A)	GODMAN AAF KY (A); Fort Knox Kentucky (M); VERSAILLES 3 NNW KY (A)
Kentucky	Marshall	93	15	0.9	BARKLEY REGIONAL KY (A)	Paducah Barkley Regional Airport Kentucky (M)	METROPOLIS MUNICIPA IL (A)
Kentucky	Martin	90	15	1.1	HUNTINGTON TRI-STAT WV (A)	Huntington Tri-State Airport West Virginia (M)	Huntington Tri-State Airport West Virginia (M)
Kentucky	Mason	91	11	1.3	Portsmouth Ohio (M); CINCINNATI MUNICIPAL OH (A); Cincinnati Municipal Airport Ohio (M)	Portsmouth Ohio (M); CINCINNATI MUNICIPAL OH (A); Cincinnati Municipal Airport Ohio (M)	Portsmouth Ohio (M); CINCINNATI MUNICIPAL OH (A); Cincinnati Municipal Airport Ohio (M)
Kentucky	McCracken	95	15	0.9	CAIRO REGIONAL IL (A)	Paducah Barkley Regional Airport Kentucky (M)	METROPOLIS MUNICIPA IL (A)
Kentucky	McCreary	92	9	1.2	Somerset Kentucky (M)	Corbin Airport Kentucky (M)	Corbin Airport Kentucky (M)
Kentucky	McLean	94	10	1.1	Owensboro Kentucky (M)	Madisonville Kentucky (M)	HENDERSON CITY-COUN KY (A)
Kentucky	Meade	93	10	1.1	Jeffersonville Indiana (M)	Jeffersonville Indiana (M)	GODMAN AAF KY (A)
Kentucky	Menifee	88	15	1.1	JULIAN CARROLL AP KY (A)	Jackson Julian Carroll Airport Kentucky (M)	Jackson Julian Carroll Airport Kentucky (M)
Kentucky	Mercer	90	13	1.2	Capital City Airport Kentucky (M)	Lexington Bluegrass Airport Kentucky (M)	VERSAILLES 3 NNW KY (A)
Kentucky	Metcalfe	89	15	0.9	BOWLING GREEN 21 NN KY (A)	BOWLING GREEN 21 NN KY (A)	BOWLING GREEN 21 NN KY (A)
Kentucky	Monroe	91	16	0.9	BOWLING GREEN AP KY (A); Bowling Green Warren Co. Airport Kentucky (M); BOWLING GREEN 21 NN KY (A)	BOWLING GREEN AP KY (A); Bowling Green Warren Co. Airport Kentucky (M); BOWLING GREEN 21 NN KY (A)	BOWLING GREEN AP KY (A); Bowling Green Warren Co. Airport Kentucky (M); BOWLING GREEN 21 NN KY (A)
Kentucky	Montgomery	90	13	1.2	BLUE GRASS AP KY (A)	Lexington Bluegrass Airport Kentucky (M)	Lexington Bluegrass Airport Kentucky (M)
Kentucky	Morgan	88	15	1.1	JULIAN CARROLL AP KY (A)	Jackson Julian Carroll Airport Kentucky (M)	Jackson Julian Carroll Airport Kentucky (M)
Kentucky	Muhlenberg	94	10	0.9	Owensboro Kentucky (M)	Madisonville Kentucky (M)	Owensboro Kentucky (M)
Kentucky	Nelson	93	10	1.1	Jeffersonville Indiana (M)	Jeffersonville Indiana (M)	GODMAN AAF KY (A)
Kentucky	Nicholas	90	13	1.2	BLUE GRASS AP KY (A)	Lexington Bluegrass Airport Kentucky (M)	Lexington Bluegrass Airport Kentucky (M)
Kentucky	Ohio	94	10	0.9	Owensboro Kentucky (M)	Madisonville Kentucky (M)	BOWLING GREEN 21 NN KY (A)
Kentucky	Oldham	93	10	1.2	Jeffersonville Indiana (M)	Jeffersonville Indiana (M)	Capital City Airport Kentucky (M)
Kentucky	Owen	90	7	1.4	Capital City Airport Kentucky (M)	Covington Airport Kentucky (M)	Cincinnati Northern KY Airport Kentucky (M)
Kentucky	Owsley	92	9	1.2	Corbin Airport Kentucky (M)	Corbin Airport Kentucky (M)	Corbin Airport Kentucky (M)
Kentucky	Pendleton	91	7	1.4	CINCINNATI MUNICIPAL OH (A)	Covington Airport Kentucky (M)	Cincinnati Northern KY Airport Kentucky (M)
Kentucky	Perry	88	15	1.1	JULIAN CARROLL AP KY (A)	Jackson Julian Carroll Airport Kentucky (M)	Jackson Julian Carroll Airport Kentucky (M)
Kentucky	Pike	84	12	1.5	LONESOME PINE AP VA (A)	Wise Lonesome Pine Airport Virginia (M)	Wise Lonesome Pine Airport Virginia (M)

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Kentucky	Powell	88	15	1.1	JULIAN CARROLL AP KY (A)	Jackson Julian Carroll Airport Kentucky (M)	Jackson Julian Carroll Airport Kentucky (M)
Kentucky	Pulaski	92	9	1.2	Somerset Kentucky (M)	Corbin Airport Kentucky (M)	Corbin Airport Kentucky (M)
Kentucky	Robertson	90	13	1.2	BLUE GRASS AP KY (A); Lexington Bluegrass Airport Kentucky (M); CINCINNATI MUNICIPAL OH (A)	BLUE GRASS AP KY (A); Lexington Bluegrass Airport Kentucky (M); CINCINNATI MUNICIPAL OH (A)	BLUE GRASS AP KY (A); Lexington Bluegrass Airport Kentucky (M); CINCINNATI MUNICIPAL OH (A)
Kentucky	Rockcastle	92	9	1.2	Somerset Kentucky (M)	Corbin Airport Kentucky (M)	Corbin Airport Kentucky (M)
Kentucky	Rowan	89	13	1.2	Jackson Julian Carroll Airport Kentucky (M); JULIAN CARROLL AP KY (A); Portsmouth Ohio (M)	Jackson Julian Carroll Airport Kentucky (M); JULIAN CARROLL AP KY (A); Portsmouth Ohio (M)	Jackson Julian Carroll Airport Kentucky (M); JULIAN CARROLL AP KY (A); Portsmouth Ohio (M)
Kentucky	Russell	92	18	0.9	Somerset Kentucky (M)	LAKE CUMBERLAND REG KY (A)	LAKE CUMBERLAND REG KY (A)
Kentucky	Scott	90	13	1.2	Capital City Airport Kentucky (M)	Lexington Bluegrass Airport Kentucky (M)	VERSAILLES 3 NNW KY (A)
Kentucky	Shelby	93	10	1.2	Jeffersonville Indiana (M)	Jeffersonville Indiana (M)	VERSAILLES 3 NNW KY (A)
Kentucky	Simpson	92	15	1.0	BOWLING GREEN AP KY (A)	Bowling Green Warren Co. Airport Kentucky (M)	Bowling Green Warren Co. Airport Kentucky (M)
Kentucky	Spencer	93	10	1.2	Jeffersonville Indiana (M)	Jeffersonville Indiana (M)	VERSAILLES 3 NNW KY (A)
Kentucky	Taylor	91	17	0.9	Somerset Kentucky (M); LAKE CUMBERLAND REG KY (A); BOWLING GREEN 21 NN KY (A)	Somerset Kentucky (M); LAKE CUMBERLAND REG KY (A); BOWLING GREEN 21 NN KY (A)	Somerset Kentucky (M); LAKE CUMBERLAND REG KY (A); BOWLING GREEN 21 NN KY (A)
Kentucky	Todd	93	10	1.0	Madisonville Kentucky (M)	Madisonville Kentucky (M)	Hopkinsville Campbell Air Force Base Kentucky (M)
Kentucky	Trigg	93	12	1.0	Hopkinsville Campbell Air Force Base Kentucky (M)	Clarksville Tennessee (M)	Hopkinsville Campbell Air Force Base Kentucky (M)
Kentucky	Trimble	93	10	1.2	Jeffersonville Indiana (M)	Jeffersonville Indiana (M)	Capital City Airport Kentucky (M)
Kentucky	Union	93	10	1.1	Madisonville Kentucky (M)	Madisonville Kentucky (M)	CARMI MUNICIPAL IL (A)
Kentucky	Warren	92	15	1.0	BOWLING GREEN AP KY (A)	Bowling Green Warren Co. Airport Kentucky (M)	Bowling Green Warren Co. Airport Kentucky (M)
Kentucky	Washington	90	13	1.2	Capital City Airport Kentucky (M)	Lexington Bluegrass Airport Kentucky (M)	VERSAILLES 3 NNW KY (A)
Kentucky	Wayne	92	18	0.9	Somerset Kentucky (M)	LAKE CUMBERLAND REG KY (A)	LAKE CUMBERLAND REG KY (A)
Kentucky	Webster	94	10	1.1	Owensboro Kentucky (M)	Madisonville Kentucky (M)	HENDERSON CITY-COUN KY (A)
Kentucky	Whitley	92	9	1.2	Somerset Kentucky (M)	Corbin Airport Kentucky (M)	Corbin Airport Kentucky (M)
Kentucky	Wolfe	88	15	1.1	JULIAN CARROLL AP KY (A)	Jackson Julian Carroll Airport Kentucky (M)	Jackson Julian Carroll Airport Kentucky (M)
Kentucky	Woodford	90	13	1.2	Capital City Airport Kentucky (M)	Lexington Bluegrass Airport Kentucky (M)	VERSAILLES 3 NNW KY (A)
<b>Louisiana</b>							
Louisiana	Acadia	94	32	0.2	LAFAYETTE REGIONAL LA (A)	Lafayette Regional Airport Louisiana (M)	LAFAYETTE 13 SE LA (A)
Louisiana	Allen	95	30	0.3	POLK AAF LA (A)	Leesville Fort Polk Louisiana (M)	Leesville Fort Polk Louisiana (M)

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Louisiana	Ascension	97	30	0.2	HAMMOND MUNICIPAL LA (A)	HAMMOND MUNICIPAL LA (A)	Baton Rouge Ryan Airport Louisiana (M)
Louisiana	Assumption	93	35	0.2	Houma Louisiana (M)	Houma Louisiana (M)	HARRY P WILLIAMS ME LA (A)
Louisiana	Avoyelles	96	28	0.3	ALEXANDRIA ESLER RE LA (A)	Alexandria Esler Regional Airport Louisiana (M)	Alexandria Esler Regional Airport Louisiana (M)
Louisiana	Beauregard	95	30	0.3	SOUTHLAND FIELD LA (A)	Leesville Fort Polk Louisiana (M)	Leesville Fort Polk Louisiana (M)
Louisiana	Bienville	97	25	0.4	BARKSDALE AFB LA (A)	Minden Louisiana (M)	Minden Louisiana (M)
Louisiana	Bossier	98	25	0.4	SHREVEPORT DOWNTOWN LA (A)	Minden Louisiana (M)	Minden Louisiana (M)
Louisiana	Caddo	98	25	0.4	SHREVEPORT DOWNTOWN LA (A)	Minden Louisiana (M)	Minden Louisiana (M)
Louisiana	Calcasieu	95	33	0.2	SOUTHLAND FIELD LA (A)	Lake Charles Regional Airport Louisiana (M)	Lake Charles Regional Airport Louisiana (M)
Louisiana	Caldwell	96	27	0.4	MONROE REGIONAL LA (A)	Monroe Regional Airport Louisiana (M)	Monroe Regional Airport Louisiana (M)
Louisiana	Cameron	95	33	0.2	SOUTHLAND FIELD LA (A)	Lake Charles Regional Airport Louisiana (M)	Lake Charles Regional Airport Louisiana (M)
Louisiana	Catahoula	96	27	0.4	ALEXANDRIA ESLER RE LA (A)	NATCHEZ-ADAMS COUNT MS (A)	Natchez Hardy Mississippi (M)
Louisiana	Claiborne	96	25	0.5	Minden Louisiana (M)	Minden Louisiana (M)	SOUTH ARKANSAS REGI AR (A)
Louisiana	Concordia	96	27	0.4	ALEXANDRIA ESLER RE LA (A)	NATCHEZ-ADAMS COUNT MS (A)	Natchez Hardy Mississippi (M)
Louisiana	De Soto	98	27	0.4	SHREVEPORT DOWNTOWN LA (A)	Barksdale Air Force Base Louisiana (M)	Barksdale Air Force Base Louisiana (M)
Louisiana	East Baton Rouge	94	31	0.2	BATON ROUGE METROPO LA (A)	Baton Rouge Ryan Airport Louisiana (M)	Baton Rouge Ryan Airport Louisiana (M)
Louisiana	East Carroll	95	26	0.4	VICKSBURG TALLULAH LA (A)	Vicksburg City Office Mississippi (M)	VICKSBURG TALLULAH LA (A)
Louisiana	East Feliciana	94	31	0.2	BATON ROUGE METROPO LA (A)	Baton Rouge Ryan Airport Louisiana (M)	Baton Rouge Ryan Airport Louisiana (M)
Louisiana	Evangeline	95	30	0.3	Alexandria International Airport Louisiana (M); ALEXANDRIA INTL LA (A); Lafayette Regional Airport Louisiana (M)	Alexandria International Airport Louisiana (M); ALEXANDRIA INTL LA (A); Lafayette Regional Airport Louisiana (M)	Alexandria International Airport Louisiana (M); ALEXANDRIA INTL LA (A); Lafayette Regional Airport Louisiana (M)
Louisiana	Franklin	96	27	0.4	MONROE REGIONAL LA (A)	Monroe Regional Airport Louisiana (M)	Monroe Regional Airport Louisiana (M)
Louisiana	Grant	98	26	0.4	NATCHITOCHEES REGION LA (A)	Natchitoches Louisiana (M)	Natchitoches Louisiana (M)
Louisiana	Iberia	93	32	0.2	ACADIANA REGIONAL LA (A)	LAFAYETTE 13 SE LA (A)	LAFAYETTE 13 SE LA (A)
Louisiana	Iberville	94	31	0.2	BATON ROUGE METROPO LA (A)	Baton Rouge Ryan Airport Louisiana (M)	Baton Rouge Ryan Airport Louisiana (M)
Louisiana	Jackson	96	27	0.4	MONROE REGIONAL LA (A)	Monroe Regional Airport Louisiana (M)	Monroe Regional Airport Louisiana (M)
Louisiana	Jefferson	93	34	0.2	LAKEFRONT AP LA (A)	New Orleans Naval Air Station Louisiana (M)	New Orleans Naval Air Station Louisiana (M)
Louisiana	Jefferson Davis	95	33	0.2	SOUTHLAND FIELD LA (A)	Lake Charles Regional Airport Louisiana (M)	Lake Charles Regional Airport Louisiana (M)
Louisiana	Lafayette	94	32	0.2	LAFAYETTE REGIONAL LA (A)	Lafayette Regional Airport Louisiana (M)	LAFAYETTE 13 SE LA (A)

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Louisiana	Lafourche	93	34	0.2	Houma Louisiana (M)	New Orleans Naval Air Station Louisiana (M)	New Orleans Naval Air Station Louisiana (M)
Louisiana	LaSalle	96	28	0.3	ALEXANDRIA ESLER RE LA (A)	Alexandria Esler Regional Airport Louisiana (M)	Alexandria Esler Regional Airport Louisiana (M)
Louisiana	Lincoln	96	24	0.5	Minden Louisiana (M)	MONROE 26 N LA (A)	MONROE 26 N LA (A)
Louisiana	Livingston	97	30	0.2	HAMMOND MUNICIPAL LA (A)	HAMMOND MUNICIPAL LA (A)	Baton Rouge Ryan Airport Louisiana (M)
Louisiana	Madison	95	26	0.4	VICKSBURG TALLULAH LA (A)	Vicksburg City Office Mississippi (M)	VICKSBURG TALLULAH LA (A)
Louisiana	Morehouse	96	24	0.5	MONROE 26 N LA (A)	MONROE 26 N LA (A)	MONROE 26 N LA (A)
Louisiana	Natchitoches	98	26	0.4	NATCHITOCHEES REGION LA (A)	Natchitoches Louisiana (M)	Natchitoches Louisiana (M)
Louisiana	Orleans	93	30	0.2	LAKEFRONT AP LA (A)	SLIDELL MUNICIPAL LA (A)	SLIDELL MUNICIPAL LA (A)
Louisiana	Ouachita	96	24	0.5	MONROE 26 N LA (A)	MONROE 26 N LA (A)	MONROE 26 N LA (A)
Louisiana	Plaquemines	92	34	0.2	NEW ORLEANS NAS LA (A)	New Orleans Naval Air Station Louisiana (M)	New Orleans Naval Air Station Louisiana (M)
Louisiana	Pointe Coupee	94	31	0.2	BATON ROUGE METROPO LA (A)	Baton Rouge Ryan Airport Louisiana (M)	Baton Rouge Ryan Airport Louisiana (M)
Louisiana	Rapides	96	28	0.3	ALEXANDRIA ESLER RE LA (A)	Alexandria Esler Regional Airport Louisiana (M)	Alexandria Esler Regional Airport Louisiana (M)
Louisiana	Red River	98	25	0.4	NATCHITOCHEES REGION LA (A)	Minden Louisiana (M)	Minden Louisiana (M)
Louisiana	Richland	96	24	0.5	MONROE 26 N LA (A)	MONROE 26 N LA (A)	MONROE 26 N LA (A)
Louisiana	Sabine	98	26	0.4	NATCHITOCHEES REGION LA (A)	Natchitoches Louisiana (M)	Natchitoches Louisiana (M)
Louisiana	St. Bernard	92	32	0.3	GULFPORT-BILOXI INT MS (A)	GULFPORT-BILOXI INT MS (A)	Biloxi Keesler Air Force Base Mississippi (M)
Louisiana	St. Charles	93	34	0.2	Houma Louisiana (M)	New Orleans Naval Air Station Louisiana (M)	New Orleans Naval Air Station Louisiana (M)
Louisiana	St. Helena	97	28	0.3	HAMMOND MUNICIPAL LA (A)	Mccomb Pike Co. Airport Mississippi (M)	Mccomb Pike Co. Airport Mississippi (M)
Louisiana	St. James	93	35	0.2	Houma Louisiana (M)	Houma Louisiana (M)	HARRY P WILLIAMS ME LA (A)
Louisiana	St. John the Baptist	97	30	0.2	HAMMOND MUNICIPAL LA (A)	HAMMOND MUNICIPAL LA (A)	HAMMOND MUNICIPAL LA (A)
Louisiana	St. Landry	94	32	0.2	LAFAYETTE REGIONAL LA (A)	Lafayette Regional Airport Louisiana (M)	LAFAYETTE 13 SE LA (A)
Louisiana	St. Martin	94	31	0.2	BATON ROUGE METROPO LA (A)	Baton Rouge Ryan Airport Louisiana (M)	Baton Rouge Ryan Airport Louisiana (M)
Louisiana	St. Mary	93	33	0.2	ACADIANA REGIONAL LA (A)	ACADIANA REGIONAL LA (A)	ACADIANA REGIONAL LA (A)
Louisiana	St. Tammany	97	28	0.3	HAMMOND MUNICIPAL LA (A)	Bogalusa Louisiana (M)	Bogalusa Louisiana (M)
Louisiana	Tangipahoa	97	28	0.3	HAMMOND MUNICIPAL LA (A)	Mccomb Pike Co. Airport Mississippi (M)	Mccomb Pike Co. Airport Mississippi (M)
Louisiana	Tensas	95	26	0.4	VICKSBURG TALLULAH LA (A)	Vicksburg City Office Mississippi (M)	VICKSBURG TALLULAH LA (A)
Louisiana	Terrebonne	93	35	0.2	Houma Louisiana (M)	Houma Louisiana (M)	HARRY P WILLIAMS ME LA (A)
Louisiana	Union	96	24	0.5	El Dorado Goodwin Field Arkansas (M)	MONROE 26 N LA (A)	MONROE 26 N LA (A)

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Louisiana	Vermilion	94	32	0.2	LAFAYETTE REGIONAL LA (A)	Lafayette Regional Airport Louisiana (M)	LAFAYETTE 13 SE LA (A)
Louisiana	Vernon	97	29	0.3	PEASON RIDGE LA (A)	PEASON RIDGE LA (A)	Leesville Fort Polk Louisiana (M)
Louisiana	Washington	97	28	0.3	HAMMOND MUNICIPAL LA (A)	Mccomb Pike Co. Airport Mississippi (M)	Mccomb Pike Co. Airport Mississippi (M)
Louisiana	Webster	98	25	0.4	SHREVEPORT DOWNTOWN LA (A)	Minden Louisiana (M)	Minden Louisiana (M)
Louisiana	West Baton Rouge	94	31	0.2	BATON ROUGE METROPO LA (A)	Baton Rouge Ryan Airport Louisiana (M)	Baton Rouge Ryan Airport Louisiana (M)
Louisiana	West Carroll	96	24	0.5	MONROE 26 N LA (A)	MONROE 26 N LA (A)	MONROE 26 N LA (A)
Louisiana	West Feliciana	94	31	0.2	BATON ROUGE METROPO LA (A)	Baton Rouge Ryan Airport Louisiana (M)	Baton Rouge Ryan Airport Louisiana (M)
Louisiana	Winn	98	26	0.4	NATCHITOCHEES REGION LA (A)	Natchitoches Louisiana (M)	Natchitoches Louisiana (M)
<b>Maine</b>							
Maine	Androscoggin	87	-4	3.9	EASTERN SLOPES REGI ME (A)	EASTERN SLOPES REGI ME (A)	Auburn-Lewiston Maine (M)
Maine	Aroostook	83	-17	7.6	HOULTON INTL ME (A)	CLAYTON LAKE ME (A)	CLAYTON LAKE ME (A)
Maine	Cumberland	87	-4	4.1	EASTERN SLOPES REGI ME (A)	EASTERN SLOPES REGI ME (A)	PORTLAND BUOY 44007 ME (A)
Maine	Franklin	83	-7	5.1	BERLIN MUNICIPAL NH (A); Berlin Municipal Airport New Hampshire (M); WATERVILLE ROBERT L ME (A)	BERLIN MUNICIPAL NH (A); Berlin Municipal Airport New Hampshire (M); WATERVILLE ROBERT L ME (A)	BERLIN MUNICIPAL NH (A); Berlin Municipal Airport New Hampshire (M); WATERVILLE ROBERT L ME (A)
Maine	Hancock	85	-5	8.5	BANGOR INTL ME (A)	OLD TOWN 2 W ME (A)	EASTERN MAINE SH BU ME (A)
Maine	Kennebec	85	-2	4.8	Lewiston Maine (M)	Lewiston Maine (M)	Rockland Knox Maine (M)
Maine	Knox	83	1	5.9	WISCASSET AP ME (A)	Wiscasset Municipal Airport Maine (M)	MATINICUS ROCK ME (A)
Maine	Lincoln	85	-2	5.9	Lewiston Maine (M)	Lewiston Maine (M)	MATINICUS ROCK ME (A)
Maine	Oxford	87	-18	92.5	EASTERN SLOPES REGI ME (A)	Mount Washington New Hampshire (M)	Mount Washington New Hampshire (M)
Maine	Penobscot	85	-9	4.9	BANGOR INTL ME (A)	Millinocket Airport Maine (M)	Millinocket Airport Maine (M)
Maine	Piscataquis	84	-9	5.4	MILLINOCKET MUNICIP ME (A)	Greenville Maine (M)	Greenville Maine (M)
Maine	Sagadahoc	85	-2	4.8	Lewiston Maine (M)	Lewiston Maine (M)	Rockland Knox Maine (M)
Maine	Somerset	81	-9	5.4	Greenville Maine (M)	Greenville Maine (M)	Greenville Maine (M)
Maine	Waldo	85	-5	5.0	BANGOR INTL ME (A)	OLD TOWN 2 W ME (A)	WEST PENOBSCOT BAY ME (A)
Maine	Washington	80	7	6.0	EASTPORT ME* (A)	EASTPORT ME (A)	EASTPORT ME (A)
Maine	York	86	0	4.1	SKYHAVEN AP NH (A)	Sanford Municipal Airport Maine (M)	PORTLAND BUOY 44007 ME (A)
<b>Maryland</b>							
Maryland	Allegany	91	10	1.6	GREATER CUMBERLAND MD (A)	Cumberland Maryland (M)	Cumberland Maryland (M)
Maryland	Anne Arundel	94	17	1.2	DAVISON AAF VA (A)	Balitimore City Office Maryland (M)	Baltimore-Washington International Airport Maryland (M)

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Maryland	Baltimore	94	12	1.7	BALTIMORE DOWNTOWN MD (A)	YORK AP PA (A)	YORK AP PA (A)
Maryland	Baltimore City	94	17	1.2	BALTIMORE DOWNTOWN MD (A)	Baltimore City Office Maryland (M)	Baltimore-Washington International Airport Maryland (M)
Maryland	Calvert	94	18	1.1	DAVISON AAF VA (A)	Fort Belvoir Newington Virginia (M)	Andrews Air Force Base District of Columbia (M)
Maryland	Caroline	91	18	1.2	DELAWARE COASTAL AP DE (A)	Dover Air Force Base Delaware (M)	Dover Air Force Base Delaware (M)
Maryland	Carroll	94	12	1.7	BALTIMORE DOWNTOWN MD (A)	Hagerstown Maryland (M)	YORK AP PA (A)
Maryland	Cecil	90	8	1.7	Lancaster Pennsylvania (M)	Lancaster Pennsylvania (M)	Lancaster Pennsylvania (M)
Maryland	Charles	94	14	1.4	DAVISON AAF VA (A)	Fredricksburg Virginia (M)	Manassas Regional Airport Virginia (M)
Maryland	Dorchester	91	18	1.1	SALISBURY-OCEAN CIT MD (A)	Salisbury Wicomico Co. Airport Maryland (M)	Salisbury Wicomico Co. Airport Maryland (M)
Maryland	Frederick	93	8	1.8	LESSBURG EXECUTIVE VA (A)	Chambersburg Pennsylvania (M)	Chambersburg Pennsylvania (M)
Maryland	Garrett	91	4	3.5	GRANT COUNTY AP WV (A)	ELKINS 21 ENE WV (A)	ELKINS 21 ENE WV (A)
Maryland	Harford	94	8	1.7	BALTIMORE DOWNTOWN MD (A)	Lancaster Pennsylvania (M)	Lancaster Pennsylvania (M)
Maryland	Howard	94	12	1.6	DAVISON AAF VA (A)	Fredrick Airport Maryland (M)	Sterling Virginia (M)
Maryland	Kent	94	17	1.2	BALTIMORE DOWNTOWN MD (A)	Baltimore City Office Maryland (M)	Dover Air Force Base Delaware (M)
Maryland	Montgomery	94	12	1.6	DAVISON AAF VA (A)	Fredrick Airport Maryland (M)	Sterling Virginia (M)
Maryland	Prince George's	94	14	1.6	DAVISON AAF VA (A)	Sterling Virginia (M)	Sterling Virginia (M)
Maryland	Queen Anne's	94	17	1.2	BALTIMORE DOWNTOWN MD (A)	Baltimore City Office Maryland (M)	Dover Air Force Base Delaware (M)
Maryland	Somerset	91	18	1.1	Melfa Accomack Co. Airport Virginia (M)	Salisbury Wicomico Co. Airport Maryland (M)	Salisbury Wicomico Co. Airport Maryland (M)
Maryland	St. Mary's	90	20	1.0	Lexington Park Patuxent River Naval Air Station Maryland (M)	WEBSTER FIELD MD (A)	Lexington Park Patuxent River Naval Air Station Maryland (M)
Maryland	Talbot	92	17	1.2	BALTIMORE-WASHINGTON MD (A)	Baltimore-Washington International Airport Maryland (M)	Baltimore-Washington International Airport Maryland (M)
Maryland	Washington	93	8	1.8	LESSBURG EXECUTIVE VA (A)	Chambersburg Pennsylvania (M)	Chambersburg Pennsylvania (M)
Maryland	Wicomico	91	18	1.1	SALISBURY-OCEAN CIT MD (A)	Salisbury Wicomico Co. Airport Maryland (M)	Salisbury Wicomico Co. Airport Maryland (M)
Maryland	Worcester	91	18	1.1	SALISBURY-OCEAN CIT MD (A)	Salisbury Wicomico Co. Airport Maryland (M)	Salisbury Wicomico Co. Airport Maryland (M)
<b>Massachusetts</b>							
Massachusetts	Barnstable	86	10	2.6	PLYMOUTH MUNICIPAL MA (A)	Plymouth Municipal Airport Massachusetts (M)	Marthas Vineyard Massachusetts (M)
Massachusetts	Berkshire	89	-3	3.2	WESTFIELD-BARNES AP MA (A)	Pittsfield Airport Massachusetts (M)	PITTSFIELD MUNICIPAL MA (A)
Massachusetts	Bristol	88	9	2.6	Norwood Memorial Massachusetts (M)	Pawtucket Rhode Island (M)	Marthas Vineyard Massachusetts (M)
Massachusetts	Dukes	87	9	2.6	TAUNTON MUNICIPAL MA (A)	Newport Rhode Island (M)	Marthas Vineyard Massachusetts (M)

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Massachusetts	Essex	90	1	3.3	NASHUA AP NH (A)	Lowell Massachusetts (M)	Isle of Shoals (Odiorne Point) New Hampshire (M)
Massachusetts	Franklin	89	-3	3.4	WESTFIELD-BARNES AP MA (A)	Pittsfield Airport Massachusetts (M)	JAFFREY-SILVER RANC NH (A)
Massachusetts	Hampden	89	-3	3.2	BRADLEY INTL CT (A)	Pittsfield Airport Massachusetts (M)	PITTSFIELD MUNICIPA MA (A)
Massachusetts	Hampshire	89	-3	3.2	BRADLEY INTL CT (A)	Pittsfield Airport Massachusetts (M)	PITTSFIELD MUNICIPA MA (A)
Massachusetts	Middlesex	90	1	3.4	NASHUA AP NH (A)	Lowell Massachusetts (M)	JAFFREY-SILVER RANC NH (A)
Massachusetts	Nantucket	82	12	2.6	Falmouth Area Massachusetts (M)	Marthas Vineyard Massachusetts (M)	Marthas Vineyard Massachusetts (M)
Massachusetts	Norfolk	89	1	2.8	FITCHBURG MUNICIPAL MA (A)	Lowell Massachusetts (M)	Worcester Regional Airport Massachusetts (M)
Massachusetts	Plymouth	88	9	2.8	Norwood Memorial Massachusetts (M)	Pawtucket Rhode Island (M)	STELLWAGEN BUOY 440 MA (A)
Massachusetts	Suffolk	90	1	2.8	NASHUA AP NH (A)	Lowell Massachusetts (M)	STELLWAGEN BUOY 440 MA (A)
Massachusetts	Worcester	90	-2	3.4	NASHUA AP NH (A)	Greenfield Massachusetts (M)	JAFFREY-SILVER RANC NH (A)
<b>Michigan</b>							
Michigan	Alcona	86	2	3.5	Oscoda Wurtsmith Air Force Base Michigan (M)	OSCODA-WURTSMITH AP MI (A)	OSCODA-WURTSMITH AP MI (A)
Michigan	Alger	83	-5	6.9	MUNISING LAKESHORE MI (A)	CHATHAM 1 SE MI (A)	STANNARD ROCK MI (A)
Michigan	Allegan	87	9	2.4	WEST MICHIGAN REGIO MI (A)	SOUTHWEST MICHIGAN MI (A)	Benton Harbor South West Michigan Regional Airport Michigan (M)
Michigan	Alpena	86	0	4.2	Oscoda Wurtsmith Air Force Base Michigan (M)	Alpena Co. Regional Airport Michigan (M)	Alpena Co. Regional Airport Michigan (M)
Michigan	Antrim	86	-3	4.4	Traverse City Cherry Capital Airport Michigan (M)	GRAYLING AAF MI (A)	GRAYLING AAF MI (A)
Michigan	Arenac	87	2	3.5	Saginaw Tri City International Airport Michigan (M)	OSCODA-WURTSMITH AP MI (A)	OSCODA-WURTSMITH AP MI (A)
Michigan	Baraga	82	-9	6.6	BIG BAY MI (A)	Marquette Co. Airport Michigan (M)	Marquette Co. Airport Michigan (M)
Michigan	Barry	88	3	2.7	Battle Creek Airport Michigan (M)	Lansing Capital City Airport Michigan (M)	Lansing Capital City Airport Michigan (M)
Michigan	Bay	88	4	2.9	SAGNAW CO HW BROWNE MI (A)	Saginaw Tri City International Airport Michigan (M)	MOUNT PLEASANT MUNI MI (A)
Michigan	Benzie	82	7	3.8	Manistee Michigan (M)	Manistee Michigan (M)	Manistee Michigan (M)
Michigan	Berrien	90	2	2.4	Valparaiso Indiana (M)	Hobart Indiana (M)	Benton Harbor South West Michigan Regional Airport Michigan (M)
Michigan	Branch	88	5	2.6	Battle Creek Airport Michigan (M)	Battle Creek Airport Michigan (M)	Battle Creek Airport Michigan (M)
Michigan	Calhoun	88	5	2.6	Battle Creek Airport Michigan (M)	Battle Creek Airport Michigan (M)	Battle Creek Airport Michigan (M)
Michigan	Cass	89	1	2.6	Goshen Airport Indiana (M)	Goshen Airport Indiana (M)	Battle Creek Airport Michigan (M)
Michigan	Charlevoix	86	-4	6.1	ANTRIM COUNTY AP MI (A)	Pellston Emmet Co. Airport Michigan (M)	Seul Choix Point / Manistique Michigan (M)
Michigan	Cheboygan	84	-5	5.2	Pellston Emmet Co. Airport Michigan (M)	Mackinack Island Michigan (M)	Mackinack Island Michigan (M)
Michigan	Chippewa	81	-6	5.6	Mackinack Island Michigan (M)	Sault St. Marie Sanderson Field Michigan (M)	Sault St. Marie Sanderson Field Michigan (M)

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Michigan	Clare	87	-2	4.1	Mount Pleasant Michigan (M)	Cadillac Wexford Co. Airport Michigan (M)	Cadillac Wexford Co. Airport Michigan (M)
Michigan	Clinton	88	3	2.9	LIVINGSTON COUNTY A MI (A)	GRATIOT COMMUNITY A MI (A)	GRATIOT COMMUNITY A MI (A)
Michigan	Crawford	86	-3	4.4	GRAYLING AAF MI (A)	GRAYLING AAF MI (A)	GRAYLING AAF MI (A)
Michigan	Delta	82	-5	5.7	CHATHAM 1 SE MI (A)	CHATHAM 1 SE MI (A)	CHATHAM 1 SE MI (A)
Michigan	Dickinson	85	-9	6.9	FORD AP MI (A)	Marquette Co. Airport Michigan (M)	MARQUETTE COUNTY AP MI (A)
Michigan	Eaton	88	3	2.7	BROOKS FIELD MI (A)	Lansing Capital City Airport Michigan (M)	Lansing Capital City Airport Michigan (M)
Michigan	Emmet	84	-5	5.2	Pellston Emmet Co. Airport Michigan (M)	Mackinack Island Michigan (M)	Mackinack Island Michigan (M)
Michigan	Genesee	88	4	2.6	Howell Michigan (M)	Flint Bishop International Airport Michigan (M)	MBS INTL MI (A)
Michigan	Gladwin	87	-1	3.9	Mount Pleasant Michigan (M)	Houghton Lake Roscommon Co. Airport Michigan (M)	Houghton Lake Roscommon Co. Airport Michigan (M)
Michigan	Gogebic	83	-14	6.3	GOGEBIC-IRON COUNTY MI (A)	KINGS LAND O'LAKES WI (M)	KINGS LAND O'LAKES WI (M)
Michigan	Grand Traverse	86	-2	4.1	Traverse City Cherry Capital Airport Michigan (M)	Cadillac Wexford Co. Airport Michigan (M)	Cadillac Wexford Co. Airport Michigan (M)
Michigan	Gratiot	88	3	3.1	OWOSSO COMMUNITY AP MI (A)	GRATIOT COMMUNITY A MI (A)	Mount Pleasant Michigan (M)
Michigan	Hillsdale	89	3	2.6	DEFIANCE MEMORIAL OH (A)	Adrian Michigan (M)	Jackson Reynolds Field Michigan (M)
Michigan	Houghton	81	-1	5.4	Hancock Houghton Co. Airport Michigan (M)	Hancock Houghton Co. Airport Michigan (M)	HOUGHTON COUNTY MEM MI (A)
Michigan	Huron	85	3	3.4	Harbor Beach Michigan (M)	HURON COUNTY MEMORI MI (A)	HURON COUNTY MEMORI MI (A)
Michigan	Ingham	88	3	2.7	Howell Michigan (M)	Lansing Capital City Airport Michigan (M)	Lansing Capital City Airport Michigan (M)
Michigan	Ionia	87	3	2.9	Lansing Capital City Airport Michigan (M)	GRATIOT COMMUNITY A MI (A)	GRATIOT COMMUNITY A MI (A)
Michigan	Iosco	86	2	3.5	Oscoda Wurtsmith Air Force Base Michigan (M)	OSCODA-WURTSMITH AP MI (A)	OSCODA-WURTSMITH AP MI (A)
Michigan	Iron	85	-14	6.3	FORD AP MI (A)	KINGS LAND O'LAKES WI (M)	KINGS LAND O'LAKES WI (M)
Michigan	Isabella	87	0	3.4	Mount Pleasant Michigan (M)	ROBEN-HOOD AP MI (A)	ROBEN-HOOD AP MI (A)
Michigan	Jackson	88	3	2.7	Adrian Michigan (M)	Lansing Capital City Airport Michigan (M)	Lansing Capital City Airport Michigan (M)
Michigan	Kalamazoo	88	5	2.6	Battle Creek Airport Michigan (M)	Battle Creek Airport Michigan (M)	Battle Creek Airport Michigan (M)
Michigan	Kalkaska	86	-3	4.4	Traverse City Cherry Capital Airport Michigan (M)	GRAYLING AAF MI (A)	GRAYLING AAF MI (A)
Michigan	Kent	87	6	2.7	GERALD R FORD INTL MI (A)	Grand Rapids Kent Co. International Airport Michigan (M)	Muskegon Co. Airport Michigan (M)
Michigan	Keweenaw	81	-4	13.7	HOUGHTON COUNTY MEM MI (A)	Passage Island (Isle Royale) Michigan (M)	Passage Island (Isle Royale) Michigan (M)
Michigan	Lake	87	-2	4.1	ROBEN-HOOD AP MI (A)	Cadillac Wexford Co. Airport Michigan (M)	Cadillac Wexford Co. Airport Michigan (M)
Michigan	Lapeer	90	4	2.8	OAKLAND TROY AP MI (A)	Flint Bishop International Airport Michigan (M)	ST CLAIR COUNTY INT MI (A)

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Michigan	Leelanau	86	5	3.6	Traverse City Cherry Capital Airport Michigan (M)	Traverse City Cherry Capital Airport Michigan (M)	CHARLEVOIX MUNICIPA MI (A)
Michigan	Lenawee	90	3	2.6	TOLEDO EXECUTIVE OH (A)	Adrian Michigan (M)	ANN ARBOR MUNICIPAL MI (A)
Michigan	Livingston	90	3	2.7	OAKLAND TROY AP MI (A)	Lansing Capital City Airport Michigan (M)	Lansing Capital City Airport Michigan (M)
Michigan	Luce	82	-1	5.0	LUCE COUNTY AP MI (A); LUCE COUNTY AP MI (A); POINT IROQUOIS MI (A)	Newberry Luce Co. Airport Michigan (M); LUCE COUNTY AP MI (A); POINT IROQUOIS MI (A)	Newberry Luce Co. Airport Michigan (M); LUCE COUNTY AP MI (A); POINT IROQUOIS MI (A)
Michigan	Mackinac	82	-5	6.1	LUCE COUNTY AP MI (A)	Mackinack Island Michigan (M)	Seul Choix Point / Manistique Michigan (M)
Michigan	Macomb	90	4	2.8	OAKLAND TROY AP MI (A)	Pontiac Michigan (M)	ST CLAIR COUNTY INT MI (A)
Michigan	Manistee	82	7	3.8	Manistee Michigan (M)	Manistee Michigan (M)	Manistee Michigan (M)
Michigan	Marquette	83	-9	6.9	Marquette Sawyer Air Force Base Michigan (M)	Marquette Co. Airport Michigan (M)	STANNARD ROCK MI (A)
Michigan	Mason	82	7	3.8	Manistee Michigan (M)	Manistee Michigan (M)	Manistee Michigan (M)
Michigan	Mecosta	87	0	3.4	Mount Pleasant Michigan (M)	ROBEN-HOOD AP MI (A)	ROBEN-HOOD AP MI (A)
Michigan	Menominee	85	-11	5.2	FORD AP MI (A)	Marinette Wisconsin (M)	DELTA COUNTY AP MI (A)
Michigan	Midland	88	3	3.1	SAGNAW CO HW BROWNE MI (A)	GRATIOT COMMUNITY A MI (A)	Mount Pleasant Michigan (M)
Michigan	Missaukee	86	-3	4.4	Traverse City Cherry Capital Airport Michigan (M)	GRAYLING AAF MI (A)	GRAYLING AAF MI (A)
Michigan	Monroe	90	2	2.6	TOLEDO EXECUTIVE OH (A)	Bowling Green Ohio (M)	ANN ARBOR MUNICIPAL MI (A)
Michigan	Montcalm	87	0	3.4	Mount Pleasant Michigan (M)	ROBEN-HOOD AP MI (A)	ROBEN-HOOD AP MI (A)
Michigan	Montmorency	86	-3	4.4	GRAYLING AAF MI (A)	GRAYLING AAF MI (A)	GRAYLING AAF MI (A)
Michigan	Muskegon	84	9	2.9	Muskegon Co. Airport Michigan (M)	Muskegon Co. Airport Michigan (M)	MUSKEGON MI (A)
Michigan	Newaygo	87	0	3.4	ROBEN-HOOD AP MI (A)	ROBEN-HOOD AP MI (A)	ROBEN-HOOD AP MI (A)
Michigan	Oakland	90	4	2.6	OAKLAND TROY AP MI (A)	Flint Bishop International Airport Michigan (M)	ANN ARBOR MUNICIPAL MI (A)
Michigan	Oceana	82	8	3.4	MASON COUNTY AP MI (A)	BIG SABLE POINT MI (A)	BIG SABLE POINT MI (A)
Michigan	Ogemaw	86	-3	4.4	Oscoda Wurtsmith Air Force Base Michigan (M)	GRAYLING AAF MI (A)	GRAYLING AAF MI (A)
Michigan	Ontonagon	80	-3	8.4	Rock Of Ages (Isle Royale) Michigan (M); ROCK OF AGES MI (A); Hancock Houghton Co. Airport Michigan (M)	Rock Of Ages (Isle Royale) Michigan (M); ROCK OF AGES MI (A); Hancock Houghton Co. Airport Michigan (M)	Rock Of Ages (Isle Royale) Michigan (M); ROCK OF AGES MI (A); Hancock Houghton Co. Airport Michigan (M)
Michigan	Osceola	87	-2	4.1	Mount Pleasant Michigan (M)	Cadillac Wexford Co. Airport Michigan (M)	Cadillac Wexford Co. Airport Michigan (M)
Michigan	Oscoda	86	-3	4.4	OSCODA-WURTSMITH AP MI (A)	GRAYLING AAF MI (A)	GRAYLING AAF MI (A)
Michigan	Otsego	86	-4	4.5	GRAYLING AAF MI (A)	Pellston Emmet Co. Airport Michigan (M)	PELLSTON REGIONAL MI (A)
Michigan	Ottawa	87	9	2.9	WEST MICHIGAN REGIO MI (A)	Muskegon Co. Airport Michigan (M)	MUSKEGON MI (A)
Michigan	Presque Isle	85	0	4.2	Alpena Co. Regional Airport Michigan (M)	Alpena Co. Regional Airport Michigan (M)	Alpena Co. Regional Airport Michigan (M)

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Michigan	Roscommon	86	-3	4.4	GRAYLING AAF MI (A)	GRAYLING AAF MI (A)	GRAYLING AAF MI (A)
Michigan	Saginaw	88	3	2.9	OWOSSO COMMUNITY AP MI (A)	GRATIOT COMMUNITY A MI (A)	MOUNT PLEASANT MUNI MI (A)
Michigan	Sanilac	87	3	3.4	Port Huron Michigan (M)	HURON COUNTY MEMORI MI (A)	HURON COUNTY MEMORI MI (A)
Michigan	Schoolcraft	83	-3	6.1	MUNISING LAKESHORE MI (A)	NAUBINWAY MI (A)	Seul Choix Point / Manistique Michigan (M)
Michigan	Shiawassee	88	3	2.9	Howell Michigan (M)	GRATIOT COMMUNITY A MI (A)	GRATIOT COMMUNITY A MI (A)
Michigan	St. Clair	90	4	2.8	OAKLAND TROY AP MI (A)	Pontiac Michigan (M)	ST CLAIR COUNTY INT MI (A)
Michigan	St. Joseph	89	1	2.6	Goshen Airport Indiana (M)	Goshen Airport Indiana (M)	Battle Creek Airport Michigan (M)
Michigan	Tuscola	88	3	3.4	SAGNAW CO HW BROWNE MI (A)	HURON COUNTY MEMORI MI (A)	HURON COUNTY MEMORI MI (A)
Michigan	Van Buren	88	5	2.6	South Bend Michiana Regional Airport Indiana (M)	South Bend Michiana Regional Airport Indiana (M)	Battle Creek Airport Michigan (M)
Michigan	Washtenaw	90	3	2.6	OAKLAND TROY AP MI (A)	Adrian Michigan (M)	ANN ARBOR MUNICIPAL MI (A)
Michigan	Wayne	90	4	2.6	OAKLAND TROY AP MI (A)	Pontiac Michigan (M)	ANN ARBOR MUNICIPAL MI (A)
Michigan	Wexford	86	-2	4.1	Traverse City Cherry Capital Airport Michigan (M)	Cadillac Wexford Co. Airport Michigan (M)	Cadillac Wexford Co. Airport Michigan (M)
<b>Minnesota</b>							
Minnesota	Aitkin	85	-15	5.4	CROW WING COUNTY AP MN (A)	Aitkin NDB Minnesota (M)	Aitkin NDB Minnesota (M)
Minnesota	Anoka	89	-11	3.7	FLYING CLOUD AP MN (A)	Cambridge Municipal Airport Minnesota (M)	RUSH CITY REGIONAL MN (A)
Minnesota	Becker	85	-18	4.7	KONSHOK FIELD MN (A)	KONSHOK FIELD MN (A)	Park Rapids Municipal Airport Minnesota (M)
Minnesota	Beltrami	84	-18	5.4	Bemidji Municipal Airport Minnesota (M)	WASKISH MUNICIPAL MN (A)	WASKISH MUNICIPAL MN (A)
Minnesota	Benton	88	-13	4.2	Princeton Municipal Airport Minnesota (M)	St Cloud Regional Airport Minnesota (M)	MORA MUNICIPAL MN (A)
Minnesota	Big Stone	89	-13	3.9	LAC QUI PARLE COUNT MN (A)	Wheaton NDB Minnesota (M)	Morris Municipal Airport Minnesota (M)
Minnesota	Blue Earth	88	-9	3.0	St. James Municipal Airport Minnesota (M)	NEW ULM MUNICIPAL MN (A)	WASECA MUNICIPAL MN (A)
Minnesota	Brown	89	-11	3.2	Redwood Falls Municipal Airport Minnesota (M)	Redwood Falls Municipal Airport Minnesota (M)	OLIVIA REGIONAL MN (A)
Minnesota	Carlton	85	-14	5.9	MOOSE LAKE CARLTON MN (A)	Duluth International Airport Minnesota (M)	CLOQUET CARLTON CO MN (A)
Minnesota	Carver	89	-10	3.3	FLYING CLOUD AP MN (A)	Hutchinson Minnesota (M)	MAPLE LAKE MUNICIPA MN (A)
Minnesota	Cass	86	-18	5.4	PEQUOT LAKES MN (A)	KONSHOK FIELD MN (A)	LONGVILLE MUNICIPAL MN (A)
Minnesota	Chippewa	89	-13	3.5	LAC QUI PARLE COUNT MN (A)	Willmar Minnesota (M)	Willmar Minnesota (M)
Minnesota	Chisago	89	-12	4.2	CRYSTAL AP MN (A)	MORA MUNICIPAL MN (A)	MORA MUNICIPAL MN (A)
Minnesota	Clay	88	-16	4.1	Fargo Hector International Airport North Dakota (M)	Detroit Lakes Minnesota (M)	DETROIT LAKES AP MN (A)
Minnesota	Clearwater	84	-19	5.2	Fosston Minnesota (M)	FOSSTON MUNICIPAL MN (A)	BEMIDJI REGIONAL MN (A)

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Minnesota	Cook	80	-14	8.8	Grand Marais Municipal Airport Minnesota* (M)	GRAND MARAIS COOK C MN (A)	Tofte Minnesota (M)
Minnesota	Cottonwood	89	-11	3.2	Redwood Falls Municipal Airport Minnesota (M)	Redwood Falls Municipal Airport Minnesota (M)	Worthington Minnesota (M)
Minnesota	Crow Wing	87	-18	5.4	Little Falls Minnesota (M)	PEQUOT LAKES MN (A)	LONGVILLE MUNICIPAL MN (A)
Minnesota	Dakota	89	-9	3.1	FLYING CLOUD AP MN (A)	Faribault Municipal Airport Minnesota (M)	AIRLAKE AP MN (A)
Minnesota	Dodge	88	-9	3.3	FARIBAULT MUNICIPAL MN (A)	Faribault Municipal Airport Minnesota (M)	Rochester International Airport Minnesota (M)
Minnesota	Douglas	87	-17	5.3	GLENWOOD MUNICIPAL MN (A)	WADENA MUNICIPAL MN (A)	WADENA MUNICIPAL MN (A)
Minnesota	Faribault	88	-9	3.0	St. James Municipal Airport Minnesota (M)	MANKATO MUNICIPAL MN (A)	WASECA MUNICIPAL MN (A)
Minnesota	Fillmore	89	-9	3.3	Winona Municipal Airport Minnesota (M)	Rochester International Airport Minnesota (M)	Rochester International Airport Minnesota (M)
Minnesota	Freeborn	88	-9	3.1	Mason City Municipal Airport Iowa (M)	OWATONNA DEGNER REG MN (A)	DODGE CENTER MUNICI MN (A)
Minnesota	Goodhue	89	-9	3.3	RED WING REGIONAL MN (A)	Faribault Municipal Airport Minnesota (M)	Rochester International Airport Minnesota (M)
Minnesota	Grant	87	-16	3.9	GLENWOOD MUNICIPAL MN (A)	HARRY STERN AP ND (A)	Morris Municipal Airport Minnesota (M)
Minnesota	Hennepin	89	-11	3.6	FLYING CLOUD AP MN (A)	Cambridge Municipal Airport Minnesota (M)	Cambridge Municipal Airport Minnesota (M)
Minnesota	Houston	89	-6	2.9	Winona Municipal Airport Minnesota (M)	La Crosse Municipal Airport Wisconsin (M)	FILLMORE COUNTY AP MN (A)
Minnesota	Hubbard	85	-18	5.4	KONSHOK FIELD MN (A)	KONSHOK FIELD MN (A)	LONGVILLE MUNICIPAL MN (A)
Minnesota	Isanti	89	-13	4.2	CRYSTAL AP MN (A)	St Cloud Regional Airport Minnesota (M)	MORA MUNICIPAL MN (A)
Minnesota	Itasca	83	-18	6.4	RANGE REGIONAL MN (A)	Hibbing Chisholm-Hibbing Airport Minnesota (M)	Hibbing Chisholm-Hibbing Airport Minnesota (M)
Minnesota	Jackson	89	-8	3.2	Spencer Iowa (M)	Spencer Iowa (M)	Worthington Minnesota (M)
Minnesota	Kanabec	88	-13	5.0	Princeton Municipal Airport Minnesota (M)	SANDSTONE 6 W MN (A)	MOOSE LAKE CARLTON MN (A)
Minnesota	Kandiyohi	88	-13	3.8	Montevideo Minnesota (M)	Willmar Minnesota (M)	PAYNESVILLE MUNICIP MN (A)
Minnesota	Kittson	85	-20	5.1	Hallock Minnesota (M)	Hallock Minnesota (M)	Hallock Minnesota (M)
Minnesota	Koochiching	83	-21	6.2	International Falls International Airport Minnesota (M)	International Falls International Airport Minnesota (M)	FALLS INTL MN (A)
Minnesota	Lac qui Parle	89	-12	3.4	LAC QUI PARLE COUNT MN (A)	BENSON MUNICIPAL MN (A)	APPLETON MUNICIPAL MN (A)
Minnesota	Lake	82	-20	8.8	Ely Municipal Airport Minnesota (M)	Ely Municipal Airport Minnesota (M)	Tofte Minnesota (M)
Minnesota	Lake of the Woods	84	-20	5.7	ROSEAU MUNICIPAL MN (A)	Roseau Municipal Airport Minnesota (M)	WARROAD INTL MEMORI MN (A)
Minnesota	Le Sueur	89	-9	3.1	FLYING CLOUD AP MN (A)	Faribault Municipal Airport Minnesota (M)	AIRLAKE AP MN (A)
Minnesota	Lincoln	89	-10	3.6	LAC QUI PARLE COUNT MN (A)	Brookings South Dakota (M)	Brookings South Dakota (M)
Minnesota	Lyon	89	-11	3.1	Redwood Falls Municipal Airport Minnesota (M)	Redwood Falls Municipal Airport Minnesota (M)	GRANITE FALLS MUNIC MN (A)

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Minnesota	Mahnomen	84	-19	4.9	Detroit Lakes Minnesota (M)	FOSSTON MUNICIPAL MN (A)	Fosston Minnesota (M)
Minnesota	Marshall	85	-21	6.0	Hallock Minnesota (M)	GOODRIDGE 12 NNW MN (A)	GOODRIDGE 12 NNW MN (A)
Minnesota	Martin	88	-8	2.9	Estherville Municipal Airport Iowa (M)	WINDOM MUNICIPAL MN (A)	Fairmont Municipal Airport Minnesota (M)
Minnesota	McLeod	89	-10	3.3	FLYING CLOUD AP MN (A)	Hutchinson Minnesota (M)	MAPLE LAKE MUNICIPAL MN (A)
Minnesota	Meeker	88	-13	3.8	Hutchinson Minnesota (M)	Willmar Minnesota (M)	PAYNESVILLE MUNICIPAL MN (A)
Minnesota	Mille Lacs	88	-13	4.6	Princeton Municipal Airport Minnesota (M)	St Cloud Regional Airport Minnesota (M)	SANDSTONE 6 W MN (A)
Minnesota	Morrison	87	-15	4.2	Little Falls Minnesota (M)	STAPLES MUNICIPAL MN (A)	STAPLES MUNICIPAL MN (A)
Minnesota	Mower	87	-9	3.3	ALBERT LEA MUNICIPAL MN (A)	Rochester International Airport Minnesota (M)	Rochester International Airport Minnesota (M)
Minnesota	Murray	88	-9	3.2	Marshall Marshall Municipal Airport Ryan Field Minnesota (M)	PIPESTONE MUNICIPAL MN (A)	Worthington Minnesota (M)
Minnesota	Nicollet	88	-10	3.2	St. James Municipal Airport Minnesota (M)	Hutchinson Minnesota (M)	HUTCHINSON MUNICIPAL MN (A)
Minnesota	Nobles	90	-9	3.2	SHELDON MUNICIPAL IA (A)	PIPESTONE MUNICIPAL MN (A)	Worthington Minnesota (M)
Minnesota	Norman	88	-19	4.9	Fargo Hector International Airport North Dakota (M)	Crookston Municipal Airport Minnesota (M)	Fosston Minnesota (M)
Minnesota	Olmsted	89	-9	3.3	Winona Municipal Airport Minnesota (M)	Rochester International Airport Minnesota (M)	Rochester International Airport Minnesota (M)
Minnesota	Otter Tail	86	-17	5.3	Fergus Falls Minnesota (M)	WADENA MUNICIPAL MN (A)	WADENA MUNICIPAL MN (A)
Minnesota	Pennington	84	-21	6.0	Crookston Municipal Airport Minnesota (M)	GOODRIDGE 12 NNW MN (A)	GOODRIDGE 12 NNW MN (A)
Minnesota	Pine	86	-13	5.0	Mora Municipal Airport Minnesota (M)	SANDSTONE 6 W MN (A)	MOOSE LAKE CARLTON MN (A)
Minnesota	Pipestone	89	-21	5.0	Sioux Falls Foss Field South Dakota (M)	SIOUX FALLS CLIMATE SD (A)	SIOUX FALLS CLIMATE SD (A)
Minnesota	Polk	87	-19	5.1	Grand Forks International Airport North Dakota (M)	Crookston Municipal Airport Minnesota (M)	THIEF RIVER FALLS R MN (A)
Minnesota	Pope	88	-14	3.9	Benson Municipal Airport Minnesota (M)	Alexandria Municipal Airport Minnesota (M)	Morris Municipal Airport Minnesota (M)
Minnesota	Ramsey	89	-11	3.6	FLYING CLOUD AP MN (A)	Cambridge Municipal Airport Minnesota (M)	Cambridge Municipal Airport Minnesota (M)
Minnesota	Red Lake	84	-21	6.0	Crookston Municipal Airport Minnesota (M)	GOODRIDGE 12 NNW MN (A)	GOODRIDGE 12 NNW MN (A)
Minnesota	Redwood	89	-11	3.2	Redwood Falls Municipal Airport Minnesota (M)	Redwood Falls Municipal Airport Minnesota (M)	OLIVIA REGIONAL MN (A)
Minnesota	Renville	89	-13	3.5	Redwood Falls Municipal Airport Minnesota (M)	Willmar Minnesota (M)	Willmar Minnesota (M)
Minnesota	Rice	89	-9	3.1	FLYING CLOUD AP MN (A)	Faribault Municipal Airport Minnesota (M)	AIRLAKE AP MN (A)
Minnesota	Rock	90	-21	5.0	SHELDON MUNICIPAL IA (A)	SIOUX FALLS CLIMATE SD (A)	SIOUX FALLS CLIMATE SD (A)
Minnesota	Roseau	84	-21	6.0	ROSEAU MUNICIPAL MN (A)	GOODRIDGE 12 NNW MN (A)	GOODRIDGE 12 NNW MN (A)
Minnesota	Scott	89	-9	3.1	FLYING CLOUD AP MN (A)	Faribault Municipal Airport Minnesota (M)	AIRLAKE AP MN (A)

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Minnesota	Sherburne	89	-13	4.2	CRYSTAL AP MN (A)	St Cloud Regional Airport Minnesota (M)	MORA MUNICIPAL MN (A)
Minnesota	Sibley	88	-10	3.3	New Ulm Municipal Airport Minnesota (M)	Hutchinson Minnesota (M)	Litchfield Municipal Airport Minnesota (M)
Minnesota	St. Louis	83	-21	6.5	Virginia Minnesota (M)	Virginia Minnesota (M)	ELY MUNICIPAL MN (A)
Minnesota	Stearns	87	-13	4.0	Little Falls Minnesota (M)	Willmar Minnesota (M)	LITTLE FALLS MORRIS MN (A)
Minnesota	Steele	88	-9	3.3	FARIBAULT MUNICIPAL MN (A)	Faribault Municipal Airport Minnesota (M)	Rochester International Airport Minnesota (M)
Minnesota	Stevens	89	-14	3.9	ORTONVILLE MUNICIPA MN (A)	Alexandria Municipal Airport Minnesota (M)	Morris Municipal Airport Minnesota (M)
Minnesota	Swift	89	-13	3.9	LAC QUI PARLE COUNT MN (A)	Morris Municipal Airport Minnesota (M)	Morris Municipal Airport Minnesota (M)
Minnesota	Todd	87	-17	5.3	Little Falls Minnesota (M)	WADENA MUNICIPAL MN (A)	WADENA MUNICIPAL MN (A)
Minnesota	Traverse	89	-16	3.9	Lidgerwood North Dakota (M)	HARRY STERN AP ND (A)	Morris Municipal Airport Minnesota (M)
Minnesota	Wabasha	89	-9	3.3	Winona Municipal Airport Minnesota (M)	Rochester International Airport Minnesota (M)	Rochester International Airport Minnesota (M)
Minnesota	Wadena	86	-18	5.3	PEQUOT LAKES MN (A)	KONSHOK FIELD MN (A)	WADENA MUNICIPAL MN (A)
Minnesota	Waseca	88	-9	3.1	FARIBAULT MUNICIPAL MN (A)	Faribault Municipal Airport Minnesota (M)	DODGE CENTER MUNICI MN (A)
Minnesota	Washington	89	-11	3.5	FLYING CLOUD AP MN (A)	CAMBRIDGE MUNICIPAL MN (A)	NEW RICHMOND MUNICI WI (A)
Minnesota	Watonwan	88	-9	3.0	St. James Municipal Airport Minnesota (M)	NEW ULM MUNICIPAL MN (A)	Mankato Minnesota (M)
Minnesota	Wilkin	89	-16	3.8	Lidgerwood North Dakota (M)	HARRY STERN AP ND (A)	HARRY STERN AP ND (A)
Minnesota	Winona	89	-9	3.3	Winona Municipal Airport Minnesota (M)	Rochester International Airport Minnesota (M)	Rochester International Airport Minnesota (M)
Minnesota	Wright	89	-13	3.8	FLYING CLOUD AP MN (A)	St Cloud Regional Airport Minnesota (M)	PAYNESVILLE MUNICIP MN (A)
Minnesota	Yellow Medicine	89	-11	3.4	LAC QUI PARLE COUNT MN (A)	APPLETON MUNICIPAL MN (A)	APPLETON MUNICIPAL MN (A)
<b>Mississippi</b>							
Mississippi	Adams	92	27	0.4	NATCHEZ-ADAMS COUNT MS (A)	NATCHEZ-ADAMS COUNT MS (A)	Natchez Hardy Mississippi (M)
Mississippi	Alcorn	94	22	0.6	Tupelo C D Lemons Airport Mississippi (M); TUPELO REGIONAL MS (A); MCKELLAR-SIPES REGI TN (A)	Tupelo C D Lemons Airport Mississippi (M); TUPELO REGIONAL MS (A); MCKELLAR-SIPES REGI TN (A)	Tupelo C D Lemons Airport Mississippi (M); TUPELO REGIONAL MS (A); MCKELLAR-SIPES REGI TN (A)
Mississippi	Amite	94	28	0.3	JOHN E LEWIS FIELD MS (A)	Mccomb Pike Co. Airport Mississippi (M)	Mccomb Pike Co. Airport Mississippi (M)
Mississippi	Attala	95	25	0.4	GREENWOOD-LEFLORE A MS (A)	Greenwood Leflore Airport Mississippi (M)	Greenwood Leflore Airport Mississippi (M)
Mississippi	Benton	94	22	0.5	Tupelo C D Lemons Airport Mississippi (M); TUPELO REGIONAL MS (A); Memphis International Airport Tennessee (M)	Tupelo C D Lemons Airport Mississippi (M); TUPELO REGIONAL MS (A); Memphis International Airport Tennessee (M)	Tupelo C D Lemons Airport Mississippi (M); TUPELO REGIONAL MS (A); Memphis International Airport Tennessee (M)
Mississippi	Bolivar	96	19	0.6	MID DELTA REGIONAL MS (A)	Clarksdale Mississippi (M)	Clarksdale Mississippi (M)

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Mississippi	Calhoun	94	23	0.6	Tupelo C D Lemons Airport Mississippi (M)	Tupelo C D Lemons Airport Mississippi (M)	Tupelo C D Lemons Airport Mississippi (M)
Mississippi	Carroll	95	25	0.4	GREENWOOD-LEFLORE A MS (A)	Greenwood Leflore Airport Mississippi (M)	Greenwood Leflore Airport Mississippi (M)
Mississippi	Chickasaw	95	23	0.6	COLUMBUS AFB MS (A)	Tupelo C D Lemons Airport Mississippi (M)	Tupelo C D Lemons Airport Mississippi (M)
Mississippi	Choctaw	94	24	0.5	GOLDEN TRIANGLE REG MS (A)	GOLDEN TRIANGLE REG MS (A)	Golden Triangle Regional Airport Mississippi (M)
Mississippi	Claiborne	95	26	0.4	VICKSBURG TALLULAH LA (A)	Vicksburg City Office Mississippi (M)	VICKSBURG TALLULAH LA (A)
Mississippi	Clarke	95	25	0.5	Meridian NAAS Mississippi (M)	NEWTON 5 ENE MS (A)	NEWTON 5 ENE MS (A)
Mississippi	Clay	95	24	0.5	COLUMBUS AFB MS (A)	GOLDEN TRIANGLE REG MS (A)	Golden Triangle Regional Airport Mississippi (M)
Mississippi	Coahoma	96	19	0.6	TUNICA MUNICIPAL MS (A)	Clarksdale Mississippi (M)	TUNICA MUNICIPAL MS (A)
Mississippi	Copiah	95	26	0.4	JACKSON INTL MS (A)	Jackson International Airport Mississippi (M)	Jackson International Airport Mississippi (M)
Mississippi	Covington	95	27	0.4	HATTIESBURG MUNICIP MS (A)	Laurel Mississippi (M)	Laurel Mississippi (M)
Mississippi	DeSoto	97	20	0.6	MILLINGTON MUNICIPA TN (A)	Millington Municipal Airport Tennessee (M)	WEST MEMPHIS MUNICI AR (A)
Mississippi	Forrest	95	27	0.4	HATTIESBURG MUNICIP MS (A)	Laurel Mississippi (M)	Laurel Mississippi (M)
Mississippi	Franklin	94	27	0.4	JOHN E LEWIS FIELD MS (A)	NATCHEZ-ADAMS COUNT MS (A)	Natchez Hardy Mississippi (M)
Mississippi	George	93	29	0.3	Mobile City Office Alabama (M)	Mobile City Office Alabama (M)	TRENT LOTT INTL MS (A)
Mississippi	Greene	95	28	0.3	HATTIESBURG MUNICIP MS (A)	Hattiesburg1 Mississippi (M)	Hattiesburg1 Mississippi (M)
Mississippi	Grenada	95	25	0.4	GREENWOOD-LEFLORE A MS (A)	Greenwood Leflore Airport Mississippi (M)	Greenwood Leflore Airport Mississippi (M)
Mississippi	Hancock	93	28	0.3	Bogalusa Louisiana (M)	Bogalusa Louisiana (M)	Bogalusa Louisiana (M)
Mississippi	Harrison	93	29	0.3	KEESLER AFB MS (A)	TRENT LOTT INTL MS (A)	TRENT LOTT INTL MS (A)
Mississippi	Hinds	95	26	0.4	VICKSBURG TALLULAH LA (A)	Vicksburg City Office Mississippi (M)	Jackson International Airport Mississippi (M)
Mississippi	Holmes	95	25	0.4	GREENWOOD-LEFLORE A MS (A)	Greenwood Leflore Airport Mississippi (M)	Greenwood Leflore Airport Mississippi (M)
Mississippi	Humphreys	96	20	0.5	MID DELTA REGIONAL MS (A)	Greenville Air Force Base Mississippi (M)	Greenville Air Force Base Mississippi (M)
Mississippi	Issaquena	95	26	0.4	VICKSBURG TALLULAH LA (A)	Vicksburg City Office Mississippi (M)	VICKSBURG TALLULAH LA (A)
Mississippi	Itawamba	94	20	0.7	Tupelo C D Lemons Airport Mississippi (M)	RUSSELLVILLE 4 SSE AL (A)	RUSSELLVILLE 4 SSE AL (A)
Mississippi	Jackson	93	29	0.3	Mobile City Office Alabama (M)	Mobile City Office Alabama (M)	TRENT LOTT INTL MS (A)
Mississippi	Jasper	94	25	0.5	Laurel Mississippi (M)	NEWTON 5 ENE MS (A)	NEWTON 5 ENE MS (A)
Mississippi	Jefferson	92	27	0.4	NATCHEZ-ADAMS COUNT MS (A)	NATCHEZ-ADAMS COUNT MS (A)	Natchez Hardy Mississippi (M)
Mississippi	Jefferson Davis	95	27	0.3	HATTIESBURG MUNICIP MS (A)	HATTIESBURG-LAUREL MS (A)	HATTIESBURG-LAUREL MS (A)
Mississippi	Jones	95	27	0.4	HATTIESBURG MUNICIP MS (A)	Laurel Mississippi (M)	Laurel Mississippi (M)

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Mississippi	Kemper	95	25	0.5	Meridian NAAS Mississippi (M)	NEWTON 5 ENE MS (A)	NEWTON 5 ENE MS (A)
Mississippi	Lafayette	95	24	0.6	TUPELO REGIONAL MS (A); Tupelo C D Lemons Airport Mississippi (M); TUNICA MUNICIPAL MS (A)	TUPELO REGIONAL MS (A); Tupelo C D Lemons Airport Mississippi (M); TUNICA MUNICIPAL MS (A)	TUPELO REGIONAL MS (A); Tupelo C D Lemons Airport Mississippi (M); TUNICA MUNICIPAL MS (A)
Mississippi	Lamar	95	27	0.3	HATTIESBURG MUNICIP MS (A)	HATTIESBURG-LAUREL MS (A)	HATTIESBURG-LAUREL MS (A)
Mississippi	Lauderdale	95	25	0.5	Meridian NAAS Mississippi (M)	NEWTON 5 ENE MS (A)	NEWTON 5 ENE MS (A)
Mississippi	Lawrence	94	28	0.3	JOHN E LEWIS FIELD MS (A)	Mccomb Pike Co. Airport Mississippi (M)	Mccomb Pike Co. Airport Mississippi (M)
Mississippi	Leake	93	25	0.5	NEWTON 5 ENE MS (A)	NEWTON 5 ENE MS (A)	NEWTON 5 ENE MS (A)
Mississippi	Lee	94	23	0.6	Tupelo C D Lemons Airport Mississippi (M)	Tupelo C D Lemons Airport Mississippi (M)	Tupelo C D Lemons Airport Mississippi (M)
Mississippi	Leflore	96	25	0.4	MID DELTA REGIONAL MS (A)	Greenwood Leflore Airport Mississippi (M)	MID DELTA REGIONAL MS (A)
Mississippi	Lincoln	94	28	0.3	JOHN E LEWIS FIELD MS (A)	Mccomb Pike Co. Airport Mississippi (M)	Mccomb Pike Co. Airport Mississippi (M)
Mississippi	Lowndes	95	24	0.5	COLUMBUS AFB MS (A)	GOLDEN TRIANGLE REG MS (A)	Golden Triangle Regional Airport Mississippi (M)
Mississippi	Madison	95	26	0.4	JACKSON INTL MS (A)	Jackson International Airport Mississippi (M)	Jackson International Airport Mississippi (M)
Mississippi	Marion	95	27	0.3	HATTIESBURG MUNICIP MS (A)	HATTIESBURG-LAUREL MS (A)	HATTIESBURG-LAUREL MS (A)
Mississippi	Marshall	95	22	0.5	MEMPHIS INTL TN (A)	Memphis International Airport Tennessee (M)	Memphis International Airport Tennessee (M)
Mississippi	Monroe	95	23	0.6	COLUMBUS AFB MS (A)	Tupelo C D Lemons Airport Mississippi (M)	Tupelo C D Lemons Airport Mississippi (M)
Mississippi	Montgomery	95	25	0.4	GREENWOOD-LEFLORE A MS (A)	Greenwood Leflore Airport Mississippi (M)	Greenwood Leflore Airport Mississippi (M)
Mississippi	Neshoba	95	25	0.5	Meridian NAAS Mississippi (M)	NEWTON 5 ENE MS (A)	NEWTON 5 ENE MS (A)
Mississippi	Newton	95	25	0.5	Meridian NAAS Mississippi (M)	NEWTON 5 ENE MS (A)	NEWTON 5 ENE MS (A)
Mississippi	Noxubee	95	24	0.5	Meridian NAAS Mississippi (M)	GOLDEN TRIANGLE REG MS (A)	Golden Triangle Regional Airport Mississippi (M)
Mississippi	Oktibbeha	95	24	0.5	COLUMBUS AFB MS (A)	GOLDEN TRIANGLE REG MS (A)	Golden Triangle Regional Airport Mississippi (M)
Mississippi	Panola	96	19	0.6	TUNICA MUNICIPAL MS (A)	Clarksdale Mississippi (M)	TUNICA MUNICIPAL MS (A)
Mississippi	Pearl River	93	28	0.3	Bogalusa Louisiana (M)	Bogalusa Louisiana (M)	Bogalusa Louisiana (M)
Mississippi	Perry	95	27	0.4	HATTIESBURG MUNICIP MS (A)	Laurel Mississippi (M)	Laurel Mississippi (M)
Mississippi	Pike	94	28	0.3	JOHN E LEWIS FIELD MS (A)	Mccomb Pike Co. Airport Mississippi (M)	Mccomb Pike Co. Airport Mississippi (M)
Mississippi	Pontotoc	94	23	0.6	Tupelo C D Lemons Airport Mississippi (M)	Tupelo C D Lemons Airport Mississippi (M)	Tupelo C D Lemons Airport Mississippi (M)
Mississippi	Prentiss	94	23	0.6	Tupelo C D Lemons Airport Mississippi (M)	Tupelo C D Lemons Airport Mississippi (M)	Tupelo C D Lemons Airport Mississippi (M)
Mississippi	Quitman	96	19	0.6	TUNICA MUNICIPAL MS (A)	Clarksdale Mississippi (M)	TUNICA MUNICIPAL MS (A)
Mississippi	Rankin	95	26	0.4	JACKSON INTL MS (A)	Jackson International Airport Mississippi (M)	Jackson International Airport Mississippi (M)

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Mississippi	Scott	95	25	0.5	JACKSON INTL MS (A)	NEWTON 5 ENE MS (A)	NEWTON 5 ENE MS (A)
Mississippi	Sharkey	95	26	0.4	VICKSBURG TALLULAH LA (A)	Vicksburg City Office Mississippi (M)	VICKSBURG TALLULAH LA (A)
Mississippi	Simpson	95	26	0.4	JACKSON INTL MS (A)	Jackson International Airport Mississippi (M)	Jackson International Airport Mississippi (M)
Mississippi	Smith	95	25	0.5	JACKSON INTL MS (A)	NEWTON 5 ENE MS (A)	NEWTON 5 ENE MS (A)
Mississippi	Stone	95	28	0.3	HATTIESBURG MUNICIPAL MS (A)	Hattiesburg1 Mississippi (M)	Hattiesburg1 Mississippi (M)
Mississippi	Sunflower	96	20	0.5	MID DELTA REGIONAL MS (A)	Greenville Air Force Base Mississippi (M)	Greenville Air Force Base Mississippi (M)
Mississippi	Tallahatchie	95	19	0.6	GREENWOOD-LEFLORE A MS (A)	Clarksdale Mississippi (M)	Clarksdale Mississippi (M)
Mississippi	Tate	96	22	0.6	TUNICA MUNICIPAL MS (A)	Memphis International Airport Tennessee (M)	WEST MEMPHIS MUNICI AR (A)
Mississippi	Tippah	94	23	0.6	Tupelo C D Lemons Airport Mississippi (M)	Tupelo C D Lemons Airport Mississippi (M)	Tupelo C D Lemons Airport Mississippi (M)
Mississippi	Tishomingo	94	20	0.7	Florence Airport Alabama (M)	RUSSELLVILLE 4 SSE AL (A)	RUSSELLVILLE 4 SSE AL (A)
Mississippi	Tunica	96	19	0.6	TUNICA MUNICIPAL MS (A)	Clarksdale Mississippi (M)	WEST MEMPHIS MUNICI AR (A)
Mississippi	Union	94	23	0.6	Tupelo C D Lemons Airport Mississippi (M)	Tupelo C D Lemons Airport Mississippi (M)	Tupelo C D Lemons Airport Mississippi (M)
Mississippi	Walthall	94	28	0.3	JOHN E LEWIS FIELD MS (A)	Mccomb Pike Co. Airport Mississippi (M)	Mccomb Pike Co. Airport Mississippi (M)
Mississippi	Warren	95	26	0.4	VICKSBURG TALLULAH LA (A)	Vicksburg City Office Mississippi (M)	VICKSBURG TALLULAH LA (A)
Mississippi	Washington	96	20	0.5	MID DELTA REGIONAL MS (A)	Greenville Air Force Base Mississippi (M)	Greenville Air Force Base Mississippi (M)
Mississippi	Wayne	94	27	0.4	Laurel Mississippi (M)	Laurel Mississippi (M)	Laurel Mississippi (M)
Mississippi	Webster	94	25	0.5	Golden Triangle Regional Airport Mississippi (M); GOLDEN TRIANGLE REG MS (A); GREENWOOD-LEFLORE A MS (A)	Golden Triangle Regional Airport Mississippi (M); GOLDEN TRIANGLE REG MS (A); GREENWOOD-LEFLORE A MS (A)	Golden Triangle Regional Airport Mississippi (M); GOLDEN TRIANGLE REG MS (A); GREENWOOD-LEFLORE A MS (A)
Mississippi	Wilkinson	92	27	0.4	NATCHEZ-ADAMS COUNT MS (A)	NATCHEZ-ADAMS COUNT MS (A)	Natchez Hardy Mississippi (M)
Mississippi	Winston	94	24	0.5	GOLDEN TRIANGLE REG MS (A)	GOLDEN TRIANGLE REG MS (A)	Golden Triangle Regional Airport Mississippi (M)
Mississippi	Yalobusha	95	23	0.5	Greenwood Leflore Airport Mississippi (M); GREENWOOD-LEFLORE A MS (A); Clarksdale Mississippi (M)	Greenwood Leflore Airport Mississippi (M); GREENWOOD-LEFLORE A MS (A); Clarksdale Mississippi (M)	Greenwood Leflore Airport Mississippi (M); GREENWOOD-LEFLORE A MS (A); Clarksdale Mississippi (M)
Mississippi	Yazoo	95	26	0.4	JACKSON INTL MS (A)	Jackson International Airport Mississippi (M)	Jackson International Airport Mississippi (M)
<b>Missouri</b>							
Missouri	Adair	91	1	1.6	Kirksville Regional Airport Missouri (M)	Kirksville Regional Airport Missouri (M)	KIRKSVILLE REGIONAL MO (A)
Missouri	Andrew	93	2	1.4	Atchison Kansas (M)	Atchison Kansas (M)	Atchison Kansas (M)
Missouri	Atchison	93	1	1.7	SHENANDOAH MUNICIPAL IA (A)	SCHENCK FIELD IA (A)	SCHENCK FIELD IA (A)

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Missouri	Audrain	94	3	1.6	Moberly Missouri (M)	Moberly Missouri (M)	Mexico Missouri (M)
Missouri	Barry	94	15	1.0	NORTHWEST ARKANSAS AR (A)	NORTHWEST ARKANSAS AR (A)	Bentonville Arkansas (M)
Missouri	Barton	95	11	1.1	JOPLIN REGIONAL MO (A)	JOPLIN 24 N MO (A)	JOPLIN 24 N MO (A)
Missouri	Bates	93	9	1.1	JOHNSON COUNTY EXEC KS (A); Olathe Johnson Co. Airport Kansas (M); LEE'S SUMMIT MUNICI MO (M)	JOHNSON COUNTY EXEC KS (A); Olathe Johnson Co. Airport Kansas (M); LEE'S SUMMIT MUNICI MO (M)	JOHNSON COUNTY EXEC KS (A); Olathe Johnson Co. Airport Kansas (M); LEE'S SUMMIT MUNICI MO (M)
Missouri	Benton	94	8	1.2	WHITEMAN AFB MO (A)	Warrensburg Whiteman Air Force Base Missouri (M)	WHITEMAN AFB MO (A)
Missouri	Bollinger	95	8	1.4	Sikeston Missouri (M)	Farmington Airport Missouri (M)	Farmington Airport Missouri (M)
Missouri	Boone	94	3	1.6	Moberly Missouri (M)	Moberly Missouri (M)	Mexico Missouri (M)
Missouri	Buchanan	95	2	1.4	CR WHEELER DOWNTOWN MO (A)	Atchison Kansas (M)	Atchison Kansas (M)
Missouri	Butler	93	16	0.9	Siloam Spring Arkansas (M)	Siloam Spring Arkansas (M)	Siloam Spring Arkansas (M)
Missouri	Caldwell	93	5	1.4	AGRICULTURAL SCIENC MO (A)	AGRICULTURAL SCIENC MO (A)	AGRICULTURAL SCIENC MO (A)
Missouri	Callaway	94	4	1.6	Mexico Missouri (M)	Mexico Missouri (M)	Mexico Missouri (M)
Missouri	Camden	93	11	1.1	LEE C FINE MEMORIAL MO (A)	LEE C FINE MEMORIAL MO (A)	LEE C FINE MEMORIAL MO (A)
Missouri	Cape Girardeau	95	7	1.3	Sikeston Missouri (M)	Carbondale Illinois (M)	Carbondale Illinois (M)
Missouri	Carroll	93	4	1.5	AGRICULTURAL SCIENC MO (A)	CHILLICOTHE 22 ENE MO (A)	CHILLICOTHE 22 ENE MO (A)
Missouri	Carter	93	16	0.9	Siloam Spring Arkansas (M)	Siloam Spring Arkansas (M)	Siloam Spring Arkansas (M)
Missouri	Cass	95	9	1.2	NEW CENTURY AIRCENT KS (A)	Kansas City Downtown Airport Missouri (M)	NEW CENTURY AIRCENT KS (A)
Missouri	Cedar	93	11	1.1	Springfield Regional Airport Missouri (M); SPRINGFIELD-BRANSON MO (A); JOPLIN 24 N MO (A)	Springfield Regional Airport Missouri (M); SPRINGFIELD-BRANSON MO (A); JOPLIN 24 N MO (A)	Springfield Regional Airport Missouri (M); SPRINGFIELD-BRANSON MO (A); JOPLIN 24 N MO (A)
Missouri	Chariton	94	3	1.5	Moberly Missouri (M)	Moberly Missouri (M)	CHILLICOTHE 22 ENE MO (A)
Missouri	Christian	93	11	1.1	SPRINGFIELD-BRANSON MO (A)	Springfield Regional Airport Missouri (M)	Springfield Regional Airport Missouri (M)
Missouri	Clark	91	2	1.7	Keokuk Municipal Airport Iowa (M)	MOUNT PLEASANT MUNI IA (A)	MOUNT PLEASANT MUNI IA (A)
Missouri	Clay	95	5	1.3	CR WHEELER DOWNTOWN MO (A)	Kansas City International Airport Missouri (M)	Kansas City International Airport Missouri (M)
Missouri	Clinton	95	2	1.4	CR WHEELER DOWNTOWN MO (A)	Atchison Kansas (M)	Atchison Kansas (M)
Missouri	Cole	93	7	1.3	LEE C FINE MEMORIAL MO (A)	Columbia Regional Airport Missouri (M)	Columbia Regional Airport Missouri (M)
Missouri	Cooper	94	7	1.3	SEDALIA MEMORIAL MO (A)	Columbia Regional Airport Missouri (M)	Columbia Regional Airport Missouri (M)
Missouri	Crawford	93	10	1.3	ROLLA NATL MO (A)	Rolla National Airport Missouri (M)	SALEM 10 W MO (A)
Missouri	Dade	94	11	1.1	JOPLIN 24 N MO (A)	Springfield Regional Airport Missouri (M)	Springfield Regional Airport Missouri (M)

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Missouri	Dallas	93	11	1.1	LEE C FINE MEMORIAL MO (A)	Springfield Regional Airport Missouri (M)	LEE C FINE MEMORIAL MO (A)
Missouri	Daviess	93	4	1.5	SPICKARD MO (A)	SPICKARD MO (A)	SPICKARD MO (A)
Missouri	DeKalb	92	5	1.4	ROSECRANS MEMORIAL MO (A)	ROSECRANS MEMORIAL MO (A)	ROSECRANS MEMORIAL MO (A)
Missouri	Dent	93	10	1.3	ROLLA NATL MO (A)	Rolla Natlional Airport Missouri (M)	SALEM 10 W MO (A)
Missouri	Douglas	92	14	1.0	WEST PLAINS MUNICIP MO (A)	WEST PLAINS MUNICIP MO (A)	WEST PLAINS MUNICIP MO (A)
Missouri	Dunklin	95	17	0.7	Blytheville Air Force Base Arkansas (M)	Eaker Air Force Base Arkansas (M)	Dyersburg Municipal Airport Tennessee (M)
Missouri	Franklin	93	2	1.4	St. Louis Spirit Of St. Louis Airport Missouri (M)	St. Joseph Airport Missouri (M)	St. Joseph Airport Missouri (M)
Missouri	Gasconade	93	10	1.2	JEFFERSON CITY MEMO MO (A)	Rolla Natlional Airport Missouri (M)	ROLLA NATL MO (A)
Missouri	Gentry	93	0	2.0	SPICKARD MO (A)	Lamoni Iowa (M)	Lamoni Iowa (M)
Missouri	Greene	93	11	1.1	SPRINGFIELD-BRANSON MO (A)	Springfield Regional Airport Missouri (M)	Springfield Regional Airport Missouri (M)
Missouri	Grundy	93	1	1.7	SPICKARD MO (A)	LAMONI MUNICIPAL IA (A)	LAMONI MUNICIPAL IA (A)
Missouri	Harrison	93	0	2.0	SPICKARD MO (A)	Lamoni Iowa (M)	Lamoni Iowa (M)
Missouri	Henry	94	8	1.2	WHITEMAN AFB MO (A)	Warrensburg Whiteman Air Force Base Missouri (M)	WHITEMAN AFB MO (A)
Missouri	Hickory	93	11	1.1	LEE C FINE MEMORIAL MO (A); Kaiser Memorial Airport Missouri (M); Springfield Regional Airport Missouri (M)	LEE C FINE MEMORIAL MO (A); Kaiser Memorial Airport Missouri (M); Springfield Regional Airport Missouri (M)	LEE C FINE MEMORIAL MO (A); Kaiser Memorial Airport Missouri (M); Springfield Regional Airport Missouri (M)
Missouri	Holt	93	2	1.4	Atchison Kansas (M)	Atchison Kansas (M)	BRENNER FIELD NE (A)
Missouri	Howard	94	3	1.3	Moberly Missouri (M)	Moberly Missouri (M)	Moberly Missouri (M)
Missouri	Howell	92	14	1.0	WEST PLAINS MUNICIP MO (A)	WEST PLAINS MUNICIP MO (A)	WEST PLAINS MUNICIP MO (A)
Missouri	Iron	93	8	1.4	Farmington Airport Missouri (M)	Farmington Airport Missouri (M)	Farmington Airport Missouri (M)
Missouri	Jackson	95	5	1.3	NEW CENTURY AIRCENT KS (A)	Kansas City International Airport Missouri (M)	Kansas City International Airport Missouri (M)
Missouri	Jasper	95	11	1.1	JOPLIN REGIONAL MO (A)	JOPLIN 24 N MO (A)	JOPLIN 24 N MO (A)
Missouri	Jefferson	94	2	1.4	St. Louis City Office Missouri (M)	St. Joseph Airport Missouri (M)	Farmington Airport Missouri (M)
Missouri	Johnson	94	8	1.2	WHITEMAN AFB MO (A)	Warrensburg Whiteman Air Force Base Missouri (M)	WHITEMAN AFB MO (A)
Missouri	Knox	91	1	1.6	Kirksville Regional Airport Missouri (M)	Kirksville Regional Airport Missouri (M)	KIRKSVILLE REGIONAL MO (A)
Missouri	Laclede	93	11	1.1	LEE C FINE MEMORIAL MO (A)	LEE C FINE MEMORIAL MO (A)	LEE C FINE MEMORIAL MO (A)
Missouri	Lafayette	94	8	1.2	WHITEMAN AFB MO (A)	Warrensburg Whiteman Air Force Base Missouri (M)	WHITEMAN AFB MO (A)
Missouri	Lawrence	95	11	1.1	JOPLIN REGIONAL MO (A)	Springfield Regional Airport Missouri (M)	Springfield Regional Airport Missouri (M)
Missouri	Lewis	93	3	1.6	Hannibal Missouri (M)	Hannibal Missouri (M)	Hannibal Missouri (M)

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Missouri	Lincoln	94	10	1.2	LAMBERT-ST LOUIS IN MO (A)	St. Louis Lambert International Airport Missouri (M)	ST CHARLES CO SMART MO (A)
Missouri	Linn	93	1	1.6	AGRICULTURAL SCIENC MO (A)	Kirksville Regional Airport Missouri (M)	KIRKSVILLE REGIONAL MO (A)
Missouri	Livingston	93	4	1.5	SPICKARD MO (A)	SPICKARD MO (A)	SPICKARD MO (A)
Missouri	Macon	94	1	1.6	Moberly Missouri (M)	Kirksville Regional Airport Missouri (M)	KIRKSVILLE REGIONAL MO (A)
Missouri	Madison	93	8	1.4	Farmington Airport Missouri (M)	Farmington Airport Missouri (M)	Farmington Airport Missouri (M)
Missouri	Maries	93	10	1.3	LEE C FINE MEMORIAL MO (A)	Rolla National Airport Missouri (M)	SALEM 10 W MO (A)
Missouri	Marion	93	3	1.6	Hannibal Missouri (M)	Hannibal Missouri (M)	Hannibal Missouri (M)
Missouri	McDonald	98	12	1.0	GROVE MUNICIPAL OK (A)	Joplin Municipal Airport Missouri (M)	Bentonville Arkansas (M)
Missouri	Mercer	93	0	2.0	SPICKARD MO (A)	Lamoni Iowa (M)	Lamoni Iowa (M)
Missouri	Miller	93	10	1.2	LEE C FINE MEMORIAL MO (A)	Rolla National Airport Missouri (M)	ROLLA NATL MO (A)
Missouri	Mississippi	95	14	1.0	Sikeston Missouri (M)	Cape Girardeau Municipal Airport Missouri (M)	CAPE GIRARDEAU REGI MO (A)
Missouri	Moniteau	94	7	1.3	SEDALIA MEMORIAL MO (A)	Columbia Regional Airport Missouri (M)	Columbia Regional Airport Missouri (M)
Missouri	Monroe	94	3	1.6	Moberly Missouri (M)	Moberly Missouri (M)	Mexico Missouri (M)
Missouri	Montgomery	94	4	1.6	Mexico Missouri (M)	Mexico Missouri (M)	Mexico Missouri (M)
Missouri	Morgan	94	10	1.1	SEDALIA MEMORIAL MO (A)	SEDALIA MEMORIAL MO (A)	LEE C FINE MEMORIAL MO (A)
Missouri	New Madrid	95	15	1.0	Sikeston Missouri (M)	Sikeston Missouri (M)	Sikeston Missouri (M)
Missouri	Newton	98	11	1.1	GROVE MUNICIPAL OK (A)	JOPLIN 24 N MO (A)	JOPLIN 24 N MO (A)
Missouri	Nodaway	93	1	1.7	SHENANDOAH MUNICIPA IA (A)	SCHENCK FIELD IA (A)	SCHENCK FIELD IA (A)
Missouri	Oregon	93	14	1.0	Siloam Spring Arkansas (M)	WEST PLAINS MUNICIP MO (A)	WEST PLAINS MUNICIP MO (A)
Missouri	Osage	93	7	1.3	JEFFERSON CITY MEMO MO (A)	Columbia Regional Airport Missouri (M)	Columbia Regional Airport Missouri (M)
Missouri	Ozark	94	14	1.0	Flippin Arkansas (M)	WEST PLAINS MUNICIP MO (A)	WEST PLAINS MUNICIP MO (A)
Missouri	Pemiscot	95	17	0.7	Blytheville Air Force Base Arkansas (M)	Eaker Air Force Base Arkansas (M)	Dyersburg Municipal Airport Tennessee (M)
Missouri	Perry	93	7	1.4	Farmington Airport Missouri (M)	Carbondale Illinois (M)	Farmington Airport Missouri (M)
Missouri	Pettis	94	8	1.2	WHITEMAN AFB MO (A)	Warrensburg Whiteman Air Force Base Missouri (M)	WHITEMAN AFB MO (A)
Missouri	Phelps	93	10	1.3	ROLLA NATL MO (A)	Rolla National Airport Missouri (M)	SALEM 10 W MO (A)
Missouri	Pike	94	3	1.6	Mexico Missouri (M)	Hannibal Missouri (M)	Mexico Missouri (M)
Missouri	Platte	96	2	1.4	LAWRENCE MUNICIPAL KS (A)	Atchison Kansas (M)	Atchison Kansas (M)
Missouri	Polk	93	11	1.1	SPRINGFIELD-BRANSON MO (A)	Springfield Regional Airport Missouri (M)	Springfield Regional Airport Missouri (M)
Missouri	Pulaski	93	10	1.3	LEE C FINE MEMORIAL MO (A)	Rolla National Airport Missouri (M)	SALEM 10 W MO (A)

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Missouri	Putnam	92	1	1.6	Spickard Missouri (M)	Kirksville Regional Airport Missouri (M)	KIRKSVILLE REGIONAL MO (A)
Missouri	Ralls	94	3	1.6	Mexico Missouri (M)	Hannibal Missouri (M)	Mexico Missouri (M)
Missouri	Randolph	94	3	1.6	Moberly Missouri (M)	Moberly Missouri (M)	Mexico Missouri (M)
Missouri	Ray	95	5	1.3	CR WHEELER DOWNTOWN MO (A)	Kansas City International Airport Missouri (M)	Kansas City International Airport Missouri (M)
Missouri	Reynolds	92	10	1.3	Farmington Airport Missouri (M); FARMINGTON REGIONAL MO (A); SALEM 10 W MO (A)	Farmington Airport Missouri (M); FARMINGTON REGIONAL MO (A); SALEM 10 W MO (A)	Farmington Airport Missouri (M); FARMINGTON REGIONAL MO (A); SALEM 10 W MO (A)
Missouri	Ripley	93	16	0.9	WALNUT RIDGE REGION AR (A)	Siloam Spring Arkansas (M)	Siloam Spring Arkansas (M)
Missouri	Saline	94	8	1.2	WHITEMAN AFB MO (A)	Warrensburg Whiteman Air Force Base Missouri (M)	WHITEMAN AFB MO (A)
Missouri	Schuyler	91	1	1.6	Kirksville Regional Airport Missouri (M)	Kirksville Regional Airport Missouri (M)	KIRKSVILLE REGIONAL MO (A)
Missouri	Scotland	91	1	1.6	Kirksville Regional Airport Missouri (M)	Kirksville Regional Airport Missouri (M)	KIRKSVILLE REGIONAL MO (A)
Missouri	Scott	95	14	1.0	Sikeston Missouri (M)	Cape Girardeau Municipal Airport Missouri (M)	CAPE GIRARDEAU REGI MO (A)
Missouri	Shannon	92	10	1.3	WEST PLAINS MUNICIP MO (A)	SALEM 10 W MO (A)	SALEM 10 W MO (A)
Missouri	Shelby	94	1	1.6	Moberly Missouri (M)	Kirksville Regional Airport Missouri (M)	KIRKSVILLE REGIONAL MO (A)
Missouri	St. Charles	94	2	1.4	St. Louis City Office Missouri (M)	St. Joseph Airport Missouri (M)	St. Joseph Airport Missouri (M)
Missouri	St. Clair	94	9	1.1	Warrensburg Whiteman Air Force Base Missouri (M); WHITEMAN AFB MO (A); SEDALIA MEMORIAL MO (A)	Warrensburg Whiteman Air Force Base Missouri (M); WHITEMAN AFB MO (A); SEDALIA MEMORIAL MO (A)	Warrensburg Whiteman Air Force Base Missouri (M); WHITEMAN AFB MO (A); SEDALIA MEMORIAL MO (A)
Missouri	St. Francois	93	8	1.4	Farmington Airport Missouri (M)	Farmington Airport Missouri (M)	Farmington Airport Missouri (M)
Missouri	St. Louis	94	2	1.4	St. Louis City Office Missouri (M)	St. Joseph Airport Missouri (M)	St. Joseph Airport Missouri (M)
Missouri	St. Louis City	94	2	1.4	St. Louis City Office Missouri (M)	St. Joseph Airport Missouri (M)	St. Joseph Airport Missouri (M)
Missouri	Ste. Genevieve	93	8	1.4	Farmington Airport Missouri (M)	Farmington Airport Missouri (M)	Farmington Airport Missouri (M)
Missouri	Stoddard	95	14	1.0	Sikeston Missouri (M)	Cape Girardeau Municipal Airport Missouri (M)	CAPE GIRARDEAU REGI MO (A)
Missouri	Stone	93	11	1.1	SPRINGFIELD-BRANSON MO (A)	Springfield Regional Airport Missouri (M)	Springfield Regional Airport Missouri (M)
Missouri	Sullivan	93	1	1.6	SPICKARD MO (A)	Kirksville Regional Airport Missouri (M)	KIRKSVILLE REGIONAL MO (A)
Missouri	Taney	94	16	0.9	Flippin Arkansas (M)	Harrison Airport Arkansas (M)	BOONE COUNTY REGION AR (A)
Missouri	Texas	92	10	1.3	WEST PLAINS MUNICIP MO (A)	SALEM 10 W MO (A)	SALEM 10 W MO (A)
Missouri	Vernon	94	11	1.1	JOPLIN 24 N MO (A)	JOPLIN 24 N MO (A)	JOPLIN 24 N MO (A)
Missouri	Warren	93	11	1.1	St. Louis Spirit Of St. Louis Airport Missouri (M)	St. Louis Spirit Of St. Louis Airport Missouri (M)	St. Louis Spirit Of St. Louis Airport Missouri (M)
Missouri	Washington	93	8	1.4	Farmington Airport Missouri (M)	Farmington Airport Missouri (M)	Farmington Airport Missouri (M)
Missouri	Wayne	93	16	0.9	POPLAR BUFF MUNICIP MO (A)	Poplar Bluff Missouri (M)	Poplar Bluff Missouri (M)

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Missouri	Webster	93	11	1.1	SPRINGFIELD-BRANSON MO (A)	Springfield Regional Airport Missouri (M)	Springfield Regional Airport Missouri (M)
Missouri	Worth	92	0	2.0	Lamoni Iowa (M)	Lamoni Iowa (M)	Lamoni Iowa (M)
Missouri	Wright	92	11	1.1	WEST PLAINS MUNICIP MO (A); SALEM 10 W MO (A); Springfield Regional Airport Missouri (M)	WEST PLAINS MUNICIP MO (A); SALEM 10 W MO (A); Springfield Regional Airport Missouri (M)	WEST PLAINS MUNICIP MO (A); SALEM 10 W MO (A); Springfield Regional Airport Missouri (M)
<b>Montana</b>							
Montana	Beaverhead	86	-9	8.7	Dillon Airport Montana (M)	DILLON 18 WSW MT (A)	DILLON 18 WSW MT (A)
Montana	Big Horn	92	-5	3.1	Sheridan Co. Airport Wyoming (M); SHERIDAN COUNTY AP WY (A); BILLINGS LOGAN INTL MT (A)	Sheridan Co. Airport Wyoming (M); SHERIDAN COUNTY AP WY (A); BILLINGS LOGAN INTL MT (A)	Sheridan Co. Airport Wyoming (M); SHERIDAN COUNTY AP WY (A); BILLINGS LOGAN INTL MT (A)
Montana	Blaine	92	-18	4.0	HAVRE CITY-COUNTY A MT (A)	Havre City-Co. Airport Montana (M)	Havre City-Co. Airport Montana (M)
Montana	Broadwater	90	-8	3.8	HELENA REGIONAL MT (A)	Helena Regional Airport Montana (M)	Helena Regional Airport Montana (M)
Montana	Carbon	91	-5	3.0	BILLINGS LOGAN INTL MT (A); Billings Logan International Airport Montana (M); Cody Yellowstone Regional Airport Wyoming (M)	BILLINGS LOGAN INTL MT (A); Billings Logan International Airport Montana (M); Cody Yellowstone Regional Airport Wyoming (M)	BILLINGS LOGAN INTL MT (A); Billings Logan International Airport Montana (M); Cody Yellowstone Regional Airport Wyoming (M)
Montana	Carter	92	-9	3.5	Buffalo South Dakota (M); BUFFALO SD (A); BUFFALO 13 ESE SD (A)	Buffalo South Dakota (M); BUFFALO SD (A); BUFFALO 13 ESE SD (A)	Buffalo South Dakota (M); BUFFALO SD (A); BUFFALO 13 ESE SD (A)
Montana	Cascade	91	-11	4.3	MALMSTROM AFB MT (A)	Great Falls International Airport Montana (M)	Great Falls Montana (M)
Montana	Chouteau	90	-9	3.5	Malmstrom Air Force Base (Great Falls) Montana (M); MALMSTROM AFB MT (A); Great Falls Montana (M)	Malmstrom Air Force Base (Great Falls) Montana (M); MALMSTROM AFB MT (A); Great Falls Montana (M)	Malmstrom Air Force Base (Great Falls) Montana (M); MALMSTROM AFB MT (A); Great Falls Montana (M)
Montana	Custer	95	-12	2.7	Miles City Municipal Airport Montana (M)	Miles City Municipal Airport Montana (M)	MILES CITY MUNICIPA MT (A)
Montana	Daniels	91	-17	4.8	WOLF POINT 29 ENE MT (A)	WOLF POINT 29 ENE MT (A)	WOLF POINT 29 ENE MT (A)
Montana	Dawson	91	-12	3.8	Glendive Montana (M)	Glendive Montana (M)	DAWSON COMMUNITY AP MT (A)
Montana	Deer Lodge	85	-12	7.9	BERT MOONEY AP MT (A)	Butte Bert Mooney Airport Montana (M)	Butte Bert Mooney Airport Montana (M)
Montana	Fallon	92	-9	3.8	BAKER MUNICIPAL MT (A)	BAKER MUNICIPAL MT (A)	BAKER MUNICIPAL MT (A)
Montana	Fergus	87	-10	5.3	Lewistown Municipal Airport Montana (M)	Lewistown Municipal Airport Montana (M)	Lewistown Municipal Airport Montana (M)
Montana	Flathead	87	-1	5.5	GLACIER PARK INTL MT (A)	Kalispell Glacier Park International Airport Montana (M)	Kalispell Glacier Park International Airport Montana (M)
Montana	Gallatin	91	-14	5.1	MISSION FIELD MT (A)	Livingston Airport Montana (M)	Bozeman Gallatin Field Montana (M)
Montana	Garfield	93	-18	3.7	Jordan Montana (M)	Jordan Montana (M)	JORDAN AP MT (A)
Montana	Glacier	86	-13	10.2	CUT BANK MUNICIPAL MT (A)	Cut Bank Municipal Airport Montana (M)	ST MARY 1 SSW MT (A)
Montana	Golden Valley	89	-9	4.4	LEWISTOWN MUNICIPAL MT (A); Lewistown Municipal Airport Montana (M); Billings Logan International Airport Montana (M)	LEWISTOWN MUNICIPAL MT (A); Lewistown Municipal Airport Montana (M); Billings Logan International Airport Montana (M)	LEWISTOWN MUNICIPAL MT (A); Lewistown Municipal Airport Montana (M); Billings Logan International Airport Montana (M)

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Montana	Granite	88	-2	5.2	Missoula International Airport Montana (M); MISSOULA INTL MT (A); BERT MOONEY AP MT (A)	Missoula International Airport Montana (M); MISSOULA INTL MT (A); BERT MOONEY AP MT (A)	Missoula International Airport Montana (M); MISSOULA INTL MT (A); BERT MOONEY AP MT (A)
Montana	Hill	92	-18	4.0	HAVRE CITY-COUNTY A MT (A)	Havre City-Co. Airport Montana (M)	Havre City-Co. Airport Montana (M)
Montana	Jefferson	90	-12	7.9	HELENA REGIONAL MT (A)	Butte Bert Mooney Airport Montana (M)	Butte Bert Mooney Airport Montana (M)
Montana	Judith Basin	87	-10	5.3	Lewistown Municipal Airport Montana (M)	Lewistown Municipal Airport Montana (M)	Lewistown Municipal Airport Montana (M)
Montana	Lake	88	1	4.9	GLACIER PARK INTL MT (A); Kalispell Glacier Park International Airport Montana (M); MISSOULA INTL MT (A)	GLACIER PARK INTL MT (A); Kalispell Glacier Park International Airport Montana (M); MISSOULA INTL MT (A)	GLACIER PARK INTL MT (A); Kalispell Glacier Park International Airport Montana (M); MISSOULA INTL MT (A)
Montana	Lewis and Clark	90	-8	3.8	HELENA REGIONAL MT (A)	Helena Regional Airport Montana (M)	Helena Regional Airport Montana (M)
Montana	Liberty	90	-16	4.7	Havre City-Co. Airport Montana (M); HAVRE CITY-COUNTY A MT (A); Cut Bank Municipal Airport Montana (M)	Havre City-Co. Airport Montana (M); HAVRE CITY-COUNTY A MT (A); Cut Bank Municipal Airport Montana (M)	Havre City-Co. Airport Montana (M); HAVRE CITY-COUNTY A MT (A); Cut Bank Municipal Airport Montana (M)
Montana	Lincoln	87	3	5.2	SANDPOINT AP ID (A); GLACIER PARK INTL MT (A); Kalispell Glacier Park International Airport Montana (M)	SANDPOINT AP ID (A); GLACIER PARK INTL MT (A); Kalispell Glacier Park International Airport Montana (M)	SANDPOINT AP ID (A); GLACIER PARK INTL MT (A); Kalispell Glacier Park International Airport Montana (M)
Montana	Madison	86	-2	5.0	Dillon Airport Montana (M)	DILLON AP MT (A)	DILLON AP MT (A)
Montana	McCone	92	-15	4.1	LM CLAYTON AP MT (A)	LM CLAYTON AP MT (A)	LM CLAYTON AP MT (A)
Montana	Meagher	90	-8	4.1	HELENA REGIONAL MT (A); Helena Regional Airport Montana (M); BOZEMAN YELLOWSTONE MT (A)	HELENA REGIONAL MT (A); Helena Regional Airport Montana (M); BOZEMAN YELLOWSTONE MT (A)	HELENA REGIONAL MT (A); Helena Regional Airport Montana (M); BOZEMAN YELLOWSTONE MT (A)
Montana	Mineral	80	3	10.6	MULLAN PASS ID* (A)	MULLAN PASS ID (A)	MULLAN PASS ID (A)
Montana	Missoula	90	2	4.1	MISSOULA INTL MT (A)	Missoula International Airport Montana (M)	Missoula International Airport Montana (M)
Montana	Musselshell	90	-6	3.5	Billings Logan International Airport Montana (M); BILLINGS LOGAN INTL MT (A); LEWISTOWN MUNICIPAL MT (A)	Billings Logan International Airport Montana (M); BILLINGS LOGAN INTL MT (A); LEWISTOWN MUNICIPAL MT (A)	Billings Logan International Airport Montana (M); BILLINGS LOGAN INTL MT (A); LEWISTOWN MUNICIPAL MT (A)
Montana	Park	91	-14	5.1	MISSION FIELD MT (A)	Livingston Airport Montana (M)	Bozeman Gallatin Field Montana (M)
Montana	Petroleum	89	-12	4.8	LEWISTOWN MUNICIPAL MT (A); Lewistown Municipal Airport Montana (M); JORDAN AP MT (A)	LEWISTOWN MUNICIPAL MT (A); Lewistown Municipal Airport Montana (M); JORDAN AP MT (A)	LEWISTOWN MUNICIPAL MT (A); Lewistown Municipal Airport Montana (M); JORDAN AP MT (A)
Montana	Phillips	92	-16	3.7	GLASGOW INTL MT (A); Glasgow International Airport Montana (M); JORDAN AP MT (A)	GLASGOW INTL MT (A); Glasgow International Airport Montana (M); JORDAN AP MT (A)	GLASGOW INTL MT (A); Glasgow International Airport Montana (M); JORDAN AP MT (A)
Montana	Pondera	86	-13	6.1	CUT BANK MUNICIPAL MT (A)	Cut Bank Municipal Airport Montana (M)	Cut Bank Municipal Airport Montana (M)
Montana	Powder River	94	-9	2.9	MILES CITY MUNICIPAL MT (A); Miles City Municipal Airport Montana (M); Gillette-Campbell Co. Airport Wyoming (M)	MILES CITY MUNICIPAL MT (A); Miles City Municipal Airport Montana (M); Gillette-Campbell Co. Airport Wyoming (M)	MILES CITY MUNICIPAL MT (A); Miles City Municipal Airport Montana (M); Gillette-Campbell Co. Airport Wyoming (M)

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Montana	Powell	90	-5	3.8	Helena Regional Airport Montana (M); HELENA REGIONAL MT (A); Missoula International Airport Montana (M)	Helena Regional Airport Montana (M); HELENA REGIONAL MT (A); Missoula International Airport Montana (M)	Helena Regional Airport Montana (M); HELENA REGIONAL MT (A); Missoula International Airport Montana (M)
Montana	Prairie	95	-12	3.8	Miles City Municipal Airport Montana (M)	Miles City Municipal Airport Montana (M)	DAWSON COMMUNITY AP MT (A)
Montana	Ravalli	90	7	3.5	Missoula International Airport Montana (M); MISSOULA INTL MT (A); Elk City Idaho (M)	Missoula International Airport Montana (M); MISSOULA INTL MT (A); Elk City Idaho (M)	Missoula International Airport Montana (M); MISSOULA INTL MT (A); Elk City Idaho (M)
Montana	Richland	91	-13	3.9	SIDNEY-RICHLAND MUN MT (A)	Sidney Municipal Airport Montana (M)	Sidney Municipal Airport Montana (M)
Montana	Roosevelt	92	-17	4.8	LM CLAYTON AP MT (A)	WOLF POINT 29 ENE MT (A)	WOLF POINT 29 ENE MT (A)
Montana	Rosebud	95	-14	3.0	MILES CITY MUNICIPAL MT (A); Miles City Municipal Airport Montana (M); Jordan Montana (M)	MILES CITY MUNICIPAL MT (A); Miles City Municipal Airport Montana (M); Jordan Montana (M)	MILES CITY MUNICIPAL MT (A); Miles City Municipal Airport Montana (M); Jordan Montana (M)
Montana	Sanders	85	3	10.6	MULLAN AWR ID (A)	MULLAN PASS ID (A)	MULLAN PASS ID (A)
Montana	Sheridan	91	-17	4.8	WOLF POINT 29 ENE MT (A)	WOLF POINT 29 ENE MT (A)	WOLF POINT 29 ENE MT (A)
Montana	Silver Bow	85	-12	7.9	BERT MOONEY AP MT (A)	Butte Bert Mooney Airport Montana (M)	Butte Bert Mooney Airport Montana (M)
Montana	Stillwater	91	-4	3.0	BILLINGS LOGAN INTL MT (A); Billings Logan International Airport Montana (M); MISSION FIELD MT (A)	BILLINGS LOGAN INTL MT (A); Billings Logan International Airport Montana (M); MISSION FIELD MT (A)	BILLINGS LOGAN INTL MT (A); Billings Logan International Airport Montana (M); MISSION FIELD MT (A)
Montana	Sweet Grass	91	-3	3.9	MISSION FIELD MT (A)	MISSION FIELD MT (A)	MISSION FIELD MT (A)
Montana	Teton	89	-10	4.0	GREAT FALLS INTL MT (A); Great Falls International Airport Montana (M); GREAT FALLS MT (A)	GREAT FALLS INTL MT (A); Great Falls International Airport Montana (M); GREAT FALLS MT (A)	GREAT FALLS INTL MT (A); Great Falls International Airport Montana (M); GREAT FALLS MT (A)
Montana	Toole	86	-13	6.1	CUT BANK MUNICIPAL MT (A)	Cut Bank Municipal Airport Montana (M)	Cut Bank Municipal Airport Montana (M)
Montana	Treasure	93	-8	2.6	Billings Logan International Airport Montana (M); BILLINGS LOGAN INTL MT (A); Miles City Municipal Airport Montana (M)	Billings Logan International Airport Montana (M); BILLINGS LOGAN INTL MT (A); Miles City Municipal Airport Montana (M)	Billings Logan International Airport Montana (M); BILLINGS LOGAN INTL MT (A); Miles City Municipal Airport Montana (M)
Montana	Valley	91	-17	3.7	GLASGOW INTL MT (A)	Glasgow International Airport Montana (M)	GLASGOW INTL MT (A)
Montana	Wheatland	88	-8	4.8	LEWISTOWN MUNICIPAL MT (A); Lewistown Municipal Airport Montana (M); MISSION FIELD MT (A)	LEWISTOWN MUNICIPAL MT (A); Lewistown Municipal Airport Montana (M); MISSION FIELD MT (A)	LEWISTOWN MUNICIPAL MT (A); Lewistown Municipal Airport Montana (M); MISSION FIELD MT (A)
Montana	Wibaux	91	-12	3.8	Glendive Montana (M)	Glendive Montana (M)	DAWSON COMMUNITY AP MT (A)
Montana	Yellowstone	92	-6	2.7	BILLINGS LOGAN INTL MT (A)	Billings Logan International Airport Montana (M)	Billings Logan International Airport Montana (M)
<b>Nebraska</b>							
Nebraska	Adams	93	0	1.9	Hastings Municipal Airport Nebraska (M)	Grand Island Central NE Region Airport Nebraska (M)	Kearney Municipal Airport Nebraska (M)
Nebraska	Antelope	92	-2	2.3	Norfolk Karl Stefan Memorial Airport Nebraska (M)	O'Neill Municipal Airport Nebraska (M)	O'NEILL MUNICIPAL NE (M)

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Nebraska	Arthur	94	-1	2.5	SEARLE FIELD NE (A)	WHITMAN 5 ENE NE (A)	WHITMAN 5 ENE NE (A)
Nebraska	Banner	94	-1	2.7	WESTERN NEBRASKA RE NE (A)	Scottsbluff W. B. Heilig Field Nebraska (M)	KIMBALL MUNICIPAL NE (A)
Nebraska	Blaine	94	0	2.3	THOMAS COUNTY AP NE (A)	THOMAS COUNTY AP NE (A)	BROKEN BOW MUNICIPAL NE (A)
Nebraska	Boone	92	-2	2.1	Norfolk Karl Stefan Memorial Airport Nebraska (M)	Norfolk Karl Stefan Memorial Airport Nebraska (M)	ALBION MUNICIPAL NE (A)
Nebraska	Box Butte	94	-5	3.7	WESTERN NEBRASKA RE NE (A)	HARRISON 20 SSE NE (A)	HARRISON 20 SSE NE (A)
Nebraska	Boyd	91	-2	2.3	O'Neill Municipal Airport Nebraska (M)	O'Neill Municipal Airport Nebraska (M)	O'NEILL MUNICIPAL NE (M)
Nebraska	Brown	92	-1	2.3	AINSWORTH MUNICIPAL NE (A)	AINSWORTH MUNICIPAL NE (A)	AINSWORTH MUNICIPAL NE (A)
Nebraska	Buffalo	93	2	2.0	Hastings Municipal Airport Nebraska (M)	Hastings Municipal Airport Nebraska (M)	JIM KELLY FIELD NE (A)
Nebraska	Burt	92	-4	2.1	TEKAMAH MUNICIPAL NE (A)	Sioux City Sioux Gateway Airport Iowa (M)	Sioux City Sioux Gateway Airport Iowa (M)
Nebraska	Butler	94	-1	2.1	Lincoln Municipal Airport Nebraska (M)	COLUMBUS MUNICIPAL NE (A)	Columbus Municipal Airport Nebraska (M)
Nebraska	Cass	94	-3	1.8	Lincoln Municipal Airport Nebraska (M)	Council Bluffs Iowa (M)	Omaha WSFO Nebraska (M)
Nebraska	Cedar	91	-3	2.3	WAYNE MUNICIPAL NE (A)	Yanktown Chan Gurney Municipal Airport South Dakota (M)	Yanktown Chan Gurney Municipal Airport South Dakota (M)
Nebraska	Chase	97	4	1.8	IMPERIAL MUNICIPAL NE (A)	IMPERIAL MUNICIPAL NE (A)	IMPERIAL MUNICIPAL NE (A)
Nebraska	Cherry	94	-6	2.5	Valentine Miller Field Nebraska (M)	Valentine Miller Field Nebraska (M)	Valentine Miller Field Nebraska (M)
Nebraska	Cheyenne	94	0	2.7	SIDNEY MUNICIPAL NE (A)	Sidney Municipal Airport Nebraska (M)	KIMBALL MUNICIPAL NE (A)
Nebraska	Clay	94	0	1.8	HEBRON MUNICIPAL NE (A)	Grand Island Central NE Region Airport Nebraska (M)	Grand Island Central NE Region Airport Nebraska (M)
Nebraska	Colfax	92	-2	2.1	Norfolk Karl Stefan Memorial Airport Nebraska (M)	Norfolk Karl Stefan Memorial Airport Nebraska (M)	Columbus Municipal Airport Nebraska (M)
Nebraska	Cuming	92	-4	2.3	Norfolk Karl Stefan Memorial Airport Nebraska (M)	Sioux City Sioux Gateway Airport Iowa (M)	WAYNE MUNICIPAL NE (A)
Nebraska	Custer	92	1	2.3	BROKEN BOW MUNICIPAL NE (A)	BROKEN BOW MUNICIPAL NE (A)	BROKEN BOW MUNICIPAL NE (A)
Nebraska	Dakota	91	-4	2.3	LE MARS MUNICIPAL IA (A)	Sioux City Sioux Gateway Airport Iowa (M)	WAYNE MUNICIPAL NE (A)
Nebraska	Dawes	97	-5	3.7	CHADRON MUNICIPAL NE (A)	HARRISON 20 SSE NE (A)	HARRISON 20 SSE NE (A)
Nebraska	Dawson	92	3	2.0	Holdrege Brewster Field Airport Nebraska (M)	JIM KELLY FIELD NE (A)	JIM KELLY FIELD NE (A)
Nebraska	Deuel	94	0	2.6	SEARLE FIELD NE (A)	Sidney Municipal Airport Nebraska (M)	Sidney Municipal Airport Nebraska (M)
Nebraska	Dixon	91	-4	2.3	LE MARS MUNICIPAL IA (A)	Sioux City Sioux Gateway Airport Iowa (M)	WAYNE MUNICIPAL NE (A)
Nebraska	Dodge	92	-2	2.1	TEKAMAH MUNICIPAL NE (A)	Omaha WSFO Nebraska (M)	Columbus Municipal Airport Nebraska (M)
Nebraska	Douglas	92	-3	1.9	Omaha Eppley Airfield Nebraska (M)	Council Bluffs Iowa (M)	TEKAMAH MUNICIPAL NE (A)
Nebraska	Dundy	97	4	1.8	IMPERIAL MUNICIPAL NE (A)	IMPERIAL MUNICIPAL NE (A)	IMPERIAL MUNICIPAL NE (A)
Nebraska	Fillmore	94	1	1.8	HEBRON MUNICIPAL NE (A)	YORK MUNICIPAL NE (A)	YORK MUNICIPAL NE (A)

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Nebraska	Franklin	92	2	1.9	Holdrege Brewster Field Airport Nebraska (M)	KEARNEY REGIONAL NE (A)	Kearney Municipal Airport Nebraska (M)
Nebraska	Frontier	99	3	2.0	Mc Cook Municipal Airport Nebraska (M)	JIM KELLY FIELD NE (A)	JIM KELLY FIELD NE (A)
Nebraska	Furnas	99	4	1.8	Mc Cook Municipal Airport Nebraska (M)	BREWSTER FIELD NE (A)	BREWSTER FIELD NE (A)
Nebraska	Gage	94	2	1.7	BEATRICE MUNICIPAL NE (A)	LINCOLN 11 SW NE (A)	LINCOLN 11 SW NE (A)
Nebraska	Garden	94	-2	2.8	ALLIANCE MUNICIPAL NE (A)	ALLIANCE MUNICIPAL NE (A)	ALLIANCE MUNICIPAL NE (A)
Nebraska	Garfield	92	0	2.1	EVELYN SHARP FIELD NE (A)	EVELYN SHARP FIELD NE (A)	EVELYN SHARP FIELD NE (A)
Nebraska	Gosper	92	3	2.0	Holdrege Brewster Field Airport Nebraska (M)	JIM KELLY FIELD NE (A)	JIM KELLY FIELD NE (A)
Nebraska	Grant	91	-1	2.5	WHITMAN 5 ENE NE (A)	WHITMAN 5 ENE NE (A)	WHITMAN 5 ENE NE (A)
Nebraska	Greeley	92	0	2.1	EVELYN SHARP FIELD NE (A)	EVELYN SHARP FIELD NE (A)	EVELYN SHARP FIELD NE (A)
Nebraska	Hall	93	0	1.9	Hastings Municipal Airport Nebraska (M)	Grand Island Central NE Region Airport Nebraska (M)	Kearney Municipal Airport Nebraska (M)
Nebraska	Hamilton	93	0	1.8	Hastings Municipal Airport Nebraska (M)	Grand Island Central NE Region Airport Nebraska (M)	Grand Island Central NE Region Airport Nebraska (M)
Nebraska	Harlan	92	4	1.8	Holdrege Brewster Field Airport Nebraska (M)	BREWSTER FIELD NE (A)	BREWSTER FIELD NE (A)
Nebraska	Hayes	99	4	1.8	Mc Cook Municipal Airport Nebraska (M)	IMPERIAL MUNICIPAL NE (A)	IMPERIAL MUNICIPAL NE (A)
Nebraska	Hitchcock	99	4	1.8	Mc Cook Municipal Airport Nebraska (M)	IMPERIAL MUNICIPAL NE (A)	IMPERIAL MUNICIPAL NE (A)
Nebraska	Holt	91	-2	2.3	O'Neill Municipal Airport Nebraska (M)	O'Neill Municipal Airport Nebraska (M)	O'NEILL MUNICIPAL NE (M)
Nebraska	Hooker	94	-1	2.5	THOMAS COUNTY AP NE (A)	WHITMAN 5 ENE NE (A)	WHITMAN 5 ENE NE (A)
Nebraska	Howard	93	0	2.1	Grand Island Central NE Region Airport Nebraska (M)	Grand Island Central NE Region Airport Nebraska (M)	EVELYN SHARP FIELD NE (A)
Nebraska	Jefferson	94	2	1.7	HEBRON MUNICIPAL NE (A)	LINCOLN 11 SW NE (A)	LINCOLN 11 SW NE (A)
Nebraska	Johnson	94	1	1.7	BEATRICE MUNICIPAL NE (A)	LINCOLN 8 ENE NE (A)	LINCOLN 8 ENE NE (A)
Nebraska	Kearney	93	2	1.9	Hastings Municipal Airport Nebraska (M)	Hastings Municipal Airport Nebraska (M)	Kearney Municipal Airport Nebraska (M)
Nebraska	Keith	94	3	2.1	SEARLE FIELD NE (A)	SEARLE FIELD NE (A)	SEARLE FIELD NE (A)
Nebraska	Keya Paha	95	-1	2.3	WINNER REGIONAL SD (A)	WINNER REGIONAL SD (A)	AINSWORTH MUNICIPAL NE (A)
Nebraska	Kimball	94	0	2.7	SIDNEY MUNICIPAL NE (A)	Sidney Municipal Airport Nebraska (M)	KIMBALL MUNICIPAL NE (A)
Nebraska	Knox	91	-3	2.3	CHAN GURNEY MUNICIPAL SD (A)	Yanktown Chan Gurney Municipal Airport South Dakota (M)	Yanktown Chan Gurney Municipal Airport South Dakota (M)
Nebraska	Lancaster	94	0	1.7	Lincoln Municipal Airport Nebraska (M)	Lincoln Municipal Airport Nebraska (M)	LINCOLN 8 ENE NE (A)
Nebraska	Lincoln	93	-1	2.2	North Platte Regional Airport Nebraska (M)	North Platte Regional Airport Nebraska (M)	North Platte Regional Airport Nebraska (M)
Nebraska	Logan	94	-1	2.2	THOMAS COUNTY AP NE (A)	North Platte Regional Airport Nebraska (M)	North Platte Regional Airport Nebraska (M)
Nebraska	Loup	92	0	2.3	EVELYN SHARP FIELD NE (A)	EVELYN SHARP FIELD NE (A)	BROKEN BOW MUNICIPAL NE (A)

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Nebraska	Madison	92	-2	2.3	Norfolk Karl Stefan Memorial Airport Nebraska (M)	Norfolk Karl Stefan Memorial Airport Nebraska (M)	WAYNE MUNICIPAL NE (A)
Nebraska	McPherson	94	-1	2.5	THOMAS COUNTY AP NE (A)	WHITMAN 5 ENE NE (A)	WHITMAN 5 ENE NE (A)
Nebraska	Merrick	93	-1	2.1	Grand Island Central NE Region Airport Nebraska (M)	COLUMBUS MUNICIPAL NE (A)	COLUMBUS MUNICIPAL NE (A)
Nebraska	Morrill	94	-2	2.8	WESTERN NEBRASKA RE NE (A)	ALLIANCE MUNICIPAL NE (A)	ALLIANCE MUNICIPAL NE (A)
Nebraska	Nance	93	-1	2.1	Grand Island Central NE Region Airport Nebraska (M)	COLUMBUS MUNICIPAL NE (A)	Columbus Municipal Airport Nebraska (M)
Nebraska	Nemaha	93	2	1.6	SHENANDOAH MUNICIPAL IA (A)	SHENANDOAH MUNICIPAL IA (A)	PLATTSMOUTH MUNICIPAL NE (A)
Nebraska	Nuckolls	94	2	1.7	HEBRON MUNICIPAL NE (A)	Hastings Municipal Airport Nebraska (M)	HASTINGS MUNICIPAL NE (A)
Nebraska	Otoe	94	0	1.7	Lincoln Municipal Airport Nebraska (M)	Lincoln Municipal Airport Nebraska (M)	LINCOLN 8 ENE NE (A)
Nebraska	Pawnee	94	3	1.6	BEATRICE MUNICIPAL NE (A)	Beatrice Municipal Airport Nebraska (M)	NEBRASKA CITY MUNIC NE (A)
Nebraska	Perkins	97	3	2.1	IMPERIAL MUNICIPAL NE (A)	SEARLE FIELD NE (A)	SEARLE FIELD NE (A)
Nebraska	Phelps	92	2	2.0	Holdrege Brewster Field Airport Nebraska (M)	KEARNEY REGIONAL NE (A)	JIM KELLY FIELD NE (A)
Nebraska	Pierce	92	-2	2.3	Norfolk Karl Stefan Memorial Airport Nebraska (M)	Norfolk Karl Stefan Memorial Airport Nebraska (M)	WAYNE MUNICIPAL NE (A)
Nebraska	Platte	92	-2	2.1	Norfolk Karl Stefan Memorial Airport Nebraska (M)	Norfolk Karl Stefan Memorial Airport Nebraska (M)	Columbus Municipal Airport Nebraska (M)
Nebraska	Polk	92	-1	2.1	YORK MUNICIPAL NE (A)	COLUMBUS MUNICIPAL NE (A)	Columbus Municipal Airport Nebraska (M)
Nebraska	Red Willow	99	5	1.6	Mc Cook Municipal Airport Nebraska (M)	MCCOOK REGIONAL NE (A)	MCCOOK REGIONAL NE (A)
Nebraska	Richardson	93	3	1.6	BRENNER FIELD NE (A)	NEBRASKA CITY MUNIC NE (A)	NEBRASKA CITY MUNIC NE (A)
Nebraska	Rock	92	-2	2.3	AINSWORTH MUNICIPAL NE (A)	O'Neill Municipal Airport Nebraska (M)	AINSWORTH MUNICIPAL NE (A)
Nebraska	Saline	94	0	1.8	Lincoln Municipal Airport Nebraska (M)	Lincoln Municipal Airport Nebraska (M)	YORK MUNICIPAL NE (A)
Nebraska	Sarpy	94	-3	1.8	Lincoln Municipal Airport Nebraska (M)	Council Bluffs Iowa (M)	Omaha WSFO Nebraska (M)
Nebraska	Saunders	94	-2	2.1	Lincoln Municipal Airport Nebraska (M)	Omaha WSFO Nebraska (M)	Columbus Municipal Airport Nebraska (M)
Nebraska	Scotts Bluff	94	-8	3.7	TORRINGTON MUNICIPAL WY (A)	Torrington Wyoming (M)	HARRISON 20 SSE NE (A)
Nebraska	Seward	94	0	1.8	Lincoln Municipal Airport Nebraska (M)	Lincoln Municipal Airport Nebraska (M)	YORK MUNICIPAL NE (A)
Nebraska	Sheridan	95	-3	2.8	PINE RIDGE LANDING SD (A)	PINE RIDGE LANDING SD (A)	ALLIANCE MUNICIPAL NE (A)
Nebraska	Sherman	93	0	2.3	Grand Island Central NE Region Airport Nebraska (M)	Grand Island Central NE Region Airport Nebraska (M)	BROKEN BOW MUNICIPAL NE (A)
Nebraska	Sioux	94	-8	3.7	TORRINGTON MUNICIPAL WY (A)	Torrington Wyoming (M)	HARRISON 20 SSE NE (A)
Nebraska	Stanton	92	-2	2.3	Norfolk Karl Stefan Memorial Airport Nebraska (M)	Norfolk Karl Stefan Memorial Airport Nebraska (M)	WAYNE MUNICIPAL NE (A)
Nebraska	Thayer	94	5	1.5	HEBRON MUNICIPAL NE (A)	HEBRON MUNICIPAL NE (A)	HEBRON MUNICIPAL NE (A)

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Nebraska	Thomas	94	0	2.1	THOMAS COUNTY AP NE (A)	THOMAS COUNTY AP NE (A)	THOMAS COUNTY AP NE (A)
Nebraska	Thurston	92	-4	2.3	TEKAMAH MUNICIPAL NE (A)	Sioux City Sioux Gateway Airport Iowa (M)	WAYNE MUNICIPAL NE (A)
Nebraska	Valley	92	0	2.3	EVELYN SHARP FIELD NE (A)	EVELYN SHARP FIELD NE (A)	BROKEN BOW MUNICIPAL NE (A)
Nebraska	Washington	92	-3	1.9	Omaha Eppley Airfield Nebraska (M)	Council Bluffs Iowa (M)	TEKAMAH MUNICIPAL NE (A)
Nebraska	Wayne	92	-2	2.3	Norfolk Karl Stefan Memorial Airport Nebraska (M)	Norfolk Karl Stefan Memorial Airport Nebraska (M)	WAYNE MUNICIPAL NE (A)
Nebraska	Webster	93	2	1.7	Hastings Municipal Airport Nebraska (M)	Hastings Municipal Airport Nebraska (M)	HASTINGS MUNICIPAL NE (A)
Nebraska	Wheeler	92	-2	2.3	EVELYN SHARP FIELD NE (A)	O'Neill Municipal Airport Nebraska (M)	O'NEILL MUNICIPAL NE (M)
Nebraska	York	93	0	1.8	Grand Island Central NE Region Airport Nebraska (M)	Grand Island Central NE Region Airport Nebraska (M)	Grand Island Central NE Region Airport Nebraska (M)
<b>Nevada</b>							
Nevada	Carson City	94	-10	11.5	RENO TAHOE INTL NV (A)	Boca California (M)	Twin Lakes California (M)
Nevada	Churchill	98	10	2.1	DERBY FIELD NV (A)	Fallon Exp Sta Nevada (M)	Fallon Exp Sta Nevada (M)
Nevada	Clark	116	17	0.6	Willow Beach Arizona (M)	Indian Spr Air Force Base Nevada (M)	Desert WLR Nevada (M)
Nevada	Douglas	93	0	11.5	Topaz Lake Nevada (M)	Squaw Valley California (M)	Twin Lakes California (M)
Nevada	Elko	97	-16	7.4	Montello Nevada (M)	Mtn City Ranger Station Nevada (M)	Mtn City Ranger Station Nevada (M)
Nevada	Esmeralda	99	-12	2.0	Silverpeak Nevada (M)	White Mtn 2 California (M)	Goldfield Nevada (M)
Nevada	Eureka	97	-10	3.4	Cortez Gold Mine Nevada (M)	Rand Ranch Nevada (M)	EUREKA RAMOS NV (A)
Nevada	Humboldt	97	-9	4.3	Jungo-Meyer Rch Nevada (M)	Winnemucca Air Force Station Nevada (M)	Duferrena Nevada (M)
Nevada	Lander	101	-9	3.3	Brinkerhoff Rch Nevada (M)	Central NV Field Lab Nevada (M)	Austin Nevada (M)
Nevada	Lincoln	103	-7	2.2	Elgin Nevada (M)	Bald Mtn Nevada (M)	Pioche Nevada (M)
Nevada	Lyon	97	4	2.8	Fallon NAAS Nevada (M)	Minden Nevada (M)	Woodfords California (M)
Nevada	Mineral	99	-13	18.9	Mina Nevada (M)	Bodie California (M)	Bodie California (M)
Nevada	Nye	105	-7	5.3	Lathrop Wells Nevada (M)	Currant Hwy Stn Nevada (M)	Snowball Ranch Nevada (M)
Nevada	Pershing	101	5	2.3	Brinkerhoff Rch Nevada (M)	Jungo-Meyer Rch Nevada (M)	Imlay Nevada (M)
Nevada	Storey	97	-10	8.1	Fernley Nevada (M)	Boca California (M)	Donner Mem St. Pk California (M)
Nevada	Washoe	97	-2	4.6	Empire (Gerlach) Nevada (M)	Vya Nevada (M)	Termo California (M); Jess Valley California (M); Susanville Airport California (M)
Nevada	White Pine	91	-11	6.1	Lund Nevada (M)	Cherry Creek Nevada (M)	Ruth Nevada (M)
<b>New Hampshire</b>							
New Hampshire	Belknap	87	0	3.8	Concord Municipal Airport New Hampshire (M)	Concord Municipal Airport New Hampshire (M)	Sanford Municipal Airport Maine (M)

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New Hampshire	Carroll	87	-18	92.5	EASTERN SLOPES REGI ME (A)	Mount Washington New Hampshire (M)	Mount Washington New Hampshire (M)
New Hampshire	Cheshire	90	-4	3.7	NASHUA AP NH (A)	Claremont New Hampshire (M)	Claremont New Hampshire (M)
New Hampshire	Coos	84	-18	92.5	ST JOHNSBURY AMOS VT (A)	Mount Washington New Hampshire (M)	Mount Washington New Hampshire (M)
New Hampshire	Grafton	86	-18	92.5	Lebanon Municipal Airport New Hampshire (M)	Mount Washington New Hampshire (M)	Mount Washington New Hampshire (M)
New Hampshire	Hillsborough	90	0	3.5	NASHUA AP NH (A)	Keene Dillant-Hopkins Airport New Hampshire (M)	Jaffrey Municipal Airport New Hampshire (M)
New Hampshire	Merrimack	90	-4	3.7	NASHUA AP NH (A)	Claremont New Hampshire (M)	Claremont New Hampshire (M)
New Hampshire	Rockingham	90	0	3.8	NASHUA AP NH (A)	Concord Municipal Airport New Hampshire (M)	Sanford Municipal Airport Maine (M)
New Hampshire	Strafford	89	0	3.8	Manchester Airport New Hampshire (M)	Concord Municipal Airport New Hampshire (M)	Sanford Municipal Airport Maine (M)
New Hampshire	Sullivan	87	-4	3.7	Concord Municipal Airport New Hampshire (M)	Claremont New Hampshire (M)	Claremont New Hampshire (M)
<b>New Jersey</b>							
New Jersey	Atlantic	91	11	1.4	SOUTH JERSEY REGION NJ (A)	Vineland New Jersey (M)	Atlantic City International Airport New Jersey (M)
New Jersey	Bergen	92	8	2.2	NEWARK LIBERTY INTL NJ (A)	ORANGE COUNTY AP NY (A)	ORANGE COUNTY AP NY (A)
New Jersey	Burlington	91	10	1.6	Philadelphia International Airport Pennsylvania (M)	Patterson New Jersey (M)	Belmar-Farmingdale New Jersey (M)
New Jersey	Camden	91	10	1.7	Philadelphia International Airport Pennsylvania (M)	Patterson New Jersey (M)	West Chester Pennsylvania (M)
New Jersey	Cape May	91	11	1.4	DELAWARE COASTAL AP DE (A)	Vineland New Jersey (M)	Atlantic City International Airport New Jersey (M)
New Jersey	Cumberland	91	11	1.4	Philadelphia International Airport Pennsylvania (M)	Vineland New Jersey (M)	Atlantic City International Airport New Jersey (M)
New Jersey	Essex	92	9	2.1	NEWARK LIBERTY INTL NJ (A)	SUSSEX AP NJ (A)	SUSSEX AP NJ (A)
New Jersey	Gloucester	91	11	1.7	Philadelphia International Airport Pennsylvania (M)	Vineland New Jersey (M)	AVONDALE 2 N PA (A)
New Jersey	Hudson	92	9	1.9	NEWARK LIBERTY INTL NJ (A)	AEROFLEX-ANDOVER AP NJ (A)	AEROFLEX-ANDOVER AP NJ (A)
New Jersey	Hunterdon	91	6	1.9	Patterson New Jersey (M)	Phillipsburg New Jersey (M)	AEROFLEX-ANDOVER AP NJ (A)
New Jersey	Mercer	92	6	1.8	NEWARK LIBERTY INTL NJ (A)	Phillipsburg New Jersey (M)	QUAKERTOWN AP PA (A)
New Jersey	Middlesex	92	10	1.7	NEWARK LIBERTY INTL NJ (A)	New Brunswick New Jersey (M)	New Brunswick New Jersey (M)
New Jersey	Monmouth	92	10	1.7	NEWARK LIBERTY INTL NJ (A)	New Brunswick New Jersey (M)	New Brunswick New Jersey (M)
New Jersey	Morris	92	6	2.1	NEWARK LIBERTY INTL NJ (A)	Phillipsburg New Jersey (M)	SUSSEX AP NJ (A)
New Jersey	Ocean	91	13	1.7	Patterson New Jersey (M)	Patterson New Jersey (M)	Long Branch New Jersey (M)
New Jersey	Passaic	92	8	2.2	NEWARK LIBERTY INTL NJ (A)	ORANGE COUNTY AP NY (A)	ORANGE COUNTY AP NY (A)
New Jersey	Salem	91	11	1.7	Philadelphia International Airport Pennsylvania (M)	Vineland New Jersey (M)	AVONDALE 2 N PA (A)
New Jersey	Somerset	92	6	1.9	NEWARK LIBERTY INTL NJ (A)	Phillipsburg New Jersey (M)	AEROFLEX-ANDOVER AP NJ (A)

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New Jersey	Sussex	90	3	3.4	Teterboro Airport New Jersey (M)	Monticello New York (M)	Monticello New York (M)
New Jersey	Union	92	9	1.9	NEWARK LIBERTY INTL NJ (A)	AEROFLEX-ANDOVER AP NJ (A)	AEROFLEX-ANDOVER AP NJ (A)
New Jersey	Warren	90	5	3.1	ESSEX COUNTY AP NJ (A)	POCONO MOUNTAINS MU PA (A)	POCONO MOUNTAINS MU PA (A)
<b>New Mexico</b>							
New Mexico	Bernalillo	94	21	1.0	ALBUQUERQUE INTL NM (A)	Albuquerque International Airport New Mexico (M)	Albuquerque International Airport New Mexico (M)
New Mexico	Catron	90	1	4.0	Alpine Arizona (M); Blue Arizona (M); Springerville Arizona (M)	Alpine Arizona (M); Blue Arizona (M); Springerville Arizona (M)	Alpine Arizona (M); Blue Arizona (M); Springerville Arizona (M)
New Mexico	Chaves	100	19	0.8	Artesia New Mexico (M)	Artesia New Mexico (M)	Artesia New Mexico (M)
New Mexico	Cibola	90	4	2.3	GRANTS-MILAN MUNICP NM (A)	Grants New Mexico (M)	GRANTS-MILAN MUNICP NM (A)
New Mexico	Colfax	91	1	2.6	RATON MUNICIPAL NM (A)	Raton Airport New Mexico (M)	Raton Airport New Mexico (M)
New Mexico	Curry	96	17	1.0	CANNON AFB NM (A)	Cannon Air Force Base (Clovis) New Mexico (M)	Clovis Municipal Airport New Mexico (M)
New Mexico	De Baca	97	17	0.8	Cannon Air Force Base (Clovis) New Mexico (M); CANNON AFB NM (A); TUCUMCARI MUNICIPAL NM (A)	Cannon Air Force Base (Clovis) New Mexico (M); CANNON AFB NM (A); TUCUMCARI MUNICIPAL NM (A)	Cannon Air Force Base (Clovis) New Mexico (M); CANNON AFB NM (A); TUCUMCARI MUNICIPAL NM (A)
New Mexico	Dona Ana	98	15	0.8	LAS CRUCES INTL NM (A)	LAS CRUCES 20 N NM (A)	LAS CRUCES 20 N NM (A)
New Mexico	Eddy	101	19	0.8	CAVERN CITY AIR TER NM (A)	Artesia New Mexico (M)	Artesia New Mexico (M)
New Mexico	Grant	94	10	1.3	Silver City Airport New Mexico (M)	Silver City Airport New Mexico (M)	Silver City Airport New Mexico (M)
New Mexico	Guadalupe	90	13	1.8	CLINES CORNERS NM (A); LAS VEGAS MUNICIPAL NM (A); Tucumcari Airport New Mexico (M)	CLINES CORNERS NM (A); LAS VEGAS MUNICIPAL NM (A); Tucumcari Airport New Mexico (M)	CLINES CORNERS NM (A); LAS VEGAS MUNICIPAL NM (A); Tucumcari Airport New Mexico (M)
New Mexico	Harding	96	15	1.0	Tucumcari Airport New Mexico (M); TUCUMCARI MUNICIPAL NM (A); CLAYTON MUNICIPAL NM (A)	Tucumcari Airport New Mexico (M); TUCUMCARI MUNICIPAL NM (A); CLAYTON MUNICIPAL NM (A)	Tucumcari Airport New Mexico (M); TUCUMCARI MUNICIPAL NM (A); CLAYTON MUNICIPAL NM (A)
New Mexico	Hidalgo	101	16	1.7	San Simon Arizona (M)	Portal Arizona (M)	Portal Arizona (M)
New Mexico	Lea	99	18	0.6	Hobbs Airport New Mexico (M)	Hobbs Airport New Mexico (M)	Hobbs Airport New Mexico (M)
New Mexico	Lincoln	86	18	1.5	Sierra Blanca Regional Airport New Mexico (M)	SIERRA BLANCA REGIO NM (A)	SIERRA BLANCA REGIO NM (A)
New Mexico	Los Alamos	91	2	10.2	SANTA FE MUNICIPAL NM (A)	LOS ALAMOS 13 W NM (A)	LOS ALAMOS 13 W NM (A)
New Mexico	Luna	99	10	1.3	DEMING MUNICIPAL NM (A)	Silver City Airport New Mexico (M)	Silver City Airport New Mexico (M)
New Mexico	McKinley	90	4	2.7	GRANTS-MILAN MUNICP NM (A)	Grants New Mexico (M)	Gallup Sen. Clarke Field New Mexico (M)
New Mexico	Mora	87	11	2.3	LAS VEGAS MUNICIPAL NM (A)	LAS VEGAS MUNICIPAL NM (A)	LAS VEGAS MUNICIPAL NM (A)
New Mexico	Otero	99	22	0.7	Alamogordo White Sands Regional Airport New Mexico (M)	HOLLOMAN AFB NM (A)	Holloman Air Force Base New Mexico (M)
New Mexico	Quay	99	15	0.9	TUCUMCARI MUNICIPAL NM (A)	Tucumcari Airport New Mexico (M)	Tucumcari Airport New Mexico (M)

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New Mexico	Rio Arriba	83	9	5.1	LOS ALAMOS 13 W NM (A); Los Alamos New Mexico (M); LOS ALAMOS AP NM (A)	LOS ALAMOS 13 W NM (A); Los Alamos New Mexico (M); LOS ALAMOS AP NM (A)	LOS ALAMOS 13 W NM (A); Los Alamos New Mexico (M); LOS ALAMOS AP NM (A)
New Mexico	Roosevelt	96	17	1.0	CANNON AFB NM (A)	Cannon Air Force Base (Clovis) New Mexico (M)	Clovis Municipal Airport New Mexico (M)
New Mexico	San Juan	94	12	1.7	FOUR CORNERS REGION NM (A)	Farmington Four Corners Regional Airport New Mexico (M)	Farmington Four Corners Regional Airport New Mexico (M)
New Mexico	San Miguel	87	11	2.3	LAS VEGAS MUNICIPAL NM (A)	LAS VEGAS MUNICIPAL NM (A)	LAS VEGAS MUNICIPAL NM (A)
New Mexico	Sandoval	87	2	10.2	Los Alamos New Mexico (M)	LOS ALAMOS 13 W NM (A)	LOS ALAMOS 13 W NM (A)
New Mexico	Santa Fe	91	2	10.2	SANTA FE MUNICIPAL NM (A)	LOS ALAMOS 13 W NM (A)	LOS ALAMOS 13 W NM (A)
New Mexico	Sierra	96	25	0.6	Truth Or Consequences Municipal Airport New Mexico (M)	Truth Or Consequences Municipal Airport New Mexico (M)	Truth Or Consequences Municipal Airport New Mexico (M)
New Mexico	Socorro	96	17	1.0	SOCORRO 20 N NM (A)	Socorro Airport New Mexico (M)	Socorro Airport New Mexico (M)
New Mexico	Taos	87	2	3.7	TAOS REGIONAL NM (A)	TAOS REGIONAL NM (A)	Taos Municipal Airport New Mexico (M)
New Mexico	Torrance	87	13	2.2	CLINES CORNERS NM (A)	CLINES CORNERS NM (A)	CLINES CORNERS NM (A)
New Mexico	Union	94	12	1.4	CLAYTON MUNICIPAL NM (A)	Clayton Municipal Airport New Mexico (M)	Clayton Municipal Airport New Mexico (M)
New Mexico	Valencia	96	17	1.0	SOCORRO 20 N NM (A)	SOCORRO 20 N NM (A)	Albuquerque International Airport New Mexico (M)
<b>New York</b>							
New York	Albany	88	-3	3.6	Albany City Office New York (M)	Pittsfield Airport Massachusetts (M)	Gloversville New York (M)
New York	Allegany	88	0	3.4	DANSVILLE MUNICIPAL NY (A)	Hornell New York (M)	Hornell New York (M)
New York	Bronx	92	9	2.1	NEWARK LIBERTY INTL NJ (A)	Norwalk Connecticut (M)	Norwalk Connecticut (M)
New York	Broome	86	0	3.5	ITHACA TOMPKINS REG NY (A)	Ithaca New York (M)	ITHACA 13 E NY (A)
New York	Cattaraugus	86	2	4.1	Jamestown New York (M)	Bradford Regional Airport Pennsylvania (M)	Bradford Regional Airport Pennsylvania (M)
New York	Cayuga	87	0	3.4	Geneva New York (M)	Ithaca New York (M)	Ithaca New York (M)
New York	Chautauqua	86	3	3.5	Jamestown New York (M)	Jamestown New York (M)	Jamestown New York (M)
New York	Chemung	87	0	3.5	Elmira Corning Regional Airport New York (M)	Ithaca New York (M)	ITHACA 13 E NY (A)
New York	Chenango	85	-4	3.5	Cortland New York (M)	Oneonta New York (M)	ITHACA 13 E NY (A)
New York	Clinton	86	-12	6.3	BURLINGTON INTL VT (A)	ADIRONDACK REGIONAL NY (A)	ADIRONDACK REGIONAL NY (A)
New York	Columbia	88	-3	3.2	Kingston New York (M)	Pittsfield Airport Massachusetts (M)	PITTSFIELD MUNICIPAL MA (A)
New York	Cortland	87	0	3.5	Auburn New York (M)	Ithaca New York (M)	ITHACA 13 E NY (A)
New York	Delaware	83	-4	3.4	Oneonta New York (M)	Oneonta New York (M)	Monticello New York (M)
New York	Dutchess	89	2	2.7	Poughkeepsie Dutchess Co. Airport New York (M)	Kingston New York (M)	Oxford Connecticut (M)
New York	Eric	87	5	2.7	Bafavia New York (M)	Bafavia New York (M)	Lockport New York (M)

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New York	Essex	86	-12	6.3	BURLINGTON INTL VT (A)	ADIRONDACK REGIONAL NY (A)	ADIRONDACK REGIONAL NY (A)
New York	Franklin	85	-12	6.3	Massena Airport New York (M)	ADIRONDACK REGIONAL NY (A)	ADIRONDACK REGIONAL NY (A)
New York	Fulton	87	-2	3.6	Schenectady New York (M)	Gloversville New York (M)	Gloversville New York (M)
New York	Genesee	88	5	2.7	DANVILLE MUNICIPAL NY (A)	Bafavia New York (M)	Lockport New York (M)
New York	Greene	88	1	2.7	Kingston New York (M)	Schenectady New York (M)	Albany City Office New York (M)
New York	Hamilton	84	-6	4.3	Gloversville New York (M); FLOYD BENNETT MEMOR NY (A); ADIRONDACK REGIONAL NY (A)	Gloversville New York (M); FLOYD BENNETT MEMOR NY (A); ADIRONDACK REGIONAL NY (A)	Gloversville New York (M); FLOYD BENNETT MEMOR NY (A); ADIRONDACK REGIONAL NY (A)
New York	Herkimer	86	0	3.0	Griffiss Air Force Base New York (M)	Griffiss Air Force Base New York (M)	Griffiss Air Force Base New York (M)
New York	Jefferson	84	-6	3.5	Fort Drum New York (M)	Watertown Airport New York (M)	Watertown Airport New York (M)
New York	Kings	92	10	1.9	NEWARK LIBERTY INTL NJ (A)	New Brunswick New Jersey (M)	White Plains Westchester Co. Airport New York (M)
New York	Lewis	86	-6	3.5	Griffiss Air Force Base New York (M)	Watertown Airport New York (M)	Watertown Airport New York (M)
New York	Livingston	88	0	3.4	DANVILLE MUNICIPAL NY (A)	Hornell New York (M)	Hornell New York (M)
New York	Madison	87	0	3.0	SYRACUSE HANCOCK IN NY (A)	Cortland New York (M)	Cortland New York (M)
New York	Monroe	86	6	2.6	GREATER ROCHESTER I NY (A)	Rochester International Airport New York (M)	Rochester International Airport New York (M)
New York	Montgomery	88	-2	3.6	Albany City Office New York (M)	Gloversville New York (M)	Gloversville New York (M)
New York	Nassau	92	9	2.1	NEWARK LIBERTY INTL NJ (A)	Norwalk Connecticut (M)	Norwalk Connecticut (M)
New York	New York	92	9	2.1	NEWARK LIBERTY INTL NJ (A)	Norwalk Connecticut (M)	Norwalk Connecticut (M)
New York	Niagara	86	6	2.7	Lockport New York (M)	NIAGARA FALLS INTL NY (A)	Lockport New York (M)
New York	Oneida	87	0	3.0	SYRACUSE HANCOCK IN NY (A)	Griffiss Air Force Base New York (M)	Griffiss Air Force Base New York (M)
New York	Onondaga	87	0	3.5	Auburn New York (M)	Cortland New York (M)	ITHACA 13 E NY (A)
New York	Ontario	88	2	3.1	DANVILLE MUNICIPAL NY (A)	Geneva New York (M)	Auburn New York (M)
New York	Orange	90	2	3.4	ESSEX COUNTY AP NJ (A)	Kingston New York (M)	Monticello New York (M)
New York	Orleans	87	5	2.7	Bafavia New York (M)	Bafavia New York (M)	Lockport New York (M)
New York	Oswego	87	-6	3.5	SYRACUSE HANCOCK IN NY (A)	Watertown Airport New York (M)	Watertown Airport New York (M)
New York	Otsego	85	-4	3.1	Utica Oneida Co. Airport New York (M)	Oneonta New York (M)	Oneonta New York (M)
New York	Putnam	89	2	2.7	Poughkeepsie Dutchess Co. Airport New York (M)	Kingston New York (M)	Oxford Connecticut (M)
New York	Queens	92	9	2.1	NEWARK LIBERTY INTL NJ (A)	Norwalk Connecticut (M)	Norwalk Connecticut (M)
New York	Rensselaer	88	-4	3.3	Albany City Office New York (M)	Glens Falls Airport New York (M)	Glens Falls Airport New York (M)
New York	Richmond	92	10	1.7	NEWARK LIBERTY INTL NJ (A)	New Brunswick New Jersey (M)	New Brunswick New Jersey (M)

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New York	Rockland	92	6	2.2	NEWARK LIBERTY INTL NJ (A)	Poughkeepsie Dutchess Co. Airport New York (M)	DANBURY MUNICIPAL CT (A)
New York	Saratoga	88	-4	3.6	Albany City Office New York (M)	Glens Falls Airport New York (M)	Gloversville New York (M)
New York	Schenectady	88	-4	3.6	Albany City Office New York (M)	Glens Falls Airport New York (M)	Gloversville New York (M)
New York	Schoharie	88	-4	3.6	Albany City Office New York (M)	Oneonta New York (M)	Gloversville New York (M)
New York	Schuyler	87	0	3.5	Geneva New York (M)	Hornell New York (M)	ITHACA 13 E NY (A)
New York	Seneca	87	0	3.5	Geneva New York (M)	Ithaca New York (M)	ITHACA 13 E NY (A)
New York	St. Lawrence	85	-9	3.6	Massena Airport New York (M)	Massena Airport New York (M)	Massena Airport New York (M)
New York	Steuben	88	0	3.4	DANVILLE MUNICIPAL NY (A)	Hornell New York (M)	Hornell New York (M)
New York	Suffolk	88	7	2.2	Republic New York (M)	New Haven Airport Connecticut (M)	FRANCIS S GABRESKI NY (A)
New York	Sullivan	88	3	3.4	ORANGE COUNTY AP NY (A)	Monticello New York (M)	Monticello New York (M)
New York	Tioga	87	0	3.5	Elmira Corning Regional Airport New York (M)	Ithaca New York (M)	ITHACA 13 E NY (A)
New York	Tompkins	87	0	3.5	Geneva New York (M)	Ithaca New York (M)	ITHACA 13 E NY (A)
New York	Ulster	89	2	3.4	Poughkeepsie Dutchess Co. Airport New York (M)	Kingston New York (M)	Monticello New York (M)
New York	Warren	85	-2	3.1	FLOYD BENNETT MEMOR NY (A)	FLOYD BENNETT MEMOR NY (A)	FLOYD BENNETT MEMOR NY (A)
New York	Washington	85	-4	3.6	Glens Falls Airport New York (M)	Glens Falls Airport New York (M)	Rutland State Airport Vermont (M)
New York	Wayne	86	4	2.8	GREATER ROCHESTER I NY (A)	OSWEGO COUNTY AP NY (A)	OSWEGO COUNTY AP NY (A)
New York	Westchester	92	6	2.7	NEWARK LIBERTY INTL NJ (A)	Poughkeepsie Dutchess Co. Airport New York (M)	Oxford Connecticut (M)
New York	Wyoming	88	0	3.4	DANVILLE MUNICIPAL NY (A)	Hornell New York (M)	Hornell New York (M)
New York	Yates	88	0	3.4	DANVILLE MUNICIPAL NY (A)	Hornell New York (M)	Hornell New York (M)
<b>North Carolina</b>							
North Carolina	Alamance	94	20	0.9	RALEIGH EXECUTIVE J NC (A)	Durham North Carolina (M)	SHILOH AP NC (A)
North Carolina	Alexander	93	15	1.8	LINCOLN TON LINCOLN NC (A)	BOONE NC (A)	BOONE NC (A)
North Carolina	Alleghany	91	12	1.8	WILKES COUNTY AP NC (A)	Marion / Wytheville Mountain Empire Airport Virginia (M)	BOONE NC (A)
North Carolina	Anson	93	21	0.8	STANLEY COUNTY AP NC (A)	Richmond International Airport North Carolina (M)	Richmond International Airport North Carolina (M)
North Carolina	Ashe	91	12	1.8	WILKES COUNTY AP NC (A)	Marion / Wytheville Mountain Empire Airport Virginia (M)	BOONE NC (A)
North Carolina	Avery	91	15	1.8	FOOTHILLS REGIONAL NC (A)	BOONE NC (A)	BOONE NC (A)
North Carolina	Beaufort	93	24	0.6	Greenville Pitt-Greenville Airport North Carolina (M)	PITT-GREENVILLE AP NC (A)	PITT-GREENVILLE AP NC (A)
North Carolina	Bertie	93	24	0.7	Greenville Pitt-Greenville Airport North Carolina (M)	TRI-COUNTY AP NC (A)	TRI-COUNTY AP NC (A)
North Carolina	Bladen	94	21	0.6	FAYETTEVILLE REGION NC (A)	Lumberton North Carolina (M)	Lumberton North Carolina (M)

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North Carolina	Brunswick	92	27	0.5	COLUMBUS CO MUNICIPAL NC (A)	WILMINGTON INTL NC (A)	CAPE FEAR REGIONAL NC (A)
North Carolina	Buncombe	91	17	1.4	RUTHERFORD COUNTY A NC (A)	ASHEVILLE 8 SSW NC (A)	ASHEVILLE 8 SSW NC (A)
North Carolina	Burke	93	15	1.8	LINCOLNTON LINCOLN NC (A)	BOONE NC (A)	BOONE NC (A)
North Carolina	Cabarrus	93	21	0.8	STANLEY COUNTY AP NC (A)	STANLEY COUNTY AP NC (A)	STATESVILLE REGIONA NC (A)
North Carolina	Caldwell	93	15	1.8	LINCOLNTON LINCOLN NC (A)	BOONE NC (A)	BOONE NC (A)
North Carolina	Camden	93	19	0.8	CHESAPEAKE REGIONAL VA (A)	Elizabeth City Airport North Carolina (M)	Chesapeake Virginia (M)
North Carolina	Carteret	92	26	0.5	New Bern Costal Carolina Regional Airport North Carolina (M)	New Bern Costal Carolina Regional Airport North Carolina (M)	New Bern Costal Carolina Regional Airport North Carolina (M)
North Carolina	Caswell	92	18	1.0	HORACE WILLIAMS AP NC (A)	Martinsville Virginia (M)	Martinsville Virginia (M)
North Carolina	Catawba	93	21	0.9	LINCOLNTON LINCOLN NC (A)	FOOTHILLS REGIONAL NC (A)	WILKES COUNTY AP NC (A)
North Carolina	Chatham	95	20	0.8	HARNETT REGIONAL NC (A)	Durham North Carolina (M)	Durham North Carolina (M)
North Carolina	Cherokee	92	18	1.1	Athens Tennessee (M)	Athens Tennessee (M)	MACON COUNTY AP NC (A)
North Carolina	Chowan	93	19	0.7	TRI-COUNTY AP NC (A)	Elizabeth City Airport North Carolina (M)	TRI-COUNTY AP NC (A)
North Carolina	Clay	89	18	1.1	WESTERN CAROLINA RE NC (A)	MACON COUNTY AP NC (A)	MACON COUNTY AP NC (A)
North Carolina	Cleveland	93	21	0.9	BRYANT FIELD SC (A)	FOOTHILLS REGIONAL NC (A)	FOOTHILLS REGIONAL NC (A)
North Carolina	Columbus	93	21	0.6	LUMBERTON MUNICIPAL NC (A)	Lumberton North Carolina (M)	Lumberton North Carolina (M)
North Carolina	Craven	93	24	0.6	Greenville Pitt-Greenville Airport North Carolina (M)	ALBERT J ELLIS AP NC (A)	Jacksonville North Carolina (M)
North Carolina	Cumberland	95	21	0.7	HARNETT REGIONAL NC (A)	Lumberton North Carolina (M)	Southern Pines North Carolina (M)
North Carolina	Currituck	93	19	0.8	CHESAPEAKE REGIONAL VA (A)	Elizabeth City Airport North Carolina (M)	Chesapeake Virginia (M)
North Carolina	Dare	91	29	0.6	DARE COUNTY REGIONA NC (A)	DUCK PIER NC (A)	DUCK PIER NC (A)
North Carolina	Davidson	93	21	0.8	STANLEY COUNTY AP NC (A)	STANLEY COUNTY AP NC (A)	Greensboro Piedmont Triad International Airport North Carolina (M)
North Carolina	Davie	92	21	0.9	ROWAN COUNTY AP NC (A)	WILKES COUNTY AP NC (A)	WILKES COUNTY AP NC (A)
North Carolina	Duplin	94	24	0.6	Goldsboro Seymour North Carolina (M)	ALBERT J ELLIS AP NC (A)	GOLDSBORO-WAYNE MUN NC (A)
North Carolina	Durham	94	15	1.0	RALEIGH EXECUTIVE J NC (A)	Henderson North Carolina (M)	Henderson North Carolina (M)
North Carolina	Edgecombe	94	21	0.7	Goldsboro Seymour North Carolina (M)	Rocky Mount North Carolina (M)	TRI-COUNTY AP NC (A)
North Carolina	Forsyth	92	18	0.9	BLUE RIDGE AP VA (A)	BLUE RIDGE AP VA (A)	BLUE RIDGE AP VA (A)
North Carolina	Franklin	93	15	1.0	RALEIGH-DURHAM INTL NC (A)	Henderson North Carolina (M)	Henderson North Carolina (M)
North Carolina	Gaston	94	22	0.8	Rock Hill South Carolina (M)	STATESVILLE REGIONA NC (A)	STATESVILLE REGIONA NC (A)
North Carolina	Gates	94	19	0.8	FRANKLIN MUNICIPAL VA (A)	Elizabeth City Airport North Carolina (M)	Chesapeake Virginia (M)

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North Carolina	Graham	91	18	1.1	MCGHEE TYSON AP TN (A)	MACON COUNTY AP NC (A)	MACON COUNTY AP NC (A)
North Carolina	Granville	93	15	1.0	RALEIGH-DURHAM INTL NC (A)	Henderson North Carolina (M)	Henderson North Carolina (M)
North Carolina	Greene	94	21	0.7	Goldsboro Seymour North Carolina (M)	Rocky Mount North Carolina (M)	Rocky Mount North Carolina (M)
North Carolina	Guilford	92	20	0.9	BURLINGTON ALAMANCE NC (A)	SHILOH AP NC (A)	SHILOH AP NC (A)
North Carolina	Halifax	93	21	0.8	MECKLENBURG-BRUNWIC VA (A)	Rocky Mount North Carolina (M)	EMPORIA-GRENVLE REG VA (A)
North Carolina	Harnett	95	21	0.7	HARNETT REGIONAL NC (A)	RALEIGH EXECUTIVE J NC (A)	Raleigh-Durham International Airport North Carolina (M)
North Carolina	Haywood	88	17	1.4	MACON COUNTY AP NC (A)	ASHEVILLE 8 SSW NC (A)	ASHEVILLE 8 SSW NC (A)
North Carolina	Henderson	92	17	1.4	GREENVILLE-SPARTANB SC (A)	ASHEVILLE 8 SSW NC (A)	ASHEVILLE 8 SSW NC (A)
North Carolina	Hertford	94	23	0.8	FRANKLIN MUNICIPAL VA (A)	EMPORIA-GRENVLE REG VA (A)	EMPORIA-GRENVLE REG VA (A)
North Carolina	Hoke	95	21	0.8	HARNETT REGIONAL NC (A)	Richmond International Airport North Carolina (M)	Richmond International Airport North Carolina (M)
North Carolina	Hyde	87	31	0.5	Hatteras Billy Mitchell Airport North Carolina (M)	Hatteras Billy Mitchell Airport North Carolina (M)	Cape Hatteras North Carolina (M)
North Carolina	Iredell	93	21	0.9	LINCOLNTON LINCOLN NC (A)	WILKES COUNTY AP NC (A)	WILKES COUNTY AP NC (A)
North Carolina	Jackson	88	17	1.4	MACON COUNTY AP NC (A)	ASHEVILLE 8 SSW NC (A)	ASHEVILLE 8 SSW NC (A)
North Carolina	Johnston	95	23	0.7	HARNETT REGIONAL NC (A)	Raleigh-Durham International Airport North Carolina (M)	Raleigh-Durham International Airport North Carolina (M)
North Carolina	Jones	93	24	0.6	DUPLIN COUNTY AP NC (A)	ALBERT J ELLIS AP NC (A)	Jacksonville North Carolina (M)
North Carolina	Lee	95	20	0.8	HARNETT REGIONAL NC (A)	Durham North Carolina (M)	Durham North Carolina (M)
North Carolina	Lenoir	94	24	0.6	Goldsboro Seymour North Carolina (M)	ALBERT J ELLIS AP NC (A)	GOLDSBORO-WAYNE MUN NC (A)
North Carolina	Lincoln	93	21	0.9	BRYANT FIELD SC (A)	FOOTHILLS REGIONAL NC (A)	FOOTHILLS REGIONAL NC (A)
North Carolina	Macon	89	18	1.1	WESTERN CAROLINA RE NC (A)	MACON COUNTY AP NC (A)	MACON COUNTY AP NC (A)
North Carolina	Madison	90	16	1.5	Greenville Tennessee (M)	Greenville Tennessee (M)	Greenville Tennessee (M)
North Carolina	Martin	93	21	0.7	Greenville Pitt-Greenville Airport North Carolina (M)	Rocky Mount North Carolina (M)	TRI-COUNTY AP NC (A)
North Carolina	McDowell	91	17	1.4	SHELBY MUNICIPAL NC (A)	ASHEVILLE 8 SSW NC (A)	ASHEVILLE 8 SSW NC (A)
North Carolina	Mecklenburg	94	22	0.8	Rock Hill South Carolina (M)	STATESVILLE REGIONA NC (A)	STATESVILLE REGIONA NC (A)
North Carolina	Mitchell	91	15	1.8	FOOTHILLS REGIONAL NC (A)	BOONE NC (A)	BOONE NC (A)
North Carolina	Montgomery	93	21	0.8	STANLEY COUNTY AP NC (A)	Richmond International Airport North Carolina (M)	Richmond International Airport North Carolina (M)
North Carolina	Moore	95	21	0.8	POPE AFB NC (A)	Richmond International Airport North Carolina (M)	Richmond International Airport North Carolina (M)
North Carolina	Nash	94	15	1.0	Goldsboro Seymour North Carolina (M)	Henderson North Carolina (M)	Henderson North Carolina (M)
North Carolina	New Hanover	92	27	0.5	WILMINGTON INTL NC (A)	WILMINGTON INTL NC (A)	CAPE FEAR REGIONAL NC (A)
North Carolina	Northampton	94	21	0.8	FRANKLIN MUNICIPAL VA (A)	Rocky Mount North Carolina (M)	EMPORIA-GRENVLE REG VA (A)

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North Carolina	Onslow	93	24	0.6	DUPLIN COUNTY AP NC (A)	ALBERT J ELLIS AP NC (A)	Jacksonville North Carolina (M)
North Carolina	Orange	94	20	0.8	RALEIGH EXECUTIVE J NC (A)	Durham North Carolina (M)	PERSON COUNTY AP NC (A)
North Carolina	Pamlico	93	25	0.5	WARREN FIELD NC (A)	WARREN FIELD NC (A)	WARREN FIELD NC (A)
North Carolina	Pasquotank	93	19	0.8	CHESAPEAKE REGIONAL VA (A)	Elizabeth City Airport North Carolina (M)	Chesapeake Virginia (M)
North Carolina	Pender	93	24	0.6	DUPLIN COUNTY AP NC (A)	ALBERT J ELLIS AP NC (A)	Jacksonville North Carolina (M)
North Carolina	Perquimans	93	19	0.7	CHESAPEAKE REGIONAL VA (A)	Elizabeth City Airport North Carolina (M)	CURRITUCK COUNTY RE NC (A)
North Carolina	Person	93	15	1.0	RALEIGH-DURHAM INTL NC (A)	Henderson North Carolina (M)	Henderson North Carolina (M)
North Carolina	Pitt	94	21	0.7	Goldsboro Seymour North Carolina (M)	Rocky Mount North Carolina (M)	Rocky Mount North Carolina (M)
North Carolina	Polk	92	17	1.4	GREENVILLE-SPARTANB SC (A)	ASHEVILLE 8 SSW NC (A)	ASHEVILLE 8 SSW NC (A)
North Carolina	Randolph	93	21	0.8	STANLEY COUNTY AP NC (A)	STANLEY COUNTY AP NC (A)	Greensboro Piedmont Triad International Airport North Carolina (M)
North Carolina	Richmond	93	21	0.8	STANLEY COUNTY AP NC (A)	Richmond International Airport North Carolina (M)	Richmond International Airport North Carolina (M)
North Carolina	Robeson	95	21	0.6	POPE AFB NC (A)	Lumberton North Carolina (M)	Lumberton North Carolina (M)
North Carolina	Rockingham	92	18	1.0	BURLINGTON ALAMANCE NC (A)	Martinsville Virginia (M)	Martinsville Virginia (M)
North Carolina	Rowan	93	21	0.8	STANLEY COUNTY AP NC (A)	STANLEY COUNTY AP NC (A)	STATESVILLE REGIONA NC (A)
North Carolina	Rutherford	92	17	1.4	GREENVILLE-SPARTANB SC (A)	ASHEVILLE 8 SSW NC (A)	ASHEVILLE 8 SSW NC (A)
North Carolina	Sampson	95	23	0.6	HARNETT REGIONAL NC (A)	JOHNSTON COUNTY AP NC (A)	JOHNSTON COUNTY AP NC (A)
North Carolina	Scotland	95	21	0.8	POPE AFB NC (A)	Richmond International Airport North Carolina (M)	Richmond International Airport North Carolina (M)
North Carolina	Stanly	93	21	0.8	STANLEY COUNTY AP NC (A)	STANLEY COUNTY AP NC (A)	ROWAN COUNTY AP NC (A)
North Carolina	Stokes	92	16	1.5	BLUE RIDGE AP VA (A)	TWIN COUNTY AP VA (A)	Hillsville Virginia (M)
North Carolina	Surry	91	16	1.5	WILKES COUNTY AP NC (A)	TWIN COUNTY AP VA (A)	Hillsville Virginia (M)
North Carolina	Swain	91	18	1.1	MCGHEE TYSON AP TN (A)	MACON COUNTY AP NC (A)	MACON COUNTY AP NC (A)
North Carolina	Transylvania	93	17	1.4	OCCONEE COUNTY REGI SC (A)	ASHEVILLE 8 SSW NC (A)	ASHEVILLE 8 SSW NC (A)
North Carolina	Tyrrell	91	19	0.7	EDENTON NORTHEASTER NC (A)	Elizabeth City Airport North Carolina (M)	CURRITUCK COUNTY RE NC (A)
North Carolina	Union	94	21	0.7	Rock Hill South Carolina (M)	STANLEY COUNTY AP NC (A)	STANLEY COUNTY AP NC (A)
North Carolina	Vance	93	15	1.0	MECKLENBURG-BRUNWIC VA (A)	Henderson North Carolina (M)	Henderson North Carolina (M)
North Carolina	Wake	95	15	1.0	HARNETT REGIONAL NC (A)	Henderson North Carolina (M)	Henderson North Carolina (M)
North Carolina	Warren	93	15	1.0	MECKLENBURG-BRUNWIC VA (A)	Henderson North Carolina (M)	Henderson North Carolina (M)
North Carolina	Washington	93	19	0.6	WARREN FIELD NC (A)	Elizabeth City Airport North Carolina (M)	Elizabeth City Airport North Carolina (M)

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North Carolina	Watauga	91	15	1.8	WILKES COUNTY AP NC (A)	BOONE NC (A)	BOONE NC (A)
North Carolina	Wayne	94	23	0.7	Goldsboro Seymour North Carolina (M)	JOHNSTON COUNTY AP NC (A)	ROCKY MOUNT-WILSON NC (A)
North Carolina	Wilkes	91	15	1.8	WILKES COUNTY AP NC (A)	BOONE NC (A)	BOONE NC (A)
North Carolina	Wilson	94	21	0.7	Goldsboro Seymour North Carolina (M)	Rocky Mount North Carolina (M)	FRANKLIN COUNTY AP NC (A)
North Carolina	Yadkin	92	21	0.9	ROWAN COUNTY AP NC (A)	WILKES COUNTY AP NC (A)	WILKES COUNTY AP NC (A)
North Carolina	Yancey	91	16	1.5	RUTHERFORD COUNTY A NC (A)	Greenville Tennessee (M)	Greenville Tennessee (M)
<b>North Dakota</b>							
North Dakota	Adams	97	-14	4.1	LEMMON MUNICIPAL SD (A)	LEMMON MUNICIPAL SD (A)	HETTINGER MUNICIPAL ND (A)
North Dakota	Barnes	88	-15	4.1	Jamestown Municipal Airport North Dakota (M)	Jamestown Municipal Airport North Dakota (M)	JAMESTOWN REGIONAL ND (A)
North Dakota	Benson	83	-18	5.0	DEVILS LAKE MUNICIP ND (A)	Devils Lake North Dakota (M)	Devils Lake North Dakota (M)
North Dakota	Billings	90	-13	4.1	Dickinson Municipal Airport North Dakota (M)	Dickinson Municipal Airport North Dakota (M)	DICKINSON ROOSEVELT ND (A)
North Dakota	Bottineau	89	-18	4.6	Minot Air Force Base North Dakota (M)	MINOT AFB ND (A)	MINOT AFB ND (A)
North Dakota	Bowman	92	-9	3.8	Buffalo South Dakota (M)	Buffalo South Dakota (M)	BAKER MUNICIPAL MT (A)
North Dakota	Burke	84	-19	6.2	NORTHGATE 5 ESE ND (A)	NORTHGATE 5 ESE ND (A)	NORTHGATE 5 ESE ND (A)
North Dakota	Burleigh	90	-14	3.6	Bismarck Municipal Airport North Dakota (M)	Bismarck Municipal Airport North Dakota (M)	Bismarck Municipal Airport North Dakota (M)
North Dakota	Cass	88	-15	3.7	Fargo Hector International Airport North Dakota (M)	Fargo Hector International Airport North Dakota (M)	Fargo Hector International Airport North Dakota (M)
North Dakota	Cavalier	84	-19	5.0	Devils Lake North Dakota (M); DEVILS LAKE MUNICIP ND (A); Hallock Minnesota (M)	Devils Lake North Dakota (M); DEVILS LAKE MUNICIP ND (A); Hallock Minnesota (M)	Devils Lake North Dakota (M); DEVILS LAKE MUNICIP ND (A); Hallock Minnesota (M)
North Dakota	Dickey	88	-13	3.6	Aberdeen Regional Airport South Dakota (M); ABERDEEN REGIONAL SD (A); JAMESTOWN REGIONAL ND (A)	Aberdeen Regional Airport South Dakota (M); ABERDEEN REGIONAL SD (A); JAMESTOWN REGIONAL ND (A)	Aberdeen Regional Airport South Dakota (M); ABERDEEN REGIONAL SD (A); JAMESTOWN REGIONAL ND (A)
North Dakota	Divide	89	-18	4.8	Williston Sloulin International Airport North Dakota (M); SLOULIN FIELD INTL ND (A); NORTHGATE 5 ESE ND (A)	Williston Sloulin International Airport North Dakota (M); SLOULIN FIELD INTL ND (A); NORTHGATE 5 ESE ND (A)	Williston Sloulin International Airport North Dakota (M); SLOULIN FIELD INTL ND (A); NORTHGATE 5 ESE ND (A)
North Dakota	Dunn	90	-13	4.1	Dickinson Municipal Airport North Dakota (M)	Dickinson Municipal Airport North Dakota (M)	DICKINSON ROOSEVELT ND (A)
North Dakota	Eddy	83	-18	5.0	DEVILS LAKE MUNICIP ND (A)	Devils Lake North Dakota (M)	Devils Lake North Dakota (M)
North Dakota	Emmons	91	-12	3.4	Bismarck Municipal Airport North Dakota (M); BISMARCK MUNICIPAL ND (A); MOBRIDGE MUNICIPAL SD (A)	Bismarck Municipal Airport North Dakota (M); BISMARCK MUNICIPAL ND (A); MOBRIDGE MUNICIPAL SD (A)	Bismarck Municipal Airport North Dakota (M); BISMARCK MUNICIPAL ND (A); MOBRIDGE MUNICIPAL SD (A)
North Dakota	Foster	88	-15	4.1	Jamestown Municipal Airport North Dakota (M)	Jamestown Municipal Airport North Dakota (M)	JAMESTOWN REGIONAL ND (A)
North Dakota	Golden Valley	89	-10	3.9	MEDORA 7 E ND (A)	MEDORA 7 E ND (A)	MEDORA 7 E ND (A)

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North Dakota	Grand Forks	88	-19	4.9	Grand Forks Air Force Base North Dakota (M)	Crookston Municipal Airport Minnesota (M)	Crookston Municipal Airport Minnesota (M)
North Dakota	Grant	97	-14	2.8	LEMMON MUNICIPAL SD (A)	LEMMON MUNICIPAL SD (A)	LEMMON MUNICIPAL SD (A)
North Dakota	Griggs	87	-15	4.1	JAMESTOWN REGIONAL ND (A); Jamestown Municipal Airport North Dakota (M); GRAND FORKS AFB ND (A)	JAMESTOWN REGIONAL ND (A); Jamestown Municipal Airport North Dakota (M); GRAND FORKS AFB ND (A)	JAMESTOWN REGIONAL ND (A); Jamestown Municipal Airport North Dakota (M); GRAND FORKS AFB ND (A)
North Dakota	Hettinger	91	-13	4.1	HETTINGER MUNICIPAL ND (A)	Dickinson Municipal Airport North Dakota (M)	HETTINGER MUNICIPAL ND (A)
North Dakota	Kidder	90	-14	3.7	BISMARCK MUNICIPAL ND (A); Jamestown Municipal Airport North Dakota (M); Bismarck Municipal Airport North Dakota (M)	BISMARCK MUNICIPAL ND (A); Jamestown Municipal Airport North Dakota (M); Bismarck Municipal Airport North Dakota (M)	BISMARCK MUNICIPAL ND (A); Jamestown Municipal Airport North Dakota (M); Bismarck Municipal Airport North Dakota (M)
North Dakota	LaMoure	88	-15	4.1	Jamestown Municipal Airport North Dakota (M)	Jamestown Municipal Airport North Dakota (M)	JAMESTOWN REGIONAL ND (A)
North Dakota	Logan	88	-14	3.8	Jamestown Municipal Airport North Dakota (M); JAMESTOWN REGIONAL ND (A); BISMARCK MUNICIPAL ND (A)	Jamestown Municipal Airport North Dakota (M); JAMESTOWN REGIONAL ND (A); BISMARCK MUNICIPAL ND (A)	Jamestown Municipal Airport North Dakota (M); JAMESTOWN REGIONAL ND (A); BISMARCK MUNICIPAL ND (A)
North Dakota	McHenry	89	-18	4.6	Minot Air Force Base North Dakota (M)	MINOT AFB ND (A)	MINOT AFB ND (A)
North Dakota	McIntosh	90	-12	3.3	MOBRIDGE MUNICIPAL SD (A); Mobridge South Dakota (M); Jamestown Municipal Airport North Dakota (M)	MOBRIDGE MUNICIPAL SD (A); Mobridge South Dakota (M); Jamestown Municipal Airport North Dakota (M)	MOBRIDGE MUNICIPAL SD (A); Mobridge South Dakota (M); Jamestown Municipal Airport North Dakota (M)
North Dakota	McKenzie	91	-18	4.1	Williston Sloulin International Airport North Dakota (M)	Williston Sloulin International Airport North Dakota (M)	SLOULIN FIELD INTL ND (A)
North Dakota	McLean	86	-16	4.7	GARRISON MUNICIPAL ND (A)	GARRISON MUNICIPAL ND (A)	GARRISON MUNICIPAL ND (A)
North Dakota	Mercer	86	-16	4.7	GARRISON MUNICIPAL ND (A)	GARRISON MUNICIPAL ND (A)	GARRISON MUNICIPAL ND (A)
North Dakota	Morton	90	-14	3.6	Bismarck Municipal Airport North Dakota (M)	Bismarck Municipal Airport North Dakota (M)	Bismarck Municipal Airport North Dakota (M)
North Dakota	Mountrail	88	-17	4.3	Minot Air Force Base North Dakota (M); MINOT AFB ND (A); Minot International Airport North Dakota (M)	Minot Air Force Base North Dakota (M); MINOT AFB ND (A); Minot International Airport North Dakota (M)	Minot Air Force Base North Dakota (M); MINOT AFB ND (A); Minot International Airport North Dakota (M)
North Dakota	Nelson	88	-18	5.0	Grand Forks Air Force Base North Dakota (M)	Devils Lake North Dakota (M)	Devils Lake North Dakota (M)
North Dakota	Oliver	90	-16	4.7	Bismarck Municipal Airport North Dakota (M)	GARRISON MUNICIPAL ND (A)	GARRISON MUNICIPAL ND (A)
North Dakota	Pembina	85	-20	5.1	Hallock Minnesota (M)	Hallock Minnesota (M)	Hallock Minnesota (M)
North Dakota	Pierce	84	-17	4.6	DEVILS LAKE MUNICIP ND (A); Devils Lake North Dakota (M); MINOT INTL ND (A)	DEVILS LAKE MUNICIP ND (A); Devils Lake North Dakota (M); MINOT INTL ND (A)	DEVILS LAKE MUNICIP ND (A); Devils Lake North Dakota (M); MINOT INTL ND (A)
North Dakota	Ramsey	83	-18	5.0	DEVILS LAKE MUNICIP ND (A)	Devils Lake North Dakota (M)	Devils Lake North Dakota (M)
North Dakota	Ransom	89	-14	3.6	Lidgerwood North Dakota (M)	Lidgerwood North Dakota (M)	Lidgerwood North Dakota (M)
North Dakota	Renville	89	-19	6.2	Minot Air Force Base North Dakota (M)	NORTHGATE 5 ESE ND (A)	NORTHGATE 5 ESE ND (A)

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North Dakota	Richland	89	-16	3.8	Lidgerwood North Dakota (M)	HARRY STERN AP ND (A)	HARRY STERN AP ND (A)
North Dakota	Rolette	84	-18	4.8	DEVILS LAKE MUNICIP ND (A); Devils Lake North Dakota (M); MINOT AFB ND (A)	DEVILS LAKE MUNICIP ND (A); Devils Lake North Dakota (M); MINOT AFB ND (A)	DEVILS LAKE MUNICIP ND (A); Devils Lake North Dakota (M); MINOT AFB ND (A)
North Dakota	Sargent	89	-14	3.6	Lidgerwood North Dakota (M)	Lidgerwood North Dakota (M)	Lidgerwood North Dakota (M)
North Dakota	Sheridan	89	-14	4.0	GARRISON MUNICIPAL ND (A); BISMARCK MUNICIPAL ND (A); Bismarck Municipal Airport North Dakota (M)	GARRISON MUNICIPAL ND (A); BISMARCK MUNICIPAL ND (A); Bismarck Municipal Airport North Dakota (M)	GARRISON MUNICIPAL ND (A); BISMARCK MUNICIPAL ND (A); Bismarck Municipal Airport North Dakota (M)
North Dakota	Sioux	91	-13	3.4	Bismarck Municipal Airport North Dakota (M); BISMARCK MUNICIPAL ND (A); Mobridge South Dakota (M)	Bismarck Municipal Airport North Dakota (M); BISMARCK MUNICIPAL ND (A); Mobridge South Dakota (M)	Bismarck Municipal Airport North Dakota (M); BISMARCK MUNICIPAL ND (A); Mobridge South Dakota (M)
North Dakota	Slope	92	-13	4.1	BAKER MUNICIPAL MT (A)	Dickinson Municipal Airport North Dakota (M)	DICKINSON ROOSEVELT ND (A)
North Dakota	Stark	90	-13	4.1	Dickinson Municipal Airport North Dakota (M)	Dickinson Municipal Airport North Dakota (M)	DICKINSON ROOSEVELT ND (A)
North Dakota	Steele	88	-16	4.3	Grand Forks Air Force Base North Dakota (M)	Grand Forks Air Force Base North Dakota (M)	GRAND FORKS AFB ND (A)
North Dakota	Stutsman	88	-15	4.1	Jamestown Municipal Airport North Dakota (M)	Jamestown Municipal Airport North Dakota (M)	JAMESTOWN REGIONAL ND (A)
North Dakota	Towner	84	-17	4.6	DEVILS LAKE MUNICIP ND (A); Devils Lake North Dakota (M); MINOT INTL ND (A)	DEVILS LAKE MUNICIP ND (A); Devils Lake North Dakota (M); MINOT INTL ND (A)	DEVILS LAKE MUNICIP ND (A); Devils Lake North Dakota (M); MINOT INTL ND (A)
North Dakota	Traill	88	-19	4.9	Grand Forks Air Force Base North Dakota (M)	Crookston Municipal Airport Minnesota (M)	Crookston Municipal Airport Minnesota (M)
North Dakota	Walsh	88	-17	4.4	Grand Forks Air Force Base North Dakota (M)	Grand Forks International Airport North Dakota (M)	GRAND FORKS INTL ND (A)
North Dakota	Ward	89	-18	4.6	Minot Air Force Base North Dakota (M)	MINOT AFB ND (A)	MINOT AFB ND (A)
North Dakota	Wells	85	-17	4.6	DEVILS LAKE MUNICIP ND (A); Devils Lake North Dakota (M); Jamestown Municipal Airport North Dakota (M)	DEVILS LAKE MUNICIP ND (A); Devils Lake North Dakota (M); Jamestown Municipal Airport North Dakota (M)	DEVILS LAKE MUNICIP ND (A); Devils Lake North Dakota (M); Jamestown Municipal Airport North Dakota (M)
North Dakota	Williams	91	-18	4.1	Williston Sloulin International Airport North Dakota (M)	Williston Sloulin International Airport North Dakota (M)	SLOULIN FIELD INTL ND (A)
<b>Northern Mariana Islands</b>							
Northern Mariana Islands	N/A	89	74	0	SAIPAN INTL (A)	SAIPAN INTL (A)	SAIPAN INTL (A)
<b>Ohio</b>							
Ohio	Adams	92	10	1.5	Portsmouth Ohio (M)	Portsmouth Ohio (M)	Portsmouth Ohio (M)
Ohio	Allen	91	4	2.1	Defiance Ohio (M)	Defiance Ohio (M)	Defiance Ohio (M)
Ohio	Ashland	88	1	2.3	Norwalk Ohio (M)	Norwalk Ohio (M)	Wooster Ohio (M)
Ohio	Ashtabula	87	4	2.9	NORTHEAST OHIO REGI OH (A)	Meadville Pennsylvania (M)	Meadville Pennsylvania (M)
Ohio	Athens	92	6	1.9	Athens Ohio (M)	Athens Ohio (M)	Athens Ohio (M)

State	County	1.0% Cooling Temp. (°F)	99.0% Heating Temp. (°F)	HDD / CDD Ratio	Weather Station(s) Selected for Cooling Temperature	Weather Station(s) Selected for Heating Temperature	Weather Station(s) Selected for HDD/CDD Ratio
Ohio	Auglaize	91	4	1.9	Lima Ohio (M)	Lima Ohio (M)	Lima Ohio (M)
Ohio	Belmont	90	5	2.2	Cambridge Ohio (M)	Wheeling West Virginia (M)	Washington Pennsylvania (M)
Ohio	Brown	91	9	1.6	CINCINNATI MUNICIPA OH (A)	WILMINGTON AIR PARK OH (A)	WILMINGTON AIR PARK OH (A)
Ohio	Butler	91	2	2.0	MIDDLETOWN REGIONAL OH (A)	Richmond Airport Indiana (M)	Richmond Airport Indiana (M)
Ohio	Carroll	87	5	2.1	HARRY CLEVER FIELD OH (A)	Stubenville Ohio (M)	Akron-Canton Regional Airport Ohio (M)
Ohio	Champaign	89	3	2.0	Wright-Paterson Air Force Base Ohio (M)	Springfield Ohio (M)	Springfield Ohio (M)
Ohio	Clark	89	3	2.0	Wright-Paterson Air Force Base Ohio (M)	Springfield Ohio (M)	Springfield Ohio (M)
Ohio	Clermont	91	5	1.7	MIDDLETOWN REGIONAL OH (A)	Hamilton Ohio (M)	Middletown Ohio (M)
Ohio	Clinton	91	3	2.0	MIDDLETOWN REGIONAL OH (A)	Springfield Ohio (M)	Springfield Ohio (M)
Ohio	Columbiana	88	5	2.7	New Castle Pennsylvania (M)	Warren Ohio (M)	Warren Ohio (M)
Ohio	Coshocton	92	5	2.3	Newark Ohio (M)	Newark Ohio (M)	Wooster Ohio (M)
Ohio	Crawford	91	1	2.3	Marion Ohio (M)	Fremont Ohio (M)	Norwalk Ohio (M)
Ohio	Cuyahoga	88	9	2.0	LORAIN COUNTY REGIO OH (A)	LORAIN COUNTY REGIO OH (A)	Cleveland-Hopkins International Airport Ohio (M)
Ohio	Darke	90	2	2.0	Richmond Airport Indiana (M)	Richmond Airport Indiana (M)	Richmond Airport Indiana (M)
Ohio	Defiance	91	4	2.1	Defiance Ohio (M)	Defiance Ohio (M)	Toledo Express Airport Ohio (M)
Ohio	Delaware	92	5	2.2	Newark Ohio (M)	Marion Ohio (M)	Marion Ohio (M)
Ohio	Erie	91	1	2.3	Sandusky City Office Ohio (M)	Fremont Ohio (M)	Norwalk Ohio (M)
Ohio	Fairfield	92	5	2.1	Chillicothe Ohio (M)	Newark Ohio (M)	Newark Ohio (M)
Ohio	Fayette	92	3	2.0	Chillicothe Ohio (M)	Springfield Ohio (M)	Springfield Ohio (M)
Ohio	Franklin	92	5	2.1	Newark Ohio (M)	Newark Ohio (M)	Newark Ohio (M)
Ohio	Fulton	91	2	2.5	Defiance Ohio (M)	Bowling Green Ohio (M)	Adrian Michigan (M)
Ohio	Gallia	92	6	1.9	Portsmouth Ohio (M)	Athens Ohio (M)	Athens Ohio (M)
Ohio	Geauga	87	5	2.7	Cleveland-Hopkins International Airport Ohio (M)	Warren Ohio (M)	Warren Ohio (M)
Ohio	Greene	91	3	2.0	MIDDLETOWN REGIONAL OH (A)	Springfield Ohio (M)	Springfield Ohio (M)
Ohio	Guernsey	90	7	1.9	Cambridge Ohio (M)	Cambridge Ohio (M)	COSHOCTON 8 NNE OH (A)
Ohio	Hamilton	91	5	1.7	MIDDLETOWN REGIONAL OH (A)	Hamilton Ohio (M)	Middletown Ohio (M)
Ohio	Hancock	91	1	2.3	Lima Ohio (M)	Fremont Ohio (M)	Bowling Green Ohio (M)
Ohio	Hardin	91	4	2.2	Lima Ohio (M)	Lima Ohio (M)	Marion Ohio (M)
Ohio	Harrison	90	5	1.9	Cambridge Ohio (M)	Wheeling West Virginia (M)	Stubenville Ohio (M)

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Ohio	Henry	91	2	2.5	Defiance Ohio (M)	Bowling Green Ohio (M)	Adrian Michigan (M)
Ohio	Highland	92	6	1.7	Chilicothe Ohio (M)	Chilicothe Ohio (M)	Chilicothe Ohio (M)
Ohio	Hocking	92	5	2.1	Chilicothe Ohio (M)	Newark Ohio (M)	Newark Ohio (M)
Ohio	Holmes	87	6	2.3	HARRY CLEVER FIELD OH (A)	Mansfield Lahm Municipal Airport Ohio (M)	Wooster Ohio (M)
Ohio	Huron	91	1	2.3	Sandusky City Office Ohio (M)	Fremont Ohio (M)	Norwalk Ohio (M)
Ohio	Jackson	92	6	1.9	Portsmouth Ohio (M)	Chilicothe Ohio (M)	Athens Ohio (M)
Ohio	Jefferson	87	5	2.2	HARRY CLEVER FIELD OH (A)	Wheeling West Virginia (M)	Washington Pennsylvania (M)
Ohio	Knox	92	5	2.3	Newark Ohio (M)	Marion Ohio (M)	Wooster Ohio (M)
Ohio	Lake	87	8	2.6	NORTHEAST OHIO REGI OH (A)	NORTHEAST OHIO REGI OH (A)	Ashtabula Ohio (M)
Ohio	Lawrence	92	10	1.6	Portsmouth Ohio (M)	Portsmouth Ohio (M)	Ashland Kentucky (M)
Ohio	Licking	92	5	2.1	Newark Ohio (M)	Newark Ohio (M)	Newark Ohio (M)
Ohio	Logan	91	3	2.2	Lima Ohio (M)	Springfield Ohio (M)	Marion Ohio (M)
Ohio	Lorain	91	1	2.3	Sandusky City Office Ohio (M)	Norwalk Ohio (M)	Norwalk Ohio (M)
Ohio	Lucas	90	1	2.6	TOLEDO EXECUTIVE OH (A)	Fremont Ohio (M)	ANN ARBOR MUNICIPAL MI (A)
Ohio	Madison	91	3	2.0	RICKENBACKER INTL OH (A)	Springfield Ohio (M)	Springfield Ohio (M)
Ohio	Mahoning	88	5	2.7	New Castle Pennsylvania (M)	Warren Ohio (M)	Warren Ohio (M)
Ohio	Marion	91	5	2.2	Marion Ohio (M)	Marion Ohio (M)	Marion Ohio (M)
Ohio	Medina	88	1	2.3	Norwalk Ohio (M)	Norwalk Ohio (M)	Wooster Ohio (M)
Ohio	Meigs	92	6	1.9	Athens Ohio (M)	Athens Ohio (M)	Athens Ohio (M)
Ohio	Mercer	91	4	1.9	Lima Ohio (M)	Lima Ohio (M)	Lima Ohio (M)
Ohio	Miami	91	2	2.0	MIDDLETOWN REGIONAL OH (A)	Richmond Airport Indiana (M)	Richmond Airport Indiana (M)
Ohio	Monroe	90	5	1.7	Cambridge Ohio (M)	Wheeling West Virginia (M)	WHEELING OHIO COUNT WV (A)
Ohio	Montgomery	91	2	2.0	MIDDLETOWN REGIONAL OH (A)	Richmond Airport Indiana (M)	Richmond Airport Indiana (M)
Ohio	Morgan	92	6	1.9	Athens Ohio (M)	Athens Ohio (M)	Athens Ohio (M)
Ohio	Morrow	92	5	2.2	Newark Ohio (M)	Marion Ohio (M)	Marion Ohio (M)
Ohio	Muskingum	92	5	2.1	Newark Ohio (M)	Newark Ohio (M)	Newark Ohio (M)
Ohio	Noble	90	7	1.7	Cambridge Ohio (M)	Cambridge Ohio (M)	Zanesville Municipal Airport Ohio (M)
Ohio	Ottawa	91	1	2.3	Sandusky City Office Ohio (M)	Fremont Ohio (M)	Bowling Green Ohio (M)
Ohio	Paulding	91	4	2.1	Defiance Ohio (M)	Fort Wayne International Airport Indiana (M)	Defiance Ohio (M)
Ohio	Perry	92	5	2.1	Newark Ohio (M)	Newark Ohio (M)	Newark Ohio (M)

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Ohio	Pickaway	92	6	1.7	Chilicothe Ohio (M)	Chilicothe Ohio (M)	Chilicothe Ohio (M)
Ohio	Pike	92	6	1.7	Portsmouth Ohio (M)	Chilicothe Ohio (M)	Chilicothe Ohio (M)
Ohio	Portage	87	5	2.7	Cleveland-Hopkins International Airport Ohio (M)	Warren Ohio (M)	Warren Ohio (M)
Ohio	Preble	91	2	2.0	MIDDLETOWN REGIONAL OH (A)	Richmond Airport Indiana (M)	Richmond Airport Indiana (M)
Ohio	Putnam	91	2	2.3	Defiance Ohio (M)	Bowling Green Ohio (M)	Bowling Green Ohio (M)
Ohio	Richland	91	1	2.3	Marion Ohio (M)	Norwalk Ohio (M)	Wooster Ohio (M)
Ohio	Ross	92	6	1.7	Chilicothe Ohio (M)	Chilicothe Ohio (M)	Chilicothe Ohio (M)
Ohio	Sandusky	91	1	2.3	Sandusky City Office Ohio (M)	Fremont Ohio (M)	Bowling Green Ohio (M)
Ohio	Scioto	92	6	1.7	Portsmouth Ohio (M)	Chilicothe Ohio (M)	Chilicothe Ohio (M)
Ohio	Seneca	91	1	2.3	Marion Ohio (M)	Fremont Ohio (M)	Bowling Green Ohio (M)
Ohio	Shelby	91	3	2.0	Lima Ohio (M)	Springfield Ohio (M)	Springfield Ohio (M)
Ohio	Stark	87	6	2.3	HARRY CLEVER FIELD OH (A)	Wooster Ohio (M)	Wooster Ohio (M)
Ohio	Summit	88	5	2.7	LORAIN COUNTY REGIO OH (A)	Warren Ohio (M)	Warren Ohio (M)
Ohio	Trumbull	88	4	2.9	New Castle Pennsylvania (M)	Meadville Pennsylvania (M)	Meadville Pennsylvania (M)
Ohio	Tuscarawas	90	6	2.3	Cambridge Ohio (M)	Wooster Ohio (M)	Wooster Ohio (M)
Ohio	Union	91	3	2.2	Marion Ohio (M)	Springfield Ohio (M)	Marion Ohio (M)
Ohio	Van Wert	91	4	2.1	Defiance Ohio (M)	Fort Wayne International Airport Indiana (M)	Defiance Ohio (M)
Ohio	Vinton	92	6	1.9	Chilicothe Ohio (M)	Chilicothe Ohio (M)	Athens Ohio (M)
Ohio	Warren	91	3	2.0	MIDDLETOWN REGIONAL OH (A)	Springfield Ohio (M)	Springfield Ohio (M)
Ohio	Washington	92	6	1.9	Athens Ohio (M)	Athens Ohio (M)	Athens Ohio (M)
Ohio	Wayne	88	6	2.3	LORAIN COUNTY REGIO OH (A)	Mansfield Lahm Municipal Airport Ohio (M)	Wooster Ohio (M)
Ohio	Williams	91	3	2.5	Defiance Ohio (M)	Adrian Michigan (M)	Adrian Michigan (M)
Ohio	Wood	91	1	2.3	Defiance Ohio (M)	Fremont Ohio (M)	Bowling Green Ohio (M)
Ohio	Wyandot	91	1	2.2	Marion Ohio (M)	Fremont Ohio (M)	Marion Ohio (M)
<b>Oklahoma</b>							
Oklahoma	Adair	98	15	0.9	TAHLEQUAH MUNICIPAL OK (A)	Fayetteville Drake Field Arkansas (M)	NORTHWEST ARKANSAS AR (A)
Oklahoma	Alfalfa	101	13	0.8	ALVA MUNICIPAL OK (A)	Vance Air Force Base Oklahoma (M)	Vance Air Force Base Oklahoma (M)
Oklahoma	Atoka	100	19	0.6	DURANT REGIONAL OK (A)	McAlester Municipal Airport Oklahoma (M)	McAlester Municipal Airport Oklahoma (M)
Oklahoma	Beaver	100	11	1.2	PERRYTON OCHILTREE TX (A)	LIBERAL MID-AMERICA KS (A)	Liberal Municipal Airport Kansas (M)

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Oklahoma	Beckham	100	18	0.7	CLINTON-SHERMAN AP OK (A)	CLINTON-SHERMAN AP OK (A)	CLINTON-SHERMAN AP OK (A)
Oklahoma	Blaine	99	15	0.8	VANCE AFB OK (A); Vance Air Force Base Oklahoma (M); Oklahoma City Wiley Post Airport Oklahoma (M)	VANCE AFB OK (A); Vance Air Force Base Oklahoma (M); Oklahoma City Wiley Post Airport Oklahoma (M)	VANCE AFB OK (A); Vance Air Force Base Oklahoma (M); Oklahoma City Wiley Post Airport Oklahoma (M)
Oklahoma	Bryan	100	20	0.5	DURANT REGIONAL OK (A)	Dennison N. Texas Regional Airport Texas (M)	Dennison N. Texas Regional Airport Texas (M)
Oklahoma	Caddo	101	14	0.7	HOBART MUNICIPAL OK (A)	Chickasha Oklahoma (M)	Hobart Municipal Airport Oklahoma (M)
Oklahoma	Canadian	100	13	0.7	GUTHRIE MUNICIPAL OK (A)	Norman Oklahoma (M)	Oklahoma City Will Rogers World Airport Oklahoma (M)
Oklahoma	Carter	100	17	0.5	PAULS VALLEY MUNICI OK (A)	Ardmore Oklahoma (M)	Ardmore Oklahoma (M)
Oklahoma	Cherokee	98	15	0.9	Muskogee Airport Oklahoma (M)	Muskogee Airport Oklahoma (M)	SMITH FIELD AR (A)
Oklahoma	Choctaw	98	25	0.5	COX FIELD TX (A)	Paris Cox Field Texas (M)	Paris Cox Field Texas (M)
Oklahoma	Cimarron	98	9	1.4	ELKHART-MORTON COUN KS (A)	COMANCHE NATL GRASS CO (A)	COMANCHE NATL GRASS CO (A)
Oklahoma	Cleveland	100	13	0.7	CHICKASHA MUNICIPAL OK (A)	Norman Oklahoma (M)	Oklahoma City Will Rogers World Airport Oklahoma (M)
Oklahoma	Coal	99	14	0.6	ADA MUNICIPAL OK (A)	Ada Oklahoma (M)	Ada Oklahoma (M)
Oklahoma	Comanche	102	19	0.7	FREDERICK MUNICIPAL OK (A)	Hobart Municipal Airport Oklahoma (M)	Hobart Municipal Airport Oklahoma (M)
Oklahoma	Cotton	102	19	0.6	FREDERICK MUNICIPAL OK (A)	Fort Sill Oklahoma (M)	Fort Sill Oklahoma (M)
Oklahoma	Craig	98	14	0.8	COFFEYVILLE MUNICIP KS (A)	COFFEYVILLE MUNICIP KS (A)	COFFEYVILLE MUNICIP KS (A)
Oklahoma	Creek	100	17	0.7	CUSHING MUNICIPAL OK (A)	Tulsa International Airport Oklahoma (M)	CUSHING MUNICIPAL OK (A)
Oklahoma	Custer	100	18	0.7	CLINTON-SHERMAN AP OK (A)	CLINTON-SHERMAN AP OK (A)	CLINTON-SHERMAN AP OK (A)
Oklahoma	Delaware	98	15	1.0	TAHLEQUAH MUNICIPAL OK (A)	NORTHWEST ARKANSAS AR (A)	Bentonville Arkansas (M)
Oklahoma	Dewey	97	10	0.8	Woodward Oklahoma (M)	Woodward Oklahoma (M)	Woodward Oklahoma (M)
Oklahoma	Ellis	101	10	0.9	WEST WOODWARD AP OK (A)	Woodward Oklahoma (M)	Gage Airport Oklahoma (M)
Oklahoma	Garfield	100	13	0.8	VANCE AFB OK (A)	Vance Air Force Base Oklahoma (M)	Vance Air Force Base Oklahoma (M)
Oklahoma	Garvin	100	13	0.7	HALLIBURTON FIELD OK (A)	Norman Oklahoma (M)	Norman Oklahoma (M)
Oklahoma	Grady	101	13	0.7	HENRY POST AAF OK (A)	Norman Oklahoma (M)	Oklahoma City Will Rogers World Airport Oklahoma (M)
Oklahoma	Grant	100	13	0.8	VANCE AFB OK (A)	Vance Air Force Base Oklahoma (M)	Vance Air Force Base Oklahoma (M)
Oklahoma	Greer	102	18	0.7	ALTUS QUARTZ MT REG OK (A)	CLINTON-SHERMAN AP OK (A)	Hobart Municipal Airport Oklahoma (M)
Oklahoma	Harmon	102	19	0.6	ALTUS QUARTZ MT REG OK (A)	ALTUS AFB OK (A)	Childress Municipal Airport Texas (M)
Oklahoma	Harper	101	10	0.9	WEST WOODWARD AP OK (A)	Woodward Oklahoma (M)	Gage Airport Oklahoma (M)
Oklahoma	Haskell	100	15	0.7	ROBERT S KERR AP OK (A)	Muskogee Airport Oklahoma (M)	Muskogee Airport Oklahoma (M)

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Oklahoma	Hughes	99	14	0.7	ADA MUNICIPAL OK (A)	Ada Oklahoma (M)	Seminole Oklahoma (M)
Oklahoma	Jackson	104	17	0.7	WILBARGER COUNTY AP TX (A)	Vernon Texas (M)	Hobart Municipal Airport Oklahoma (M)
Oklahoma	Jefferson	102	20	0.5	WICHITA FALL REGION TX (A)	HALLIBURTON FIELD OK (A)	HALLIBURTON FIELD OK (A)
Oklahoma	Johnston	100	14	0.6	ARDMORE DOWNTOWN EX OK (A)	Ada Oklahoma (M)	Ada Oklahoma (M)
Oklahoma	Kay	99	14	0.8	Winfield Kansas (M)	STROTHER FIELD KS (A)	STROTHER FIELD KS (A)
Oklahoma	Kingfisher	100	13	0.8	GUTHRIE MUNICIPAL OK (A)	Vance Air Force Base Oklahoma (M)	Vance Air Force Base Oklahoma (M)
Oklahoma	Kiowa	102	18	0.7	FREDERICK MUNICIPAL OK (A)	CLINTON-SHERMAN AP OK (A)	Hobart Municipal Airport Oklahoma (M)
Oklahoma	Latimer	100	19	0.6	ROBERT S KERR AP OK (A)	McAlester Municipal Airport Oklahoma (M)	McAlester Municipal Airport Oklahoma (M)
Oklahoma	Le Flore	100	20	0.6	ROBERT S KERR AP OK (A)	Fort Smith Regional Airport Arkansas (M)	SALLISAW MUNICIPAL OK (A)
Oklahoma	Lincoln	100	15	0.8	GUTHRIE MUNICIPAL OK (A)	Seminole Oklahoma (M)	STILLWATER 5 WNW OK (A)
Oklahoma	Logan	100	13	0.8	GUTHRIE MUNICIPAL OK (A)	Vance Air Force Base Oklahoma (M)	Vance Air Force Base Oklahoma (M)
Oklahoma	Love	100	17	0.5	ARDMORE DOWNTOWN EX OK (A)	Ardmore Oklahoma (M)	Ardmore Oklahoma (M)
Oklahoma	Major	101	13	0.8	ALVA MUNICIPAL OK (A)	Vance Air Force Base Oklahoma (M)	Vance Air Force Base Oklahoma (M)
Oklahoma	Marshall	100	17	0.5	ARDMORE DOWNTOWN EX OK (A)	Ardmore Oklahoma (M)	Ardmore Oklahoma (M)
Oklahoma	Mayes	98	17	0.8	TULSA INTL OK (A)	Tulsa International Airport Oklahoma (M)	CLAREMORE REGIONAL OK (A)
Oklahoma	McClain	100	13	0.7	CHICKASHA MUNICIPAL OK (A)	Norman Oklahoma (M)	Oklahoma City Will Rogers World Airport Oklahoma (M)
Oklahoma	McCurtain	98	23	0.5	MC CURTAIN COUNTY R OK (A)	J LYNN HELMS SEVIER AR (A)	J LYNN HELMS SEVIER AR (A)
Oklahoma	McIntosh	100	15	0.7	OKMULGEE MUNICIPAL OK (A)	Muskogee Airport Oklahoma (M)	Muskogee Airport Oklahoma (M)
Oklahoma	Murray	100	14	0.6	PAULS VALLEY MUNICI OK (A)	Ada Oklahoma (M)	Ada Oklahoma (M)
Oklahoma	Muskogee	100	15	0.8	OKMULGEE MUNICIPAL OK (A)	Muskogee Airport Oklahoma (M)	TAHLEQUAH MUNICIPAL OK (A)
Oklahoma	Noble	100	13	0.8	GUTHRIE MUNICIPAL OK (A)	Vance Air Force Base Oklahoma (M)	Vance Air Force Base Oklahoma (M)
Oklahoma	Nowata	98	10	0.9	Bartlesville Oklahoma (M)	Bartlesville Oklahoma (M)	TRI-CITY AP KS (A)
Oklahoma	Okfuskee	100	15	0.7	SHAWNEE REGIONAL OK (A)	Seminole Oklahoma (M)	Seminole Oklahoma (M)
Oklahoma	Oklahoma	100	13	0.7	GUTHRIE MUNICIPAL OK (A)	Norman Oklahoma (M)	Oklahoma City Will Rogers World Airport Oklahoma (M)
Oklahoma	Okmulgee	100	15	0.7	OKMULGEE MUNICIPAL OK (A)	Muskogee Airport Oklahoma (M)	Muskogee Airport Oklahoma (M)
Oklahoma	Osage	99	10	0.9	PONCA CITY REGIONAL OK (A)	Bartlesville Oklahoma (M)	BARTLESVILLE MUNICI OK (A)
Oklahoma	Ottawa	98	12	0.9	GROVE MUNICIPAL OK (A)	Joplin Municipal Airport Missouri (M)	Joplin Municipal Airport Missouri (M)
Oklahoma	Pawnee	100	15	0.8	STILLWATER REGIONAL OK (A)	Ponca City Municipal Airport Oklahoma (M)	STILLWATER 5 WNW OK (A)

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Oklahoma	Payne	100	15	0.8	GUTHRIE MUNICIPAL OK (A)	STILLWATER 5 WNW OK (A)	STILLWATER 5 WNW OK (A)
Oklahoma	Pittsburg	98	19	0.6	MCALESTER REGIONAL OK (A)	McAlester Municipal Airport Oklahoma (M)	McAlester Municipal Airport Oklahoma (M)
Oklahoma	Pontotoc	100	14	0.7	PAULS VALLEY MUNICI OK (A)	Ada Oklahoma (M)	Seminole Oklahoma (M)
Oklahoma	Pottawatomie	100	13	0.7	U OF OKLAHOMA WESTH OK (A)	Norman Oklahoma (M)	Oklahoma City Will Rogers World Airport Oklahoma (M)
Oklahoma	Pushmataha	98	21	0.6	MCALESTER REGIONAL OK (A); McAlester Municipal Airport Oklahoma (M); MC CURTAIN COUNTY R OK (A)	MCALESTER REGIONAL OK (A); McAlester Municipal Airport Oklahoma (M); MC CURTAIN COUNTY R OK (A)	MCALESTER REGIONAL OK (A); McAlester Municipal Airport Oklahoma (M); MC CURTAIN COUNTY R OK (A)
Oklahoma	Roger Mills	100	16	0.8	CLINTON-SHERMAN AP OK (A)	HEMPHILL COUNTY AP TX (A)	HEMPHILL COUNTY AP TX (A)
Oklahoma	Rogers	99	10	0.9	Tulsa Lloyd Jones Jr. Airport Oklahoma (M)	Bartlesville Oklahoma (M)	BARTLESVILLE MUNICI OK (A)
Oklahoma	Seminole	100	14	0.7	SHAWNEE REGIONAL OK (A)	Ada Oklahoma (M)	Seminole Oklahoma (M)
Oklahoma	Sequoyah	100	15	0.8	ROBERT S KERR AP OK (A)	Muskogee Airport Oklahoma (M)	TAHLEQUAH MUNICIPAL OK (A)
Oklahoma	Stephens	102	14	0.6	LAWTON-FORT SILL RE OK (A)	Chickasha Oklahoma (M)	Chickasha Oklahoma (M)
Oklahoma	Texas	100	11	1.2	GUYMON MUNICIPAL OK (A)	LIBERAL MID-AMERICA KS (A)	Liberal Municipal Airport Kansas (M)
Oklahoma	Tillman	104	17	0.6	WILBARGER COUNTY AP TX (A)	Vernon Texas (M)	Fort Sill Oklahoma (M)
Oklahoma	Tulsa	100	17	0.8	OKMULGEE MUNICIPAL OK (A)	Tulsa International Airport Oklahoma (M)	CLAREMORE REGIONAL OK (A)
Oklahoma	Wagoner	100	15	0.8	OKMULGEE MUNICIPAL OK (A)	Muskogee Airport Oklahoma (M)	CLAREMORE REGIONAL OK (A)
Oklahoma	Washington	98	10	0.9	Bartlesville Oklahoma (M)	Bartlesville Oklahoma (M)	BARTLESVILLE MUNICI OK (A)
Oklahoma	Washita	101	18	0.7	HOBART MUNICIPAL OK (A)	CLINTON-SHERMAN AP OK (A)	Hobart Municipal Airport Oklahoma (M)
Oklahoma	Woods	101	10	0.8	ALVA MUNICIPAL OK (A)	Woodward Oklahoma (M)	ALVA MUNICIPAL OK (A)
Oklahoma	Woodward	101	10	0.9	WEST WOODWARD AP OK (A)	Woodward Oklahoma (M)	Gage Airport Oklahoma (M)
<b>Oregon</b>							
Oregon	Baker	90	7	4.2	Baker Municipal Airport Oregon (M)	Baker Municipal Airport Oregon (M)	BAKER CITY MUNICIPA OR (A)
Oregon	Benton	90	22	6.2	Corvallis Municipal Airport Oregon (M)	Albany Oregon (M)	Newport State Beach Oregon (M)
Oregon	Clackamas	89	24	1.8	AURORA STATE AP OR (A)	Portland City Office Oregon (M)	AURORA STATE AP OR (A)
Oregon	Clatsop	83	26	4.5	Longview Kelso Longview Airport Washington (M)	Longview Kelso Longview Airport Washington (M)	GARIBALDI TILLAMOOK OR (A)
Oregon	Columbia	88	24	3.0	Hillsboro Portland- Hillsboro Airport Oregon (M)	Portland City Office Oregon (M)	ASTORIA OR (A)
Oregon	Coos	91	23	4.9	ROSEBURG REGIONAL OR (A)	Roseburg Airport Oregon (M)	CAPE ARAGO OR (A)
Oregon	Crook	91	12	3.8	ROBERTS FIELD OR (A)	Redmond Roberts Field Oregon (M)	Redmond Roberts Field Oregon (M)
Oregon	Curry	80	35	3.2	BROOKINGS STATE AP OR (A)	BROOKINGS STATE AP OR (A)	PORT ORFORD OR (A)
Oregon	Deschutes	91	4	4.9	ROBERTS FIELD OR (A)	Bend Oregon (M)	Bend Oregon (M)

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Oregon	Douglas	91	23	1.4	ROSEBURG REGIONAL OR (A)	Roseburg Airport Oregon (M)	ROSEBURG REGIONAL OR (A)
Oregon	Gilliam	93	19	1.6	COLUMBIA GORGE REGI WA (A); The Dalles Oregon (M); HERMISTON MUNICIPAL OR (A)	COLUMBIA GORGE REGI WA (A); The Dalles Oregon (M); HERMISTON MUNICIPAL OR (A)	COLUMBIA GORGE REGI WA (A); The Dalles Oregon (M); HERMISTON MUNICIPAL OR (A)
Oregon	Grant	96	15	2.4	JOHN DAY 35 WNW OR (A)	GRANT COUNT REGIONA OR (A)	GRANT COUNT REGIONA OR (A)
Oregon	Harney	91	4	4.5	BURNS MUNICIPAL OR (A)	BURNS MUNICIPAL OR (A)	Burns Municipal Airport Oregon (M)
Oregon	Hood River	94	19	1.7	COLUMBIA GORGE REGI WA (A)	The Dalles Oregon (M)	PORTLAND-TROUTDALE OR (A)
Oregon	Jackson	96	18	3.8	Grants Pass Oregon (M)	Hilts California (M)	Sexton Summit Oregon (M)
Oregon	Jefferson	91	12	3.8	ROBERTS FIELD OR (A)	Redmond Roberts Field Oregon (M)	Redmond Roberts Field Oregon (M)
Oregon	Josephine	96	24	3.8	Idlewild California (M)	Grants Pass Oregon (M)	Sexton Summit Oregon (M)
Oregon	Klamath	88	12	3.8	Klamath Falls International Airport Oregon (M)	Klamath Falls International Airport Oregon (M)	KLAMATH FALLS AP OR (A)
Oregon	Lake	88	7	5.0	Lakeview Oregon (M); LAKE COUNTY AP OR (A); RILEY 10 WSW OR (A)	Lakeview Oregon (M); LAKE COUNTY AP OR (A); RILEY 10 WSW OR (A)	Lakeview Oregon (M)
Oregon	Lane	88	26	2.4	EUGENE AP OR (A)	Eugene Mahlon Sweet Airport Oregon (M)	CORVALLIS 10 SSW OR (A)
Oregon	Lincoln	90	22	6.2	Corvallis Municipal Airport Oregon (M)	Albany Oregon (M)	Newport State Beach Oregon (M)
Oregon	Linn	90	22	2.4	Corvallis Municipal Airport Oregon (M)	Albany Oregon (M)	CORVALLIS 10 SSW OR (A)
Oregon	Malheur	96	8	2.5	ONTARIO MUNICIPAL OR (A)	ROME MET OR (A)	ROME STATE AP OR (A)
Oregon	Marion	90	22	2.1	Mc Minnville Municipal Airport Oregon (M)	Albany Oregon (M)	MCMINNVILLE MUNICIPAL OR (A)
Oregon	Morrow	96	17	1.7	HERMISTON MUNICIPAL OR (A)	HERMISTON MUNICIPAL OR (A)	HERMISTON MUNICIPAL OR (A)
Oregon	Multnomah	89	24	2.2	AURORA STATE AP OR (A)	Portland City Office Oregon (M)	PORTLAND-HILLSBORO OR (A)
Oregon	Polk	90	22	6.2	Corvallis Municipal Airport Oregon (M)	Albany Oregon (M)	Newport State Beach Oregon (M)
Oregon	Sherman	94	19	1.5	COLUMBIA GORGE REGI WA (A)	The Dalles Oregon (M)	The Dalles Oregon (M)
Oregon	Tillamook	90	27	4.5	Mc Minnville Municipal Airport Oregon (M)	Hillsboro Portland- Hillsboro Airport Oregon (M)	GARIBALDI TILLAMOOK OR (A)
Oregon	Umatilla	96	2	10.3	HERMISTON MUNICIPAL OR (A)	Meacham Oregon (M)	Meacham Oregon (M)
Oregon	Union	91	2	10.3	LA GRANDE UNION COU OR (A)	Meacham Oregon (M)	Meacham Oregon (M)
Oregon	Wallowa	92	16	2.7	La Grande Municipal Airport Oregon (M); LA GRANDE UNION COU OR (A); LEWISTON-NEZ PERCE ID (A)	La Grande Municipal Airport Oregon (M); LA GRANDE UNION COU OR (A); LEWISTON-NEZ PERCE ID (A)	La Grande Municipal Airport Oregon (M); LA GRANDE UNION COU OR (A); LEWISTON-NEZ PERCE ID (A)
Oregon	Wasco	94	19	1.5	COLUMBIA GORGE REGI WA (A)	The Dalles Oregon (M)	The Dalles Oregon (M)
Oregon	Washington	90	24	4.5	Mc Minnville Municipal Airport Oregon (M)	Portland City Office Oregon (M)	GARIBALDI TILLAMOOK OR (A)
Oregon	Wheeler	96	16	1.8	JOHN DAY 35 WNW OR (A)	JOHN DAY 35 WNW OR (A)	JOHN DAY 35 WNW OR (A)

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Oregon	Yamhill	90	24	4.5	Mc Minnville Municipal Airport Oregon (M)	Portland City Office Oregon (M)	GARIBALDI TILLAMOOK OR (A)
<b>Pennsylvania</b>							
Pennsylvania	Adams	91	8	1.8	Hagerstown Maryland (M)	Chambersburg Pennsylvania (M)	Chambersburg Pennsylvania (M)
Pennsylvania	Allegheny	87	5	2.3	Pittsburgh International Airport Pennsylvania (M)	Stubenville Ohio (M)	Butler Co. Pennsylvania (M)
Pennsylvania	Armstrong	87	5	2.8	ALLEGHENY COUNTY AP PA (A)	Dubois Airport Pennsylvania (M)	Dubois Airport Pennsylvania (M)
Pennsylvania	Beaver	88	5	2.3	New Castle Pennsylvania (M)	Stubenville Ohio (M)	New Castle Pennsylvania (M)
Pennsylvania	Bedford	91	7	2.6	GREATER CUMBERLAND MD (A)	Johnstown Cambria Co. Airport Pennsylvania (M)	JOHNSTOWN REGIONAL PA (A)
Pennsylvania	Berks	90	8	1.8	Lancaster Pennsylvania (M)	Lancaster Pennsylvania (M)	QUAKERTOWN AP PA (A)
Pennsylvania	Blair	87	7	2.6	State College Pennsylvania (M)	Johnstown Cambria Co. Airport Pennsylvania (M)	JOHNSTOWN REGIONAL PA (A)
Pennsylvania	Bradford	87	3	3.1	Elmira Corning Regional Airport New York (M)	Elmira Corning Regional Airport New York (M)	Binghamton Edwin A-Link Field New York (M)
Pennsylvania	Bucks	91	6	1.8	Philadelphia International Airport Pennsylvania (M)	Phillipsburg New Jersey (M)	QUAKERTOWN AP PA (A)
Pennsylvania	Butler	88	6	2.8	New Castle Pennsylvania (M)	Franklin Pennsylvania (M)	Franklin Pennsylvania (M)
Pennsylvania	Cambria	86	7	2.6	Altoona Blair Co. Airport Pennsylvania (M)	Johnstown Cambria Co. Airport Pennsylvania (M)	JOHNSTOWN REGIONAL PA (A)
Pennsylvania	Cameron	85	2	4.1	CLEARFIELD-LAWRENCE PA (A)	Bradford Regional Airport Pennsylvania (M)	Bradford Regional Airport Pennsylvania (M)
Pennsylvania	Carbon	90	5	3.1	Reading Spaatz Field Pennsylvania (M)	POCONO MOUNTAINS MU PA (A)	POCONO MOUNTAINS MU PA (A)
Pennsylvania	Centre	87	7	2.6	State College Pennsylvania (M)	State College Pennsylvania (M)	CLEARFIELD-LAWRENCE PA (A)
Pennsylvania	Chester	91	8	1.8	Philadelphia International Airport Pennsylvania (M)	Lancaster Pennsylvania (M)	QUAKERTOWN AP PA (A)
Pennsylvania	Clarion	84	5	2.8	Butler Co. Pennsylvania (M)	Dubois Airport Pennsylvania (M)	Franklin Pennsylvania (M)
Pennsylvania	Clearfield	87	5	2.8	State College Pennsylvania (M)	Dubois Airport Pennsylvania (M)	Dubois Airport Pennsylvania (M)
Pennsylvania	Clinton	88	7	2.4	Williamsport Regional Airport Pennsylvania (M)	State College Pennsylvania (M)	State College Pennsylvania (M)
Pennsylvania	Columbia	89	7	2.0	Sunbury Pennsylvania (M)	Sunbury Pennsylvania (M)	Williamsport Regional Airport Pennsylvania (M)
Pennsylvania	Crawford	87	4	2.9	NORTHEAST OHIO REGI OH (A)	Meadville Pennsylvania (M)	Meadville Pennsylvania (M)
Pennsylvania	Cumberland	91	8	1.8	York Pennsylvania (M)	Chambersburg Pennsylvania (M)	Chambersburg Pennsylvania (M)
Pennsylvania	Dauphin	91	7	2.0	York Pennsylvania (M)	Sunbury Pennsylvania (M)	Sunbury Pennsylvania (M)
Pennsylvania	Delaware	91	11	1.8	Philadelphia International Airport Pennsylvania (M)	Vineland New Jersey (M)	QUAKERTOWN AP PA (A)
Pennsylvania	Elk	86	2	4.1	Warren Pennsylvania (M)	Bradford Regional Airport Pennsylvania (M)	Bradford Regional Airport Pennsylvania (M)
Pennsylvania	Erie	87	4	2.9	NORTHEAST OHIO REGI OH (A)	Meadville Pennsylvania (M)	Meadville Pennsylvania (M)
Pennsylvania	Fayette	88	8	2.2	Uniontown Pennsylvania (M)	WASHINGTON COUNTY A PA (A)	Washington Pennsylvania (M)

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Pennsylvania	Forest	86	2	4.1	Warren Pennsylvania (M)	Bradford Regional Airport Pennsylvania (M)	Bradford Regional Airport Pennsylvania (M)
Pennsylvania	Franklin	91	8	1.8	Hagerstown Maryland (M)	Chambersburg Pennsylvania (M)	Chambersburg Pennsylvania (M)
Pennsylvania	Fulton	91	8	2.1	Hagerstown Maryland (M)	Chambersburg Pennsylvania (M)	Altoona Blair Co. Airport Pennsylvania (M)
Pennsylvania	Greene	90	5	2.2	Clarksburg West Virginia (M)	Wheeling West Virginia (M)	Washington Pennsylvania (M)
Pennsylvania	Huntingdon	90	7	2.4	Chambersburg Pennsylvania (M)	State College Pennsylvania (M)	State College Pennsylvania (M)
Pennsylvania	Indiana	85	5	2.8	INDIANA COUNTY JIMM PA (A)	Dubois Airport Pennsylvania (M)	Dubois Airport Pennsylvania (M)
Pennsylvania	Jefferson	85	5	2.8	INDIANA COUNTY JIMM PA (A)	Dubois Airport Pennsylvania (M)	Dubois Airport Pennsylvania (M)
Pennsylvania	Juniata	90	7	2.4	Harrisburg Capital City Airport Pennsylvania (M)	State College Pennsylvania (M)	State College Pennsylvania (M)
Pennsylvania	Lackawanna	87	5	3.1	WILKES-BARRE SCRANT PA (A)	POCONO MOUNTAINS MU PA (A)	POCONO MOUNTAINS MU PA (A)
Pennsylvania	Lancaster	91	8	1.7	York Pennsylvania (M)	Lancaster Pennsylvania (M)	Lancaster Pennsylvania (M)
Pennsylvania	Lawrence	88	5	2.8	New Castle Pennsylvania (M)	Warren Ohio (M)	Franklin Pennsylvania (M)
Pennsylvania	Lebanon	91	7	2.0	York Pennsylvania (M)	Sunbury Pennsylvania (M)	Sunbury Pennsylvania (M)
Pennsylvania	Lehigh	90	5	3.1	Reading Spaatz Field Pennsylvania (M)	POCONO MOUNTAINS MU PA (A)	POCONO MOUNTAINS MU PA (A)
Pennsylvania	Luzerne	87	5	3.1	WILKES-BARRE SCRANT PA (A)	POCONO MOUNTAINS MU PA (A)	POCONO MOUNTAINS MU PA (A)
Pennsylvania	Lycoming	89	7	2.0	Sunbury Pennsylvania (M)	Sunbury Pennsylvania (M)	Williamsport Regional Airport Pennsylvania (M)
Pennsylvania	McKean	86	2	4.1	Jamestown New York (M)	Bradford Regional Airport Pennsylvania (M)	Bradford Regional Airport Pennsylvania (M)
Pennsylvania	Mercer	88	4	2.9	New Castle Pennsylvania (M)	Meadville Pennsylvania (M)	Meadville Pennsylvania (M)
Pennsylvania	Mifflin	87	7	2.4	State College Pennsylvania (M)	State College Pennsylvania (M)	State College Pennsylvania (M)
Pennsylvania	Monroe	89	5	3.1	Phillipsburg New Jersey (M)	POCONO MOUNTAINS MU PA (A)	POCONO MOUNTAINS MU PA (A)
Pennsylvania	Montgomery	91	6	1.8	Philadelphia International Airport Pennsylvania (M)	Phillipsburg New Jersey (M)	QUAKERTOWN AP PA (A)
Pennsylvania	Montour	89	7	2.0	Sunbury Pennsylvania (M)	Sunbury Pennsylvania (M)	Williamsport Regional Airport Pennsylvania (M)
Pennsylvania	Northampton	90	5	3.1	Willow Grove Naval Air Station Pennsylvania (M)	POCONO MOUNTAINS MU PA (A)	POCONO MOUNTAINS MU PA (A)
Pennsylvania	Northumberland	89	7	2.0	Sunbury Pennsylvania (M)	Sunbury Pennsylvania (M)	Williamsport Regional Airport Pennsylvania (M)
Pennsylvania	Perry	90	8	1.8	Chambersburg Pennsylvania (M)	Chambersburg Pennsylvania (M)	PENN VALLEY AP PA (A)
Pennsylvania	Philadelphia	91	11	1.8	Philadelphia International Airport Pennsylvania (M)	Vineland New Jersey (M)	QUAKERTOWN AP PA (A)
Pennsylvania	Pike	87	3	3.4	SUSSEX AP NJ (A)	Monticello New York (M)	Monticello New York (M)
Pennsylvania	Potter	84	2	4.1	Olean New York (M)	Bradford Regional Airport Pennsylvania (M)	Bradford Regional Airport Pennsylvania (M)
Pennsylvania	Schuylkill	90	7	2.0	Reading Spaatz Field Pennsylvania (M)	Sunbury Pennsylvania (M)	Sunbury Pennsylvania (M)

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Pennsylvania	Snyder	90	7	2.0	Harrisburg Capital City Airport Pennsylvania (M)	Sunbury Pennsylvania (M)	Williamsport Regional Airport Pennsylvania (M)
Pennsylvania	Somerset	91	7	2.6	GREATER CUMBERLAND MD (A)	Johnstown Cambria Co. Airport Pennsylvania (M)	JOHNSTOWN REGIONAL PA (A)
Pennsylvania	Sullivan	88	9	2.0	Williamsport Regional Airport Pennsylvania (M)	Williamsport Regional Airport Pennsylvania (M)	Williamsport Regional Airport Pennsylvania (M)
Pennsylvania	Susquehanna	87	4	3.1	WILKES-BARRE SCRANT PA (A)	Binghamton Edwin A-Link Field New York (M)	Binghamton Edwin A-Link Field New York (M)
Pennsylvania	Tioga	87	3	2.8	Elmira Corning Regional Airport New York (M)	Elmira Corning Regional Airport New York (M)	Elmira Corning Regional Airport New York (M)
Pennsylvania	Union	89	7	2.0	Sunbury Pennsylvania (M)	Sunbury Pennsylvania (M)	Williamsport Regional Airport Pennsylvania (M)
Pennsylvania	Venango	85	4	2.9	Meadville Pennsylvania (M)	Meadville Pennsylvania (M)	Meadville Pennsylvania (M)
Pennsylvania	Warren	86	2	4.1	Jamestown New York (M)	Bradford Regional Airport Pennsylvania (M)	Bradford Regional Airport Pennsylvania (M)
Pennsylvania	Washington	88	5	2.2	Uniontown Pennsylvania (M)	Wheeling West Virginia (M)	Washington Pennsylvania (M)
Pennsylvania	Wayne	87	3	3.4	WILKES-BARRE SCRANT PA (A)	Monticello New York (M)	Monticello New York (M)
Pennsylvania	Westmoreland	88	7	2.6	Uniontown Pennsylvania (M)	Johnstown Cambria Co. Airport Pennsylvania (M)	JOHNSTOWN REGIONAL PA (A)
Pennsylvania	Wyoming	87	8	2.2	WILKES-BARRE SCRANT PA (A)	Wilkes-Barre / Scranton International Airport Pennsylvania (M)	Wilkes-Barre / Scranton International Airport Pennsylvania (M)
Pennsylvania	York	91	8	1.7	York Pennsylvania (M)	Lancaster Pennsylvania (M)	Lancaster Pennsylvania (M)
<b>Puerto Rico</b>							
Puerto Rico	N/A	90	68	0	LUIS MUNOZ MARIN INTL (A)	RAFAEL HERNANDEZ AP (A)	LUIS MUNOZ MARIN INTL (A)
<b>Rhode Island</b>							
Rhode Island	Bristol	88	9	2.6	Norwood Memorial Massachusetts (M)	Pawtucket Rhode Island (M)	Pawtucket Rhode Island (M)
Rhode Island	Kent	87	7	2.6	Providence T. F. Green State Airport Rhode Island (M)	Norwich Connecticut (M)	Pawtucket Rhode Island (M)
Rhode Island	Newport	87	9	2.6	Providence T. F. Green State Airport Rhode Island (M)	Pawtucket Rhode Island (M)	Marthas Vineyard Massachusetts (M)
Rhode Island	Providence	88	2	2.8	Norwood Memorial Massachusetts (M)	Clinton Massachusetts (M)	Worcester Regional Airport Massachusetts (M)
Rhode Island	Washington	87	7	2.6	Providence T. F. Green State Airport Rhode Island (M)	Norwich Connecticut (M)	Pawtucket Rhode Island (M)
<b>South Carolina</b>							
South Carolina	Abbeville	94	22	0.7	GREENWOOD COUNTY AP SC (A)	Greenwood South Carolina (M)	Greenwood South Carolina (M)
South Carolina	Aiken	95	26	0.5	Augusta Bush Field Georgia (M)	Augusta Bush Field Georgia (M)	Columbia Metro Airport South Carolina (M)
South Carolina	Allendale	94	27	0.4	PLANTATION AIRPARK GA (A)	BLACKVILLE 3 W SC (A)	BLACKVILLE 3 W SC (A)
South Carolina	Anderson	94	22	0.7	GREENWOOD COUNTY AP SC (A)	Spartanburg Airport South Carolina (M)	Greenwood South Carolina (M)
South Carolina	Bamberg	95	24	0.5	Orangeburg South Carolina (M)	Orangeburg South Carolina (M)	Orangeburg South Carolina (M)

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South Carolina	Barnwell	95	24	0.5	Augusta Bush Field Georgia (M)	Orangeburg South Carolina (M)	Orangeburg South Carolina (M)
South Carolina	Beaufort	94	30	0.3	SAVANNAH HILTON HEA GA (A)	SAVANNAH HILTON HEA GA (A)	Beaufort Marine Corps South Carolina (M)
South Carolina	Berkeley	93	26	0.4	CHARLESTON INTL SC (A)	Georgetown South Carolina (M)	MCCLELLANVILLE 7 NE SC (A)
South Carolina	Calhoun	95	24	0.5	Columbia Metro Airport South Carolina (M)	Orangeburg South Carolina (M)	Columbia Metro Airport South Carolina (M)
South Carolina	Charleston	93	28	0.4	CHARLESTON INTL SC (A)	Charleston City Office South Carolina (M)	MCCLELLANVILLE 7 NE SC (A)
South Carolina	Cherokee	94	22	0.7	Rock Hill South Carolina (M)	Spartanburg Airport South Carolina (M)	LINCOLN TON LINCOLN NC (A)
South Carolina	Chester	94	23	0.6	Rock Hill South Carolina (M)	Rock Hill South Carolina (M)	Rock Hill South Carolina (M)
South Carolina	Chesterfield	93	21	0.8	RICHMOND COUNTY AP NC (A)	Richmond International Airport North Carolina (M)	Richmond International Airport North Carolina (M)
South Carolina	Clarendon	95	24	0.5	Orangeburg South Carolina (M)	Orangeburg South Carolina (M)	Orangeburg South Carolina (M)
South Carolina	Colleton	93	30	0.3	Beaufort Marine Corps South Carolina (M)	Charleston International Airport South Carolina (M)	Charleston International Airport South Carolina (M)
South Carolina	Darlington	94	26	0.5	FLORENCE REGIONAL SC (A)	DARLINGTON COUNTY A SC (A)	DARLINGTON COUNTY A SC (A)
South Carolina	Dillon	94	21	0.6	FLORENCE REGIONAL SC (A)	Lumberton North Carolina (M)	Lumberton North Carolina (M)
South Carolina	Dorchester	95	24	0.5	Orangeburg South Carolina (M)	Orangeburg South Carolina (M)	Orangeburg South Carolina (M)
South Carolina	Edgefield	95	22	0.7	Augusta Bush Field Georgia (M)	Greenwood South Carolina (M)	Greenwood South Carolina (M)
South Carolina	Fairfield	95	23	0.6	Columbia Metro Airport South Carolina (M)	Rock Hill South Carolina (M)	Rock Hill South Carolina (M)
South Carolina	Florence	94	26	0.5	FLORENCE REGIONAL SC (A)	DARLINGTON COUNTY A SC (A)	DARLINGTON COUNTY A SC (A)
South Carolina	Georgetown	90	26	0.4	Georgetown South Carolina (M)	Georgetown South Carolina (M)	MYRTLE BEACH INTL SC (A)
South Carolina	Greenville	93	19	1.3	Anderson County Airport South Carolina (M)	ASHEVILLE 13 S NC (A)	ASHEVILLE 13 S NC (A)
South Carolina	Greenwood	94	22	0.7	GREENWOOD COUNTY AP SC (A)	Greenwood South Carolina (M)	Greenwood South Carolina (M)
South Carolina	Hampton	97	29	0.3	STATESBORO-BULLOCK GA (A)	PLANTATION AIRPARK GA (A)	PLANTATION AIRPARK GA (A)
South Carolina	Horry	92	28	0.4	COLUMBUS CO MUNICIPAL NC (A)	Myrtle Beach Air Force Base South Carolina (M)	COLUMBUS CO MUNICIPAL NC (A)
South Carolina	Jasper	94	29	0.3	PLANTATION AIRPARK GA (A)	PLANTATION AIRPARK GA (A)	PLANTATION AIRPARK GA (A)
South Carolina	Kershaw	95	27	0.5	COLUMBIA OWENS DOWN SC (A)	SHAW AFB SC (A)	Shaw Air Force Base / Sumter South Carolina (M)
South Carolina	Lancaster	94	23	0.6	Rock Hill South Carolina (M)	Rock Hill South Carolina (M)	Rock Hill South Carolina (M)
South Carolina	Laurens	94	22	0.7	GREENWOOD COUNTY AP SC (A)	Spartanburg Airport South Carolina (M)	Greenwood South Carolina (M)
South Carolina	Lee	94	26	0.5	FLORENCE REGIONAL SC (A)	DARLINGTON COUNTY A SC (A)	DARLINGTON COUNTY A SC (A)
South Carolina	Lexington	95	24	0.5	Columbia Metro Airport South Carolina (M)	Orangeburg South Carolina (M)	Columbia Metro Airport South Carolina (M)
South Carolina	Marion	94	26	0.5	FLORENCE REGIONAL SC (A)	LUMBERTON MUNICIPAL NC (A)	LUMBERTON MUNICIPAL NC (A)

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South Carolina	Marlboro	94	21	0.8	FLORENCE REGIONAL SC (A)	Richmond International Airport North Carolina (M)	Richmond International Airport North Carolina (M)
South Carolina	McCormick	94	22	0.7	DANIEL FIELD GA (A)	Greenwood South Carolina (M)	Greenwood South Carolina (M)
South Carolina	Newberry	95	22	0.7	Columbia Metro Airport South Carolina (M)	Greenwood South Carolina (M)	Greenwood South Carolina (M)
South Carolina	Oconee	93	18	1.1	Anderson County Airport South Carolina (M)	MACON COUNTY AP NC (A)	MACON COUNTY AP NC (A)
South Carolina	Orangeburg	95	24	0.5	Columbia Metro Airport South Carolina (M)	Orangeburg South Carolina (M)	Columbia Metro Airport South Carolina (M)
South Carolina	Pickens	93	19	1.3	Anderson County Airport South Carolina (M)	ASHEVILLE 13 S NC (A)	ASHEVILLE 13 S NC (A)
South Carolina	Richland	95	24	0.5	Columbia Metro Airport South Carolina (M)	Orangeburg South Carolina (M)	Columbia Metro Airport South Carolina (M)
South Carolina	Saluda	95	22	0.7	Columbia Metro Airport South Carolina (M)	Greenwood South Carolina (M)	Greenwood South Carolina (M)
South Carolina	Spartanburg	92	22	0.7	GREENVILLE-SPARTANB SC (A)	Spartanburg Airport South Carolina (M)	SHELBY MUNICIPAL NC (A)
South Carolina	Sumter	95	27	0.5	COLUMBIA OWENS DOWN SC (A)	SHAW AFB SC (A)	Shaw Air Force Base / Sumter South Carolina (M)
South Carolina	Union	94	22	0.7	Rock Hill South Carolina (M)	Spartanburg Airport South Carolina (M)	SHELBY MUNICIPAL NC (A)
South Carolina	Williamsburg	94	26	0.4	FLORENCE REGIONAL SC (A)	Georgetown South Carolina (M)	Florence Regional Airport South Carolina (M)
South Carolina	York	94	22	0.7	Rock Hill South Carolina (M)	LINCOLNTON LINCOLN NC (A)	LINCOLNTON LINCOLN NC (A)
<b>South Dakota</b>							
South Dakota	Aurora	93	-6	2.5	Chamberlain South Dakota (M)	Mitchell South Dakota (M)	Mitchell South Dakota (M)
South Dakota	Beadle	91	-10	2.7	Huron Regional Airport South Dakota (M)	Huron Regional Airport South Dakota (M)	HURON REGIONAL SD (A)
South Dakota	Bennett	96	-4	2.5	PINE RIDGE LANDING SD (A); PHILIP MUNICIPAL SD (A); MILLER FIELD NE (A)	PINE RIDGE LANDING SD (A); PHILIP MUNICIPAL SD (A); MILLER FIELD NE (A)	PINE RIDGE LANDING SD (A); PHILIP MUNICIPAL SD (A); MILLER FIELD NE (A)
South Dakota	Bon Homme	91	-3	2.3	CHAN GURNEY MUNICIP SD (A)	Yanktown Chan Gurney Municipal Airport South Dakota (M)	Yanktown Chan Gurney Municipal Airport South Dakota (M)
South Dakota	Brookings	88	-11	3.6	CANBY MUNICIPAL MN (A)	WATERTOWN MUNICIPAL SD (A)	Brookings South Dakota (M)
South Dakota	Brown	89	-12	3.4	Aberdeen Regional Airport South Dakota (M)	Aberdeen Regional Airport South Dakota (M)	ABERDEEN REGIONAL SD (A)
South Dakota	Brule	93	-5	2.4	Chamberlain South Dakota (M)	Chamberlain South Dakota (M)	Chamberlain South Dakota (M)
South Dakota	Buffalo	93	-5	2.4	Chamberlain South Dakota (M)	Chamberlain South Dakota (M)	Chamberlain South Dakota (M)
South Dakota	Butte	92	-9	3.5	BUFFALO 13 ESE SD (A); Buffalo South Dakota (M); BUFFALO SD (A)	BUFFALO 13 ESE SD (A); Buffalo South Dakota (M); BUFFALO SD (A)	BUFFALO 13 ESE SD (A); Buffalo South Dakota (M); BUFFALO SD (A)
South Dakota	Campbell	91	-10	3.0	Mobridge South Dakota (M)	Mobridge South Dakota (M)	MOBRIDGE MUNICIPAL SD (A)
South Dakota	Charles Mix	91	-5	2.4	Mitchell South Dakota (M); MITCHELL MUNICIPAL SD (A); O'NEILL MUNICIPAL NE (M)	Mitchell South Dakota (M); MITCHELL MUNICIPAL SD (A); O'NEILL MUNICIPAL NE (M)	Mitchell South Dakota (M); MITCHELL MUNICIPAL SD (A); O'NEILL MUNICIPAL NE (M)

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South Dakota	Clark	87	-12	3.6	Watertown Municipal Airport South Dakota (M)	Watertown Municipal Airport South Dakota (M)	Watertown Municipal Airport South Dakota (M)
South Dakota	Clay	91	-3	2.3	CHAN GURNEY MUNICIPAL SD (A)	Yanktown Chan Gurney Municipal Airport South Dakota (M)	Yanktown Chan Gurney Municipal Airport South Dakota (M)
South Dakota	Codington	87	-12	3.6	Watertown Municipal Airport South Dakota (M)	Watertown Municipal Airport South Dakota (M)	Watertown Municipal Airport South Dakota (M)
South Dakota	Corson	91	-10	3.0	Mobridge South Dakota (M)	Mobridge South Dakota (M)	MOBRIDGE MUNICIPAL SD (A)
South Dakota	Custer	93	-12	5.6	Rapid City Regional Airport South Dakota (M)	Newcastle Wyoming (M)	Custer South Dakota (M)
South Dakota	Davison	91	-6	2.5	MITCHELL MUNICIPAL SD (A)	Mitchell South Dakota (M)	Mitchell South Dakota (M)
South Dakota	Day	88	-12	3.6	SISSETON MUNICIPAL SD (A)	Watertown Municipal Airport South Dakota (M)	Watertown Municipal Airport South Dakota (M)
South Dakota	Deuel	89	-12	3.6	LAC QUI PARLE COUNT MN (A)	Watertown Municipal Airport South Dakota (M)	Watertown Municipal Airport South Dakota (M)
South Dakota	Dewey	91	-10	3.0	Mobridge South Dakota (M)	Mobridge South Dakota (M)	MOBRIDGE MUNICIPAL SD (A)
South Dakota	Douglas	91	-6	2.5	MITCHELL MUNICIPAL SD (A)	Mitchell South Dakota (M)	Mitchell South Dakota (M)
South Dakota	Edmunds	89	-12	3.4	Aberdeen Regional Airport South Dakota (M)	Aberdeen Regional Airport South Dakota (M)	ABERDEEN REGIONAL SD (A)
South Dakota	Fall River	97	-3	5.6	CHADRON MUNICIPAL NE (A)	Chadron Airport Nebraska (M)	Custer South Dakota (M)
South Dakota	Faulk	89	-11	3.1	ABERDEEN REGIONAL SD (A); Aberdeen Regional Airport South Dakota (M); HURON REGIONAL SD (A)	ABERDEEN REGIONAL SD (A); Aberdeen Regional Airport South Dakota (M); HURON REGIONAL SD (A)	ABERDEEN REGIONAL SD (A); Aberdeen Regional Airport South Dakota (M); HURON REGIONAL SD (A)
South Dakota	Grant	89	-12	3.6	LAC QUI PARLE COUNT MN (A)	Watertown Municipal Airport South Dakota (M)	Watertown Municipal Airport South Dakota (M)
South Dakota	Gregory	95	-1	2.0	WINNER REGIONAL SD (A)	WINNER REGIONAL SD (A)	WINNER REGIONAL SD (A)
South Dakota	Haakon	97	-4	2.4	PHILIP MUNICIPAL SD (A)	PHILIP MUNICIPAL SD (A)	PHILIP MUNICIPAL SD (A)
South Dakota	Hamlin	87	-12	3.6	Watertown Municipal Airport South Dakota (M)	Watertown Municipal Airport South Dakota (M)	Watertown Municipal Airport South Dakota (M)
South Dakota	Hand	92	-8	2.6	Huron Regional Airport South Dakota (M); HURON REGIONAL SD (A); Chamberlain South Dakota (M)	Huron Regional Airport South Dakota (M); HURON REGIONAL SD (A); Chamberlain South Dakota (M)	Huron Regional Airport South Dakota (M); HURON REGIONAL SD (A); Chamberlain South Dakota (M)
South Dakota	Hanson	91	-6	2.5	MITCHELL MUNICIPAL SD (A)	Mitchell South Dakota (M)	Mitchell South Dakota (M)
South Dakota	Harding	92	-10	3.9	Buffalo South Dakota (M)	BUFFALO 13 ESE SD (A)	BUFFALO 13 ESE SD (A)
South Dakota	Hughes	95	-6	2.7	Pierre Municipal Airport South Dakota (M)	Pierre Municipal Airport South Dakota (M)	PIERRE 24 S SD (A)
South Dakota	Hutchinson	91	-6	2.5	MITCHELL MUNICIPAL SD (A)	Mitchell South Dakota (M)	Mitchell South Dakota (M)
South Dakota	Hyde	94	-6	2.4	PIERRE REGIONAL SD (A); Pierre Municipal Airport South Dakota (M); Chamberlain South Dakota (M)	PIERRE REGIONAL SD (A); Pierre Municipal Airport South Dakota (M); Chamberlain South Dakota (M)	PIERRE REGIONAL SD (A); Pierre Municipal Airport South Dakota (M); Chamberlain South Dakota (M)
South Dakota	Jackson	97	-4	2.4	PHILIP MUNICIPAL SD (A)	PHILIP MUNICIPAL SD (A)	PHILIP MUNICIPAL SD (A)
South Dakota	Jerauld	93	-10	2.7	Chamberlain South Dakota (M)	Huron Regional Airport South Dakota (M)	HURON REGIONAL SD (A)

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South Dakota	Jones	95	-6	2.7	Pierre Municipal Airport South Dakota (M)	Pierre Municipal Airport South Dakota (M)	PIERRE 24 S SD (A)
South Dakota	Kingsbury	91	-10	3.6	Huron Regional Airport South Dakota (M)	Huron Regional Airport South Dakota (M)	Brookings South Dakota (M)
South Dakota	Lake	89	-21	5.0	Sioux Falls Foss Field South Dakota (M)	SIoux FALLS CLIMATE SD (A)	SIoux FALLS CLIMATE SD (A)
South Dakota	Lawrence	92	-12	6.2	Ellsworth Air Force Base South Dakota (M)	Newcastle Wyoming (M)	SUNDANCE 8 NNW WY (A)
South Dakota	Lincoln	90	-21	5.0	ORANGE CITY MUNICIPAL IA (A)	SIoux FALLS CLIMATE SD (A)	SIoux FALLS CLIMATE SD (A)
South Dakota	Lyman	95	-5	2.7	WINNER REGIONAL SD (A)	PIERRE REGIONAL SD (A)	PIERRE 24 S SD (A)
South Dakota	Marshall	89	-14	3.6	Lidgerwood North Dakota (M)	Lidgerwood North Dakota (M)	Lidgerwood North Dakota (M)
South Dakota	McCook	91	-21	5.0	MITCHELL MUNICIPAL SD (A)	SIoux FALLS CLIMATE SD (A)	SIoux FALLS CLIMATE SD (A)
South Dakota	McPherson	90	-11	3.2	Aberdeen Regional Airport South Dakota (M); ABERDEEN REGIONAL SD (A); MOBRIDGE MUNICIPAL SD (A)	Aberdeen Regional Airport South Dakota (M); ABERDEEN REGIONAL SD (A); MOBRIDGE MUNICIPAL SD (A)	Aberdeen Regional Airport South Dakota (M); ABERDEEN REGIONAL SD (A); MOBRIDGE MUNICIPAL SD (A)
South Dakota	Meade	93	-6	2.9	FAITH MUNICIPAL SD (A)	FAITH MUNICIPAL SD (A)	FAITH MUNICIPAL SD (A)
South Dakota	Mellette	92	-5	2.7	PIERRE 24 S SD (A)	PIERRE 24 S SD (A)	PIERRE 24 S SD (A)
South Dakota	Miner	91	-10	2.7	Huron Regional Airport South Dakota (M)	Huron Regional Airport South Dakota (M)	HURON REGIONAL SD (A)
South Dakota	Minnehaha	89	-21	5.0	Sioux Falls Foss Field South Dakota (M)	SIoux FALLS CLIMATE SD (A)	SIoux FALLS CLIMATE SD (A)
South Dakota	Moody	89	-21	5.0	Sioux Falls Foss Field South Dakota (M)	SIoux FALLS CLIMATE SD (A)	SIoux FALLS CLIMATE SD (A)
South Dakota	Pennington	93	-5	2.7	Rapid City Regional Airport South Dakota (M)	Rapid City Regional Airport South Dakota (M)	RAPID CITY REGIONAL SD (A)
South Dakota	Perkins	97	-14	4.1	LEMMON MUNICIPAL SD (A)	LEMMON MUNICIPAL SD (A)	HETTINGER MUNICIPAL ND (A)
South Dakota	Potter	91	-9	3.0	MOBRIDGE MUNICIPAL SD (A)	MOBRIDGE MUNICIPAL SD (A)	MOBRIDGE MUNICIPAL SD (A)
South Dakota	Roberts	89	-14	3.7	Lidgerwood North Dakota (M)	Lidgerwood North Dakota (M)	Wheaton NDB Minnesota (M)
South Dakota	Sanborn	91	-10	2.7	Huron Regional Airport South Dakota (M)	Huron Regional Airport South Dakota (M)	HURON REGIONAL SD (A)
South Dakota	Shannon	95	-3	2.6	PINE RIDGE LANDING SD (A)	PINE RIDGE LANDING SD (A)	PINE RIDGE LANDING SD (A)
South Dakota	Spink	91	-12	3.4	Huron Regional Airport South Dakota (M)	Aberdeen Regional Airport South Dakota (M)	ABERDEEN REGIONAL SD (A)
South Dakota	Stanley	95	-6	2.7	Pierre Municipal Airport South Dakota (M)	Pierre Municipal Airport South Dakota (M)	PIERRE 24 S SD (A)
South Dakota	Sully	95	-6	2.4	Pierre Municipal Airport South Dakota (M)	Pierre Municipal Airport South Dakota (M)	PIERRE REGIONAL SD (A)
South Dakota	Todd	94	-6	2.5	Valentine Miller Field Nebraska (M)	Valentine Miller Field Nebraska (M)	Valentine Miller Field Nebraska (M)
South Dakota	Tripp	95	-1	2.0	WINNER REGIONAL SD (A)	WINNER REGIONAL SD (A)	WINNER REGIONAL SD (A)
South Dakota	Turner	91	-21	5.0	CHAN GURNEY MUNICIPAL SD (A)	SIoux FALLS CLIMATE SD (A)	SIoux FALLS CLIMATE SD (A)
South Dakota	Union	91	-4	2.3	LE MARS MUNICIPAL IA (A)	Sioux City Sioux Gateway Airport Iowa (M)	Yanktown Chan Gurney Municipal Airport South Dakota (M)

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South Dakota	Walworth	91	-10	3.0	Mobridge South Dakota (M)	Mobridge South Dakota (M)	MOBRIDGE MUNICIPAL SD (A)
South Dakota	Yankton	91	-3	2.3	CHAN GURNEY MUNICIPAL SD (A)	Yanktown Chan Gurney Municipal Airport South Dakota (M)	Yanktown Chan Gurney Municipal Airport South Dakota (M)
South Dakota	Ziebach	93	-6	2.9	FAITH MUNICIPAL SD (A)	FAITH MUNICIPAL SD (A)	FAITH MUNICIPAL SD (A)
<b>Tennessee</b>							
Tennessee	Anderson	91	20	0.8	OAK RIDGE TN (A)	Knoxville Mcghee Tyson Airport Tennessee (M)	Knoxville Mcghee Tyson Airport Tennessee (M)
Tennessee	Bedford	97	13	1.0	SMYRNA AP TN (A)	Tullahoma Tennessee (M)	Columbia Tennessee (M)
Tennessee	Benton	93	14	0.9	Clarksville Tennessee (M); CAMPBELL AAF KY (A); Hopkinsville Campbell Air Force Base Kentucky (M)	Clarksville Tennessee (M); CAMPBELL AAF KY (A); Hopkinsville Campbell Air Force Base Kentucky (M)	Clarksville Tennessee (M); CAMPBELL AAF KY (A); Hopkinsville Campbell Air Force Base Kentucky (M)
Tennessee	Bledsoe	93	14	1.3	CHATTANOOGA AP TN (A)	CROSSVILLE 7 NW TN (A)	CROSSVILLE 7 NW TN (A)
Tennessee	Blount	91	19	0.9	OAK RIDGE TN (A)	WESTERN CAROLINA RE NC (A)	WESTERN CAROLINA RE NC (A)
Tennessee	Bradley	93	18	1.0	Dalton Georgia (M)	Athens Tennessee (M)	Athens Tennessee (M)
Tennessee	Campbell	92	18	0.9	MIDDLESBORO-BELL CO KY (A)	MIDDLESBORO-BELL CO KY (A)	MIDDLESBORO-BELL CO KY (A)
Tennessee	Cannon	97	13	1.0	SMYRNA AP TN (A)	Tullahoma Tennessee (M)	Murfreesboro Tennessee (M)
Tennessee	Carroll	93	19	0.7	Jackson Mckellar-Sipes Regional Airport Tennessee (M)	Jackson Mckellar-Sipes Regional Airport Tennessee (M)	Jackson Mckellar-Sipes Regional Airport Tennessee (M)
Tennessee	Carter	88	15	1.8	Bristol Tri-City Airport Tennessee (M)	BOONE NC (A)	BOONE NC (A)
Tennessee	Cheatham	97	12	1.0	SMYRNA AP TN (A)	Clarksville Tennessee (M)	Hopkinsville Campbell Air Force Base Kentucky (M)
Tennessee	Chester	93	19	0.7	Jackson Mckellar-Sipes Regional Airport Tennessee (M)	Jackson Mckellar-Sipes Regional Airport Tennessee (M)	Jackson Mckellar-Sipes Regional Airport Tennessee (M)
Tennessee	Claiborne	92	18	0.9	MIDDLESBORO-BELL CO KY (A)	MIDDLESBORO-BELL CO KY (A)	MIDDLESBORO-BELL CO KY (A)
Tennessee	Clay	86	15	1.2	CROSSVILLE 7 NW TN (A); Crossville Memorial Airport Tennessee (M); CROSSVILLE MEMORIAL TN (A)	CROSSVILLE 7 NW TN (A); Crossville Memorial Airport Tennessee (M); CROSSVILLE MEMORIAL TN (A)	CROSSVILLE 7 NW TN (A); Crossville Memorial Airport Tennessee (M); CROSSVILLE MEMORIAL TN (A)
Tennessee	Cocke	90	16	1.5	Greenville Tennessee (M)	Greenville Tennessee (M)	Greenville Tennessee (M)
Tennessee	Coffee	94	13	1.0	Murfreesboro Tennessee (M)	Tullahoma Tennessee (M)	Murfreesboro Tennessee (M)
Tennessee	Crockett	94	19	0.7	BLYTHEVILLE MUNICIPAL AR (A)	Dyersburg Municipal Airport Tennessee (M)	Dyersburg Municipal Airport Tennessee (M)
Tennessee	Cumberland	87	14	1.3	CROSSVILLE MEMORIAL TN (A)	CROSSVILLE 7 NW TN (A)	CROSSVILLE 7 NW TN (A)
Tennessee	Davidson	97	14	1.0	SMYRNA AP TN (A)	Murfreesboro Tennessee (M)	Murfreesboro Tennessee (M)
Tennessee	Decatur	94	17	0.8	MCKELLAR-SIPES REGI TN (A); Jackson Mckellar-Sipes Regional Airport Tennessee (M); Columbia Tennessee (M)	MCKELLAR-SIPES REGI TN (A); Jackson Mckellar-Sipes Regional Airport Tennessee (M); Columbia Tennessee (M)	MCKELLAR-SIPES REGI TN (A); Jackson Mckellar-Sipes Regional Airport Tennessee (M); Columbia Tennessee (M)
Tennessee	DeKalb	97	14	1.3	SMYRNA AP TN (A)	Murfreesboro Tennessee (M)	CROSSVILLE 7 NW TN (A)

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Tennessee	Dickson	93	12	1.0	Hopkinsville Campbell Air Force Base Kentucky (M)	Clarksville Tennessee (M)	Hopkinsville Campbell Air Force Base Kentucky (M)
Tennessee	Dyer	95	17	0.7	Blytheville Air Force Base Arkansas (M)	Eaker Air Force Base Arkansas (M)	Dyersburg Municipal Airport Tennessee (M)
Tennessee	Fayette	97	19	0.7	MILLINGTON MUNICIPA TN (A)	Jackson Mckellar-Sipes Regional Airport Tennessee (M)	Jackson Mckellar-Sipes Regional Airport Tennessee (M)
Tennessee	Fentress	87	14	1.3	CROSSVILLE MEMORIAL TN (A)	CROSSVILLE 7 NW TN (A)	CROSSVILLE 7 NW TN (A)
Tennessee	Franklin	93	13	0.9	Tullahoma Tennessee (M)	Tullahoma Tennessee (M)	Tullahoma Tennessee (M)
Tennessee	Gibson	93	19	0.7	Jackson Mckellar-Sipes Regional Airport Tennessee (M)	Dyersburg Municipal Airport Tennessee (M)	Dyersburg Municipal Airport Tennessee (M)
Tennessee	Giles	94	15	1.0	Columbia Tennessee (M)	Columbia Tennessee (M)	Columbia Tennessee (M)
Tennessee	Grainger	92	16	1.5	MIDDLESBORO-BELL CO KY (A)	Greenville Tennessee (M)	Greenville Tennessee (M)
Tennessee	Greene	90	16	1.5	Greenville Tennessee (M)	Greenville Tennessee (M)	Greenville Tennessee (M)
Tennessee	Grundy	93	13	0.9	Tullahoma Tennessee (M)	Tullahoma Tennessee (M)	Tullahoma Tennessee (M)
Tennessee	Hamblen	92	16	1.5	MIDDLESBORO-BELL CO KY (A)	Greenville Tennessee (M)	Greenville Tennessee (M)
Tennessee	Hamilton	93	18	1.0	Dalton Georgia (M)	Athens Tennessee (M)	Athens Tennessee (M)
Tennessee	Hancock	92	16	1.5	MIDDLESBORO-BELL CO KY (A)	Greenville Tennessee (M)	Greenville Tennessee (M)
Tennessee	Hardeman	93	19	0.7	Jackson Mckellar-Sipes Regional Airport Tennessee (M)	Jackson Mckellar-Sipes Regional Airport Tennessee (M)	Jackson Mckellar-Sipes Regional Airport Tennessee (M)
Tennessee	Hardin	94	21	0.6	MUSCLE SHOALS 2 N AL (A); Muscle Shoals Regional Airport Alabama (M); Florence Airport Alabama (M)	MUSCLE SHOALS 2 N AL (A); Muscle Shoals Regional Airport Alabama (M); Florence Airport Alabama (M)	MUSCLE SHOALS 2 N AL (A); Muscle Shoals Regional Airport Alabama (M); Florence Airport Alabama (M)
Tennessee	Hawkins	90	16	1.5	Greenville Tennessee (M)	Greenville Tennessee (M)	Greenville Tennessee (M)
Tennessee	Haywood	97	19	0.7	MILLINGTON MUNICIPA TN (A)	Dyersburg Municipal Airport Tennessee (M)	Dyersburg Municipal Airport Tennessee (M)
Tennessee	Henderson	93	19	0.7	Jackson Mckellar-Sipes Regional Airport Tennessee (M)	Jackson Mckellar-Sipes Regional Airport Tennessee (M)	Jackson Mckellar-Sipes Regional Airport Tennessee (M)
Tennessee	Henry	93	16	0.9	Hopkinsville Campbell Air Force Base Kentucky (M); CAMPBELL AAF KY (A); Fort Campbell AAF Kentucky (M)	Hopkinsville Campbell Air Force Base Kentucky (M); CAMPBELL AAF KY (A); Fort Campbell AAF Kentucky (M)	Hopkinsville Campbell Air Force Base Kentucky (M); CAMPBELL AAF KY (A); Fort Campbell AAF Kentucky (M)
Tennessee	Hickman	94	15	1.0	Columbia Tennessee (M)	Columbia Tennessee (M)	Columbia Tennessee (M)
Tennessee	Houston	93	12	1.0	Hopkinsville Campbell Air Force Base Kentucky (M)	Clarksville Tennessee (M)	Hopkinsville Campbell Air Force Base Kentucky (M)
Tennessee	Humphreys	93	15	0.9	Clarksville Tennessee (M); CLARKSVILLE REGIONA TN (A); CAMPBELL AAF KY (A)	Clarksville Tennessee (M); CLARKSVILLE REGIONA TN (A); CAMPBELL AAF KY (A)	Clarksville Tennessee (M); CLARKSVILLE REGIONA TN (A); CAMPBELL AAF KY (A)
Tennessee	Jackson	85	14	1.3	CROSSVILLE 7 NW TN (A)	CROSSVILLE 7 NW TN (A)	CROSSVILLE 7 NW TN (A)
Tennessee	Jefferson	91	16	1.5	MCGHEE TYSON AP TN (A)	Greenville Tennessee (M)	Greenville Tennessee (M)
Tennessee	Johnson	88	15	1.8	Bristol Tri-City Airport Tennessee (M)	BOONE NC (A)	BOONE NC (A)

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Tennessee	Knox	91	20	0.8	OAK RIDGE TN (A)	Knoxville Mcghee Tyson Airport Tennessee (M)	Knoxville Mcghee Tyson Airport Tennessee (M)
Tennessee	Lake	95	15	1.0	Blytheville Air Force Base Arkansas (M)	Sikeston Missouri (M)	Sikeston Missouri (M)
Tennessee	Lauderdale	97	17	0.7	MILLINGTON MUNICIPA TN (A)	Eaker Air Force Base Arkansas (M)	Dyersburg Municipal Airport Tennessee (M)
Tennessee	Lawrence	94	15	1.0	Florence Airport Alabama (M)	Columbia Tennessee (M)	Columbia Tennessee (M)
Tennessee	Lewis	94	15	1.0	Columbia Tennessee (M)	Columbia Tennessee (M)	Columbia Tennessee (M)
Tennessee	Lincoln	93	13	0.9	Tullahoma Tennessee (M)	Tullahoma Tennessee (M)	Tullahoma Tennessee (M)
Tennessee	Loudon	92	18	1.0	Athens Tennessee (M)	Athens Tennessee (M)	Athens Tennessee (M)
Tennessee	Macon	92	15	1.0	BOWLING GREEN AP KY (A)	Bowling Green Warren Co. Airport Kentucky (M)	Bowling Green Warren Co. Airport Kentucky (M)
Tennessee	Madison	93	19	0.7	Jackson Mckellar-Sipes Regional Airport Tennessee (M)	Jackson Mckellar-Sipes Regional Airport Tennessee (M)	Jackson Mckellar-Sipes Regional Airport Tennessee (M)
Tennessee	Marion	93	13	0.9	Tullahoma Tennessee (M)	Tullahoma Tennessee (M)	Tullahoma Tennessee (M)
Tennessee	Marshall	97	13	1.0	SMYRNA AP TN (A)	Tullahoma Tennessee (M)	Columbia Tennessee (M)
Tennessee	Maury	94	15	1.0	Columbia Tennessee (M)	Columbia Tennessee (M)	Columbia Tennessee (M)
Tennessee	McMinn	92	18	1.0	Athens Tennessee (M)	Athens Tennessee (M)	Athens Tennessee (M)
Tennessee	McNairy	93	19	0.7	Jackson Mckellar-Sipes Regional Airport Tennessee (M)	Jackson Mckellar-Sipes Regional Airport Tennessee (M)	Jackson Mckellar-Sipes Regional Airport Tennessee (M)
Tennessee	Meigs	93	14	1.3	CHATTANOOGA AP TN (A)	CROSSVILLE 7 NW TN (A)	CROSSVILLE 7 NW TN (A)
Tennessee	Monroe	92	18	1.0	Athens Tennessee (M)	Athens Tennessee (M)	Athens Tennessee (M)
Tennessee	Montgomery	93	12	1.0	Hopkinsville Campbell Air Force Base Kentucky (M)	Clarksville Tennessee (M)	Hopkinsville Campbell Air Force Base Kentucky (M)
Tennessee	Moore	94	13	1.0	Murfreesboro Tennessee (M)	Tullahoma Tennessee (M)	Murfreesboro Tennessee (M)
Tennessee	Morgan	91	14	1.3	OAK RIDGE TN (A)	CROSSVILLE 7 NW TN (A)	CROSSVILLE 7 NW TN (A)
Tennessee	Obion	93	19	0.7	DYERSBURG MUNICIPAL TN (A)	Dyersburg Municipal Airport Tennessee (M)	Dyersburg Municipal Airport Tennessee (M)
Tennessee	Overton	87	14	1.3	CROSSVILLE MEMORIAL TN (A)	CROSSVILLE 7 NW TN (A)	CROSSVILLE 7 NW TN (A)
Tennessee	Perry	94	17	0.8	Columbia Tennessee (M); MCKELLAR-SIPES REGI TN (A); Jackson Mckellar-Sipes Regional Airport Tennessee (M)	Columbia Tennessee (M); MCKELLAR-SIPES REGI TN (A); Jackson Mckellar-Sipes Regional Airport Tennessee (M)	Columbia Tennessee (M); MCKELLAR-SIPES REGI TN (A); Jackson Mckellar-Sipes Regional Airport Tennessee (M)
Tennessee	Pickett	85	14	1.3	CROSSVILLE 7 NW TN (A)	CROSSVILLE 7 NW TN (A)	CROSSVILLE 7 NW TN (A)
Tennessee	Polk	93	18	1.0	Dalton Georgia (M)	Athens Tennessee (M)	Athens Tennessee (M)
Tennessee	Putnam	87	14	1.3	CROSSVILLE MEMORIAL TN (A)	CROSSVILLE 7 NW TN (A)	CROSSVILLE 7 NW TN (A)
Tennessee	Rhea	92	14	1.3	Athens Tennessee (M)	CROSSVILLE 7 NW TN (A)	CROSSVILLE 7 NW TN (A)
Tennessee	Roane	92	14	1.3	Athens Tennessee (M)	CROSSVILLE 7 NW TN (A)	CROSSVILLE 7 NW TN (A)
Tennessee	Robertson	93	12	1.0	Hopkinsville Campbell Air Force Base Kentucky (M)	Clarksville Tennessee (M)	Hopkinsville Campbell Air Force Base Kentucky (M)

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Tennessee	Rutherford	97	13	1.0	SMYRNA AP TN (A)	Tullahoma Tennessee (M)	Columbia Tennessee (M)
Tennessee	Scott	91	21	0.8	OAK RIDGE TN (A)	OAK RIDGE TN (A)	OAK RIDGE TN (A)
Tennessee	Sequatchie	93	22	0.7	CHATTANOOGA AP TN (A)	Chattanooga Lovell Field Airport Tennessee (M)	Chattanooga Lovell Field Airport Tennessee (M)
Tennessee	Sevier	91	20	0.8	MCGHEE TYSON AP TN (A)	Knoxville Mcghee Tyson Airport Tennessee (M)	Knoxville Mcghee Tyson Airport Tennessee (M)
Tennessee	Shelby	97	20	0.6	MILLINGTON MUNICIPA TN (A)	Millington Municipal Airport Tennessee (M)	WEST MEMPHIS MUNICI AR (A)
Tennessee	Smith	97	14	1.0	SMYRNA AP TN (A)	Murfreesboro Tennessee (M)	Murfreesboro Tennessee (M)
Tennessee	Stewart	93	12	1.0	Hopkinsville Campbell Air Force Base Kentucky (M)	Clarksville Tennessee (M)	Hopkinsville Campbell Air Force Base Kentucky (M)
Tennessee	Sullivan	90	12	1.5	Greenville Tennessee (M)	Wise Lonesome Pine Airport Virginia (M)	Greenville Tennessee (M)
Tennessee	Sumner	97	15	1.0	SMYRNA AP TN (A)	Bowling Green Warren Co. Airport Kentucky (M)	Bowling Green Warren Co. Airport Kentucky (M)
Tennessee	Tipton	97	17	0.7	MILLINGTON MUNICIPA TN (A)	Eaker Air Force Base Arkansas (M)	Dyersburg Municipal Airport Tennessee (M)
Tennessee	Trousdale	97	18	0.7	SMYRNA AP TN (A)	Nashville International Airport Tennessee (M)	Nashville International Airport Tennessee (M)
Tennessee	Unicoi	90	16	1.5	Greenville Tennessee (M)	Greenville Tennessee (M)	Greenville Tennessee (M)
Tennessee	Union	92	18	0.9	MIDDLESBORO-BELL CO KY (A)	MIDDLESBORO-BELL CO KY (A)	MIDDLESBORO-BELL CO KY (A)
Tennessee	Van Buren	87	14	1.3	CROSSVILLE MEMORIAL TN (A)	CROSSVILLE 7 NW TN (A)	CROSSVILLE 7 NW TN (A)
Tennessee	Warren	94	13	1.0	Murfreesboro Tennessee (M)	Tullahoma Tennessee (M)	Murfreesboro Tennessee (M)
Tennessee	Washington	90	16	1.5	Greenville Tennessee (M)	Greenville Tennessee (M)	Greenville Tennessee (M)
Tennessee	Wayne	94	21	0.7	Florence Airport Alabama (M)	Florence Airport Alabama (M)	MUSCLE SHOALS 2 N AL (A)
Tennessee	Weakley	93	19	0.7	DYERSBURG MUNICIPAL TN (A); Dyersburg Municipal Airport Tennessee (M); Jackson Mckellar-Sipes Regional Airport Tennessee (M)	DYERSBURG MUNICIPAL TN (A); Dyersburg Municipal Airport Tennessee (M); Jackson Mckellar-Sipes Regional Airport Tennessee (M)	DYERSBURG MUNICIPAL TN (A); Dyersburg Municipal Airport Tennessee (M); Jackson Mckellar-Sipes Regional Airport Tennessee (M)
Tennessee	White	87	14	1.3	CROSSVILLE MEMORIAL TN (A)	CROSSVILLE 7 NW TN (A)	CROSSVILLE 7 NW TN (A)
Tennessee	Williamson	97	14	1.0	SMYRNA AP TN (A)	Murfreesboro Tennessee (M)	Columbia Tennessee (M)
Tennessee	Wilson	97	14	1.0	SMYRNA AP TN (A)	Murfreesboro Tennessee (M)	Murfreesboro Tennessee (M)
<b>Texas</b>							
Texas	Anderson	99	24	0.3	PALESTINE MUNICIPAL TX (A)	Tyler Airport Texas (M)	CHEROKEE COUNTY AP TX (A)
Texas	Andrews	100	22	0.5	MIDLAND AIRPARK TX (A)	GAINES COUNTY AP TX (A)	GAINES COUNTY AP TX (A)
Texas	Angelina	97	27	0.3	AL MANGHAM JR REGIO TX (A)	AL MANGHAM JR REGIO TX (A)	AL MANGHAM JR REGIO TX (A)
Texas	Aransas	96	32	0.2	CORPUS CHRISTI INTL TX (A)	PORT ARANSAS 32 NNE TX (A)	PORT ARANSAS 32 NNE TX (A)
Texas	Archer	102	21	0.5	WICHITA FALL REGION TX (A)	Wichita Falls Municipal Airport Texas (M)	Wichita Falls Municipal Airport Texas (M)

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Texas	Armstrong	96	14	1.0	AMARILLO RICK HUSBA TX (A)	Amarillo International Airport Texas (M)	Amarillo International Airport Texas (M)
Texas	Atascosa	100	32	0.2	STINSON MUNICIPAL TX (A)	San Antonio Kelly Air Force Base Texas (M)	Kelly Air Force Base Texas (M)
Texas	Austin	98	31	0.2	BRENHAM MUNICIPAL TX (A)	BRENHAM MUNICIPAL TX (A)	BRENHAM MUNICIPAL TX (A)
Texas	Bailey	97	15	1.0	MULESHOE 19 S TX (A)	MULESHOE 19 S TX (A)	Clovis Municipal Airport New Mexico (M)
Texas	Bandera	99	27	0.3	HONDO MUNICIPAL TX (A)	GILLESPIE COUNTY AP TX (A)	GILLESPIE COUNTY AP TX (A)
Texas	Bastrop	99	30	0.2	SAN MARCOS REGIONAL TX (A)	Austin Bergstrom International Airport Texas (M)	San Marcos Municipal Airport Texas (M)
Texas	Baylor	100	17	0.6	Vernon Texas (M)	Vernon Texas (M)	Vernon Texas (M)
Texas	Bee	99	33	0.1	CHASE NAS TX (A)	CHASE NAS TX (A)	Beeville Chase NAAS Texas (M)
Texas	Bell	100	27	0.3	MCGREGOR EXECUTIVE TX (A)	MCGREGOR EXECUTIVE TX (A)	Mc Gregor Texas (M)
Texas	Bexar	100	30	0.2	STINSON MUNICIPAL TX (A)	Hondo Municipal Airport Texas (M)	Hondo Municipal Airport Texas (M)
Texas	Blanco	101	27	0.3	LLANO MUNICIPAL TX (A)	GILLESPIE COUNTY AP TX (A)	GILLESPIE COUNTY AP TX (A)
Texas	Borden	100	17	0.7	BIG SPRING MCMAHON- TX (A)	Lamesa Texas (M)	Lamesa Texas (M)
Texas	Bosque	101	24	0.5	GRANBURY MUNICIPAL TX (A)	Stephenville Clark Field Texas (M)	Stephenville Clark Field Texas (M)
Texas	Bowie	98	25	0.5	MOUNT PLEASANT REGI TX (A)	MC CURTAIN COUNTY R OK (A)	MC CURTAIN COUNTY R OK (A)
Texas	Brazoria	96	33	0.2	SUGAR LAND REGIONAL TX (A)	Bay City Texas (M)	SUGAR LAND REGIONAL TX (A)
Texas	Brazos	99	28	0.3	HEARNE MUNICIPAL TX (A)	HEARNE MUNICIPAL TX (A)	CALDWELL MUNICIPAL TX (A)
Texas	Brewster	98	23	0.5	PANTHER JUNCTION 2 TX (A)	ALPINE-CASPARIS MUN TX (A)	ALPINE-CASPARIS MUN TX (A)
Texas	Briscoe	96	13	0.9	Plainview Texas (M)	Plainview Texas (M)	Plainview Texas (M)
Texas	Brooks	100	36	0.1	JIM HOGG COUNTY AP TX (A)	JIM HOGG COUNTY AP TX (A)	Kingsville Texas (M)
Texas	Brown	100	22	0.4	BROWNWOOD REGIONAL TX (A)	Brownwood Texas (M)	Brownwood Texas (M)
Texas	Burleson	99	28	0.3	HEARNE MUNICIPAL TX (A)	HEARNE MUNICIPAL TX (A)	CALDWELL MUNICIPAL TX (A)
Texas	Burnet	101	27	0.3	LLANO MUNICIPAL TX (A)	LLANO MUNICIPAL TX (A)	GEORGETOWN MUNICIPAL TX (A)
Texas	Caldwell	99	30	0.2	SAN MARCOS REGIONAL TX (A)	Austin Bergstrom International Airport Texas (M)	San Marcos Municipal Airport Texas (M)
Texas	Calhoun	96	32	0.2	VICTORIA REGIONAL TX (A)	PORT ARANSAS 32 NNE TX (A)	PORT ARANSAS 32 NNE TX (A)
Texas	Callahan	101	22	0.4	DYESS AFB ABILENE TX (A)	Abilene Dyess Air Force Base Texas (M)	Abilene Dyess Air Force Base Texas (M)
Texas	Cameron	99	40	0.1	MID VALLEY AP TX (A)	MID VALLEY AP TX (A)	VALLEY INTL TX (A)
Texas	Camp	100	27	0.4	WOOD COUNTY AP TX (A)	MOUNT PLEASANT REGI TX (A)	MOUNT PLEASANT REGI TX (A)
Texas	Carson	99	12	1.1	HUTCHINSON COUNTY TX (A)	Pampa Texas (M)	Pampa Texas (M)
Texas	Cass	98	26	0.4	MOUNT PLEASANT REGI TX (A)	Texarkana Webb Field Arkansas (M)	MOUNT PLEASANT REGI TX (A)
Texas	Castro	96	13	0.9	Plainview Texas (M)	Plainview Texas (M)	Plainview Texas (M)

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Texas	Chambers	95	36	0.2	HOUSTON ELLINGTON A TX (A)	Houston William P. Hobby Airport Texas (M)	SABINE PASS TX (A)
Texas	Cherokee	99	24	0.3	PALESTINE MUNICIPAL TX (A)	Tyler Airport Texas (M)	AL MANGHAM JR REGIO TX (A)
Texas	Childress	100	21	0.6	CHILDRESS MUNICIPAL TX (A)	Childress Municipal Airport Texas (M)	Childress Municipal Airport Texas (M)
Texas	Clay	102	21	0.5	WICHITA FALL REGION TX (A)	Wichita Falls Municipal Airport Texas (M)	Wichita Falls Municipal Airport Texas (M)
Texas	Cochran	97	15	0.9	MULESHOE 19 S TX (A)	MULESHOE 19 S TX (A)	MULESHOE 19 S TX (A)
Texas	Coke	100	21	0.5	SAN ANGELO REGIONAL TX (A)	BRONTE 11 NNE TX (A)	BRONTE 11 NNE TX (A)
Texas	Coleman	100	22	0.4	BROWNWOOD REGIONAL TX (A)	Brownwood Texas (M)	Brownwood Texas (M)
Texas	Collin	100	20	0.5	DENTON ENTERPRISE A TX (A)	Dennison N. Texas Regional Airport Texas (M)	Dennison N. Texas Regional Airport Texas (M)
Texas	Collingsworth	100	21	0.6	CHILDRESS MUNICIPAL TX (A)	Childress Municipal Airport Texas (M)	Childress Municipal Airport Texas (M)
Texas	Colorado	98	32	0.2	FAYETTE REGIONAL AI TX (A)	FAYETTE REGIONAL AI TX (A)	FAYETTE REGIONAL AI TX (A)
Texas	Comal	100	30	0.2	STINSON MUNICIPAL TX (A)	SAN MARCOS REGIONAL TX (A)	San Marcos Municipal Airport Texas (M)
Texas	Comanche	100	22	0.5	BROWNWOOD REGIONAL TX (A)	Brownwood Texas (M)	Stephenville Clark Field Texas (M)
Texas	Concho	100	25	0.4	SAN ANGELO REGIONAL TX (A)	San Angelo Mathis Field Texas (M)	San Angelo Mathis Field Texas (M)
Texas	Cooke	100	17	0.5	DENTON ENTERPRISE A TX (A)	Ardmore Oklahoma (M)	Ardmore Oklahoma (M)
Texas	Coryell	100	27	0.3	MCGREGOR EXECUTIVE TX (A)	MCGREGOR EXECUTIVE TX (A)	Mc Gregor Texas (M)
Texas	Cottle	100	21	0.6	CHILDRESS MUNICIPAL TX (A)	Childress Municipal Airport Texas (M)	Childress Municipal Airport Texas (M)
Texas	Crane	100	23	0.5	MONAHANS 6 ENE TX (A)	Midland International Airport Texas (M)	Midland International Airport Texas (M)
Texas	Crockett	99	28	0.3	SONORA MUNICIPAL TX (A); TERRELL COUNTY AP TX (A); SAN ANGELO REGIONAL TX (A)	SONORA MUNICIPAL TX (A); TERRELL COUNTY AP TX (A); SAN ANGELO REGIONAL TX (A)	SONORA MUNICIPAL TX (A); TERRELL COUNTY AP TX (A); SAN ANGELO REGIONAL TX (A)
Texas	Crosby	98	19	0.7	LUBBOCK INTL TX (A)	Lubbock International Airport Texas (M)	Lubbock International Airport Texas (M)
Texas	Culberson	92	19	0.7	GUADALUPE PASS AMOS TX (A)	Guadalupe Pass Texas (M)	Guadalupe Pass Texas (M)
Texas	Dallam	96	12	1.4	DALHART MUNICIPAL A TX (A)	Clayton Municipal Airport New Mexico (M)	Clayton Municipal Airport New Mexico (M)
Texas	Dallas	101	22	0.5	FORT WORTH NAS TX (A)	Fort Worth Carswell Air Force Base Texas (M)	Denton Texas (M)
Texas	Dawson	96	17	0.7	Lamesa Texas (M)	Lamesa Texas (M)	Lamesa Texas (M)
Texas	Deaf Smith	95	16	1.0	CLOVIS MUNICIPAL NM (A); Clovis Municipal Airport New Mexico (M); Amarillo International Airport Texas (M)	CLOVIS MUNICIPAL NM (A); Clovis Municipal Airport New Mexico (M); Amarillo International Airport Texas (M)	CLOVIS MUNICIPAL NM (A); Clovis Municipal Airport New Mexico (M); Amarillo International Airport Texas (M)
Texas	Delta	99	22	0.5	Greenville Texas (M)	Greenville Texas (M)	Greenville Texas (M)
Texas	Denton	101	22	0.5	FORT WORTH NAS TX (A)	Fort Worth Carswell Air Force Base Texas (M)	GAINESVILLE MUNICIP TX (A)

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Texas	DeWitt	96	34	0.2	VICTORIA REGIONAL TX (A)	Victoria Regional Airport Texas (M)	Victoria Regional Airport Texas (M)
Texas	Dickens	98	19	0.6	LUBBOCK INTL TX (A); Lubbock International Airport Texas (M); Snyder Texas (M)	LUBBOCK INTL TX (A); Lubbock International Airport Texas (M); Snyder Texas (M)	LUBBOCK INTL TX (A); Lubbock International Airport Texas (M); Snyder Texas (M)
Texas	Dimmit	102	35	0.1	COTULLA-LA SALLE CO TX (A)	Cotulla Airport Texas (M)	Cotulla Airport Texas (M)
Texas	Donley	98	15	0.9	Pampa Texas (M); PERRY LEFORS FIELD TX (A); Childress Municipal Airport Texas (M)	Pampa Texas (M); PERRY LEFORS FIELD TX (A); Childress Municipal Airport Texas (M)	Pampa Texas (M); PERRY LEFORS FIELD TX (A); Childress Municipal Airport Texas (M)
Texas	Duval	100	36	0.1	JIM HOGG COUNTY AP TX (A)	JIM HOGG COUNTY AP TX (A)	JIM HOGG COUNTY AP TX (A)
Texas	Eastland	100	24	0.5	BROWNWOOD REGIONAL TX (A)	Stephenville Clark Field Texas (M)	Stephenville Clark Field Texas (M)
Texas	Ector	103	23	0.5	WINKLER COUNTY AP TX (A)	Midland International Airport Texas (M)	Midland International Airport Texas (M)
Texas	Edwards	96	31	0.3	EDWARDS COUNTY AP TX (A)	EDWARDS COUNTY AP TX (A)	EDWARDS COUNTY AP TX (A)
Texas	El Paso	99	26	0.4	EL PASO INTL TX (A)	El Paso International Airport Texas (M)	El Paso International Airport Texas (M)
Texas	Ellis	100	25	0.4	CLEBURNE MUNICIPAL TX (A)	Corsicana Texas (M)	Corsicana Texas (M)
Texas	Erath	101	22	0.5	GRANBURY MUNICIPAL TX (A)	Mineral Wells Airport Texas (M)	Stephenville Clark Field Texas (M)
Texas	Falls	100	27	0.3	MCGREGOR EXECUTIVE TX (A)	MCGREGOR EXECUTIVE TX (A)	Mc Gregor Texas (M)
Texas	Fannin	100	20	0.5	DURANT REGIONAL OK (A)	Dennison N. Texas Regional Airport Texas (M)	Dennison N. Texas Regional Airport Texas (M)
Texas	Fayette	99	31	0.2	GIDDINGS-LEE COUNTY TX (A)	GIDDINGS-LEE COUNTY TX (A)	GIDDINGS-LEE COUNTY TX (A)
Texas	Fisher	101	18	0.6	DYESS AFB ABILENE TX (A)	Snyder Texas (M)	Snyder Texas (M)
Texas	Floyd	96	13	0.9	Plainview Texas (M)	Plainview Texas (M)	Plainview Texas (M)
Texas	Foard	104	17	0.6	WILBARGER COUNTY AP TX (A)	Vernon Texas (M)	Vernon Texas (M)
Texas	Fort Bend	97	32	0.2	WHARTON REGIONAL AP TX (A)	HOOKS MEMORIAL TX (A)	HOOKS MEMORIAL TX (A)
Texas	Franklin	100	25	0.5	WOOD COUNTY AP TX (A)	Paris Cox Field Texas (M)	Paris Cox Field Texas (M)
Texas	Freestone	99	25	0.4	CORSICANA MUNICIPAL TX (A)	Corsicana Texas (M)	Corsicana Texas (M)
Texas	Frio	102	30	0.2	COTULLA-LA SALLE CO TX (A)	Hondo Municipal Airport Texas (M)	Hondo Municipal Airport Texas (M)
Texas	Gaines	99	17	0.7	Hobbs Airport New Mexico (M)	Lamesa Texas (M)	Lamesa Texas (M)
Texas	Galveston	95	34	0.2	HOUSTON ELLINGTON A TX (A)	BRAZORIA COUNTY AP TX (A)	BRAZORIA COUNTY AP TX (A)
Texas	Garza	98	18	0.6	Snyder Texas (M)	Snyder Texas (M)	Snyder Texas (M)
Texas	Gillespie	101	27	0.3	LLANO MUNICIPAL TX (A)	GILLESPIE COUNTY AP TX (A)	GILLESPIE COUNTY AP TX (A)
Texas	Glasscock	100	20	0.5	MIDLAND AIRPARK TX (A)	Big Springs Airport Texas (M)	Big Springs Airport Texas (M)
Texas	Goliad	99	33	0.2	CHASE NAS TX (A)	CHASE NAS TX (A)	Victoria Regional Airport Texas (M)
Texas	Gonzales	99	30	0.2	SAN MARCOS REGIONAL TX (A)	SAN MARCOS REGIONAL TX (A)	San Marcos Municipal Airport Texas (M)
Texas	Gray	99	12	1.1	HUTCHINSON COUNTY TX (A)	Pampa Texas (M)	Pampa Texas (M)

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Texas	Grayson	100	20	0.5	DURANT REGIONAL OK (A)	Dennison N. Texas Regional Airport Texas (M)	Dennison N. Texas Regional Airport Texas (M)
Texas	Gregg	98	24	0.3	LONGVIEW EAST TEXAS TX (A)	Tyler Airport Texas (M)	FOX STEPHENS FIELD TX (A)
Texas	Grimes	98	27	0.3	EASTERWOOD FIELD TX (A)	Huntsville Texas (M)	Huntsville Texas (M)
Texas	Guadalupe	100	30	0.2	STINSON MUNICIPAL TX (A)	SAN MARCOS REGIONAL TX (A)	San Marcos Municipal Airport Texas (M)
Texas	Hale	98	13	0.9	REESE AFB LUBBOCK TX (A)	Plainview Texas (M)	Plainview Texas (M)
Texas	Hall	100	21	0.6	CHILDRESS MUNICIPAL TX (A)	Childress Municipal Airport Texas (M)	Childress Municipal Airport Texas (M)
Texas	Hamilton	100	24	0.5	GATESVILLE MUNICIPA TX (A)	Stephenville Clark Field Texas (M)	Stephenville Clark Field Texas (M)
Texas	Hansford	100	11	1.1	PERRYTON OCHILTREE TX (A)	GOODWELL 2 E OK (A)	GOODWELL 2 E OK (A)
Texas	Hardeman	104	17	0.6	WILBARGER COUNTY AP TX (A)	Vernon Texas (M)	Vernon Texas (M)
Texas	Hardin	94	32	0.2	JACK BROOKS REGIONA TX (A)	Beaumont Texas (M)	Beaumont Texas (M)
Texas	Harris	97	29	0.3	HOOKS MEMORIAL TX (A)	MONTGOMERY COUNTY A TX (A)	MONTGOMERY COUNTY A TX (A)
Texas	Harrison	98	27	0.3	LONGVIEW EAST TEXAS TX (A)	Longview Gregg County Airport Texas (M)	Shreveport Regional Airport Louisiana (M)
Texas	Hartley	97	13	1.2	MOORE COUNTY AP TX (A)	Dalhart Municipal Airport Texas (M)	Dalhart Municipal Airport Texas (M)
Texas	Haskell	99	23	0.4	Abilene Dyess Air Force Base Texas (M); Abilene Regional Airport Texas (M); ABILENE REGIONAL TX (A)	Abilene Dyess Air Force Base Texas (M); Abilene Regional Airport Texas (M); ABILENE REGIONAL TX (A)	Abilene Dyess Air Force Base Texas (M); Abilene Regional Airport Texas (M); ABILENE REGIONAL TX (A)
Texas	Hays	99	30	0.2	SAN MARCOS REGIONAL TX (A)	Austin Bergstrom International Airport Texas (M)	San Marcos Municipal Airport Texas (M)
Texas	Hemphill	99	16	0.8	HEMPHILL COUNTY AP TX (A)	HEMPHILL COUNTY AP TX (A)	HEMPHILL COUNTY AP TX (A)
Texas	Henderson	99	24	0.4	CORSICANA MUNICIPAL TX (A)	Tyler Airport Texas (M)	Corsicana Texas (M)
Texas	Hidalgo	100	38	0.1	EDINBURG INTL TX (A)	EDINBURG 17 NNE TX (A)	EDINBURG 17 NNE TX (A)
Texas	Hill	100	25	0.4	CLEBURNE MUNICIPAL TX (A)	Corsicana Texas (M)	Corsicana Texas (M)
Texas	Hockley	98	15	0.9	REESE AFB LUBBOCK TX (A)	MULESHOE 19 S TX (A)	MULESHOE 19 S TX (A)
Texas	Hood	101	22	0.5	GRANBURY MUNICIPAL TX (A)	Mineral Wells Airport Texas (M)	Stephenville Clark Field Texas (M)
Texas	Hopkins	100	22	0.5	WOOD COUNTY AP TX (A)	Greenville Texas (M)	Greenville Texas (M)
Texas	Houston	99	27	0.3	PALESTINE MUNICIPAL TX (A)	Palestine City Office Texas (M)	CHEROKEE COUNTY AP TX (A)
Texas	Howard	100	20	0.5	BIG SPRING MCMAHON- TX (A)	Big Springs Airport Texas (M)	Big Springs Airport Texas (M)
Texas	Hudspeth	91	21	0.7	GUADALUPE PASS AMOS TX (A); Guadalupe Pass Texas (M); Pine Springs Guadalupe Pass Texas (M)	GUADALUPE PASS AMOS TX (A); Guadalupe Pass Texas (M); Pine Springs Guadalupe Pass Texas (M)	GUADALUPE PASS AMOS TX (A); Guadalupe Pass Texas (M); Pine Springs Guadalupe Pass Texas (M)
Texas	Hunt	100	22	0.5	MCKINNEY NATL TX (A)	Greenville Texas (M)	Greenville Texas (M)
Texas	Hutchinson	99	12	1.1	HUTCHINSON COUNTY TX (A)	Pampa Texas (M)	Pampa Texas (M)
Texas	Irion	100	25	0.4	SAN ANGELO REGIONAL TX (A)	San Angelo Mathis Field Texas (M)	San Angelo Mathis Field Texas (M)

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Texas	Jack	101	22	0.4	GRAHAM MUNICIPAL TX (A)	Mineral Wells Airport Texas (M)	BRIDGEPORT MUNICIPA TX (A)
Texas	Jackson	97	33	0.2	WHARTON REGIONAL AP TX (A)	Bay City Texas (M)	WHARTON REGIONAL AP TX (A)
Texas	Jasper	96	30	0.3	JASPER COUNTY-BELL TX (A)	JASPER COUNTY-BELL TX (A)	JASPER COUNTY-BELL TX (A)
Texas	Jeff Davis	95	19	0.9	ALPINE-CASPARIS MUN TX (A)	Marfa Airport Texas (M)	Marfa Airport Texas (M)
Texas	Jefferson	94	32	0.2	JACK BROOKS REGIONA TX (A)	Beaumont Texas (M)	Beaumont Texas (M)
Texas	Jim Hogg	100	36	0.1	JIM HOGG COUNTY AP TX (A)	JIM HOGG COUNTY AP TX (A)	JIM HOGG COUNTY AP TX (A)
Texas	Jim Wells	100	36	0.1	BROOKS COUNTY AP TX (A)	NUECES COUNTY AP TX (A)	Kingsville Texas (M)
Texas	Johnson	101	22	0.4	GRANBURY MUNICIPAL TX (A)	Fort Worth Carswell Air Force Base Texas (M)	MID-WAY REGIONAL TX (A)
Texas	Jones	101	22	0.4	DYESS AFB ABILENE TX (A)	Abilene Dyess Air Force Base Texas (M)	Abilene Dyess Air Force Base Texas (M)
Texas	Karnes	99	33	0.1	CHASE NAS TX (A)	CHASE NAS TX (A)	Beeville Chase NAAS Texas (M)
Texas	Kaufman	100	22	0.5	DALLAS EXECUTIVE TX (A)	Greenville Texas (M)	Greenville Texas (M)
Texas	Kendall	99	27	0.3	LACKLAND AFB TX (A)	GILLESPIE COUNTY AP TX (A)	GILLESPIE COUNTY AP TX (A)
Texas	Kenedy	100	36	0.1	BROOKS COUNTY AP TX (A)	BROOKS COUNTY AP TX (A)	BROOKS COUNTY AP TX (A)
Texas	Kent	98	18	0.6	Snyder Texas (M)	Snyder Texas (M)	Snyder Texas (M)
Texas	Kerr	99	25	0.3	KIMBLE COUNTY AP TX (A)	Junction Kimble County Airport Texas (M)	Junction Kimble County Airport Texas (M)
Texas	Kimble	99	25	0.3	KIMBLE COUNTY AP TX (A)	Junction Kimble County Airport Texas (M)	Junction Kimble County Airport Texas (M)
Texas	King	100	19	0.6	CHILDRESS MUNICIPAL TX (A); Childress Municipal Airport Texas (M); Vernon Texas (M)	CHILDRESS MUNICIPAL TX (A); Childress Municipal Airport Texas (M); Vernon Texas (M)	CHILDRESS MUNICIPAL TX (A); Childress Municipal Airport Texas (M); Vernon Texas (M)
Texas	Kinney	102	34	0.2	LAUGHLIN AFB TX (A)	Del Rio International Airport Texas (M)	DEL RIO INTL TX (A)
Texas	Kleberg	100	36	0.1	BROOKS COUNTY AP TX (A)	NUECES COUNTY AP TX (A)	Kingsville Texas (M)
Texas	Knox	101	20	0.5	Vernon Texas (M); WILBARGER COUNTY AP TX (A); CHILDRESS MUNICIPAL TX (A)	Vernon Texas (M); WILBARGER COUNTY AP TX (A); CHILDRESS MUNICIPAL TX (A)	Vernon Texas (M); WILBARGER COUNTY AP TX (A); CHILDRESS MUNICIPAL TX (A)
Texas	La Salle	102	35	0.1	COTULLA-LA SALLE CO TX (A)	Cotulla Airport Texas (M)	Cotulla Airport Texas (M)
Texas	Lamar	99	25	0.5	SULPHUR SPRINGS MUN TX (A)	Paris Cox Field Texas (M)	Paris Cox Field Texas (M)
Texas	Lamb	98	13	0.9	REESE AFB LUBBOCK TX (A)	Plainview Texas (M)	Plainview Texas (M)
Texas	Lampasas	101	27	0.3	LLANO MUNICIPAL TX (A)	LLANO MUNICIPAL TX (A)	GATESVILLE MUNICIPA TX (A)
Texas	Lavaca	98	32	0.2	FAYETTE REGIONAL AI TX (A)	FAYETTE REGIONAL AI TX (A)	FAYETTE REGIONAL AI TX (A)
Texas	Lee	99	29	0.3	GIDDINGS-LEE COUNTY TX (A)	Bryan Airport Texas (M)	CALDWELL MUNICIPAL TX (A)
Texas	Leon	99	27	0.3	PALESTINE MUNICIPAL TX (A)	Palestine City Office Texas (M)	Palestine City Office Texas (M)
Texas	Liberty	96	29	0.3	MONTGOMERY COUNTY A TX (A)	MONTGOMERY COUNTY A TX (A)	MONTGOMERY COUNTY A TX (A)

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Texas	Limestone	100	25	0.4	WACO REGIONAL TX (A)	Corsicana Texas (M)	Corsicana Texas (M)
Texas	Lipscomb	100	13	1.0	PERRYTON OCHILTREE TX (A)	Gage Airport Oklahoma (M)	PERRYTON OCHILTREE TX (A)
Texas	Live Oak	99	33	0.1	CHASE NAS TX (A)	CHASE NAS TX (A)	Beeville Chase NAAS Texas (M)
Texas	Llano	101	27	0.3	LLANO MUNICIPAL TX (A)	GILLESPIE COUNTY AP TX (A)	GILLESPIE COUNTY AP TX (A)
Texas	Loving	104	24	0.4	PECOS MUNICIPAL TX (A)	Pecos Winkler County Airport Texas (M)	Pecos Winkler County Airport Texas (M)
Texas	Lubbock	98	18	0.8	REESE AFB LUBBOCK TX (A)	Lubbock Reese Air Force Base Texas (M)	HALE COUNTY AP TX (A)
Texas	Lynn	98	17	0.7	REESE AFB LUBBOCK TX (A)	Lamesa Texas (M)	Lubbock Reese Air Force Base Texas (M)
Texas	Madison	98	27	0.3	EASTERWOOD FIELD TX (A)	Huntsville Texas (M)	Huntsville Texas (M)
Texas	Marion	98	27	0.3	LONGVIEW EAST TEXAS TX (A)	Longview Gregg County Airport Texas (M)	Shreveport Regional Airport Louisiana (M)
Texas	Martin	100	17	0.7	MIDLAND AIRPARK TX (A)	Lamesa Texas (M)	Lamesa Texas (M)
Texas	Mason	101	25	0.3	LLANO MUNICIPAL TX (A)	Junction Kimble County Airport Texas (M)	Junction Kimble County Airport Texas (M)
Texas	Matagorda	97	33	0.2	WHARTON REGIONAL AP TX (A)	Bay City Texas (M)	WHARTON REGIONAL AP TX (A)
Texas	Maverick	99	32	0.2	Eagle Pass Texas (M)	Eagle Pass Texas (M)	Eagle Pass Texas (M)
Texas	McCulloch	100	26	0.3	CURTIS FIELD TX (A)	CURTIS FIELD TX (A)	CURTIS FIELD TX (A)
Texas	McLennan	100	27	0.3	MCGREGOR EXECUTIVE TX (A)	MCGREGOR EXECUTIVE TX (A)	HILLSBORO MUNICIPAL TX (A)
Texas	McMullen	102	35	0.1	COTULLA-LA SALLE CO TX (A)	Cotulla Airport Texas (M)	Cotulla Airport Texas (M)
Texas	Medina	100	30	0.2	GARNER FIELD TX (A)	Hondo Municipal Airport Texas (M)	Hondo Municipal Airport Texas (M)
Texas	Menard	100	25	0.3	CURTIS FIELD TX (A)	Junction Kimble County Airport Texas (M)	Junction Kimble County Airport Texas (M)
Texas	Midland	100	20	0.5	MIDLAND AIRPARK TX (A)	Big Springs Airport Texas (M)	Big Springs Airport Texas (M)
Texas	Milam	99	28	0.3	DRAUGHON-MILLER CEN TX (A)	Draughon Miller Central Texas Airport Texas (M)	DRAUGHON-MILLER CEN TX (A)
Texas	Mills	100	22	0.4	BROWNWOOD REGIONAL TX (A)	Brownwood Texas (M)	Brownwood Texas (M)
Texas	Mitchell	100	18	0.6	BIG SPRING MCMAHON- TX (A)	Snyder Texas (M)	Snyder Texas (M)
Texas	Montague	100	23	0.5	BRIDGEPORT MUNICIPA TX (A)	GAINESVILLE MUNICIP TX (A)	GAINESVILLE MUNICIP TX (A)
Texas	Montgomery	98	27	0.3	Huntsville Texas (M)	Huntsville Texas (M)	Huntsville Texas (M)
Texas	Moore	99	13	1.2	HUTCHINSON COUNTY TX (A)	Dalhart Municipal Airport Texas (M)	Dalhart Municipal Airport Texas (M)
Texas	Morris	98	27	0.4	MOUNT PLEASANT REGI TX (A)	MOUNT PLEASANT REGI TX (A)	MOUNT PLEASANT REGI TX (A)
Texas	Motley	100	21	0.6	CHILDRESS MUNICIPAL TX (A)	Childress Municipal Airport Texas (M)	Childress Municipal Airport Texas (M)
Texas	Nacogdoches	97	27	0.3	AL MANGHAM JR REGIO TX (A)	AL MANGHAM JR REGIO TX (A)	AL MANGHAM JR REGIO TX (A)
Texas	Navarro	100	25	0.4	HILLSBORO MUNICIPAL TX (A)	Corsicana Texas (M)	Corsicana Texas (M)

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Texas	Newton	96	30	0.3	JASPER COUNTY-BELL TX (A)	Leesville Fort Polk Louisiana (M)	Leesville Fort Polk Louisiana (M)
Texas	Nolan	101	21	0.5	DYESS AFB ABILENE TX (A)	BRONTE 11 NNE TX (A)	BRONTE 11 NNE TX (A)
Texas	Nueces	99	36	0.1	Alice International Airport Texas (M)	NUECES COUNTY AP TX (A)	Kingsville Texas (M)
Texas	Ochiltree	100	13	1.0	PERRYTON OCHILTREE TX (A)	PERRYTON OCHILTREE TX (A)	PERRYTON OCHILTREE TX (A)
Texas	Oldham	96	13	1.1	DALHART MUNICIPAL A TX (A); Dalhart Municipal Airport Texas (M); MOORE COUNTY AP TX (A)	DALHART MUNICIPAL A TX (A); Dalhart Municipal Airport Texas (M); MOORE COUNTY AP TX (A)	DALHART MUNICIPAL A TX (A); Dalhart Municipal Airport Texas (M); MOORE COUNTY AP TX (A)
Texas	Orange	95	32	0.2	SOUTHLAND FIELD LA (A)	Beaumont Texas (M)	Beaumont Texas (M)
Texas	Palo Pinto	101	22	0.5	GRANBURY MUNICIPAL TX (A)	Mineral Wells Airport Texas (M)	Stephenville Clark Field Texas (M)
Texas	Panola	98	27	0.3	LONGVIEW EAST TEXAS TX (A)	Longview Gregg County Airport Texas (M)	Shreveport Regional Airport Louisiana (M)
Texas	Parker	101	22	0.4	GRANBURY MUNICIPAL TX (A)	Mineral Wells Airport Texas (M)	BRIDGEPORT MUNICIPA TX (A)
Texas	Parmer	96	17	1.0	CANNON AFB NM (A)	Cannon Air Force Base (Clovis) New Mexico (M)	Clovis Municipal Airport New Mexico (M)
Texas	Pecos	100	28	0.3	FT STOCKTON PECOS C TX (A)	FT STOCKTON PECOS C TX (A)	FT STOCKTON PECOS C TX (A)
Texas	Polk	97	29	0.3	ANGELINA COUNTY AP TX (A)	Lufkin Angelina Co. Airport Texas (M)	Lufkin Angelina Co. Airport Texas (M)
Texas	Potter	99	14	1.0	HUTCHINSON COUNTY TX (A)	MOORE COUNTY AP TX (A)	MOORE COUNTY AP TX (A)
Texas	Presidio	92	19	0.9	Marfa Airport Texas (M)	Marfa Airport Texas (M)	Marfa Airport Texas (M)
Texas	Rains	100	22	0.5	WOOD COUNTY AP TX (A)	Greenville Texas (M)	Greenville Texas (M)
Texas	Randall	96	14	1.0	AMARILLO RICK HUSBA TX (A)	Amarillo International Airport Texas (M)	Amarillo International Airport Texas (M)
Texas	Reagan	99	24	0.4	MIDLAND INTL TX (A); Midland International Airport Texas (M); MIDLAND AIRPARK TX (A)	MIDLAND INTL TX (A); Midland International Airport Texas (M); MIDLAND AIRPARK TX (A)	MIDLAND INTL TX (A); Midland International Airport Texas (M); MIDLAND AIRPARK TX (A)
Texas	Real	96	31	0.3	EDWARDS COUNTY AP TX (A)	EDWARDS COUNTY AP TX (A)	EDWARDS COUNTY AP TX (A)
Texas	Red River	98	25	0.5	MOUNT PLEASANT REGI TX (A)	Paris Cox Field Texas (M)	MC CURTAIN COUNTY R OK (A)
Texas	Reeves	104	25	0.3	PECOS MUNICIPAL TX (A)	PECOS MUNICIPAL TX (A)	PECOS MUNICIPAL TX (A)
Texas	Refugio	99	32	0.2	CHASE NAS TX (A)	PORT ARANSAS 32 NNE TX (A)	PORT ARANSAS 32 NNE TX (A)
Texas	Roberts	100	12	1.1	PERRYTON OCHILTREE TX (A)	Pampa Texas (M)	Pampa Texas (M)
Texas	Robertson	99	28	0.3	HEARNE MUNICIPAL TX (A)	HEARNE MUNICIPAL TX (A)	CALDWELL MUNICIPAL TX (A)
Texas	Rockwall	100	22	0.5	DALLAS EXECUTIVE TX (A)	Greenville Texas (M)	Greenville Texas (M)
Texas	Runnels	101	21	0.5	DYESS AFB ABILENE TX (A)	BRONTE 11 NNE TX (A)	BRONTE 11 NNE TX (A)
Texas	Rusk	98	27	0.3	LONGVIEW EAST TEXAS TX (A)	Longview Gregg County Airport Texas (M)	AL MANGHAM JR REGIO TX (A)
Texas	Sabine	97	29	0.3	PEASON RIDGE LA (A)	PEASON RIDGE LA (A)	PEASON RIDGE LA (A)
Texas	San Augustine	97	27	0.3	AL MANGHAM JR REGIO TX (A)	AL MANGHAM JR REGIO TX (A)	AL MANGHAM JR REGIO TX (A)
Texas	San Jacinto	98	27	0.3	Huntsville Texas (M)	Huntsville Texas (M)	Huntsville Texas (M)

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Texas	San Patricio	99	33	0.1	Alice International Airport Texas (M)	CHASE NAS TX (A)	Beeville Chase NAAS Texas (M)
Texas	San Saba	101	22	0.4	LLANO MUNICIPAL TX (A)	Brownwood Texas (M)	Brownwood Texas (M)
Texas	Schleicher	100	25	0.4	SAN ANGELO REGIONAL TX (A)	San Angelo Mathis Field Texas (M)	San Angelo Mathis Field Texas (M)
Texas	Scurry	99	18	0.6	AVENGER FIELD TX (A)	Snyder Texas (M)	Snyder Texas (M)
Texas	Shackelford	101	22	0.4	DYESS AFB ABILENE TX (A)	Abilene Dyess Air Force Base Texas (M)	Abilene Dyess Air Force Base Texas (M)
Texas	Shelby	97	27	0.3	AL MANGHAM JR REGIO TX (A)	AL MANGHAM JR REGIO TX (A)	AL MANGHAM JR REGIO TX (A)
Texas	Sherman	100	11	1.1	GUYMON MUNICIPAL OK (A)	GOODWELL 2 E OK (A)	GOODWELL 2 E OK (A)
Texas	Smith	100	24	0.3	WOOD COUNTY AP TX (A)	Tyler Airport Texas (M)	WOOD COUNTY AP TX (A)
Texas	Somervell	101	24	0.5	GRANBURY MUNICIPAL TX (A)	Stephenville Clark Field Texas (M)	Stephenville Clark Field Texas (M)
Texas	Starr	100	40	0.1	EDINBURG INTL TX (A)	EDINBURG INTL TX (A)	EDINBURG INTL TX (A)
Texas	Stephens	101	22	0.4	GRAHAM MUNICIPAL TX (A)	GRAHAM MUNICIPAL TX (A)	GRAHAM MUNICIPAL TX (A)
Texas	Sterling	100	20	0.5	BIG SPRING MCMAHON- TX (A)	Big Springs Airport Texas (M)	Big Springs Airport Texas (M)
Texas	Stonewall	99	21	0.5	Snyder Texas (M); AVENGER FIELD TX (A); WINSTON FIELD TX (A)	Snyder Texas (M); AVENGER FIELD TX (A); WINSTON FIELD TX (A)	Snyder Texas (M); AVENGER FIELD TX (A); WINSTON FIELD TX (A)
Texas	Sutton	98	26	0.3	SONORA MUNICIPAL TX (A)	SONORA MUNICIPAL TX (A)	SONORA MUNICIPAL TX (A)
Texas	Swisher	96	13	0.9	Plainview Texas (M)	Plainview Texas (M)	Plainview Texas (M)
Texas	Tarrant	101	22	0.5	GRANBURY MUNICIPAL TX (A)	Fort Worth Carswell Air Force Base Texas (M)	Denton Texas (M)
Texas	Taylor	101	21	0.5	DYESS AFB ABILENE TX (A)	BRONTE 11 NNE TX (A)	BRONTE 11 NNE TX (A)
Texas	Terrell	100	27	0.3	TERRELL COUNTY AP TX (A)	SANDERSON TX (A)	SANDERSON TX (A)
Texas	Terry	99	17	0.7	GAINES COUNTY AP TX (A)	Lamesa Texas (M)	Lubbock Reese Air Force Base Texas (M)
Texas	Throckmorton	101	22	0.4	GRAHAM MUNICIPAL TX (A)	GRAHAM MUNICIPAL TX (A)	GRAHAM MUNICIPAL TX (A)
Texas	Titus	99	27	0.4	SULPHUR SPRINGS MUN TX (A)	MOUNT PLEASANT REGI TX (A)	MOUNT PLEASANT REGI TX (A)
Texas	Tom Green	100	25	0.4	SAN ANGELO REGIONAL TX (A)	San Angelo Mathis Field Texas (M)	San Angelo Mathis Field Texas (M)
Texas	Travis	99	28	0.3	SAN MARCOS REGIONAL TX (A)	Georgetown Texas (M)	GEORGETOWN MUNICIPA TX (A)
Texas	Trinity	98	27	0.3	Huntsville Texas (M)	Huntsville Texas (M)	Lufkin Angelina Co. Airport Texas (M)
Texas	Tyler	97	29	0.3	ANGELINA COUNTY AP TX (A)	Lufkin Angelina Co. Airport Texas (M)	Lufkin Angelina Co. Airport Texas (M)
Texas	Upshur	100	24	0.4	WOOD COUNTY AP TX (A)	Tyler Airport Texas (M)	MOUNT PLEASANT REGI TX (A)
Texas	Upton	99	24	0.4	MIDLAND INTL TX (A); Midland International Airport Texas (M); ODESSA-SCHLEMEYER F TX (A)	MIDLAND INTL TX (A); Midland International Airport Texas (M); ODESSA-SCHLEMEYER F TX (A)	MIDLAND INTL TX (A); Midland International Airport Texas (M); ODESSA-SCHLEMEYER F TX (A)
Texas	Uvalde	100	30	0.2	GARNER FIELD TX (A)	Hondo Municipal Airport Texas (M)	Hondo Municipal Airport Texas (M)

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Texas	Val Verde	102	34	0.2	LAUGHLIN AFB TX (A)	Del Rio International Airport Texas (M)	DEL RIO INTL TX (A)
Texas	Van Zandt	100	24	0.4	WOOD COUNTY AP TX (A)	Tyler Airport Texas (M)	MAJORS AP TX (A)
Texas	Victoria	96	32	0.2	VICTORIA REGIONAL TX (A)	PORT ARANSAS 32 NNE TX (A)	PORT ARANSAS 32 NNE TX (A)
Texas	Walker	98	27	0.3	Huntsville Texas (M)	Huntsville Texas (M)	Huntsville Texas (M)
Texas	Waller	98	31	0.2	BRENHAM MUNICIPAL TX (A)	BRENHAM MUNICIPAL TX (A)	BRENHAM MUNICIPAL TX (A)
Texas	Ward	104	24	0.4	PECOS MUNICIPAL TX (A)	Pecos Winkler County Airport Texas (M)	Pecos Winkler County Airport Texas (M)
Texas	Washington	99	29	0.3	GIDDINGS-LEE COUNTY TX (A)	Bryan Airport Texas (M)	CALDWELL MUNICIPAL TX (A)
Texas	Webb	103	38	0.1	LAREDO INTL TX (A)	Laredo International Airport Texas (M)	Laredo International Airport Texas (M)
Texas	Wharton	97	33	0.2	WHARTON REGIONAL AP TX (A)	Bay City Texas (M)	WHARTON REGIONAL AP TX (A)
Texas	Wheeler	99	16	0.8	HEMPHILL COUNTY AP TX (A)	HEMPHILL COUNTY AP TX (A)	HEMPHILL COUNTY AP TX (A)
Texas	Wichita	104	17	0.6	WILBARGER COUNTY AP TX (A)	Vernon Texas (M)	Vernon Texas (M)
Texas	Wilbarger	104	17	0.6	WILBARGER COUNTY AP TX (A)	Vernon Texas (M)	Vernon Texas (M)
Texas	Willacy	100	38	0.1	EDINBURG INTL TX (A)	EDINBURG 17 NNE TX (A)	EDINBURG 17 NNE TX (A)
Texas	Williamson	100	28	0.3	HOOD AAF TX (A)	Fort Hood Gray AAF Texas (M)	DRAUGHON-MILLER CEN TX (A)
Texas	Wilson	100	31	0.2	STINSON MUNICIPAL TX (A)	San Antonio Randolph Air Force Base Texas (M)	Randolph Air Force Base Texas (M)
Texas	Winkler	103	24	0.4	WINKLER COUNTY AP TX (A)	Pecos Winkler County Airport Texas (M)	Pecos Winkler County Airport Texas (M)
Texas	Wise	101	22	0.5	FORT WORTH NAS TX (A)	Mineral Wells Airport Texas (M)	Denton Texas (M)
Texas	Wood	100	24	0.4	WOOD COUNTY AP TX (A)	Tyler Airport Texas (M)	MOUNT PLEASANT REGI TX (A)
Texas	Yoakum	99	18	0.6	Hobbs Airport New Mexico (M)	Hobbs Airport New Mexico (M)	Hobbs Airport New Mexico (M)
Texas	Young	101	22	0.4	GRAHAM MUNICIPAL TX (A)	GRAHAM MUNICIPAL TX (A)	GRAHAM MUNICIPAL TX (A)
Texas	Zapata	100	36	0.1	JIM HOGG COUNTY AP TX (A)	JIM HOGG COUNTY AP TX (A)	JIM HOGG COUNTY AP TX (A)
Texas	Zavala	100	32	0.2	GARNER FIELD TX (A)	GARNER FIELD TX (A)	GARNER FIELD TX (A)
<b>Utah</b>							
Utah	Beaver	95	3	2.2	MILFORD MUNICIPAL UT (A)	Milford Municipal Airport Utah (M)	Milford Municipal Airport Utah (M)
Utah	Box Elder	92	6	2.7	BRIGHAM CITY 28 WNW UT (A)	BRIGHAM CITY 28 WNW UT (A)	BRIGHAM CITY 28 WNW UT (A)
Utah	Cache	93	0	3.2	LOGAN-CACHE AP UT (A)	Logan-Cache Airport Utah (M)	Logan-Cache Airport Utah (M)
Utah	Carbon	91	8	2.6	BUCK DAVIS FIELD UT (A)	Price Carbon Co. Airport Utah (M)	Price Carbon Co. Airport Utah (M)
Utah	Daggett	91	-2	2.7	Vernal Utah (M)	VERNAL REGIONAL UT (A)	VERNAL REGIONAL UT (A)
Utah	Davis	96	12	2.0	SALT LAKE CITY INTL UT (A)	Hill Air Force Base Ogden Utah (M)	Hill Air Force Base Ogden Utah (M)

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Utah	Duchesne	91	3	2.7	Vernal Utah (M); VERNAL REGIONAL UT (A); Price Carbon Co. Airport Utah (M)	Vernal Utah (M); VERNAL REGIONAL UT (A); Price Carbon Co. Airport Utah (M)	Vernal Utah (M); VERNAL REGIONAL UT (A); Price Carbon Co. Airport Utah (M)
Utah	Emery	93	7	2.1	BUCK DAVIS FIELD UT (A); Price Carbon Co. Airport Utah (M); CANYONLANDS FIELD UT (A)	BUCK DAVIS FIELD UT (A); Price Carbon Co. Airport Utah (M); CANYONLANDS FIELD UT (A)	BUCK DAVIS FIELD UT (A); Price Carbon Co. Airport Utah (M); CANYONLANDS FIELD UT (A)
Utah	Garfield	89	-4	7.4	TORREY 7 E UT (A)	BRYCE CANYON AP UT (A)	BRYCE CANYON AP UT (A)
Utah	Grand	98	7	1.4	Moab Utah (M)	CANYONLANDS FIELD UT (A)	CANYONLANDS FIELD UT (A)
Utah	Iron	95	4	2.1	MILFORD MUNICIPAL UT (A)	MILFORD MUNICIPAL UT (A)	CEDAR CITY REGIONAL UT (A)
Utah	Juab	92	9	2.3	PROVO MUNICIPAL UT (A); Provo Municipal Airport Utah (M); Richfield Utah (M)	PROVO MUNICIPAL UT (A); Provo Municipal Airport Utah (M); Richfield Utah (M)	PROVO MUNICIPAL UT (A); Provo Municipal Airport Utah (M); Richfield Utah (M)
Utah	Kane	105	-4	7.4	Lees Ferry Arizona (M)	BRYCE CANYON AP UT (A)	BRYCE CANYON AP UT (A)
Utah	Millard	93	3	2.8	Milford Municipal Airport Utah (M)	Milford Municipal Airport Utah (M)	Lehman Caves National Monument Nevada (M)
Utah	Morgan	96	-3	7.9	SALT LAKE CITY INTL UT (A)	Evanston Wyoming (M)	Evanston Wyoming (M)
Utah	Piute	91	5	2.7	Richfield Utah (M)	Richfield Utah (M)	Richfield Utah (M)
Utah	Rich	93	-3	7.9	LOGAN-CACHE AP UT (A)	Evanston Wyoming (M)	Evanston Wyoming (M)
Utah	Salt Lake	96	11	2.1	SALT LAKE CITY INTL UT (A)	PROVO MUNICIPAL UT (A)	Provo Municipal Airport Utah (M)
Utah	San Juan	95	9	2.1	Dinnehotso Arizona (M); Teec Nos Pos Arizona (M); Kayenta Arizona (M)	Dinnehotso Arizona (M); Teec Nos Pos Arizona (M); Kayenta Arizona (M)	Teec Nos Pos Arizona (M); Cortez Montezuma Co. Airport Colorado (M); CORTEZ MUNICIPAL CO (A)
Utah	Sanpete	91	7	2.5	BUCK DAVIS FIELD UT (A); Price Carbon Co. Airport Utah (M); Richfield Utah (M)	BUCK DAVIS FIELD UT (A); Price Carbon Co. Airport Utah (M); Richfield Utah (M)	BUCK DAVIS FIELD UT (A); Price Carbon Co. Airport Utah (M); Richfield Utah (M)
Utah	Sevier	91	5	2.7	Richfield Utah (M)	Richfield Utah (M)	Richfield Utah (M)
Utah	Summit	84	-3	7.9	Evanston Wyoming (M)	Evanston Wyoming (M)	Evanston Wyoming (M)
Utah	Tooele	95	10	1.7	WENDOVER AP UT (A)	WENDOVER AP UT (A)	WENDOVER AP UT (A)
Utah	Uintah	91	-2	2.7	Vernal Utah (M)	VERNAL REGIONAL UT (A)	VERNAL REGIONAL UT (A)
Utah	Utah	92	11	2.1	PROVO MUNICIPAL UT (A)	PROVO MUNICIPAL UT (A)	Provo Municipal Airport Utah (M)
Utah	Wasatch	92	11	2.1	PROVO MUNICIPAL UT (A)	PROVO MUNICIPAL UT (A)	Provo Municipal Airport Utah (M)
Utah	Washington	109	7	2.1	Beaver Dam Arizona (M)	CEDAR CITY REGIONAL UT (A)	CEDAR CITY REGIONAL UT (A)
Utah	Wayne	89	12	2.0	TORREY 7 E UT (A)	TORREY 7 E UT (A)	TORREY 7 E UT (A)
Utah	Weber	96	0	3.2	SALT LAKE CITY INTL UT (A)	Logan-Cache Airport Utah (M)	Logan-Cache Airport Utah (M)
<b>Vermont</b>							
Vermont	Addison	86	-11	4.4	BURLINGTON INTL VT (A)	Barre Vermont (M)	Montpelier Airport Vermont (M)
Vermont	Bennington	86	-4	3.6	HARTNESS STATE AP VT (A)	Glens Falls Airport New York (M)	Rutland State Airport Vermont (M)
Vermont	Caledonia	84	-11	5.2	MORRISVILLE-STOWE S VT (A)	Barre Vermont (M)	MT WASHINGTON REGIO NH (A)

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Vermont	Chittenden	86	-11	4.4	BURLINGTON INTL VT (A)	Barre Vermont (M)	Montpelier Airport Vermont (M)
Vermont	Essex	84	-18	92.5	ST JOHNSBURY AMOS VT (A)	Mount Washington New Hampshire (M)	Mount Washington New Hampshire (M)
Vermont	Franklin	86	-8	4.3	BURLINGTON INTL VT (A)	Morrisville-Stowe State Airport Vermont (M)	Morrisville-Stowe State Airport Vermont (M)
Vermont	Grand Isle	86	-8	4.3	BURLINGTON INTL VT (A)	Morrisville-Stowe State Airport Vermont (M)	Morrisville-Stowe State Airport Vermont (M)
Vermont	Lamoille	86	-11	4.4	BURLINGTON INTL VT (A)	Barre Vermont (M)	Montpelier Airport Vermont (M)
Vermont	Orange	86	-11	4.4	Lebanon Municipal Airport New Hampshire (M)	Barre Vermont (M)	Montpelier Airport Vermont (M)
Vermont	Orleans	84	-8	4.3	MORRISVILLE-STOWE S VT (A)	Morrisville-Stowe State Airport Vermont (M)	Morrisville-Stowe State Airport Vermont (M)
Vermont	Rutland	86	-4	3.7	Claremont New Hampshire (M)	Glens Falls Airport New York (M)	Claremont New Hampshire (M)
Vermont	Washington	86	-11	4.4	BURLINGTON INTL VT (A)	Barre Vermont (M)	Montpelier Airport Vermont (M)
Vermont	Windham	87	-4	3.7	ORANGE MUNICIPAL MA (A)	Glens Falls Airport New York (M)	Claremont New Hampshire (M)
Vermont	Windsor	86	-4	3.7	Claremont New Hampshire (M)	Claremont New Hampshire (M)	Claremont New Hampshire (M)
<b>Virginia</b>							
Virginia	Accomack	91	21	1.0	Melfa Accomack Co. Airport Virginia (M)	WALLOPS FLIGHT FACI VA (A)	Wattsville Wallops Flight Facility Virginia (M)
Virginia	Albemarle	92	16	1.2	FREEMAN FIELD VA (A)	Harrisonburg Virginia (M)	SHENANDOAH VALLEY R VA (A)
Virginia	Alexandria City	94	14	1.6	DAVISON AAF VA (A)	Sterling Virginia (M)	Sterling Virginia (M)
Virginia	Alleghany	90	7	2.4	Roanoke Regional Airport Virginia (M)	Hot Springs Ingalls Field Airport Virginia (M)	INGALLS FIELD VA (A)
Virginia	Amelia	95	18	1.0	Petersburg Dinwiddie Co. Airport Virginia (M)	Richmond Airport Virginia (M)	Farmville Virginia (M)
Virginia	Amherst	90	19	1.1	Lynchburg Regional Airport Virginia (M)	Lynchburg Regional Airport Virginia (M)	LYNCHBURG REGIONAL VA (A)
Virginia	Appomattox	93	18	1.1	FARMVILLE REGIONAL VA (A)	FARMVILLE REGIONAL VA (A)	LYNCHBURG REGIONAL VA (A)
Virginia	Arlington	94	14	1.6	DAVISON AAF VA (A)	Sterling Virginia (M)	Sterling Virginia (M)
Virginia	Augusta	91	7	2.4	Staunton Shenandoah Valley Regional Airport Virginia (M)	INGALLS FIELD VA (A)	INGALLS FIELD VA (A)
Virginia	Bath	85	7	2.4	GREENBRIER VALLEY A WV (A)	Hot Springs Ingalls Field Airport Virginia (M)	INGALLS FIELD VA (A)
Virginia	Bedford	90	19	1.1	Roanoke Regional Airport Virginia (M)	Roanoke Regional Airport Virginia (M)	LYNCHBURG REGIONAL VA (A)
Virginia	Bedford City	90	19	1.1	Roanoke Regional Airport Virginia (M)	Roanoke Regional Airport Virginia (M)	LYNCHBURG REGIONAL VA (A)
Virginia	Bland	89	12	1.6	NEW RIVER VALLEY AP VA (A)	Marion / Wytheville Mountain Empire Airport Virginia (M)	Bluefield Mercer Co. Airport West Virginia (M)
Virginia	Botetourt	90	7	2.4	Roanoke Regional Airport Virginia (M)	Hot Springs Ingalls Field Airport Virginia (M)	INGALLS FIELD VA (A)
Virginia	Bristol City	88	12	1.5	Bristol Tri-City Airport Tennessee (M)	Wise Lonesome Pine Airport Virginia (M)	Wise Lonesome Pine Airport Virginia (M)

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Virginia	Brunswick	95	19	0.8	Petersburg Dinwiddie Co. Airport Virginia (M)	Petersburg Dinwiddie Co. Airport Virginia (M)	EMPORIA-GRENVLE REG VA (A)
Virginia	Buchanan	88	12	1.5	KEE FIELD WV (A)	Wise Lonesome Pine Airport Virginia (M)	Wise Lonesome Pine Airport Virginia (M)
Virginia	Buckingham	93	17	1.1	FARMVILLE REGIONAL VA (A)	CHARLOTTESVILLE 2 S VA (A)	CHARLOTTESVILLE 2 S VA (A)
Virginia	Buena Vista City	90	7	2.4	Lynchburg Regional Airport Virginia (M)	Hot Springs Ingalls Field Airport Virginia (M)	INGALLS FIELD VA (A)
Virginia	Campbell	93	18	1.1	FARMVILLE REGIONAL VA (A)	FARMVILLE REGIONAL VA (A)	LYNCHBURG REGIONAL VA (A)
Virginia	Caroline	93	14	1.2	Fredricksburg Virginia (M)	Fredricksburg Virginia (M)	Fredricksburg Virginia (M)
Virginia	Carroll	91	12	1.5	MT AIRY SURRY COUNT NC (A)	Marion / Wytheville Mountain Empire Airport Virginia (M)	Virginia Tech. Airport Virginia (M)
Virginia	Charles City	95	18	0.9	Petersburg Dinwiddie Co. Airport Virginia (M)	Richmond Airport Virginia (M)	Richmond Airport Virginia (M)
Virginia	Charlotte	93	18	1.1	FARMVILLE REGIONAL VA (A)	FARMVILLE REGIONAL VA (A)	LYNCHBURG REGIONAL VA (A)
Virginia	Charlottesville City	92	16	1.2	FREEMAN FIELD VA (A)	Harrisonburg Virginia (M)	SHENANDOAH VALLEY R VA (A)
Virginia	Chesapeake City	94	19	0.8	FRANKLIN MUNICIPAL VA (A)	Elizabeth City Airport North Carolina (M)	Hampton Langley Air Force Base Virginia (M)
Virginia	Chesterfield	95	18	0.9	Petersburg Dinwiddie Co. Airport Virginia (M)	Richmond Airport Virginia (M)	Richmond Airport Virginia (M)
Virginia	Clarke	93	12	1.6	LESSBURG EXECUTIVE VA (A)	Hagerstown Maryland (M)	Sterling Virginia (M)
Virginia	Colonial Heights City	95	18	0.9	Petersburg Dinwiddie Co. Airport Virginia (M)	Richmond Airport Virginia (M)	Richmond Airport Virginia (M)
Virginia	Covington City	90	7	2.4	Roanoke Regional Airport Virginia (M)	Hot Springs Ingalls Field Airport Virginia (M)	INGALLS FIELD VA (A)
Virginia	Craig	90	7	2.4	Roanoke Regional Airport Virginia (M)	Hot Springs Ingalls Field Airport Virginia (M)	Hot Springs Ingalls Field Airport Virginia (M)
Virginia	Culpeper	93	14	1.4	Fredricksburg Virginia (M)	Fredricksburg Virginia (M)	Manassas Regional Airport Virginia (M)
Virginia	Cumberland	93	17	1.1	FARMVILLE REGIONAL VA (A)	CHARLOTTESVILLE 2 S VA (A)	CHARLOTTESVILLE 2 S VA (A)
Virginia	Danville City	92	18	1.0	BURLINGTON ALAMANCE NC (A)	Martinsville Virginia (M)	Martinsville Virginia (M)
Virginia	Dickenson	88	12	1.5	VIRGINIA HIGHLANDS VA (A)	Wise Lonesome Pine Airport Virginia (M)	Wise Lonesome Pine Airport Virginia (M)
Virginia	Dinwiddie	95	18	0.9	Petersburg Dinwiddie Co. Airport Virginia (M)	Richmond Airport Virginia (M)	Richmond Airport Virginia (M)
Virginia	Emporia City	95	19	0.8	Petersburg Dinwiddie Co. Airport Virginia (M)	Petersburg Dinwiddie Co. Airport Virginia (M)	EMPORIA-GRENVLE REG VA (A)
Virginia	Essex	93	14	1.2	Fredricksburg Virginia (M)	Fredricksburg Virginia (M)	Fredricksburg Virginia (M)
Virginia	Fairfax	94	14	1.6	DAVISON AAF VA (A)	Fredricksburg Virginia (M)	Sterling Virginia (M)
Virginia	Fairfax City	94	12	1.6	DAVISON AAF VA (A)	Fredrick Airport Maryland (M)	Sterling Virginia (M)
Virginia	Falls Church City	94	12	1.6	DAVISON AAF VA (A)	Fredrick Airport Maryland (M)	Sterling Virginia (M)
Virginia	Fauquier	94	14	1.6	DAVISON AAF VA (A)	Fredricksburg Virginia (M)	Sterling Virginia (M)
Virginia	Floyd	92	15	1.5	BLUE RIDGE AP VA (A)	VIRGINIA TECH MONTG VA (A)	Virginia Tech. Airport Virginia (M)

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Virginia	Fluvanna	93	17	1.1	FARMVILLE REGIONAL VA (A)	CHARLOTTESVILLE 2 S VA (A)	CHARLOTTESVILLE 2 S VA (A)
Virginia	Franklin	92	15	1.5	BLUE RIDGE AP VA (A)	VIRGINIA TECH MONTG VA (A)	Virginia Tech. Airport Virginia (M)
Virginia	Franklin City	95	22	0.8	WILLIAMSBURG-JAMEST VA (A)	WAKEFIELD MUNICIPAL VA (A)	EMPORIA-GRENVLE REG VA (A)
Virginia	Frederick	93	15	1.4	LESSBURG EXECUTIVE VA (A)	Martinsburg Eastern W.V. Regional Airport West Virginia (M)	GREATER CUMBERLAND MD (A)
Virginia	Fredericksburg City	94	14	1.4	DAVISON AAF VA (A)	Fredricksburg Virginia (M)	Manassas Regional Airport Virginia (M)
Virginia	Galax City	91	12	1.6	WILKES COUNTY AP NC (A)	Marion / Wytheville Mountain Empire Airport Virginia (M)	ASHE COUNTY AP NC (A)
Virginia	Giles	89	11	1.8	NEW RIVER VALLEY AP VA (A)	Beckley Raleigh Co. Memorial Airport West Virginia (M)	Beckley Raleigh Co. Memorial Airport West Virginia (M)
Virginia	Gloucester	95	22	0.8	WILLIAMSBURG-JAMEST VA (A)	WAKEFIELD MUNICIPAL VA (A)	CAPE CHARLES 5 ENE VA (A)
Virginia	Goochland	93	17	1.1	FARMVILLE REGIONAL VA (A)	CHARLOTTESVILLE 2 S VA (A)	CHARLOTTESVILLE 2 S VA (A)
Virginia	Grayson	91	12	1.8	WILKES COUNTY AP NC (A)	Marion / Wytheville Mountain Empire Airport Virginia (M)	BOONE NC (A)
Virginia	Greene	93	16	1.2	CULPEPER REGIONAL VA (A)	Harrisonburg Virginia (M)	SHENANDOAH VALLEY R VA (A)
Virginia	Greensville	95	19	0.8	Petersburg Dinwiddie Co. Airport Virginia (M)	Petersburg Dinwiddie Co. Airport Virginia (M)	EMPORIA-GRENVLE REG VA (A)
Virginia	Halifax	92	21	0.8	DANVILLE REGIONAL VA (A)	PERSON COUNTY AP NC (A)	PERSON COUNTY AP NC (A)
Virginia	Hampton City	95	22	0.8	WILLIAMSBURG-JAMEST VA (A)	WAKEFIELD MUNICIPAL VA (A)	CAPE CHARLES 5 ENE VA (A)
Virginia	Hanover	95	14	1.2	Petersburg Dinwiddie Co. Airport Virginia (M)	Fredricksburg Virginia (M)	Fredricksburg Virginia (M)
Virginia	Harrisonburg City	91	16	1.2	Staunton Shenandoah Valley Regional Airport Virginia (M)	Harrisonburg Virginia (M)	SHENANDOAH VALLEY R VA (A)
Virginia	Henrico	95	18	0.9	Petersburg Dinwiddie Co. Airport Virginia (M)	Richmond Airport Virginia (M)	Richmond Airport Virginia (M)
Virginia	Henry	92	18	1.0	BLUE RIDGE AP VA (A)	Martinsville Virginia (M)	Martinsville Virginia (M)
Virginia	Highland	91	7	2.4	Staunton Shenandoah Valley Regional Airport Virginia (M)	Elkins-Randolph Co. Airport West Virginia (M)	INGALLS FIELD VA (A)
Virginia	Hopewell City	95	18	0.9	Petersburg Dinwiddie Co. Airport Virginia (M)	Richmond Airport Virginia (M)	Richmond Airport Virginia (M)
Virginia	Isle of Wight	95	22	0.8	WILLIAMSBURG-JAMEST VA (A)	WAKEFIELD MUNICIPAL VA (A)	Hampton Langley Air Force Base Virginia (M)
Virginia	James City	95	18	0.9	WILLIAMSBURG-JAMEST VA (A)	Richmond Airport Virginia (M)	Richmond Airport Virginia (M)
Virginia	King and Queen	95	18	0.9	WILLIAMSBURG-JAMEST VA (A)	Richmond Airport Virginia (M)	WEBSTER FIELD MD (A)
Virginia	King George	94	14	1.4	DAVISON AAF VA (A)	Fredricksburg Virginia (M)	Manassas Regional Airport Virginia (M)
Virginia	King William	95	18	0.9	WILLIAMSBURG-JAMEST VA (A)	Richmond Airport Virginia (M)	Richmond Airport Virginia (M)
Virginia	Lancaster	95	20	1.0	WILLIAMSBURG-JAMEST VA (A)	WEBSTER FIELD MD (A)	Lexington Park Patuxent River Naval Air Station Maryland (M)
Virginia	Lee	92	12	1.5	MIDDLESBORO-BELL CO KY (A)	Wise Lonesome Pine Airport Virginia (M)	Wise Lonesome Pine Airport Virginia (M)
Virginia	Lexington City	90	7	2.4	Lynchburg Regional Airport Virginia (M)	Hot Springs Ingalls Field Airport Virginia (M)	INGALLS FIELD VA (A)

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Virginia	Loudoun	94	12	1.6	DAVISON AAF VA (A)	Hagerstown Maryland (M)	Sterling Virginia (M)
Virginia	Louisa	93	14	1.2	Fredricksburg Virginia (M)	Fredricksburg Virginia (M)	Fredricksburg Virginia (M)
Virginia	Lunenburg	93	18	1.0	MECKLENBURG-BRUNWIC VA (A)	FARMVILLE REGIONAL VA (A)	Farmville Virginia (M)
Virginia	Lynchburg City	90	19	1.1	Lynchburg Regional Airport Virginia (M)	Lynchburg Regional Airport Virginia (M)	LYNCHBURG REGIONAL VA (A)
Virginia	Madison	93	16	1.2	CULPEPER REGIONAL VA (A)	Harrisonburg Virginia (M)	SHENANDOAH VALLEY R VA (A)
Virginia	Manassas City	94	14	1.6	DAVISON AAF VA (A)	Fredricksburg Virginia (M)	Sterling Virginia (M)
Virginia	Manassas Park City	94	14	1.6	DAVISON AAF VA (A)	Fredricksburg Virginia (M)	Sterling Virginia (M)
Virginia	Martinsville City	92	18	1.0	BLUE RIDGE AP VA (A)	Martinsville Virginia (M)	Martinsville Virginia (M)
Virginia	Mathews	95	22	0.8	WILLIAMSBURG-JAMEST VA (A)	MIDDLE PENINSULA RE VA (A)	Melfa Accomack Co. Airport Virginia (M)
Virginia	Mecklenburg	93	15	1.0	MECKLENBURG-BRUNWIC VA (A)	Henderson North Carolina (M)	Henderson North Carolina (M)
Virginia	Middlesex	95	20	0.9	WILLIAMSBURG-JAMEST VA (A)	WEBSTER FIELD MD (A)	WEBSTER FIELD MD (A)
Virginia	Montgomery	90	15	1.5	Roanoke Regional Airport Virginia (M)	VIRGINIA TECH MONTG VA (A)	Virginia Tech. Airport Virginia (M)
Virginia	Nelson	93	16	1.2	FARMVILLE REGIONAL VA (A)	SHENANDOAH VALLEY R VA (A)	SHENANDOAH VALLEY R VA (A)
Virginia	New Kent	95	18	0.9	Petersburg Dinwiddie Co. Airport Virginia (M)	Richmond Airport Virginia (M)	Richmond Airport Virginia (M)
Virginia	Newport News	95	22	0.8	WILLIAMSBURG-JAMEST VA (A)	WAKEFIELD MUNICIPAL VA (A)	CAPE CHARLES 5 ENE VA (A)
Virginia	Norfolk City	95	22	0.8	WILLIAMSBURG-JAMEST VA (A)	CHESAPEAKE REGIONAL VA (A)	CAPE CHARLES 5 ENE VA (A)
Virginia	Northampton	92	23	0.8	NEWPORT NEWS WILLIA VA (A)	Newport News Virginia (M)	Melfa Accomack Co. Airport Virginia (M)
Virginia	Northumberland	93	20	1.0	MIDDLE PENINSULA RE VA (A)	WEBSTER FIELD MD (A)	Lexington Park Patuxent River Naval Air Station Maryland (M)
Virginia	Norton City	88	12	1.5	Bristol Tri-City Airport Tennessee (M)	Wise Lonesome Pine Airport Virginia (M)	Wise Lonesome Pine Airport Virginia (M)
Virginia	Nottoway	95	18	1.0	Petersburg Dinwiddie Co. Airport Virginia (M)	FARMVILLE REGIONAL VA (A)	Farmville Virginia (M)
Virginia	Orange	93	14	1.2	Fredricksburg Virginia (M)	Fredricksburg Virginia (M)	Fredricksburg Virginia (M)
Virginia	Page	93	16	1.2	CULPEPER REGIONAL VA (A)	Harrisonburg Virginia (M)	SHENANDOAH VALLEY R VA (A)
Virginia	Patrick	92	15	1.5	BLUE RIDGE AP VA (A)	VIRGINIA TECH MONTG VA (A)	Virginia Tech. Airport Virginia (M)
Virginia	Petersburg City	95	18	0.9	Petersburg Dinwiddie Co. Airport Virginia (M)	Richmond Airport Virginia (M)	Richmond Airport Virginia (M)
Virginia	Pittsylvania	92	18	1.1	BLUE RIDGE AP VA (A)	Martinsville Virginia (M)	LYNCHBURG REGIONAL VA (A)
Virginia	Poquoson City	95	22	0.8	WILLIAMSBURG-JAMEST VA (A)	WAKEFIELD MUNICIPAL VA (A)	CAPE CHARLES 5 ENE VA (A)
Virginia	Portsmouth City	95	22	0.8	WILLIAMSBURG-JAMEST VA (A)	WAKEFIELD MUNICIPAL VA (A)	CAPE CHARLES 5 ENE VA (A)
Virginia	Powhatan	95	18	1.0	Petersburg Dinwiddie Co. Airport Virginia (M)	Richmond Airport Virginia (M)	Farmville Virginia (M)

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Virginia	Prince Edward	93	18	1.0	FARMVILLE REGIONAL VA (A)	FARMVILLE REGIONAL VA (A)	Farmville Virginia (M)
Virginia	Prince George	95	18	0.9	Petersburg Dinwiddie Co. Airport Virginia (M)	Richmond Airport Virginia (M)	Richmond Airport Virginia (M)
Virginia	Prince William	94	14	1.6	DAVISON AAF VA (A)	Fredricksburg Virginia (M)	Sterling Virginia (M)
Virginia	Pulaski	89	12	1.6	NEW RIVER VALLEY AP VA (A)	Marion / Wytheville Mountain Empire Airport Virginia (M)	Bluefield Mercer Co. Airport West Virginia (M)
Virginia	Radford City	90	12	1.6	Roanoke Regional Airport Virginia (M)	Bluefield Mercer Co. Airport West Virginia (M)	Bluefield Mercer Co. Airport West Virginia (M)
Virginia	Rappahannock	93	16	1.4	CULPEPER REGIONAL VA (A)	Manassas Regional Airport Virginia (M)	Manassas Regional Airport Virginia (M)
Virginia	Richmond	93	20	1.0	MIDDLE PENINSULA RE VA (A)	WEBSTER FIELD MD (A)	Lexington Park Patuxent River Naval Air Station Maryland (M)
Virginia	Richmond City	95	18	0.9	Petersburg Dinwiddie Co. Airport Virginia (M)	Richmond Airport Virginia (M)	Richmond Airport Virginia (M)
Virginia	Roanoke	90	11	2.1	Roanoke Regional Airport Virginia (M)	GREENBRIER VALLEY A WV (A)	GREENBRIER VALLEY A WV (A)
Virginia	Roanoke City	90	15	1.5	Roanoke Regional Airport Virginia (M)	VIRGINIA TECH MONTG VA (A)	Virginia Tech. Airport Virginia (M)
Virginia	Rockbridge	90	7	2.4	Lynchburg Regional Airport Virginia (M)	Hot Springs Ingalls Field Airport Virginia (M)	INGALLS FIELD VA (A)
Virginia	Rockingham	91	16	1.2	Staunton Shenandoah Valley Regional Airport Virginia (M)	Harrisonburg Virginia (M)	GRANT COUNTY AP WV (A)
Virginia	Russell	88	12	1.5	Bristol Tri-City Airport Tennessee (M)	Wise Lonesome Pine Airport Virginia (M)	Wise Lonesome Pine Airport Virginia (M)
Virginia	Salem City	90	15	1.5	Roanoke Regional Airport Virginia (M)	VIRGINIA TECH MONTG VA (A)	Virginia Tech. Airport Virginia (M)
Virginia	Scott	90	12	1.5	Greenville Tennessee (M)	Wise Lonesome Pine Airport Virginia (M)	Greenville Tennessee (M)
Virginia	Shenandoah	91	16	1.2	Harrisonburg Virginia (M)	Harrisonburg Virginia (M)	GRANT COUNTY AP WV (A)
Virginia	Smyth	88	12	1.6	Marion / Wytheville Mountain Empire Airport Virginia (M)	Marion / Wytheville Mountain Empire Airport Virginia (M)	ASHE COUNTY AP NC (A)
Virginia	Southampton	95	19	0.8	Petersburg Dinwiddie Co. Airport Virginia (M)	Petersburg Dinwiddie Co. Airport Virginia (M)	EMPORIA-GRENVLE REG VA (A)
Virginia	Spotsylvania	93	14	1.4	Fredricksburg Virginia (M)	Fredricksburg Virginia (M)	Manassas Regional Airport Virginia (M)
Virginia	Stafford	94	14	1.4	DAVISON AAF VA (A)	Fredricksburg Virginia (M)	Manassas Regional Airport Virginia (M)
Virginia	Staunton City	91	16	1.2	Staunton Shenandoah Valley Regional Airport Virginia (M)	Harrisonburg Virginia (M)	SHENANDOAH VALLEY R VA (A)
Virginia	Suffolk City	95	19	0.8	WILLIAMSBURG-JAMEST VA (A)	Elizabeth City Airport North Carolina (M)	Hampton Langley Air Force Base Virginia (M)
Virginia	Surry	95	18	0.9	Petersburg Dinwiddie Co. Airport Virginia (M)	Richmond Airport Virginia (M)	Richmond Airport Virginia (M)
Virginia	Sussex	95	19	0.8	Petersburg Dinwiddie Co. Airport Virginia (M)	Petersburg Dinwiddie Co. Airport Virginia (M)	EMPORIA-GRENVLE REG VA (A)
Virginia	Tazewell	88	12	1.6	Marion / Wytheville Mountain Empire Airport Virginia (M)	Marion / Wytheville Mountain Empire Airport Virginia (M)	Bluefield Mercer Co. Airport West Virginia (M)
Virginia	Virginia Beach City	93	19	0.8	CHESAPEAKE REGIONAL VA (A)	Elizabeth City Airport North Carolina (M)	CAPE CHARLES 5 ENE VA (A)

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Virginia	Warren	93	15	1.4	CULPEPER REGIONAL VA (A)	Martinsburg Eastern W.V. Regional Airport West Virginia (M)	Martinsburg Eastern W.V. Regional Airport West Virginia (M)
Virginia	Washington	88	12	1.6	Bristol Tri-City Airport Tennessee (M)	Wise Lonesome Pine Airport Virginia (M)	ASHE COUNTY AP NC (A)
Virginia	Waynesboro City	91	16	1.2	Staunton Shenandoah Valley Regional Airport Virginia (M)	Harrisonburg Virginia (M)	SHENANDOAH VALLEY R VA (A)
Virginia	Westmoreland	93	14	1.2	Fredricksburg Virginia (M)	Fredricksburg Virginia (M)	Fredricksburg Virginia (M)
Virginia	Williamsburg City	95	18	0.9	WILLIAMSBURG-JAMEST VA (A)	Richmond Airport Virginia (M)	Richmond Airport Virginia (M)
Virginia	Winchester City	93	15	1.4	LESSBURG EXECUTIVE VA (A)	Martinsburg Eastern W.V. Regional Airport West Virginia (M)	Martinsburg Eastern W.V. Regional Airport West Virginia (M)
Virginia	Wise	88	12	1.5	Bristol Tri-City Airport Tennessee (M)	Wise Lonesome Pine Airport Virginia (M)	Wise Lonesome Pine Airport Virginia (M)
Virginia	Wythe	89	12	1.6	NEW RIVER VALLEY AP VA (A)	Marion / Wytheville Mountain Empire Airport Virginia (M)	ASHE COUNTY AP NC (A)
Virginia	York	95	22	0.8	WILLIAMSBURG-JAMEST VA (A)	WAKEFIELD MUNICIPAL VA (A)	CAPE CHARLES 5 ENE VA (A)
<b>Virgin Islands, U.S.</b>							
Virgin Islands, U.S.	N/A	89	69	0	HENRY E ROHLSSEN AP	HENRY E ROHLSSEN AP	HENRY E ROHLSSEN AP
<b>Washington</b>							
Washington	Adams	95	7	2.9	GRANT COUNTY INTL WA (A)	Moses Lake Washington (M)	Moses Lake Washington (M)
Washington	Asotin	95	0	3.6	LEWISTON-NEZ PERCE ID (A)	Moscow Idaho (M)	Moscow Idaho (M)
Washington	Benton	98	11	1.7	HANFORD AP WA (A)	Kennewick Washington (M)	HERMISTON MUNICIPAL OR (A)
Washington	Chelan	93	12	2.0	PANGBORN MEMORIAL WA (A)	Wenatchee Pangborn Memorial Airport Washington (M)	Wenatchee Pangborn Memorial Airport Washington (M)
Washington	Clallam	80	27	9.1	Quillayute State Airport Washington* (M)	Quillayute State Airport Washington (M)	NEW DUNGENESS BUOY WA (A)
Washington	Clark	89	24	2.4	AURORA STATE AP OR (A)	Portland City Office Oregon (M)	SOUTHWEST WASHINGTON WA (A)
Washington	Columbia	95	16	1.5	Walla Walla Regional Airport Washington (M)	Walla Walla Regional Airport Washington (M)	Walla Walla Regional Airport Washington (M)
Washington	Cowlitz	88	25	2.4	Vancouver Pearson Airfield Washington (M)	SCAPOOSE INDUSTRIA OR (A)	SOUTHWEST WASHINGTON WA (A)
Washington	Douglas	95	12	2.0	EPHRATA MUNICIPAL WA (A)	Wenatchee Pangborn Memorial Airport Washington (M)	Wenatchee Pangborn Memorial Airport Washington (M)
Washington	Ferry	93	11	3.0	OMAK MUNICIPAL WA (A); Omak Washington (M); DEER PARK AP WA (A)	OMAK MUNICIPAL WA (A); Omak Washington (M); DEER PARK AP WA (A)	OMAK MUNICIPAL WA (A); Omak Washington (M); DEER PARK AP WA (A)
Washington	Franklin	98	11	1.6	HANFORD AP WA (A)	Kennewick Washington (M)	TRI-CITIES AP WA (A)
Washington	Garfield	95	0	3.6	LEWISTON-NEZ PERCE ID (A)	Moscow Idaho (M)	Moscow Idaho (M)
Washington	Grant	95	7	2.9	GRANT COUNTY INTL WA (A)	Moses Lake Washington (M)	Moses Lake Washington (M)
Washington	Grays Harbor	83	25	4.0	Shelton Sanderson Field Washington (M)	SANDERSON FIELD WA (A)	QUINAULT 4 NE WA (A)
Washington	Island	80	24	9.1	ARLINGTON MUNICIPAL WA (A)	ARLINGTON MUNICIPAL WA (A)	NEW DUNGENESS BUOY WA (A)
Washington	Jefferson	80	27	9.1	QUINAULT 4 NE WA* (A)	FAIRCHILD INTL WA (A)	NEW DUNGENESS BUOY WA (A)

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Washington	King	83	11	11.6	MCCHORD AFB WA (A)	Stampede Pass Washington (M)	Stampede Pass Washington (M)
Washington	Kitsap	84	24	3.6	GRAY AFF WA (A)	Gray AAF Washington (M)	BREMERTON NATL WA (A)
Washington	Kittitas	94	6	11.6	YAKIMA AIR TERMINAL WA (A)	Ellensburg Airport Washington (M)	Stampede Pass Washington (M)
Washington	Klickitat	94	19	1.5	COLUMBIA GORGE REGI WA (A)	The Dalles Oregon (M)	The Dalles Oregon (M)
Washington	Lewis	84	24	3.2	OLYMPIA REGIONAL WA (A)	Olympia Airport Washington (M)	Olympia Airport Washington (M)
Washington	Lincoln	89	11	3.3	Fairchild Air Force Base Washington (M)	Fairchild Air Force Base Washington (M)	FAIRCHILD AFB WA (A)
Washington	Mason	84	24	4.0	OLYMPIA REGIONAL WA (A)	Olympia Airport Washington (M)	QUINAULT 4 NE WA (A)
Washington	Okanogan	94	10	2.4	OMAK MUNICIPAL WA (A)	OMAK MUNICIPAL WA (A)	OMAK MUNICIPAL WA (A)
Washington	Pacific	80	28	3.5	Aberdeen Washington* (M)	Aberdeen Washington (M)	BOWERMAN AP WA (A)
Washington	Pend Oreille	86	10	4.6	SANDPOINT AP ID (A)	SANDPOINT AP ID (A)	SANDPOINT AP ID (A)
Washington	Pierce	84	24	3.2	OLYMPIA REGIONAL WA (A)	Olympia Airport Washington (M)	Olympia Airport Washington (M)
Washington	San Juan	80	23	9.1	BELLINGHAM INTL WA* (A)	Bellingham International Airport Washington (M)	NEW DUNGENESS BUOY WA (A)
Washington	Skagit	84	23	4.5	DARRINGTON 21 NNE WA (A)	Bellingham International Airport Washington (M)	WHIDBEY ISLAND NAS WA (A)
Washington	Skamania	88	29	1.7	PORTLAND-TROUTDALE OR (A)	PORTLAND-TROUTDALE OR (A)	PORTLAND-TROUTDALE OR (A)
Washington	Snohomish	84	24	3.4	DARRINGTON 21 NNE WA (A)	ARLINGTON MUNICIPAL WA (A)	DARRINGTON 21 NNE WA (A)
Washington	Spokane	91	8	5.1	Spokane Felts Field Municipal Airport Washington (M)	SPOKANE 17 SSW WA (A)	SPOKANE 17 SSW WA (A)
Washington	Stevens	90	8	4.2	DEER PARK AP WA (A)	DEER PARK AP WA (A)	DEER PARK AP WA (A)
Washington	Thurston	84	24	3.6	OLYMPIA REGIONAL WA (A)	Olympia Airport Washington (M)	BREMERTON NATL WA (A)
Washington	Wahkiakum	83	26	3.4	Longview Kelso Longview Airport Washington (M)	Longview Kelso Longview Airport Washington (M)	Astoria Regional Airport Oregon (M)
Washington	Walla Walla	97	11	1.6	Pasco Washington (M)	Kennewick Washington (M)	TRI-CITIES AP WA (A)
Washington	Whatcom	84	23	3.4	DARRINGTON 21 NNE WA (A)	Bellingham International Airport Washington (M)	Bellingham International Airport Washington (M)
Washington	Whitman	90	0	5.1	Pullman-Moscow Regional Airport Washington (M)	Moscow Idaho (M)	SPOKANE 17 SSW WA (A)
Washington	Yakima	94	12	2.5	YAKIMA AIR TERMINAL WA (A)	Yakima Air Terminal / McAllister Field Washington (M)	Yakima Air Terminal / McAllister Field Washington (M)
<b>West Virginia</b>							
West Virginia	Barbour	90	4	3.5	Clarksburg West Virginia (M)	ELKINS 21 ENE WV (A)	ELKINS 21 ENE WV (A)
West Virginia	Berkeley	93	8	1.8	LESSBURG EXECUTIVE VA (A)	Chambersburg Pennsylvania (M)	Chambersburg Pennsylvania (M)
West Virginia	Boone	89	11	1.8	Charleston Yeager Airport West Virginia (M)	Beckley Raleigh Co. Memorial Airport West Virginia (M)	Beckley Raleigh Co. Memorial Airport West Virginia (M)
West Virginia	Braxton	85	11	1.5	UPSHUR COUNTY REGIO WV (A)	UPSHUR COUNTY REGIO WV (A)	UPSHUR COUNTY REGIO WV (A)
West Virginia	Brooke	87	5	2.2	Pittsburgh International Airport Pennsylvania (M)	Wheeling West Virginia (M)	Washington Pennsylvania (M)

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West Virginia	Cabell	91	10	1.6	Ashland Kentucky (M)	Ashland Kentucky (M)	Ashland Kentucky (M)
West Virginia	Calhoun	89	12	1.4	MID-OHIO VALLEY REG WV (A)	Parkersburg Mid-Ohio Valley Regional Airport West Virginia (M)	MID-OHIO VALLEY REG WV (A)
West Virginia	Clay	89	15	1.2	Charleston Yeager Airport West Virginia (M)	Charleston Yeager Airport West Virginia (M)	Charleston Yeager Airport West Virginia (M)
West Virginia	Doddridge	90	10	1.8	Clarksburg West Virginia (M)	Clarksburg West Virginia (M)	Clarksburg West Virginia (M)
West Virginia	Fayette	89	11	2.1	Charleston Yeager Airport West Virginia (M)	Beckley Raleigh Co. Memorial Airport West Virginia (M)	GREENBRIER VALLEY A WV (A)
West Virginia	Gilmer	90	10	1.8	Clarksburg West Virginia (M)	Clarksburg West Virginia (M)	Clarksburg West Virginia (M)
West Virginia	Grant	91	4	3.5	GRANT COUNTY AP WV (A)	ELKINS 21 ENE WV (A)	ELKINS 21 ENE WV (A)
West Virginia	Greenbrier	85	7	2.4	GREENBRIER VALLEY A WV (A)	Hot Springs Ingalls Field Airport Virginia (M)	INGALLS FIELD VA (A)
West Virginia	Hampshire	91	10	1.6	Winchester Regional Airport Virginia (M)	Cumberland Maryland (M)	Cumberland Maryland (M)
West Virginia	Hancock	88	5	2.3	New Castle Pennsylvania (M)	Wheeling West Virginia (M)	New Castle Pennsylvania (M)
West Virginia	Hardy	91	4	3.5	Harrisonburg Virginia (M)	ELKINS 21 ENE WV (A)	ELKINS 21 ENE WV (A)
West Virginia	Harrison	90	7	2.2	Clarksburg West Virginia (M)	Elkins-Randolph Co. Airport West Virginia (M)	Elkins-Randolph Co. Airport West Virginia (M)
West Virginia	Jackson	89	12	1.4	Charleston Yeager Airport West Virginia (M)	Parkersburg Mid-Ohio Valley Regional Airport West Virginia (M)	MID-OHIO VALLEY REG WV (A)
West Virginia	Jefferson	93	12	1.6	LESSBURG EXECUTIVE VA (A)	Hagerstown Maryland (M)	Sterling Virginia (M)
West Virginia	Kanawha	89	15	1.2	Charleston Yeager Airport West Virginia (M)	Charleston Yeager Airport West Virginia (M)	Charleston Yeager Airport West Virginia (M)
West Virginia	Lewis	90	7	2.2	Clarksburg West Virginia (M)	Elkins-Randolph Co. Airport West Virginia (M)	Elkins-Randolph Co. Airport West Virginia (M)
West Virginia	Lincoln	91	10	1.6	Ashland Kentucky (M)	Ashland Kentucky (M)	Ashland Kentucky (M)
West Virginia	Logan	88	15	1.3	KEE FIELD WV (A)	KEE FIELD WV (A)	KEE FIELD WV (A)
West Virginia	Marion	90	9	2.0	Clarksburg West Virginia (M)	Uniontown Pennsylvania (M)	Uniontown Pennsylvania (M)
West Virginia	Marshall	86	5	2.2	Wheeling West Virginia (M)	Wheeling West Virginia (M)	Washington Pennsylvania (M)
West Virginia	Mason	92	6	1.9	Athens Ohio (M)	Athens Ohio (M)	Athens Ohio (M)
West Virginia	McDowell	88	12	1.6	Marion / Wytheville Mountain Empire Airport Virginia (M)	Marion / Wytheville Mountain Empire Airport Virginia (M)	Bluefield Mercer Co. Airport West Virginia (M)
West Virginia	Mercer	89	11	1.8	NEW RIVER VALLEY AP VA (A)	Beckley Raleigh Co. Memorial Airport West Virginia (M)	Beckley Raleigh Co. Memorial Airport West Virginia (M)
West Virginia	Mineral	91	4	3.5	GRANT COUNTY AP WV (A)	ELKINS 21 ENE WV (A)	ELKINS 21 ENE WV (A)
West Virginia	Mingo	88	15	1.3	KEE FIELD WV (A)	KEE FIELD WV (A)	KEE FIELD WV (A)
West Virginia	Monongalia	90	8	2.2	Clarksburg West Virginia (M)	WASHINGTON COUNTY A PA (A)	Washington Pennsylvania (M)
West Virginia	Monroe	90	11	2.1	Roanoke Regional Airport Virginia (M)	Beckley Raleigh Co. Memorial Airport West Virginia (M)	GREENBRIER VALLEY A WV (A)
West Virginia	Morgan	91	10	1.6	Winchester Regional Airport Virginia (M)	Cumberland Maryland (M)	Hagerstown Maryland (M)

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West Virginia	Nicholas	85	11	2.1	GREENBRIER VALLEY A WV (A)	Beckley Raleigh Co. Memorial Airport West Virginia (M)	GREENBRIER VALLEY A WV (A)
West Virginia	Ohio	87	5	2.2	Pittsburgh International Airport Pennsylvania (M)	Wheeling West Virginia (M)	Washington Pennsylvania (M)
West Virginia	Pendleton	91	4	3.5	Staunton Shenandoah Valley Regional Airport Virginia (M)	ELKINS 21 ENE WV (A)	ELKINS 21 ENE WV (A)
West Virginia	Pleasants	89	12	1.4	MID-OHIO VALLEY REG WV (A)	Parkersburg Mid-Ohio Valley Regional Airport West Virginia (M)	MID-OHIO VALLEY REG WV (A)
West Virginia	Pocahontas	85	7	2.4	ELKINS AP WV (A)	Elkins-Randolph Co. Airport West Virginia (M)	INGALLS FIELD VA (A)
West Virginia	Preston	90	4	3.5	Clarksburg West Virginia (M)	ELKINS 21 ENE WV (A)	ELKINS 21 ENE WV (A)
West Virginia	Putnam	91	10	1.6	Ashland Kentucky (M)	Ashland Kentucky (M)	Ashland Kentucky (M)
West Virginia	Raleigh	88	11	1.8	KEE FIELD WV (A)	Beckley Raleigh Co. Memorial Airport West Virginia (M)	Beckley Raleigh Co. Memorial Airport West Virginia (M)
West Virginia	Randolph	87	4	3.5	NORTH CENTRAL WV AP WV (A)	ELKINS 21 ENE WV (A)	ELKINS 21 ENE WV (A)
West Virginia	Ritchie	90	10	1.8	Clarksburg West Virginia (M)	Clarksburg West Virginia (M)	Clarksburg West Virginia (M)
West Virginia	Roane	89	15	1.2	Charleston Yeager Airport West Virginia (M)	Charleston Yeager Airport West Virginia (M)	Charleston Yeager Airport West Virginia (M)
West Virginia	Summers	89	11	2.1	NEW RIVER VALLEY AP VA (A)	Beckley Raleigh Co. Memorial Airport West Virginia (M)	GREENBRIER VALLEY A WV (A)
West Virginia	Taylor	90	4	3.5	Clarksburg West Virginia (M)	ELKINS 21 ENE WV (A)	ELKINS 21 ENE WV (A)
West Virginia	Tucker	91	4	3.5	GRANT COUNTY AP WV (A)	ELKINS 21 ENE WV (A)	ELKINS 21 ENE WV (A)
West Virginia	Tyler	90	10	1.8	Clarksburg West Virginia (M)	Clarksburg West Virginia (M)	Clarksburg West Virginia (M)
West Virginia	Upshur	90	7	2.2	Clarksburg West Virginia (M)	Elkins-Randolph Co. Airport West Virginia (M)	Elkins-Randolph Co. Airport West Virginia (M)
West Virginia	Wayne	91	10	1.6	Ashland Kentucky (M)	Ashland Kentucky (M)	Ashland Kentucky (M)
West Virginia	Webster	85	11	1.5	UPSHUR COUNTY REGIO WV (A)	UPSHUR COUNTY REGIO WV (A)	UPSHUR COUNTY REGIO WV (A)
West Virginia	Wetzel	90	5	1.8	Clarksburg West Virginia (M)	Wheeling West Virginia (M)	Clarksburg West Virginia (M)
West Virginia	Wirt	89	12	1.4	MID-OHIO VALLEY REG WV (A)	Parkersburg Mid-Ohio Valley Regional Airport West Virginia (M)	MID-OHIO VALLEY REG WV (A)
West Virginia	Wood	92	6	1.9	Athens Ohio (M)	Athens Ohio (M)	Athens Ohio (M)
West Virginia	Wyoming	88	11	1.8	KEE FIELD WV (A)	Beckley Raleigh Co. Memorial Airport West Virginia (M)	Beckley Raleigh Co. Memorial Airport West Virginia (M)
<b>Wisconsin</b>							
Wisconsin	Adams	89	-11	3.8	Stevens Point Wisconsin (M)	Stevens Point Wisconsin (M)	Stevens Point Wisconsin (M)
Wisconsin	Ashland	84	-16	6.1	JOHN F KENNEDY MEMO WI (A)	Ashland Wisconsin (M)	Devils Island Wisconsin (M)
Wisconsin	Barron	87	-11	3.9	MENOMONIE MUNICIPAL WI (A)	BURNETT COUNTY AP WI (A)	BURNETT COUNTY AP WI (A)
Wisconsin	Bayfield	84	-16	6.5	JOHN F KENNEDY MEMO WI (A)	Ashland Wisconsin (M)	RICHARD B HELGESON MN (A)
Wisconsin	Brown	87	-4	4.6	CLINTONVILLE MUNICI WI (A)	Green Bay Austin Straubel International Airport Wisconsin (M)	KEWAUNEE WI (A)

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Wisconsin	Buffalo	89	-10	3.1	Winona Municipal Airport Minnesota (M)	Eau Claire County Airport Wisconsin (M)	CHIPPEWA VALLEY REG WI (A)
Wisconsin	Burnett	86	-13	4.6	RUSH CITY REGIONAL MN (A)	SANDSTONE 6 W MN (A)	SANDSTONE 6 W MN (A)
Wisconsin	Calumet	86	-4	3.7	Appleton Outagamie Co. Regional Airport Wisconsin (M)	Green Bay Austin Straubel International Airport Wisconsin (M)	Manitowac Co. Airport Wisconsin (M)
Wisconsin	Chippewa	87	-10	3.9	Eau Claire County Airport Wisconsin (M)	Eau Claire County Airport Wisconsin (M)	RUSK COUNTY WI (A)
Wisconsin	Clark	87	-10	3.9	Eau Claire County Airport Wisconsin (M)	Eau Claire County Airport Wisconsin (M)	TAYLOR COUNTY AP WI (A)
Wisconsin	Columbia	88	-3	2.8	WATERTOWN MUNICIPAL WI (A)	Madison Dane Co. Regional Airport Wisconsin (M)	Madison Dane Co. Regional Airport Wisconsin (M)
Wisconsin	Crawford	90	-6	2.6	BOSCOBEL AP WI (A)	TRI-COUNTY REGIONAL WI (A)	TRI-COUNTY REGIONAL WI (A)
Wisconsin	Dane	88	-6	2.8	TRI-COUNTY REGIONAL WI (A)	TRI-COUNTY REGIONAL WI (A)	Madison Dane Co. Regional Airport Wisconsin (M)
Wisconsin	Dodge	88	-5	3.0	WATERTOWN MUNICIPAL WI (A)	Waukesha Wisconsin (M)	WEST BEND MUNICIPAL WI (A)
Wisconsin	Door	84	-11	4.0	Marinette Wisconsin (M)	Marinette Wisconsin (M)	Menominee Michigan (M)
Wisconsin	Douglas	85	-14	5.9	HAYWARD MUNICIPAL WI (A)	Duluth International Airport Minnesota (M)	CLOQUET CARLTON CO MN (A)
Wisconsin	Dunn	89	-10	3.7	RED WING REGIONAL MN (A)	RICE LAKE REGIONAL WI (A)	RICE LAKE REGIONAL WI (A)
Wisconsin	Eau Claire	87	-10	3.1	Eau Claire County Airport Wisconsin (M)	Eau Claire County Airport Wisconsin (M)	CHIPPEWA VALLEY REG WI (A)
Wisconsin	Florence	85	-7	4.6	FORD AP MI (A)	FORD AP MI (A)	Iron Mountain Ford Airport Michigan (M)
Wisconsin	Fond du Lac	86	-2	3.4	Appleton Outagamie Co. Regional Airport Wisconsin (M)	WITTMAN REGIONAL WI (A)	Sheboygan Co. Memorial Airport Wisconsin (M)
Wisconsin	Forest	85	-14	6.3	FORD AP MI (A)	KINGS LAND O'LAKES WI (M)	KINGS LAND O'LAKES WI (M)
Wisconsin	Grant	90	-6	2.6	BOSCOBEL AP WI (A)	TRI-COUNTY REGIONAL WI (A)	TRI-COUNTY REGIONAL WI (A)
Wisconsin	Green	90	-4	2.8	Beloit Wisconsin (M)	Freeport Illinois (M)	Freeport Illinois (M)
Wisconsin	Green Lake	88	-4	3.0	WAUPACA MUNICIPAL WI (A)	WAUPACA MUNICIPAL WI (A)	WAUPACA MUNICIPAL WI (A)
Wisconsin	Iowa	90	-6	2.6	BOSCOBEL AP WI (A)	TRI-COUNTY REGIONAL WI (A)	TRI-COUNTY REGIONAL WI (A)
Wisconsin	Iron	84	-16	5.2	JOHN F KENNEDY MEMO WI (A)	Ashland Wisconsin (M)	Ironwood Michigan (M)
Wisconsin	Jackson	89	-10	3.5	La Crosse Municipal Airport Wisconsin (M)	Eau Claire County Airport Wisconsin (M)	MARSHFIELD MUNICIPAL WI (A)
Wisconsin	Jefferson	90	-5	2.9	Beloit Wisconsin (M)	Waukesha Wisconsin (M)	BURLINGTON MUNICIPAL WI (A)
Wisconsin	Juneau	88	-8	3.3	SPARTA FORT MCCOY A WI (A)	SPARTA FORT MCCOY A WI (A)	SPARTA FORT MCCOY A WI (A)
Wisconsin	Kenosha	91	-3	2.8	GLENVIEW NAS IL (A)	Waukegan Illinois (M)	Racine Wisconsin (M)
Wisconsin	Kewaunee	82	-1	4.6	Manitowac Co. Airport Wisconsin (M)	KEWAUNEE WI (A)	KEWAUNEE WI (A)
Wisconsin	La Crosse	89	-8	3.3	Winona Municipal Airport Minnesota (M)	SPARTA FORT MCCOY A WI (A)	SPARTA FORT MCCOY A WI (A)
Wisconsin	Lafayette	89	-6	2.8	Freeport Illinois (M)	TRI-COUNTY REGIONAL WI (A)	Freeport Illinois (M)

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Wisconsin	Langlade	85	-12	5.2	Wausau Municipal Airport Wisconsin (M)	TOMAHAWK REGIONAL WI (A)	TOMAHAWK REGIONAL WI (A)
Wisconsin	Lincoln	85	-12	5.2	Wausau Municipal Airport Wisconsin (M)	TOMAHAWK REGIONAL WI (A)	TOMAHAWK REGIONAL WI (A)
Wisconsin	Manitowoc	85	-1	4.6	SHEBOYGAN COUNTY ME WI (A)	KEWAUNEE WI (A)	KEWAUNEE WI (A)
Wisconsin	Marathon	89	-12	5.2	Stevens Point Wisconsin (M)	TOMAHAWK REGIONAL WI (A)	TOMAHAWK REGIONAL WI (A)
Wisconsin	Marinette	85	-11	4.6	FORD AP MI (A)	Marinette Wisconsin (M)	Iron Mountain Ford Airport Michigan (M)
Wisconsin	Marquette	88	-4	3.0	WAUPACA MUNICIPAL WI (A)	WAUPACA MUNICIPAL WI (A)	WAUPACA MUNICIPAL WI (A)
Wisconsin	Menominee	87	-9	4.7	CLINTONVILLE MUNICI WI (A)	LANGLADE COUNTY AP WI (A)	LANGLADE COUNTY AP WI (A)
Wisconsin	Milwaukee	88	-5	3.1	Kenosha Regional Airport Wisconsin (M)	Waukesha Wisconsin (M)	PORT WASHINGTON WI (A)
Wisconsin	Monroe	89	-8	3.3	La Crosse Municipal Airport Wisconsin (M)	SPARTA FORT MCCOY A WI (A)	SPARTA FORT MCCOY A WI (A)
Wisconsin	Oconto	87	-11	4.0	CLINTONVILLE MUNICI WI (A)	Marinette Wisconsin (M)	Menominee Michigan (M)
Wisconsin	Oneida	83	-14	6.3	Rhineland-Oneida Co. Airport Wisconsin (M)	KINGS LAND O'LAKES WI (M)	KINGS LAND O'LAKES WI (M)
Wisconsin	Outagamie	88	-4	3.3	WAUPACA MUNICIPAL WI (A)	Green Bay Austin Straubel International Airport Wisconsin (M)	Green Bay Austin Straubel International Airport Wisconsin (M)
Wisconsin	Ozaukee	87	0	3.6	Milwaukee Mitchell International Airport Wisconsin (M)	SHEBOYGAN COUNTY ME WI (A)	Sheboygan Downtown 1-Mile Offshore Wisconsin (M)
Wisconsin	Pepin	89	-10	3.1	Winona Municipal Airport Minnesota (M)	Eau Claire County Airport Wisconsin (M)	CHIPPEWA VALLEY REG WI (A)
Wisconsin	Pierce	89	-9	3.5	RED WING REGIONAL MN (A)	AIRLAKE AP MN (A)	NEW RICHMOND MUNICI WI (A)
Wisconsin	Polk	88	-11	3.9	Cambridge Municipal Airport Minnesota (M)	Cambridge Municipal Airport Minnesota (M)	BURNETT COUNTY AP WI (A)
Wisconsin	Portage	89	-11	4.0	Stevens Point Wisconsin (M)	Stevens Point Wisconsin (M)	CENTRAL WISCONSIN A WI (A)
Wisconsin	Price	84	-13	5.2	RUSK COUNTY WI (A)	Phillips Price Co. Airport Wisconsin (M)	TOMAHAWK REGIONAL WI (A)
Wisconsin	Racine	89	-3	2.9	Waukegan Illinois (M)	Waukegan Illinois (M)	BURLINGTON MUNICIPA WI (A)
Wisconsin	Richland	90	-6	2.7	BOSCOBEL AP WI (A)	TRI-COUNTY REGIONAL WI (A)	BARABOO WISCONSIN D WI (A)
Wisconsin	Rock	90	-4	2.9	Beloit Wisconsin (M)	Freeport Illinois (M)	BURLINGTON MUNICIPA WI (A)
Wisconsin	Rusk	85	-13	4.7	RICE LAKE REGIONAL WI (A)	Phillips Price Co. Airport Wisconsin (M)	Phillips Price Co. Airport Wisconsin (M)
Wisconsin	Sauk	88	-6	2.8	TRI-COUNTY REGIONAL WI (A)	TRI-COUNTY REGIONAL WI (A)	Madison Dane Co. Regional Airport Wisconsin (M)
Wisconsin	Sawyer	85	-13	4.8	HAYWARD MUNICIPAL WI (A)	HAYWARD MUNICIPAL WI (A)	Park Falls Municipal Airport Wisconsin (M)
Wisconsin	Shawano	88	-9	4.7	WAUPACA MUNICIPAL WI (A)	LANGLADE COUNTY AP WI (A)	LANGLADE COUNTY AP WI (A)
Wisconsin	Sheboygan	86	-1	3.7	Fond Du Lac Co. Airport Wisconsin (M)	FOND DU LAC COUNTY WI (A)	Manitowac Co. Airport Wisconsin (M)
Wisconsin	St. Croix	89	-9	3.5	RED WING REGIONAL MN (A)	LO SIMENSTAD MUNICI WI (A)	NEW RICHMOND MUNICI WI (A)
Wisconsin	Taylor	84	-13	5.2	RUSK COUNTY WI (A)	Phillips Price Co. Airport Wisconsin (M)	TOMAHAWK REGIONAL WI (A)

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Wisconsin	Trempealeau	89	-10	3.3	Winona Municipal Airport Minnesota (M)	Eau Claire County Airport Wisconsin (M)	SPARTA FORT MCCOY A WI (A)
Wisconsin	Vernon	90	-8	3.3	BOSCOBEL AP WI (A)	SPARTA FORT MCCOY A WI (A)	SPARTA FORT MCCOY A WI (A)
Wisconsin	Vilas	83	-14	6.3	Rhineland-Oneida Co. Airport Wisconsin (M)	KINGS LAND O'LAKES WI (M)	KINGS LAND O'LAKES WI (M)
Wisconsin	Walworth	90	-5	2.9	Beloit Wisconsin (M)	Waukesha Wisconsin (M)	BURLINGTON MUNICIPAL WI (A)
Wisconsin	Washburn	85	-13	4.5	BURNETT COUNTY AP WI (A)	HAYWARD MUNICIPAL WI (A)	HAYWARD MUNICIPAL WI (A)
Wisconsin	Washington	88	-5	3.6	WATERTOWN MUNICIPAL WI (A)	Waukesha Wisconsin (M)	Sheboygan Downtown 1-Mile Offshore Wisconsin (M)
Wisconsin	Waukesha	88	-5	3.1	Kenosha Regional Airport Wisconsin (M)	Waukesha Wisconsin (M)	PORT WASHINGTON WI (A)
Wisconsin	Waupaca	89	-11	4.0	Stevens Point Wisconsin (M)	Stevens Point Wisconsin (M)	CENTRAL WISCONSIN A WI (A)
Wisconsin	Waushara	89	-11	3.8	Stevens Point Wisconsin (M)	Stevens Point Wisconsin (M)	Stevens Point Wisconsin (M)
Wisconsin	Winnebago	88	-4	3.3	WAUPACA MUNICIPAL WI (A)	Green Bay Austin Straubel International Airport Wisconsin (M)	Green Bay Austin Straubel International Airport Wisconsin (M)
Wisconsin	Wood	89	-11	4.0	Stevens Point Wisconsin (M)	Stevens Point Wisconsin (M)	CENTRAL WISCONSIN A WI (A)
<b>Wyoming</b>							
Wyoming	Albany	83	-4	6.7	LARAMIE REGIONAL WY (A)	LARAMIE REGIONAL WY (A)	Laramie Laramie Regional Airport Wyoming (M)
Wyoming	Big Horn	95	-10	3.0	SOUTH BIG HORN COUN WY (A)	Worland Municipal Airport Wyoming (M)	WORLAND MUNICIPAL WY (A)
Wyoming	Campbell	92	-4	3.3	Gillette-Campbell Co. Airport Wyoming (M)	Gillette-Campbell Co. Airport Wyoming (M)	Gillette-Campbell Co. Airport Wyoming (M)
Wyoming	Carbon	88	-4	4.5	RAWLINS MUNICIPAL WY (A)	Rawlins Wyoming (M)	RAWLINS MUNICIPAL WY (A)
Wyoming	Converse	93	-2	3.1	CONVERSE COUNTY AP WY (A)	CONVERSE COUNTY AP WY (A)	CONVERSE COUNTY AP WY (A)
Wyoming	Crook	80	-7	6.2	SUNDANCE 8 NNW WY (A)	SUNDANCE 8 NNW WY (A)	SUNDANCE 8 NNW WY (A)
Wyoming	Fremont	91	-3	3.3	RIVERTON REGIONAL WY (A)	Lander Hunt Field Wyoming (M)	RIVERTON REGIONAL WY (A)
Wyoming	Goshen	94	-8	3.7	TORRINGTON MUNICIPAL WY (A)	Torrington Wyoming (M)	HARRISON 20 SSE NE (A)
Wyoming	Hot Springs	93	-10	3.0	Worland Municipal Airport Wyoming (M)	Worland Municipal Airport Wyoming (M)	WORLAND MUNICIPAL WY (A)
Wyoming	Johnson	91	-1	3.2	JOHNSON COUNTY AP WY (A)	JOHNSON COUNTY AP WY (A)	JOHNSON COUNTY AP WY (A)
Wyoming	Laramie	91	1	3.6	NUNN 7 NNE CO (A)	NUNN 7 NNE CO (A)	Cheyenne Municipal Airport Wyoming (M)
Wyoming	Lincoln	83	-13	11.1	BIG PINEY-MARBLETON WY (A)	Big Piney Marbleton Airport Wyoming (M)	Big Piney Marbleton Airport Wyoming (M)
Wyoming	Natrona	92	-2	3.3	CASPER-NATRONA COUN WY (A)	Casper Natrona Co. International Airport Wyoming (M)	Casper Natrona Co. International Airport Wyoming (M)
Wyoming	Niobrara	91	-7	3.3	CONVERSE COUNTY AP WY (A); Newcastle Wyoming (M); HARRISON 20 SSE NE (A)	CONVERSE COUNTY AP WY (A); Newcastle Wyoming (M); HARRISON 20 SSE NE (A)	CONVERSE COUNTY AP WY (A); Newcastle Wyoming (M); HARRISON 20 SSE NE (A)
Wyoming	Park	88	-5	3.6	Cody Yellowstone Regional Airport Wyoming (M)	Cody Yellowstone Regional Airport Wyoming (M)	Cody Yellowstone Regional Airport Wyoming (M)
Wyoming	Platte	91	-8	2.9	Torrington Wyoming (M)	Torrington Wyoming (M)	Torrington Wyoming (M)

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Wyoming	Sheridan	92	-6	3.5	Sheridan Co. Airport Wyoming (M)	Sheridan Co. Airport Wyoming (M)	SHERIDAN COUNTY AP WY (A)
Wyoming	Sublette	83	-13	11.1	BIG PINEY-MARBLETON WY (A)	Big Piney Marbleton Airport Wyoming (M)	Big Piney Marbleton Airport Wyoming (M)
Wyoming	Sweetwater	86	0	4.4	ROCK SPRINGS-SWEETW WY (A)	Rock Springs Sweetwater Co. Airport Wyoming (M)	Rock Springs Sweetwater Co. Airport Wyoming (M)
Wyoming	Teton	82	-13	29.7	MOOSE 1 NNE WY (A)	Yellowstone Lake Bridge Bay Amphitheater Wyoming (M)	YELLOWSTONE WY (A)
Wyoming	Uinta	84	-3	7.9	Evanston Wyoming (M)	Evanston Wyoming (M)	Evanston Wyoming (M)
Wyoming	Washakie	93	-10	3.0	Worland Municipal Airport Wyoming (M)	Worland Municipal Airport Wyoming (M)	WORLAND MUNICIPAL WY (A)
Wyoming	Weston	87	-12	3.1	Newcastle Wyoming (M)	Newcastle Wyoming (M)	Newcastle Wyoming (M)

## Appendix B – Target Superheat

### Table B1 – Target Superheat

		Return Air Wet-Bulb Temperature (°F)																										
		50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76
Outdoor Air Temperature (°F)	70	-	-	-	-	6.4	8.1	9.7	11.2	12.7	14.2	15.7	17	18.4	19.7	20.9	22.3	23.9	25.4	27	28.5	30	31.5	33	34.4	35.9	37.3	38.7
	71	-	-	-	-	5.6	7.3	8.9	10.5	12.1	13.6	15	16.4	17.8	19.1	20.3	21.7	23.3	24.9	26.4	28	29.5	31	32.5	34	35.4	36.9	38.3
	72	-	-	-	-	-	6.4	8.1	9.8	11.4	12.9	14.4	15.8	17.2	18.5	19.7	21.2	22.8	24.3	25.9	27.4	29	30.5	32	33.5	35	36.5	37.9
	73	-	-	-	-	-	5.6	7.3	9	10.7	12.2	13.7	15.2	16.6	17.9	19.2	20.6	22.2	23.8	25.4	26.9	28.5	30	31.5	33.1	34.6	36	37.5
	74	-	-	-	-	-	-	6.5	8.2	9.9	11.5	13.1	14.5	15.9	17.3	18.6	20	21.6	23.2	24.8	26.4	28	29.5	31.1	32.6	34.1	35.6	37.1
	75	-	-	-	-	-	-	5.6	7.4	9.2	10.8	12.4	13.9	15.3	16.7	18	19.4	21.1	22.7	24.3	25.9	27.5	29.1	30.6	32.2	33.7	35.2	36.7
	76	-	-	-	-	-	-	-	6.6	8.4	10.1	11.7	13.2	14.7	16.1	17.4	18.9	20.5	22.1	23.8	25.4	27	28.6	30.1	31.7	33.3	34.8	36.3
	77	-	-	-	-	-	-	-	5.7	7.5	9.3	11	12.5	14	15.4	16.8	18.3	20	21.6	23.2	24.9	26.5	28.1	29.7	31.3	32.8	34.4	36
	78	-	-	-	-	-	-	-	-	6.7	8.5	10.2	11.8	13.4	14.8	16.2	17.7	19.4	21.1	22.7	24.4	26	27.6	29.2	30.8	32.4	34	35.6
	79	-	-	-	-	-	-	-	-	5.9	7.7	9.5	11.1	12.7	14.2	15.6	17.1	18.8	20.5	22.2	23.8	25.5	27.1	28.8	30.4	32	33.6	35.2
	80	-	-	-	-	-	-	-	-	-	6.9	8.7	10.4	12	13.5	15	16.6	18.3	20	21.7	23.3	25	26.7	28.3	29.9	31.6	33.2	34.8
	81	-	-	-	-	-	-	-	-	-	6	7.9	9.7	11.3	12.9	14.3	16	17.7	19.4	21.1	22.8	24.5	26.2	27.9	29.5	31.2	32.8	34.4
	82	-	-	-	-	-	-	-	-	-	5.2	7.1	8.9	10.6	12.2	13.7	15.4	17.2	18.9	20.6	22.3	24	25.7	27.4	29.1	30.7	32.4	34
	83	-	-	-	-	-	-	-	-	-	-	6.3	8.2	9.9	11.6	13.1	14.9	16.6	18.4	20.1	21.8	23.5	25.2	26.9	28.6	30.3	32	33.7
	84	-	-	-	-	-	-	-	-	-	-	5.5	7.4	9.2	10.9	12.5	14.3	16.1	17.8	19.6	21.3	23	24.8	26.5	28.2	29.9	31.6	33.3
	85	-	-	-	-	-	-	-	-	-	-	-	6.6	8.5	10.3	11.9	13.7	15.5	17.3	19	20.8	22.6	24.3	26	27.8	29.5	31.2	32.9
	86	-	-	-	-	-	-	-	-	-	-	-	5.8	7.8	9.6	11.3	13.2	15	16.7	18.5	20.3	22.1	23.8	25.6	27.3	29.1	30.8	32.6
	87	-	-	-	-	-	-	-	-	-	-	-	5	7	8.9	10.6	12.6	14.4	16.2	18	19.8	21.6	23.4	25.1	26.9	28.7	30.4	32.2
	88	-	-	-	-	-	-	-	-	-	-	-	-	6.3	8.2	10	12	13.9	15.7	17.5	19.3	21.1	22.9	24.7	26.5	28.3	30.1	31.8
	89	-	-	-	-	-	-	-	-	-	-	-	-	5.5	7.5	9.4	11.5	13.3	15.1	17	18.8	20.6	22.4	24.3	26.1	27.9	29.7	31.5
	90	-	-	-	-	-	-	-	-	-	-	-	-	-	6.8	8.8	10.9	12.8	14.6	16.5	18.3	20.1	22	23.8	25.6	27.5	29.3	31.1
	91	-	-	-	-	-	-	-	-	-	-	-	-	-	6.1	8.1	10.3	12.2	14.1	15.9	17.8	19.7	21.5	23.4	25.2	27.1	28.9	30.8
	92	-	-	-	-	-	-	-	-	-	-	-	-	-	5.4	7.5	9.8	11.7	13.5	15.4	17.3	19.2	21.1	22.9	24.8	26.7	28.5	30.4
	93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.8	9.2	11.1	13	14.9	16.8	18.7	20.6	22.5	24.4	26.3	28.2	30.1
	94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.2	8.7	10.6	12.5	14.4	16.3	18.2	20.2	22.1	24	25.9	27.8	29.7

**Table B1 – Target Superheat (Continued)**

		Return Air Wet-Bulb Temperature (°F)																									
		50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75
Outdoor Air Temperature (°F)	95	-	-	-	-	-	-	-	-	-	-	-	-	-	5.6	8.1	10	12	13.9	15.8	17.8	19.7	21.6	23.6	25.5	27.4	29.4
	96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.5	9.5	11.4	13.4	15.3	17.3	19.2	21.2	23.2	25.1	27.1	29
	97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	8.9	10.9	12.9	14.9	16.8	18.8	20.8	22.7	24.7	26.7	28.7
	98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.4	8.4	10.4	12.4	14.4	16.4	18.3	20.3	22.3	24.3	26.3	28.3
	99	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.8	7.9	9.9	11.9	13.9	15.9	17.9	19.9	21.9	24	26	28
	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.3	7.3	9.3	11.4	13.4	15.4	17.5	19.5	21.5	23.6	25.6	27.7
	101	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.8	8.8	10.9	12.9	15	17	19.1	21.1	23.2	25.3	27.3
	102	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.2	8.3	10.4	12.4	14.5	16.6	18.6	20.7	22.8	24.9	27
	103	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.7	7.8	9.9	11.9	14	16.1	18.2	20.3	22.4	24.5	26.7
	104	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.2	7.2	9.3	11.5	13.6	15.7	17.8	19.9	22.1	24.2	26.3
	105	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.7	8.8	11	13.1	15.2	17.4	19.5	21.7	23.8	26
	106	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.2	8.3	10.5	12.6	14.8	17	19.1	21.3	23.5	25.7
	107	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.7	7.9	10	12.2	14.4	16.6	18.7	21	23.2	25.4
	108	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.2	7.4	9.5	11.7	13.9	16.1	18.4	20.6	22.8	25.1
	109	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.9	9.1	11.3	13.5	15.7	18	20.2	22.5	24.7
	110	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.4	8.6	10.8	13.1	15.3	17.6	19.9	22.1	24.4
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.9	8.1	10.4	12.6	14.9	17.2	19.5	21.8	24.1
112	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.4	7.6	9.9	12.2	14.5	16.8	19.1	21.5	23.8	
113	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.2	9.5	11.8	14.1	16.4	18.8	21.1	23.5	
114	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.7	9	11.4	13.7	16.1	18.4	20.8	23.2	
115	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.2	8.6	10.9	13.3	15.7	18.1	20.5	22.9	

## Appendix C – Weigh-In Method Refrigerant Charge Verification Weight

### Table C1 – Verification Weight (ounces)

Delta Line Length (feet)	Liquid Line Diameter (inches)				Delta Line Length (feet)	Liquid Line Diameter (inches)				Delta Line Length (feet)	Liquid Line Diameter (inches)			
	1/4	5/16	3/8	1/2		1/4	5/16	3/8	1/2		1/4	5/16	3/8	1/2
-50	-15.0	-20.0	-30.0	-60.0	-16	-4.8	-6.4	-9.6	-19.2	18	5.4	7.2	10.8	21.6
-49	-14.7	-19.6	-29.4	-58.8	-15	-4.5	-6.0	-9.0	-18.0	19	5.7	7.6	11.4	22.8
-48	-14.4	-19.2	-28.8	-57.6	-14	-4.2	-5.6	-8.4	-16.8	20	6.0	8.0	12.0	24.0
-47	-14.1	-18.8	-28.2	-56.4	-13	-3.9	-5.2	-7.8	-15.6	21	6.3	8.4	12.6	25.2
-46	-13.8	-18.4	-27.6	-55.2	-12	-3.6	-4.8	-7.2	-14.4	22	6.6	8.8	13.2	26.4
-45	-13.5	-18.0	-27.0	-54.0	-11	-3.3	-4.4	-6.6	-13.2	23	6.9	9.2	13.8	27.6
-44	-13.2	-17.6	-26.4	-52.8	-10	-3.0	-4.0	-6.0	-12.0	24	7.2	9.6	14.4	28.8
-43	-12.9	-17.2	-25.8	-51.6	-9	-2.7	-3.6	-5.4	-10.8	25	7.5	10.0	15.0	30.0
-42	-12.6	-16.8	-25.2	-50.4	-8	-2.4	-3.2	-4.8	-9.6	26	7.8	10.4	15.6	31.2
-41	-12.3	-16.4	-24.6	-49.2	-7	-2.1	-2.8	-4.2	-8.4	27	8.1	10.8	16.2	32.4
-40	-12.0	-16.0	-24.0	-48.0	-6	-1.8	-2.4	-3.6	-7.2	28	8.4	11.2	16.8	33.6
-39	-11.7	-15.6	-23.4	-46.8	-5	-1.5	-2.0	-3.0	-6.0	29	8.7	11.6	17.4	34.8
-38	-11.4	-15.2	-22.8	-45.6	-4	-1.2	-1.6	-2.4	-4.8	30	9.0	12.0	18.0	36.0
-37	-11.1	-14.8	-22.2	-44.4	-3	-0.9	-1.2	-1.8	-3.6	31	9.3	12.4	18.6	37.2
-36	-10.8	-14.4	-21.6	-43.2	-2	-0.6	-0.8	-1.2	-2.4	32	9.6	12.8	19.2	38.4
-35	-10.5	-14.0	-21.0	-42.0	-1	-0.3	-0.4	-0.6	-1.2	33	9.9	13.2	19.8	39.6
-34	-10.2	-13.6	-20.4	-40.8	0	0.0	0.0	0.0	0.0	34	10.2	13.6	20.4	40.8
-33	-9.9	-13.2	-19.8	-39.6	1	0.3	0.4	0.6	1.2	35	10.5	14.0	21.0	42.0
-32	-9.6	-12.8	-19.2	-38.4	2	0.6	0.8	1.2	2.4	36	10.8	14.4	21.6	43.2
-31	-9.3	-12.4	-18.6	-37.2	3	0.9	1.2	1.8	3.6	37	11.1	14.8	22.2	44.4
-30	-9.0	-12.0	-18.0	-36.0	4	1.2	1.6	2.4	4.8	38	11.4	15.2	22.8	45.6
-29	-8.7	-11.6	-17.4	-34.8	5	1.5	2.0	3.0	6.0	39	11.7	15.6	23.4	46.8
-28	-8.4	-11.2	-16.8	-33.6	6	1.8	2.4	3.6	7.2	40	12.0	16.0	24.0	48.0
-27	-8.1	-10.8	-16.2	-32.4	7	2.1	2.8	4.2	8.4	41	12.3	16.4	24.6	49.2
-26	-7.8	-10.4	-15.6	-31.2	8	2.4	3.2	4.8	9.6	42	12.6	16.8	25.2	50.4
-25	-7.5	-10.0	-15.0	-30.0	9	2.7	3.6	5.4	10.8	43	12.9	17.2	25.8	51.6
-24	-7.2	-9.6	-14.4	-28.8	10	3.0	4.0	6.0	12.0	44	13.2	17.6	26.4	52.8
-23	-6.9	-9.2	-13.8	-27.6	11	3.3	4.4	6.6	13.2	45	13.5	18.0	27.0	54.0
-22	-6.6	-8.8	-13.2	-26.4	12	3.6	4.8	7.2	14.4	46	13.8	18.4	27.6	55.2
-21	-6.3	-8.4	-12.6	-25.2	13	3.9	5.2	7.8	15.6	47	14.1	18.8	28.2	56.4
-20	-6.0	-8.0	-12.0	-24.0	14	4.2	5.6	8.4	16.8	48	14.4	19.2	28.8	57.6
-19	-5.7	-7.6	-11.4	-22.8	15	4.5	6.0	9.0	18.0	49	14.7	19.6	29.4	58.8
-18	-5.4	-7.2	-10.8	-21.6	16	4.8	6.4	9.6	19.2	50	15.0	20.0	30.0	60.0
-17	-5.1	-6.8	-10.2	-20.4	17	5.1	6.8	10.2	20.4	-	-	-	-	-