

Community Involvement

There are several elements to a master plan process beginning with the community involvement program. Since a master plan is a joint-process between the FAA and a public airport owner, community input is an important part of the process. Additional steps include the inventory, forecasts, facility requirements, alternatives, financial planning and environmental overview.

Throughout the process there will be several opportunities to provide input including surveys, open houses, public meetings and submitting comments via the website.

Airport Facts:

- Runway 11/29 is 4,800' long by 75' wide
- Home to approximately 340 aircraft
- Home to several major businesses

For more information or questions about the Airport Master Plan process please contact:

Aviation at 720.544.6520

or

Airport Manager at 303.651.8431

http://www.ci.longmont.co.us/airport/master_plan



Noise Abatement

To address the community's concerns with aircraft noise, the city of Longmont has adopted voluntary noise abatement procedures. These procedures encourage pilots operating at LMO to use certain power settings, climb rates and departure headings to help reduce aircraft noise.

Federal laws prohibit Federally-obligated airports from restricting aircraft operations. LMO management encourages pilots to follow noise abatement procedures but has no authority to require compliance or penalize pilots. The FAA has the regulatory authority to certificate pilots and aircraft and to enforce laws pertaining to flight.

See the website for the complete voluntary noise abatement procedures:

www.ci.longmont.co.us/airport/pilot_info/noise_abatement_procedures.htm

To report a suggestion, complaint or concern:
303.651.8431, Press 1

FAA Denver Flight Standards District Office:
303.342.1100



Longmont Vance Brand Municipal Airport



2011 Airport Master Plan

Q&A



An airport is a reflection of its community

Aviation has been part of the Longmont community since 1927. The key to continuously meeting the future demand is to periodically update the Airport Master Plan.

The Master Plan is a 20-year look at the possible development for the airport. The Plan is primarily funded through a grant provided by the Federal Aviation Administration with matching money from State of Colorado Division of Aeronautics and the Airport itself.

An airport is often a reflection of its community and growing communities often mean growing airports. According to Woods & Poole Economics 2011 Profile, the Western Regions (including Colorado) will experience the most growth of any region in the nation in the next thirty years.

The airport is already the home of 340-based aircraft, the fourth largest number of based aircraft of all airports in the State. The Master Plan Forecast expects that number to increase to 578 in the next 20 years. Takeoffs and landings (aka Operations) are expected to increase from 61,211 in 2010 to over 90,000 by 2030.

The Facility Requirements section outlines possible improvements, which include a potential runway extension, taxiway additions and relocations, land acquisitions for approach protection, better pilot visual aids and airfield markings, additional hangar sites, a security plan, wildlife fencing, additional utilities and aircraft fuel facilities.

http://www.ci.longmont.co.us/airport/master_plan

What a Master Plan IS:

- A requirement of the FAA
- A comprehensive study of the airport
- A list of recommended capital improvements
- A plan to accommodate future facility needs
- A strategy for funding opportunities
- An update of the Airport Layout Plan set for FAA approval

What a Master Plan is NOT:

- A construction project
- A development agreement
- A marketing plan
- A Noise Abatement Study
- An Environmental Assessment
- A guarantee for Federal and State funding

The City of Longmont decides whether and what to build.

The Alternatives Analysis will further evaluate key facility requirements to determine the best strategy to meet the needs of airport users and the community. Each alternative will assess the financial, planning, safety, environmental, and community concerns.

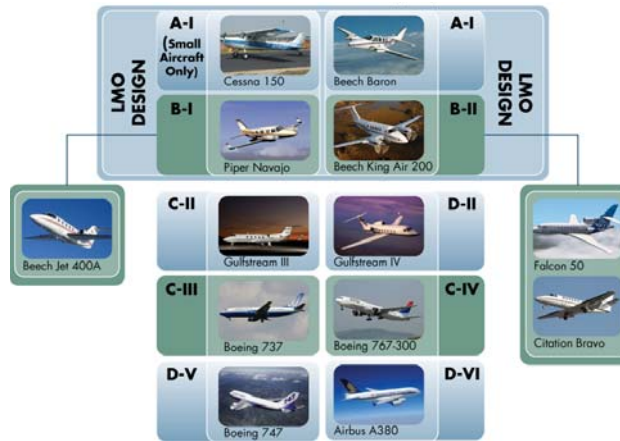
Airports have a wide variety of development options, so an organized approach to identifying and evaluating alternative development options is essential for effective planning.



Why Extend The Runway?

Presently, the runway is adequate for only a portion of the piston and business aircraft that the airport is designed to accommodate. Many aircraft taking off from Longmont must do so with partial fuel loads, and partial passenger and cargo loads. Often aircraft depart Longmont to fly to another airport to buy more fuel. Longmont businesses lose that revenue source, even though the aircraft are still using the facilities. This creates a situation where users of the facility are not financially supporting the facility or the City of Longmont. A 1,000-foot runway extension allows aircraft that are already using Longmont to carry higher fuel, cargo and passenger loads. This will benefit more of the business and charter aircraft community, and the citizens of Longmont.

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What is meant by the "Design Aircraft" and the Airport Reference Code?

The Federal Aviation Administration (FAA) classifies airports in the United States with a coding system known as the Airport Reference Code (ARC). This classification helps apply design criteria appropriate to operational and physical characteristics of the aircraft types operating at the airport, which is based on approach speed and wingspan. Longmont's Airport is designed to accommodate aircraft with an ARC of B-II. For an airport to accommodate larger aircraft, the reference code must change, thus changing the design standards. In Longmont Airport's Master Plan update, there is no recommendation, nor any stated FAA or State of Colorado support, to expand the airport for larger aircraft than what already use the facility. A 1,000-foot extension does not change the ARC and the airport will remain B-II in the foreseeable future.



Longmont Vance Brand Municipal Airport



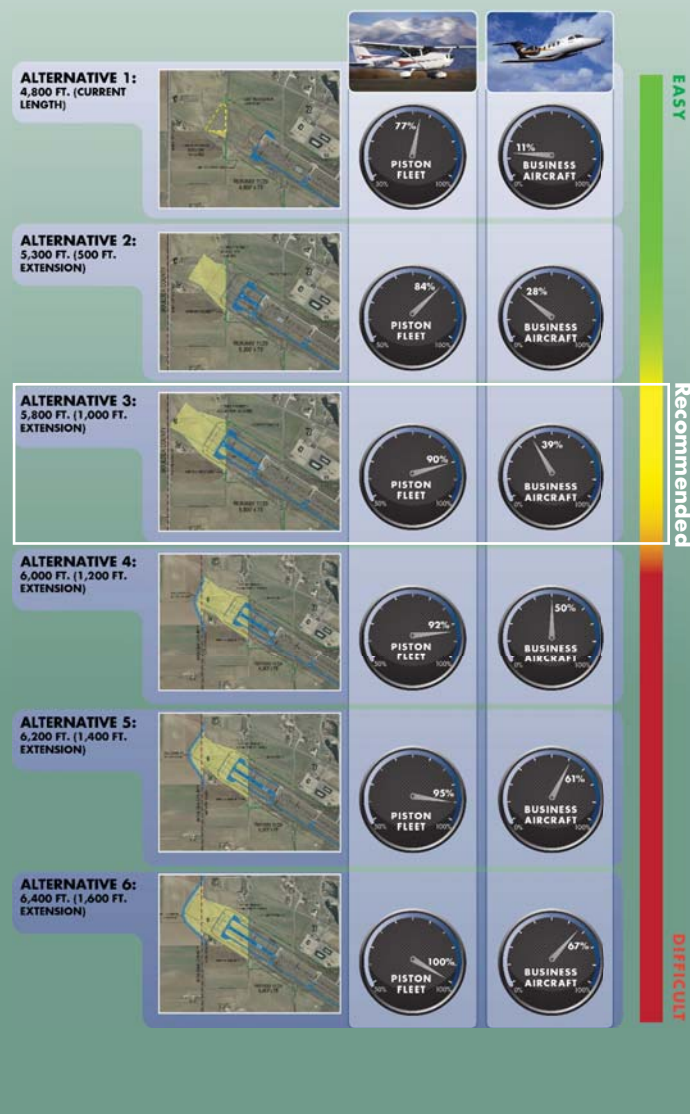
Airport Master Plan — 2011 —

Facility Improvements and Runway Alternatives

Facility Improvements

Facility	Improvements Needed
Runway Capacity	No Improvement Needed
Runway Orientation	No Improvement Needed
Runway Length	Extend Runway (Recommended)
Runway Width	No Improvement Needed
Runway Pavement Strength	No Improvement Needed
Runway Surface	No Improvement Needed
Taxiways	Extend Taxiway B to a Full Parallel (Recommended) Rehabilitate Panels on Taxiway B (Recommended) Increase the Size of the Taxiway Holding Bays at the Runway Ends (Required)
Runway Protection Zone	Acquire or Lease All Land within the RPZ (Required)
Runway Visibility Zone	No Improvement Needed
Safety Areas	Relocate the VASI Building Outside of the TSA & TOFA (Required)
Object Free Areas	Relocate Five Tiedowns Outside of the TOFA (Required)
Airfield Markings	Add Aiming Point Markings to Runway 11 (Recommended)
Navigational Aids	Replace VASI System with PAPI System (Recommended)
Instrument Approaches	Approach Study for Improved Approaches (Recommended) Remote Communications Outlet (Recommended)
Obstructions	No Improvement Needed
Airspace Class and Air Traffic Control	No Improvement Needed
Landside Requirements	Additional Vehicle Parking (Recommended)
Hangar Facilities	Additional Hangar Sites (Recommended)
Apron Space/Tiedowns	Additional Apron Space and Tiedowns (Recommended)
Airport Security	Conduct a Security Assessment and Develop an Airport Security Program (Recommended) Install Six-Foot Chain Link Perimeter Fence (Recommended)
Airport Equipment	Acquire One Sweeper, One Mower, and One Snow Plow (Recommended)
Support Facilities	Upgrade Airport Administration Office/Flight Center (Recommended) Construct an SRE/Maintenance Building (Recommended) Add an Aircraft/Equipment Wash Bay (Recommended) Additional Parking (Recommended)
Fuel Storage Requirements	Installation of a 10,000 gallon Jet A Fuel Tank (Recommended)
Utilities	Extend Water and Sewer Utilities to South Side (Recommended)

Runway Extension Alternatives



- Alternative 1: the runway does not change, but the additional land to accommodate the runway protection zone must still be acquired to meet current FAA requirements; the runway currently accommodates 77% of the piston fleet and 11% of the business aircraft fleet
- Alternative 2: 500-foot extension, provides adequate safety for the airport's "design" aircraft and can accommodate 84% of the piston fleet, and 28% of the business aircraft fleet; cost – approximately \$2.6 million and 14 acres of property acquisition (an additional \$350,000)
- Alternative 3: 1,000-foot extension accommodates 90% of the piston fleet and 39% of the business aircraft that currently use LMO. This is the longest option that does not require 75th Street to be altered. Construction & design costs are estimated at \$4 million with 25 acres of property to be acquired (additional \$950,000)
- Alternative 4: 1,200-foot extension accommodates 92% of the piston and 50% of the business fleet – while design and acquisition costs are at \$6.5 million total. However, any extension over 1,000 feet may trigger the airport to be reclassified to accommodate larger aircraft, which would cost approximately \$40 million in capital improvements and will not be supported by the FAA.
- Alternatives 5-6: 1,400-foot and 1,600-foot extension accommodates more of the piston and business aircraft fleet, but may trigger a reclassification in the size of aircraft the airport is designed to handle and require up to \$40 million or more in improvements and will not be supported by the FAA.

The extension of taxiway Bravo (B) is already underway and will improve runway safety.

Key:

PAPI: Precision Approach Path Indicator – a visual guidance system for pilots (more accurate than VASI's)

RPZ: Runway protection zone, an area at the approach end of a runway designed to protect individuals and objects on the ground

SRE: Snow Removal Equipment

TSA: Taxiway Safety Area, land adjacent to a taxiway that allows for the overrun of an aircraft off the paved surface

TOFA: Taxiway Object Free Area, land areas surrounding taxiways that are to be kept free of objects that could interfere with aircraft maneuvering

VASI: Visual Approach Slope Indicator – a visual guidance system for pilots



EXISTING CONDITIONS (I.E. INVENTORY) SUMMARY

The Airport Inventory

The inventory part of the airport master plan looks at the current operational levels of the airport, and community characteristics.

Metrics, such as the number of takeoffs or landings, the number of aircraft that call Longmont home, along with transient aircraft flights, are determined.

Community numbers, such as population, education all levels, income, and taxes are also assessed. These measurements provide planners a current “picture” of the airport, which is then compared to forecasted conditions. The analysis between what “is” today and what “tomorrow” may bring, results in recommended improvements to airport facilities.

An airport is often a reflection of its community. Growing communities often mean growing airports and the master plan is used to determine how the airport can best keep up with the community development. The inventory, which is sometimes called “existing conditions” also includes weather data, airfield features (runways and taxiways), navigational aids to pilots, and an environmental review.

The Longmont Vance Brand Municipal Airport is classified by the FAA as a General Aviation airport, which means it accepts most types of aircraft operations, with the exception of scheduled commercial service. Airports like Denver International and Colorado Springs are classified as commercial service and receive both scheduled service and general aviation aircraft.

Longmont’s airport is presently estimated to have 61,211 annual operations (any takeoff or landing is an operation) and the airport is home to 340 based aircraft. The airport not only serves local needs, it is considered essential to the State of Colorado and the United States airspace system. A review of instrument flight plans over the course of one year show flights to and from every corner of the country. The airport owns 264 acres of land, which includes both airfield and surrounding property.

The Colorado Aviation System Plan, prepared by CDOT’s Division of Aeronautics, evaluates and measures the performance of each of Colorado’s airports. The Longmont Airport is classified as a “Major” airport in the system due to the importance of the airport to the State. The State believes that 75% of all major airports must have planning studies updated every five years.

Airfield Characteristics

Airports are designed around the largest aircraft that uses the airport more than 500 times per year. This is known as the “critical aircraft”. The wingspan or tail height and the approach speed of the critical



aircraft determines the Airport Reference Code (ARC). Airport planners use this aircraft (or the ARC) as their guide to construct runways, taxiways and airport facilities.

Longmont's ARC is known as "B-II," which relates to an aircraft with an approach speed between 91 and 121 knots (104-139 mph), and a wingspan between 49-79 feet. This category applies to virtually all piston-powered and turboprop single and multi-engine aircraft, as well as most mid-sized business jets.

Longmont's runway is 4,800 feet long and is constructed with concrete, which is fortunate for airport users and the City. Many airports of Longmont's size have asphalt runways, which deteriorate quicker and require higher levels of maintenance. Concrete contributes greatly to a pavements' longevity. The pavement is currently rated as excellent by the Colorado Division of Aeronautics.

There is instrumentation on the airport (known as a non-precision approach) to allow aircraft to land when the clouds are no lower than 625-feet above the ground and visibility is at least 1-mile. Longmont Airport does not have an Instrument Landing System, which is a "precision approach," and would allow aircraft to continue to operate as the cloud ceiling and visibility worsens.

The airport has two Fixed-Base Operators (FBOs). An FBO serves as a terminal for private and chartered aircraft, providing fuel, maintenance services, hangar rental, pilot rest and flight planning services. Think of an FBO as a "truck-stop" for private aircraft. There are nine other businesses on the airport including two charter operations, Mile-Hi Skydiving, and a restaurant.

Community Demographics

According to the U.S. Census Bureau and the Colorado Department of Transportation, the City of Longmont is growing similar to other surrounding cities and the cities of the nearby competitor airports. Furthermore, it has grown more than twice as fast as Boulder County.

The U.S. Bureau of Economic Analysis (BEA) tracks employment by category and shows that for Boulder County, the Professional, Scientific, and Technical Services classification is the largest sector for the county. Typically these businesses employ highly skilled, specialized and educated workers.

Environmental Review

Ever since the passage of the National Environmental Policy Act in 1970, before an airport project can go forward, the environmental impacts must be determined. Airport projects are evaluated to determine if there will be an environmental impact and to what extent further review is necessary. Some projects have no environmental impact, such as the acquisition of a fire truck.

Other projects may require an Environmental Assessment or in some cases, a complete Environmental Impact Statement. The EA and EIS not only determine potential environmental impact, but also provide mitigation measures. Noise, along with several other impact categories, is included as part of any level of environmental review.



An airport master plan generally does not include an EA or an EIS on any particular project, but does make comments about which future projects may need an EA or EIS before moving forward.

Noise is an important issue around most every airport. The FAA uses the Day-Night Average Sound Level (DNL) as the standard metric to determine the cumulative exposure individuals around an airport have to noise. DNL is the 24-hour average sound level in decibels (dB). The average is determined by measuring all aircraft operations in a 24-hour period, with a 10 dB noise penalty added to night operations (10 p.m. to 7 a.m.) to compensate for people's heightened sensitivity to noise during this period.

Using the DNL metric, noise contours will be developed for the airport during the master plan project that show areas of noise exposure for both the current and 20 year timeframe. Individuals residing within the 65 DNL contour may be eligible for noise mitigation relief, but this is determined through an additional FAA Part 150 noise study. Areas outside of the 65 DNL contour, are generally not eligible for Federally sponsored noise abatement programs.

There are no residences inside of the 65 DNL Contour that was created for the 2004 Longmont Municipal Airport Master Plan and a majority of the contour is contained within airport property.

Airport Funding

Currently, all General Aviation airports, such as Longmont, are provided an annual \$150,000 entitlement grant from the FAA. This type of grant is available for use on certain planning, development and airport pavement maintenance projects. Entitlement money funded much of the master plan study.

For larger projects that cannot be funded by the entitlement grant, the FAA can tap into discretionary grant money. However, this money is in limited supply, and must be shared amongst all FAA grant-eligible airports. The FAA evaluates each project and assigns funds based on a set of priorities. A project typically must be shown on an approved Capital Improvement Plan for several years in order for the FAA to adequately be able to assess the need and assign funds.

Survey Information

Surveys from 84 local aircraft owners and pilots were collected. The surveys reflect the general opinion of those who base at Longmont Airport.

Overwhelmingly, they expressed a desire for a year-round restaurant, a new crosswind runway, additional hangar space and hangar availability, and a runway extension for Runway 11/29.

Local users felt that self-service fueling, aircraft maintenance, tie-downs or hangars, and flight instruction are the most essential facilities at the airport, while least essential were fire and rescue and tourism or entertainment related activities. Users also expressed a desire for 24-hour bathroom



availability, an area to wash aircraft, access to courtesy cars. A majority of the users stated the airport is extremely important, if not vital, to the local community and businesses.

Surveys from 9 airport tenants were collected, which also indicated the desire for a runway extension for Runway 11/29, with a majority requesting additional aircraft parking space, dedicated snow removal equipment, and a better instrument approach into the airport.

A total of five transient pilot surveys were collected and four corporate aircraft surveys were collected. Lowest rated categories were hangar availability and runway length. Runway length should be the highest priority according to this survey group. The highest rated categories were runway orientation, Fixed-Base Operator services, visual aids and condition of pavement.

Surveys from 28 Longmont Area Business were collected. They showed that the airport is very important to the community. Many respondents commented that the airport has a reciprocating effect on the growth of Longmont and all Longmont businesses benefit in some way from the airport. Two businesses stated they use Longmont Airport for business travel, while others use Denver International Airport. A majority of the respondents would like to see the runway extended.

Historical Aviation Activity

With 340 based aircraft, Longmont Airport ranks fourth in the number of based aircraft in the state of Colorado, behind Centennial, Rocky Mountain Metro and Front Range Airports.

General aviation airports are often measured by the number of flight operations that are conducted. An “operation” is either a landing or a take-off. However, since Longmont Airport does not have an air traffic control tower, there is not an official count of each and every operation. Therefore, planners must estimate the annual number of operations.

For this master plan study, five different methods were analyzed to estimate aircraft operations. These include the FAA Terminal Area Forecast (known as the TAF), a national average of operations per based aircraft, a local average of operations per based aircraft obtained from survey information, a review of recorded FAA radar flight tracks, and a comparison to other local airports.

TAF: The FAA collects data from non-towered airports from estimates of operations provided to the FAA by the airport management. The operations count for the TAF was originally derived from an acoustical counter that was placed at the runway end in 2005.

National Average Operations per Based Aircraft: Used averages from the FAA’s National Plan of Integrated Airport Systems (NPIAS) - which is kind of like the FAA’s master plan for all airports in the U.S. that are eligible for federal funding. This method averages the number of flight operations at an uncontrolled airports based on the number of based aircraft. Using this method puts Longmont’s estimated operations at 119,000 annually, nearly 100% higher than all other estimates. In this case, the



planners felt that the NPIAS guidance was not written during current economic conditions, so this method was not used.

Local Pilot Reported Operations per Based Aircraft: Used surveys of actual pilots and regional flight instructors.

FAA Recorded Flight Radar Tracks: Data was obtained from DIA's Airport Noise and Monitoring System (ANOMS), which records all flights within the coverage area of DIA's radar. This process estimates flight tracks, but not necessarily operations. DIA's system will pick up an aircraft when the pilot activates their transponder, but not all aircraft are required to carry or use a transponder.

Comparisons To Other Local Airports that have accurate traffic counts due to having control towers: Operations at other airports around the Denver Metro area, including Centennial, Rocky Mountain Metro and Front Range, were analyzed. From the period 2005-2010, there was an overall regional decline in flight operations, which averaged 34.4%. This decrease was applied to Longmont's annual reported operations.

Comparing all methods, planners estimate that Longmont Airport had about 61,211 operations in 2010.

Summary

This represents a summary of the airport inventory for the Longmont Vance Brand Municipal Airport Master Plan. To read the actual study, [click here](#).

The next step in the process is to conduct the forecast. The forecast will determine what the future operational and based aircraft activity will look like for Longmont Airport. It must be approved by the FAA, after which the public will be able to attend the open house, review the work that's been done thus far and talk with airport management, the planners and others involved in the process.

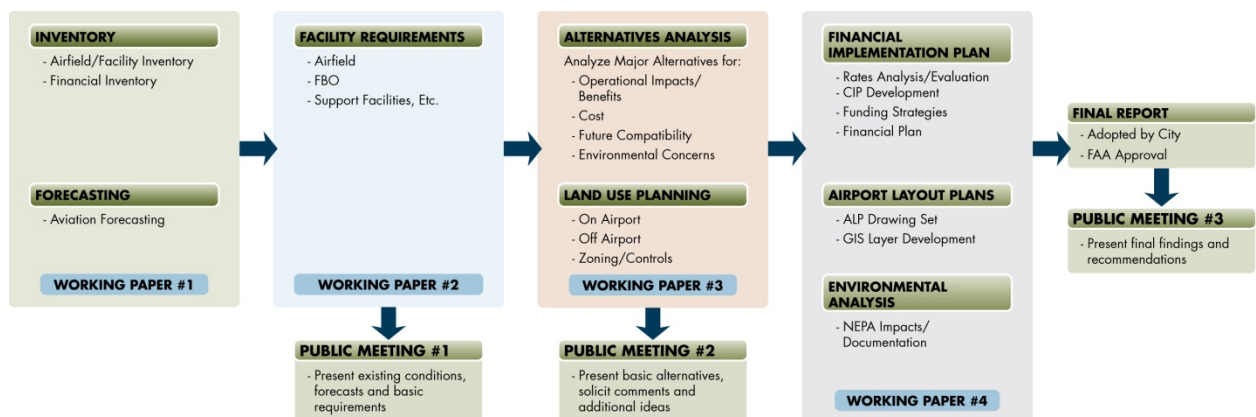
FAQ's About the Upcoming Airport Master Plan

What is an Airport Master Plan?

The Federal Aviation Administration (FAA) defines a Master Plan as, "a comprehensive study of the airport and typically describes short-, medium-, and long-term plans for airport development."

An Airport Master Plan assesses what the airport could become in terms of facilities (runways, taxiways, hangars, etc), while being careful not to discount future possibilities. It provides governing boards with options in how the airport can be developed and which facility projects could be eligible for federal funding. A Master Plan assesses many elements including environmental and noise issues.

The FAA standard Master Process is as follows:



[FAA AC 150/5070-6B Airport Master Plans](#)

Who pays for the Master Plan Study? Will my tax dollars be used to fund this?

The FAA typically funds the majority of the project. Usually the FAA pays for 95% of the study and the airport provides the remaining 5%. The FAA uses money from the Airport and Airway Trust Fund which is funded by various aviation-user taxes. These are taxes on items like airline tickets, air freight, and aviation fuel. In addition to the FAA the Colorado Division of Aeronautics provides grant funding and uses money collected from aviation users similar to the ones used by the FAA.

No City General Fund Taxes are used on Airport Projects. The Airport Fund, which receives revenues from airport user fees, funds all Airport operations and would be the funding source for the City's 5% matching funds.

How long does the Master Plan Study take to complete and who conducts the study?

How do we know the study will be unbiased and objective? A typical Master Plan takes approximately a year to a year and a half to complete. This can be shorter or longer depending on the airport and its complexity. The City will contract with an airport Planning and Engineering firm to perform the Master Plan Study. The Master Plan will be prepared using guidelines from the FAA. These guidelines ensure that all voices are heard and considered in the process. Local FAA and CDOT Division of Aeronautics personnel will be involved in the process from the beginning to help ensure that proper planning processes are followed and objective consideration are given.

Will there be commercial airline flights into Longmont if the runway is extended.

No. The airport is not designed for airline flight activity. The runway is not strong enough to accommodate larger commercial airline aircraft, and the general layout of the runway, taxiways, parking ramps and hangars does not comply with the requirements for a commercial airline airport. In addition, the airport does not meet security requirement for commercial airline service, and does not have a baggage system, a terminal building, vehicle parking, instrument approaches, correct runway lighting, fueling services, cargo services, ground handling equipment, catering facilities, etc., to accommodate airline service.

If you make the runway longer will it draw more aircraft? A longer runway would likely result in a modest increase in aircraft using the airport. It would also make the airport more attractive to businesses that would want to relocate/locate in Longmont where they can keep their aircraft close to their business operation. Normal projected growth in the area flying population will also result in increased use of the Longmont Vance Brand Airport during the period covered by the Master Plan update.

Are business jets inevitable? Business jets already use the airport. According to Federal Aviation Administration records, there are 120 business jet operations annually. On average, there is one business jet operation every three days.

Why is a longer runway being considered as part of the Master Plan Update? The first and foremost reason is to provide an enhanced environment for economic development purposes and to increase the utility of the airport. Many businesses today choose to use aircraft for business purposes as a means of modern efficiency, saving time, money and other resources when conducting business. The increase in direct and indirect expenditures (fuels sales, services and increased business activity) will not only provide more revenue to the City, but will also influence job growth and economic vitality. In addition, a longer runway would increase safety for existing airport users.

Are there going to be time restrictions for takeoffs and landings? Because the airport is the recipient of Federal and State funding, there are certain requirements and agreements that the City must adhere to in order to be eligible for Federal and State funds. In accepting Federal and State funds for the airport, the City agrees to keep the airport open for use 24 hours a day to all classes of aircraft that the airport is designed to accommodate.

Why isn't a noise control alternative integrated with the plan? We currently have in place Noise Abatement Procedures, and are in the process of updating them.

Are there regulations that can restrict the altitude of aircraft flying over residential neighborhoods? Yes, FAA Regulations describe the minimum safe aircraft operating altitudes. FAA Regulations require that an aircraft maintain an elevation 1,000 feet above any congested area and an elevation of 500 feet above any non-congested area.