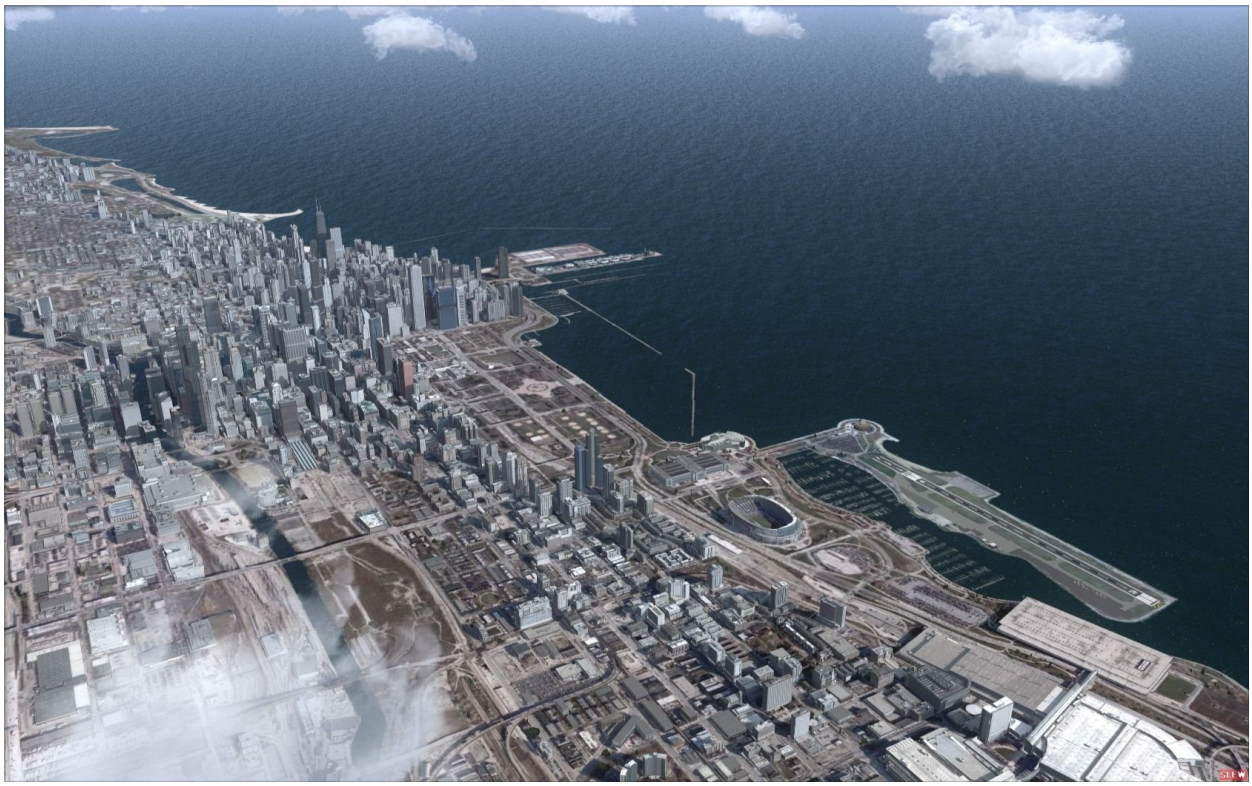
US Cities X:

Chicago



INTRODUCTION

US Cities X is a series of city scenery that should be positioned between the high end city scenery like Manhattan X and the default scenery. It is intended to give new destinations to the user who likes to explore the world. Fully aimed at daytime VFR flights it does not include seasons and night textures (this would make the product too large for comfort as well).

Chicago being the largest city in the US Cities X series so far we have also included a retro style scenery of Meigs Field. Being the default start-up airport in all FS versions from 1982 to 2002, most of you will know the sad story of this airport that has been demolished at midnight, March 30-31, 2003 by bulldozers send in by Chicago's mayor. Additionally we have although created vast suburbs and the surrounding airports including an enhanced version of one of the world's largest and best-known: Chicago O'Hare.

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Installer:	Andreas Mügge
Testing:	Several good folks who will all be getting a free copy.
Source of airport aerial images	U.S. Geological Survey

SYSTEM REQUIREMENTS

- Intel Core 2 Duo E6850 CPU (Core 2 Quad advised)
- 2 GB RAM
- Direct X 9 compatible Graphics Card with minimal 512 MB
- Microsoft FSX:STEAM
- Windows 7, Windows 8.1, Windows 10 (fully updated and 64 bit recommended)
- Adobe Acrobat® Reader 8 minimal to read and print the manual (1)

CONTACT SUPPORT

Support for this product is done by Aerosoft. We prefer to do support on the support forum for one simple reason, it is fast and efficient because customers help customers when we are sleeping.

Aerosoft forums: http://www.forum.aerosoft.com/

We feel strongly about support. Buying one of our products gives you the right to waste out time with questions you feel might be silly. They are not.

AIRPORTS AND HELIPORTS

There are 9 published heliports and 5 airports covered in the scenery, you will find them in the Google Earth file and in the Goto Airport menu in FSX (search on city).

HELIPORTS:

Please note that except for the WGN-TV helipad there are no helipads in high detail in this volume. Being a city without helipads in the downtown area we decided to put more attention into Meigs Field and the surrounding airports than spending too much time on the heliports.

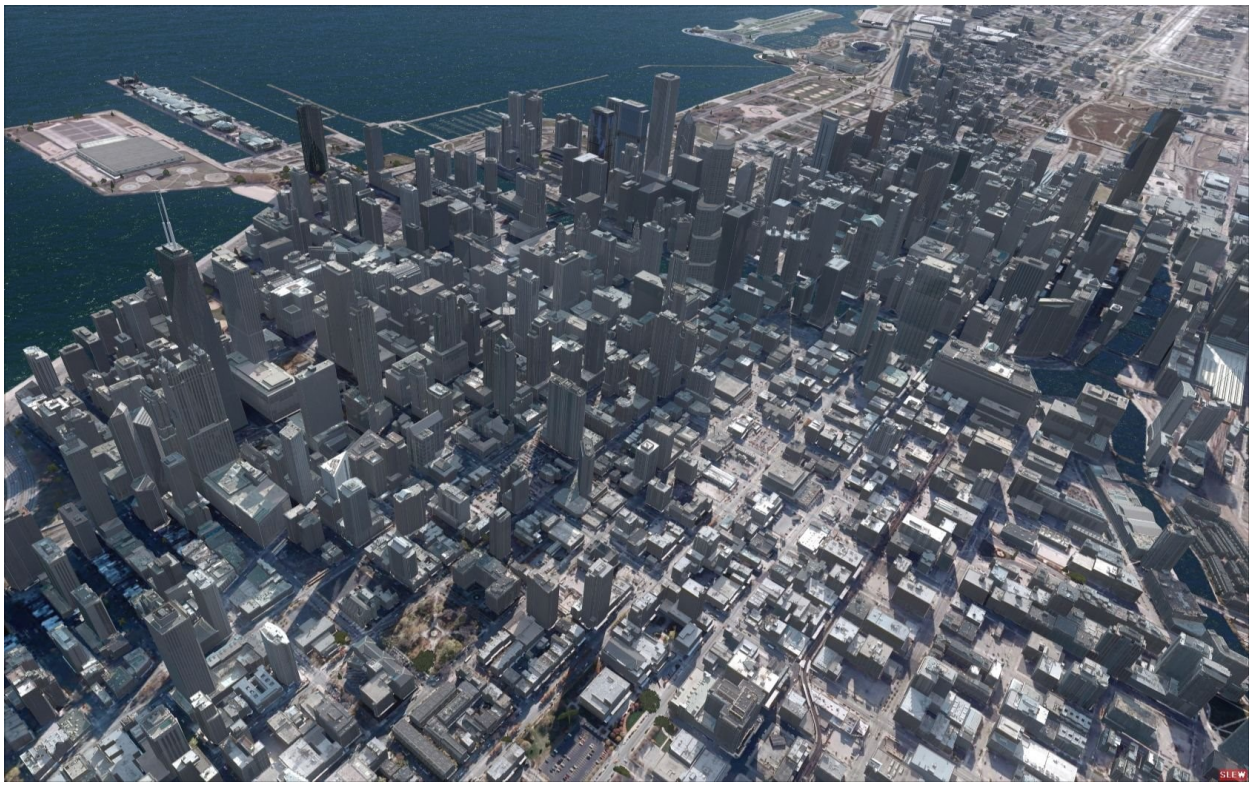
- IL70 – WGN-TV Heliport (private). Where news helicopters takeoff. Beware of the signpost of a large fastfood chain south of the heliport.
- IL75 – John H. Stroger Hospital of Cook County
- 6IS7 – St.Mary of Nazareth Hospital. Reopened after construction
- 40IS – Children's Memorial Hospital. Will be relocated to Gold Coast/Downtown in a few years, there is much controversy if the helipad can be moved there, too.
- 64LL – Rose No 4 Helipad (private)
- 4IS3 – University of Chicago Hospitals
- IL74 – Rose Packing Co Helipad (private)
- IL73 – Fire Academy Helipad (closed, ID fictional)
- IL76 – Marcor Helipad (closed)

AIRPORTS

We have also included detailed ground images for the 5 airports in the region – including a retro style version of Meigs Field. Do note that there is no change in the buildings on those airports except for Meigs Field where we created a more detailed scenery assuming that the world's best-known FS airport has never been closed. For airport charts and diagrams check out the next pages.

- **KCGX – Merrill C. Meigs Field**. No comment. Everyone will know this airport from older FS versions and what happened to it sadly. For more info check out Wikipedia or www. friendsofmeigs.org
- **KORD – Chicago O'Hare**. One of the world's largest airports in size and passengers. Note that a lot has changed at this airport. A completely new 9L/27R runway has been opened in the north and the former 9R/27L runway has been extended to 13000ft length and renamed to 10/28. All those changes have been included in this scenery! Check out the airport diagrams for more info.

- **KMDW – Chicago Midway**. Midway is the second largest passenger airport in Illinois after O'Hare and is dominated by low-cost and domestic airlines. Being much closer to the city you will instantly see downtown rising ahead of you when taking off from Rwy 4L/R.
- **KPWK – Chicago Executive**. Formerly known as Palwaukee Municipal it has been renamed to Chicago Executive a while after the destruction of Meigs and is attracting business jets and general aviation.
- **K06C – Schaumburg Regional**. Uncontrolled, mainly general aviation.
- **LL22 – Brookeridge Airpark**. Located in a well-to-do suburb southwest of Chicago house owners can park their aircraft right in front of their garage connected to the runway by a taxiway.



AIRPORT CHARTS:

KCGX – Merrill C. Meigs Field – Page 1 of 2



Airport Charts:
KCGX – Merrill C. Meigs Field – Page 2 of 2

ICAO-Code:	KCGX
Name:	Chicago Merrill C. Meigs Field
Elevation:	593ft
Latitude:	N41 51.5
Longitude	W87 36.5
Frequencies :	
ATIS :	127.35
Tower	121.30
Ground :	121.80
Runway:	3350'x150' Asphalt
Runway (36) direction:	356.90°

CAUTION: Birds in vicinity of airport.
CAUTION: Low-flying blimp over Soldier Field possible.
Rwy 36 right traffic pattern.
Closed to student flying.
Aerial towing prohibited.
The city of Chicago discourages low approaches.
Airport closed when tower closed.
Closure possible with crosswind.
No touch (nor stop-) & go.

IFR DEPARTURE PROCEDURE: Comply with radar vectors or
Rwy18: Climb to 3000' direct CGT VOR
Rwy36: Climbing right turn to 3000' heading 140° to intercept the CGT VOR R-011, then via CGT VOR R-011 to CGT VOR.

KORD – Chicago O'Hare:
http://flightaware.com/resources/airport/KORD/APD/AIRPORT+DIAGRAM

KMDW – Chicago Midway:
http://flightaware.com/resources/airport/KMDW/APD/AIRPORT+DIAGRAM

KPWK – Chicago Executive:
http://flightaware.com/resources/airport/KPWK/APD/AIRPORT+DIAGRAM

K06C – Schaumburg Regional:
http://www.schaumburgairport.com/Schaumburg-Airport-Runway-Information.html
http://www.airnav.com/airport/06C

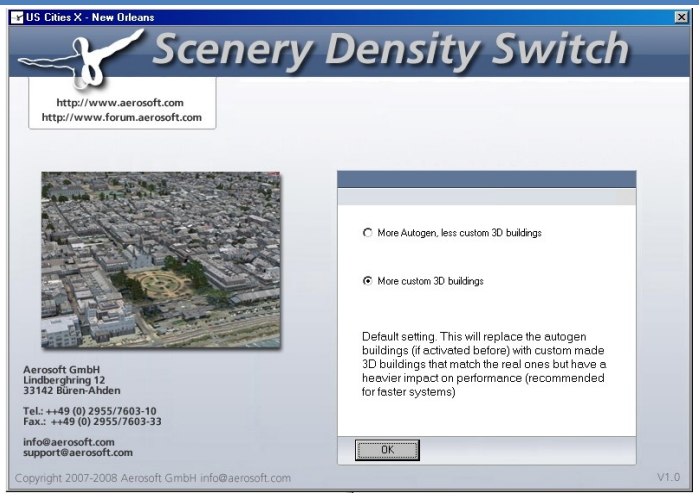
LL22 – Brookeridge Airpark
http://www.airnav.com/airport/LL22

Chicago Helicopter Route Chart:
http://skyvector.com/?id=06C&zoom=2

Chicago VFR Terminal Area Chart:
http://skyvector.com/?id=06C&zoom=2



SCENERY DENSITY TOOL



Due to the high complexity of this scenery there is something that cannot be done with the setting options that FSX gives us. That's why we supply a so-called Scenery Complexity Switch that enables you to choose your favourite scenery complexity matching your system speed.

In Chicago, this will replace some smaller buildings and commercial flat roof buildings (e.g. Shopping malls) around the city by autogen (hence the abbreviation for "auto generic") buildings if you choose the performance friendlier version. Of course those buildings would not look at good as they could why we recommend using the highest possible setting using this tool (if you can afford to do so).

You will find the tool on the Windows Start Menu at: Aerosoft | US Cities X: Chicago

ADVISED DISPLAY SETTINGS

To change your scenery settings, go to Settings -> Display

Note: All other settings not mentioned here are up to you. They don't actually affect the scenery very much. Keep in mind to do your settings with care otherwise you may overload your system.

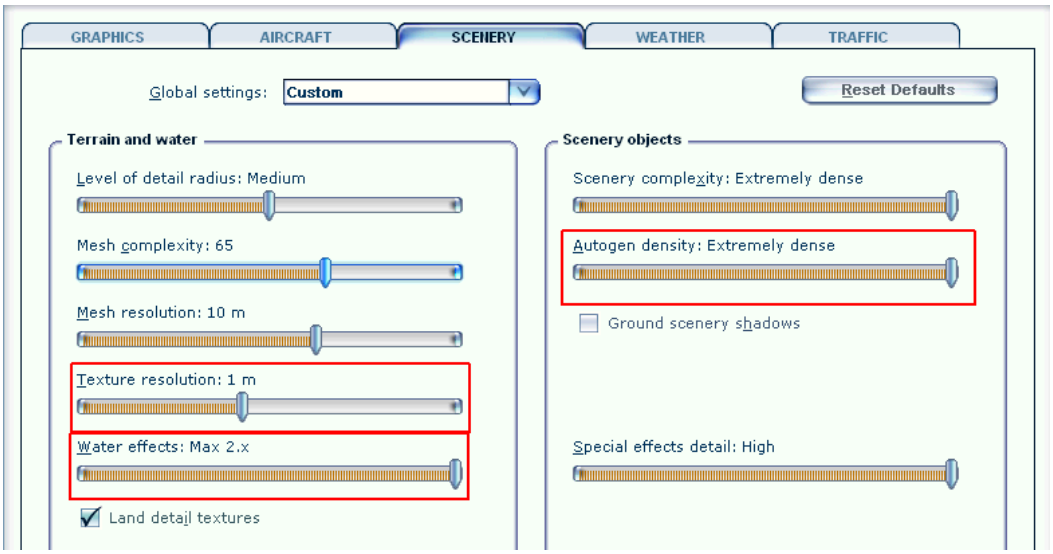
GRAPHICS MENU



Global Texture resolution should be at Very High to get the full detail in textures (aerial image, building walls etc.)

SCENERY SETTINGS

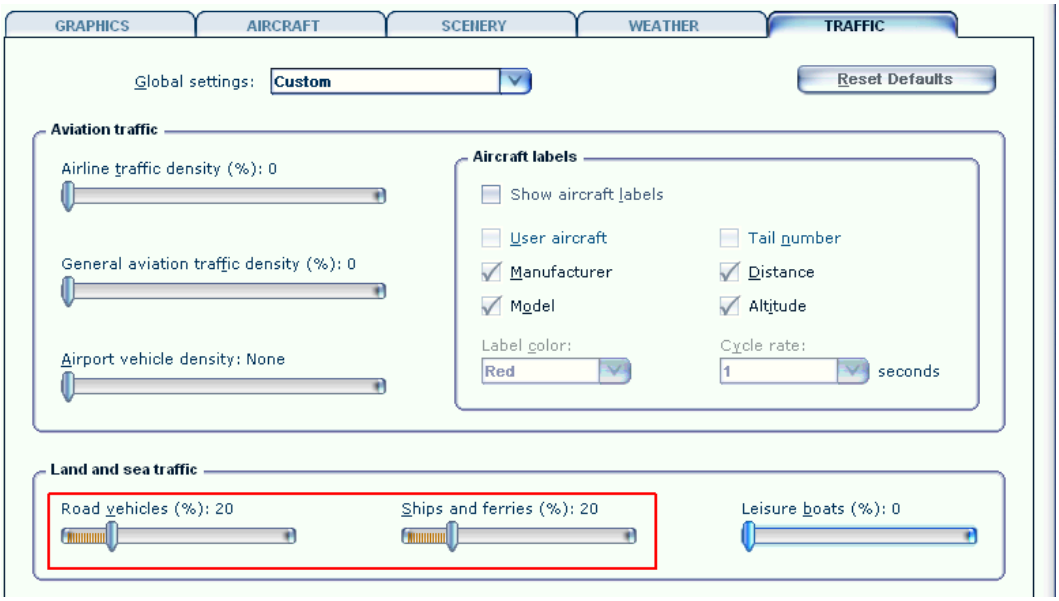
- Unlike in many other sceneries the **Scenery Complexity** slider won't do much in this scenery. We recommend using the supplied tool for this (see the chapter describing our scenery complexity tool).
    - **Normal:** Most city buildings are visible, except some default buildings at the airports.
    - **Very Dense:** The following objects will become visible:
      - Restaurant shaped like a ship on North Avenue Beach
      - Cloud Gate (also called "The Bean") in Millennium Park
      - Boy on hid daddy's shoulders watching planes in Meigs Field (one of our beta testers a while ago...)
      - Blimp over soldier Field + sound
      - Animated gulls north and west of Meigs + sound
- For best results in displaying the blocks, suburbs and vegetation in between we recommend to set **Autogen Density** to **Extremely Dense**. But keep in mind not all systems can handle this much detail!
- **Texture resolution** should be at **50cm/pix** or higher to get the best resolution of the aerial image under the 3D objects.
- **Water Effects** set to **Max 2x** look best but keep in mind that this setting requires a lot of performance, too!



TRAFFIC MENU:

To get some life in the scenery set the traffic of **Road Vehicles** to **20%** or higher. This will bring you animated car and truck traffic along the major roads, freeways and bridges. For more information about ground traffic see the traffic chapter.

Some major roads within the city boundaries were equipped with additional road traffic. This will bring you a better real-world feeling when flying over the scenery, but: FSX only knows freeway traffic, meaning that the traffic doesn't stop at intersections and other obstructions.
If you don't like this but still would like to keep the default traffic on the Interstates, do the following: Go to folder FSX\Aerosoft\USCitiesX-Chicago\Scenery and remove the file Chicago_Traffic.bgl from this folder.



THE CHICAGO SPIRE

The Chicago Spire is a 2000ft (!) skyscraper that was under construction until hit by the economic recession. In real world there is nothing more than the foundation finished as yet and it's uncertain if it will ever be completed. This scenery can show you the finished building in its full glory if you choose to do so during installation. To activate or deactivate the Spire, rename the following file's extension either from BGL to OFF (do deactivate it) or from OFF to BGL (to activate it):

Location: FSXMainFolder\DLC\536575\Aerosoft\USCitiesX-Chicago\Scenery\Chicago_Spire.bgl/off



SYSTEM OVERLOAD

Because of the extremely high complexity of this scenery it can happen that weaker systems have to struggle with system overloads resulting in blurry textures and a non-readable FSX menu bar and ATC and "out of memory" crashes. This usually happens with 256MB video cards, which is the reason why we recommend a minimum of 512MB memory on your video card (see system requirements). Although we haven't had any reports of problems with 512MB video cards some people may still encounter problems with budget video cards or the like.

SOUND EFFECTS

There are sounds (gulls, blimp engines, highway traffic, city traffic) around the airports, helipads and downtown. We decided to set the sound volume a bit higher than in real world for a better show-effect. If you don't like this, just go to settings -> Sound and decrease the environment sound volume.

COMPATIBILITY WITH OTHER ADD-ONS

There are 3 other products covering the same area we know about:

MEGA SCENERY EARTH (LAKE MICHIGAN AREAS #001 AND #002):

Both sceneries merge quite well together if you do the following:

- Ensure that "US Cities X – Chicago" has a higher priority (=lower number) in your scenery library (FSX->settings->scenery library)
- 2. Go to
  [Folder where you installed MegaScenery Earth]\LakeMichigan-001\Scenery
  and deactivate a file called obj003100210300.bgl by renaming its extension from BGL to OFF. The guys from Mega Scenery Earth moved some default buildings to their original position in their aerial image, which is actually a good thing but results in some buildings being displayed twice together with "US Cities X – Chicago"
- Do the same with *obj003100210120.bgl* and *obj003100210122.bgl* in your *Mega Scenery\LakeMichigan-002\Scenery* folder.

Optional: In case you want to keep Mega Scenery Earth's night textures you can set Mega Scenery Earth to a higher priority in your scenery library but this will cost you the high density autogen that comes with "US Cities – Chicago".

NEWPORT CHICAGO:

Both sceneries work well together except for some minor duplications along the coastline that also appear with Mega Scenery Earth at some places. Same applies here: Please ensure that you have "US Cities X – Chicago" set at a higher priority level in your scenery library.

FSDREAMTEAM CHICAGO O'HARE:

Here it's the other way around: To avoid airport buildings being displayed twice, *US Cities X – Chicago* needs to be below *FSDreamteam's O'Hare* in your scenery library! This is usually done automatically by our installer provided it can find an installed version of *FSDreamteam's O'Hare*.
Important: While writing this manual (Dec 2009) there is no new version of *FSDreamteam's O'Hare* available, which inclludes the latest modernizations at this airport (see airport chapter in this manual), meaning: As soon as you install FSDreamteam's O'Hare you will lose the new runway and runway extension!

FAQ

Q: Why are there no night and seasonal textures?
A: We wanted to keep the price of this whole series as low as possible and the development process as simple as possible so that we can cover as many cities as possible. The VFR flights over these cities is mostly a daytime affair anyway. Still all autogen buildings and airports in the series will have night illumination and autogen vegetation will change with the season.

Q: Even after the loading process has reached 100% some objects are still not loaded!
A: Due to the extreme scenery density some computers (mainly those with only 256MB video memory, slower hard disks etc.) take a little longer to load everything. This can last up to 2-3 additional minutes. Still the frames per second should be pretty good after everything becomes visible.

Q: When selecting one of the helipads I'm beneath the terrain!
A: Unfortunately this is a very bad FSX simulation flaw which doesn't support starting a flight on a 3D object. You can circumvent this by selecting the same helipad a second time or using the slew mode of FSX to move the aircraft to the desired level (Y to activate and deactivate slew mode, F1-F4 keys to go up and down).

Q: I just started FSX but after selecting one of the cities' helipads/airports everything stands still for a long while!
A: This can happen on slower systems because FSX actually starts loading the scenery after the airport has been selected - before you even started the flight. If you have one of those systems, do as follows: First select the desired aircraft, time and weather and at last select the airport/helipad in the city and start the flight.

Q: Are any extensions planned for this city? I'm missing a certain 3D object, newly constructed building or more coverage!
A: There might be updates for possible bugs or additional missions, but extensions are not planned once a city is finished and released.

Q: Some of the 3D buildings look weird – kind of a painting of Picasso!
A: Chicago is the only city in the US Cities series affected by this so far and this is another reason why we but more attention in the airports than on the helipads that are so closeby to those buildings. The reason is technical: Due to to larger coverage of Chicago, the city had two be downsized to 0.1% of its size in the original 3D files with vertexes allowing three digits after the comma – in other words: A resolution of 1 meter, which is not enough for small details on smaller buildings. Still as most of the 3D buildings in this scenery consists of larger buildings you won't see it unless you get very close.

Q: Some of the 3D buildings or autogen's positions are slightly shifted on the aerial image
A: This can happen on the corners of the covered scenery and is due to different coordinate system used. However this only happens on a very limited scale.

Q: Some 3D buildings seem to have misplaced textures!
A: Please note that to create a dense scenery like this for a low price was only possible with some automatic processes and images couldn't be taken from every angle of a cities building (for this scenery alone there are about 1800 unique buildings!)

Q: The roofs of some autogen storage buildings show residential buildings!
A: An – unfortunately – well known bug in the FSX object library we can't do much about because FSX chooses the buildings and textures it wants to display on autogen buildings.

Q: Why is the volume of gulls and traffic so high? Can I do something about this?
A: Yes, you can! We decided to make the sound volume a bit higher as in real world for a better show-effect. If you don't like this, just go to settings -> Sound and decrease the environment sound volume.

Q: Why appear the residential villas along Brookeridge Airpark so oversized?
A: Microsoft decided to create the residential autogen houses at about twice their original size to emulate a higher scenery density at only 25% of CPU/GPU usage that would be actually required. Of course we could have created unique buildings around the airpark matching the original ones but first of all this would have extended the development time for this scenery considerably (and thus making it more expensive) and second this is a private airpark: Most owners there won't like it if someone walks around their home taking photographs.