# US Cities X

# BOSTON

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## INTRODUCTION

US Cities X is a series of city scenery that is specifically created for sightseeing flights. It's typically VFR scenery with only summer season and does not include night textures. This was done to keep the product low priced and also reasonable in size.  Although it is NOT intended to be an airport scenery it will enhance any airports in the covered region.

There is no doubt Boston is one of the more important American cities. Not only is it one of the oldest it is also important as a port, economic center and is one of the major centers of education in that great country.  It deserves a place in your flight simulation and we are happy to provide that in this great US Cities X product created by Limesim.

Enter Boston's buzzing airspace with a wide choice of aviation options. New England's largest city has plenty of helipads within its boundaries, some nice rural general aviation airports surrounding it and last but not least: Boston Logan. No other US airport of this size it that close to a major city center - thrilling and scenic approaches guaranteed! From there head out to Boston Harbor's islands or fly along the magnificent coastline dotted with some of the most attractive homes in New England.

## COPYRIGHTS

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## CREDITS

| | |
|---|---|
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| Testing: | Several good folks who will all be getting a copy |
| Source of aerial images: | Office of Geographic Information (MassGIS) |
| | Commonwealth of Massachusetts, MassIT |

## SYSTEM REQUIREMENTS

- Core i3, (Core i5 recommended)
- 4 GB RAM (8 GB recommended
- Direct X 9 compatible Graphics Card with minimal 1 GB
- Microsoft FSX (with SP2 or Acceleration); P3D v2; FSX:STEAM
- Windows 7, Windows 8.1, Windows 10 (all fully updated and 64 bits highly recommended)
- Adobe Acrobat® Reader 8 minimal to read and print the manual [1]

[1] Available for free, download at: http://www.adobe.com/prodindex/acrobat/readstep.html

## 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/

If you prefer support via email use this link: https://aerosoft.zendesk.com/tickets/new
We feel strong 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

All airports (and heliports) are included with new high res ground images and with customized mesh terrain (no new building structures added).

### HELIPORTS:

- 0MA1 – Massachusetts General Hospital Heliport
  Stunning location very close to between downtown and Charles River. The heliport itself is located on top of a roof next to one of the larger hospital buildings. Patients and visitors can see the helicopters landing and taking off right next to them through the large windows.
- 7MA9 – Tufts Medical Center Heliport
  Located on a rooftop between higher buildings that have recently been build all around Chinatown. Downtown is less than a mile north from here.

- 0MA4 – Boston Medical Center Hospital Heliport
  Crammed at ground level between the hospital's car park, power plant and a busy 6 lane street. The massive "Suffolk County House of Correction" is just a few yards to the east. Keep your distance!
- MA39 – Brigham and Women's Hospital Heliport
  Rooftop helipad located within the Longwood medical and academic area. Also used by the Children's hospital north of BWH.
- 8MA9 - Beth Israel Deaconess Medical Center Heliport
  Rooftop helipad located within the Longwood medical and academic area. Very close of MA39 helipad.
- MA10 – Chambers Heliport
  Private heliport located on a car dealership's rooftop between Boston Downlown and Cambridge. Watch the massive US flag when approaching and taking off!
- MA96 – Rent-A-Tool Heliport
  Private heliport, current status unknown. Located right next to Revere beach.
- 3MA7 – Lynn Gear Plant Heliport
  Private heliport located to a former aviation parts plant that has recently been torn down. Most likely inactive.
- 9MA9 - Thacher Island Helipad
  Thacher Island is a small island off Cape Ann on the Massachusetts coast. It is a part of the Town of Rockport. It was a place where some naval confrontations, both minor and major, took place, which helped secure victory for the colonists. The Thacher Island National Wildlife Refuge occupies the northern part of the island. There is a small wooden helipad placed on stilts that is usually used for camping and BBQs. It seems it's rarely used for aviation purposes. But nonetheless it's a nice landing spot right next to the island's two scenic lighthouses.
- Heliports you may be missing:
  Beth Israel East Campus Rooftop: Has been removed in recent years, not existing anymore.
  Boston Globe Heliport: Redevelopment of the area announced, heliport will be removed.
  Marina Bay: Is a car park, seems to be in use for certain events only.

## AIRPORTS

- KBOS – Boston Logan Intl
  Like other major airports Boston Logan does not only serve many national and international cities, it is also located as close to downtown as few other airports of this size. Note the port cranes when approaching Rwy 4L/R. They are lower than usual port cranes and have been constructed to allow approaching aircraft to pass. Still you will note that you get VERY close to them when approaching the usual ILS glideslope. There has been some controversy about Rwy 14/32 when it has been build and the airports operator has been barred by court to use the runway for overland landings and takeoffs, which would bring aircraft VERY close of downtown. To prevent aircraft using this route state legislators have carefully chosen the location of the Hyatt hotel: It's located right inside the runway's western approach path...
- KBED – Hanscom
  Conveniently located and accessible via public transit from Boston Hanscom is propably the Bostonian's favourite general aviation airport. Both runways can accommodate jets, and are used by Hanscom Air Force Base, a defense-research facility next to Hanscom Field. It is a popular training airport, with more than 40 rental aircraft on the field. The Civil Air Terminal building hosts one airline and is home to two flight schools. It is is a popular place for R44 helicopter training.

- KBVY – Beverly
  Beverly Municipal Airport is a city owned, public use airport located 3 nautical miles northwest of the central business district of Beverly. It covers an area of 470 acres at an elevation of 107 feet above mean sea level. It has two runways with asphalt surfaces: 9/27 is 4,755 by 100 feet and 16/34 is 5,001 by 100 feet.
- KOWD – Norwood
  Norwood Memorial Airport is a public-use airport located two miles east of the central business district of Norwood. Located off Route 128, it is home to the offices of prominent local businessmen and several maintenance facilities. Located between I95 and the airport is signal hill, a rock outcrop that was once a seasonal camp for paleo-Americans who settled the Neponset River Valley after the last glacial retreat.
- NZW – South Weymouth NAS (closed)
  Naval Air Station South Weymouth, was an operational United States Navy airfield from 1942 to 1997 in South Weymouth, Massachusetts. It was first established as a regular Navy blimp base during World War II. During the postwar era the base part of the Naval Air Reserve Training Command, hosting a variety of Navy and Marine Corps reserve aircraft squadrons and other types of reserve units. Environmental contamination from wastes stored in 3 landfills was detected in 1986. Numerous remedies and long term monitoring of ground water are in place. Since 2005, over 600 acres have been transferred to the affected towns for reuse, and in 2011 the Navy signed a $25 million contract to transfer its remaining land.

## AIRPORT CHARTS

- KBOS – Boston Logan Intl
  http://flightaware.com/resources/airport/KBOS/APD/AIRPORT+DIAGRAM
- KBED – Hanscom
  http://flightaware.com/resources/airport/KBED/APD/AIRPORT+DIAGRAM
- KBVY – Beverly
  http://www.airnav.com/airport/KBVY
- KOWD – Norwood
  http://www.airnav.com/airport/KOWD
- VFR Terminal Area Charts (KBOS)
  http://skyvector.com/?id=KBOS

## SCENERY DENSITY TOOL

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

This will replace some smaller buildings and commercial flat roof buildings (e.g. shopping malls, historic row houses) in and 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. That's why we recommend using the highest possible setting using this tool if you can afford to do so.

You will find the tool in your Windows Start Menu at: Aerosoft | US Cities X: Boston

In addition to that the tool gives you the option to you switch into compatibility mode to Fly Tampa's KBOS, if you install it after US Cities X – Boston.
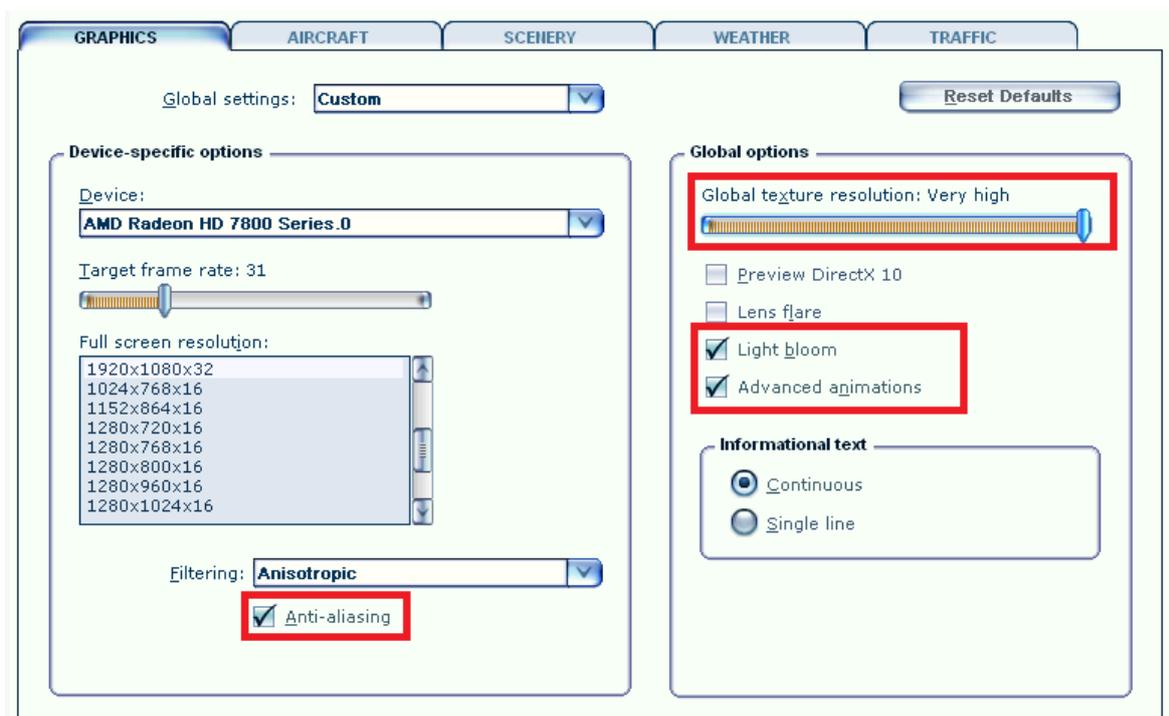
## FSX SETTINGS

These settings apply for FSX:SP2 and FSX:STEAM.

### ADVISED FSX 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.)
- **Advanced Animations** should be activated to ensure you hear sound effects.
- The other settings are advised but optional.

## SCENERY SETTINGS
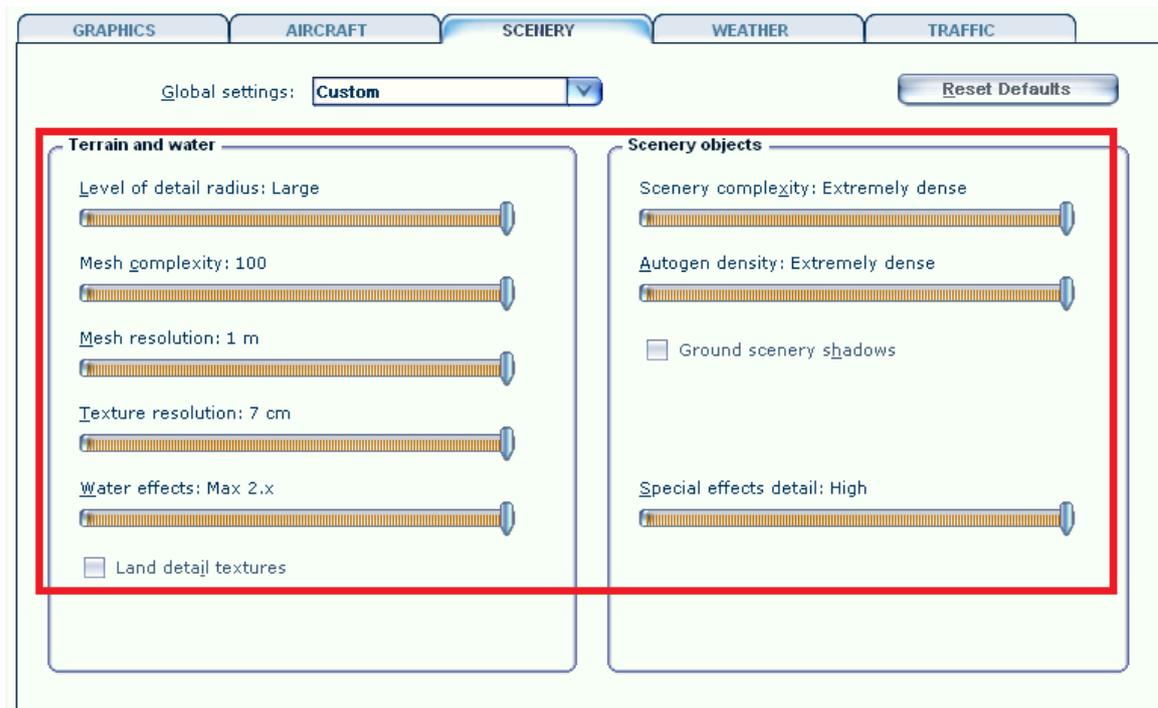


- Unlike in many other sceneries the **Scenery Complexity** slider won't do much in this scenery. Most of the 3D stuff will become visible at "Normal" or higher. Static aircraft around the airports and cars around the heliports will become visible at "Extremely Dense".
- For best results in displaying 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!
- **Mesh resolution**: VERY IMPORTANT in this scenery! Please set the slider to the very right (highest resolution). Otherwise you might see hovering buildings and other "funny" stuff.
- **Texture resolution** should be at **7cm/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!
- **Ground Scenery casts shadows:** Should be deactivated for a better performance (shadows are already in the model's texture and the terrain that comes with this scenery)

## TRAFFIC MENU:
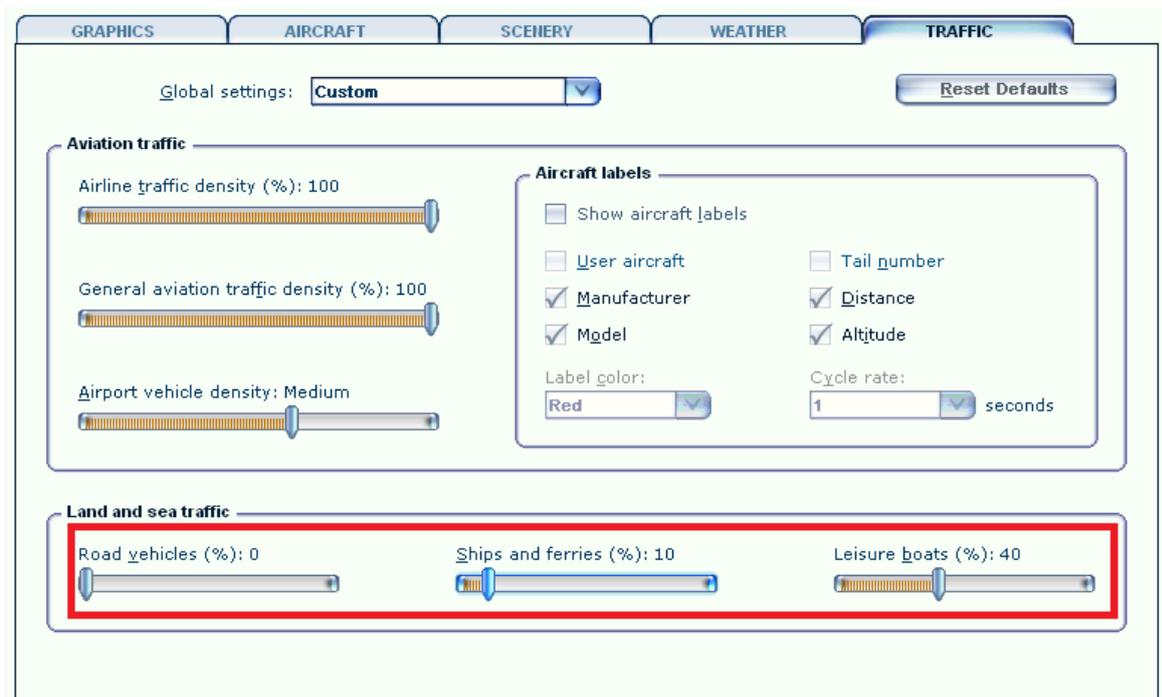


- **Road Vehicles: IMPORTANT SETTING for Boston!** Due to the high amount of traffic in the Boston area you might have to deal with major performance problems when activating road traffic in addition to the highly detailed scenery. We recommend using the scenery without any road traffic activated at all at first. If you feel your system can handle the scenery performance impact good enough you can gradually increase the traffic slider (provided you have the applicable file activated first, see below). We equipped some major roads within the city boundaries 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 want to activate road traffic, you need to activate the applicable file first (deactivated by default): Go to folder
  [Your Simulator]\Aerosoft\ USCitiesX-Boston\Scenery
  and rename the extension of the file Boston_Traffic from OFF to BGL. Then restart your simulator.
- **Ships and ferries: Another IMPORTANT setting:** If you want to see the animated boats and ships that come with this scenery, set it to 10%. If you set it higher than that, some unrealistic ships will gather around Boston Harbor!
  Unfortunately it is not possible to remove default FSX ship traffic without touching FSX's source files, which we don't have access to.
- **Leisure boats:** Please be aware of that FSX's engine has some problems having the leisure boats stay within water boundaries when a scenery is a bit more complex. They are nice to look at but don't be surprised to see some of them running ashore when activated.

## PREPAR3D SETTINGS

Please note that Pepar3D is a simulator under development. While writing this manual "Antarctica X" has been confirmed to be compatible with Prepar3D V2.5. We can however not guarantee that this will be the case for future versions since changes made to Prepar3D are out of our hands. We will however always give our best to keep the scenery compatible.

For the latest compatibility status check out the "Antarctica X" product page under www.aerosoft.com
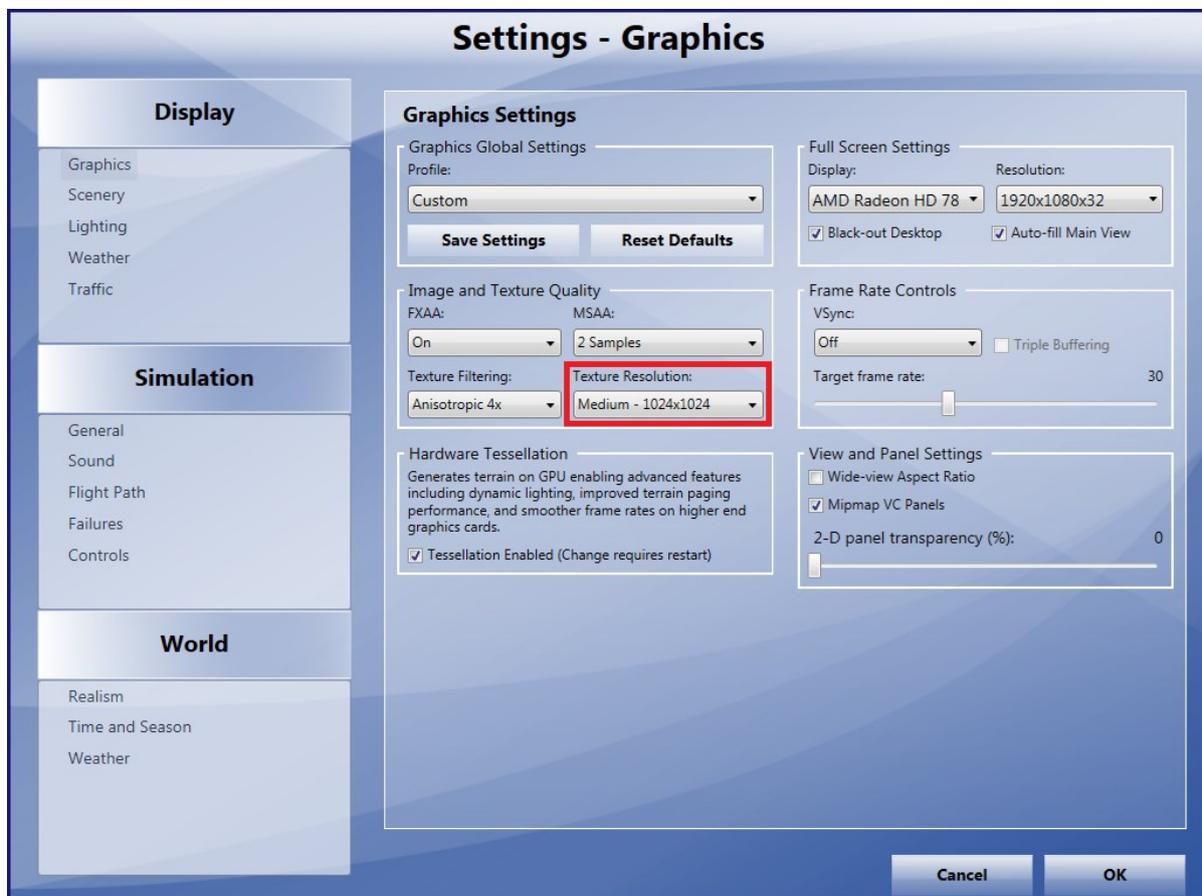
The advised Prepar3D settings below are based on Prepar3D V2.5. Future versions might look different.

### ADVISED DISPLAY SETTINGS PREPAR3D

To change your scenery settings, go to Options  -> Settings -> Display
Note: All other settings not mentioned here are up to you. Keep in mind to do your settings with care otherwise you may overload your system.

### GRAPHICS MENU



- **Texture resolution** should be set to 1024x1024 to have the building textures displayed at full resolution. Raising this to 2048x2048 will display the city's bridge surfaces with more detail, but should be used with caution if you struggle with system overloads.

## SCENERY MENU
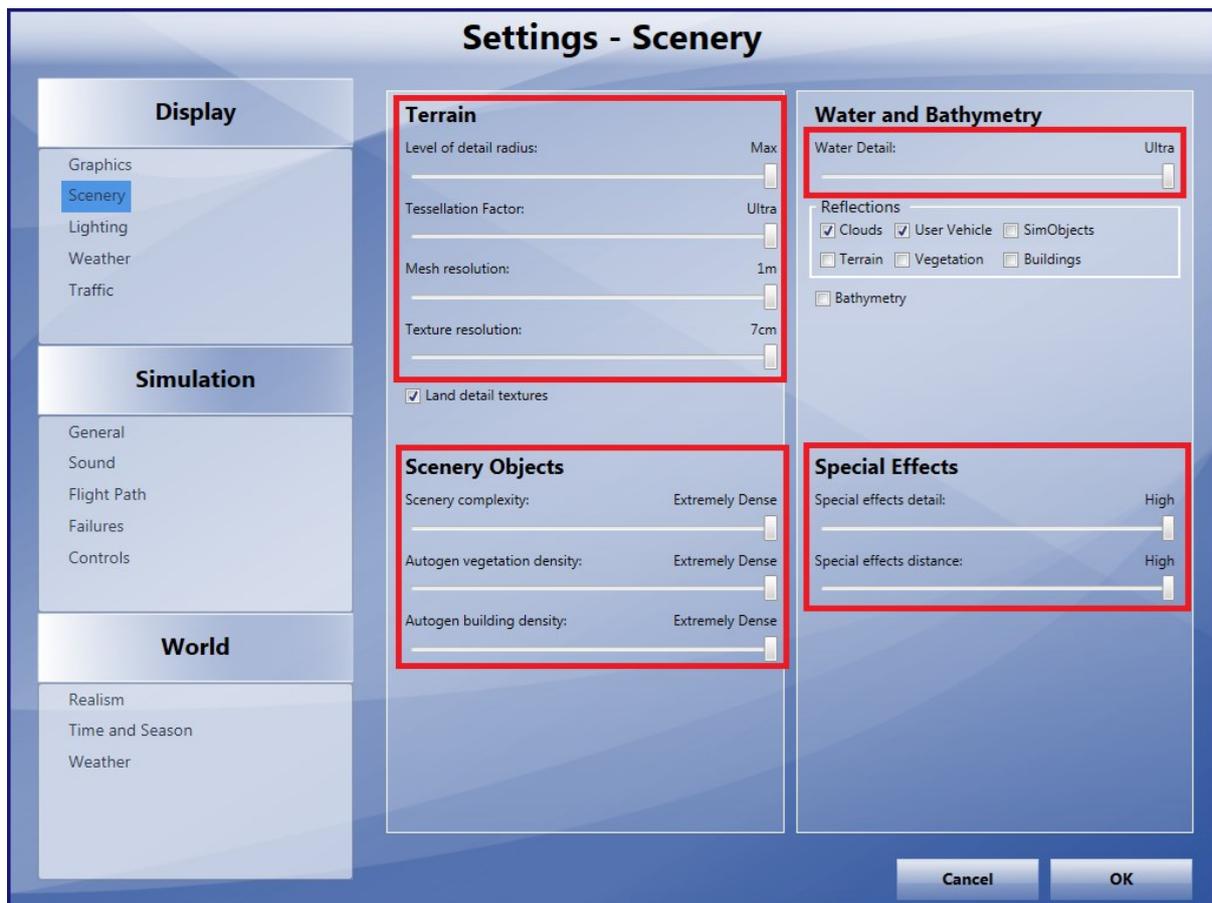


- All **Terrain** settings can easily be maxed out to get the most out of the data and to make sure the terrain at the bases matches the buildings. Due to the better performance of P3D compared to FSX there will only be few systems that struggle with settings like these.
- Unlike in many other sceneries the **Scenery Complexity** slider won't do much in this scenery. Most of the 3D stuff will become visible at "Normal" or higher.
  Static aircraft around the airports, cars around the heliports and static yachts/boats will become visible at "Extremely Dense".
- For best results in displaying the blocks, suburbs and vegetation in between we recommend to set **Autogen Building and Vegetation** Density to Extremely Dense. But keep in mind not all systems can handle this much detail! (see system overload chapter)
- **Texture resolution** should be at 30cm/pix or higher to get the best resolution of the aerial image below the 3D objects.
- Water Effects set to **Ultralook** best but keep in mind that this setting requires a lot of performance, too! If you're struggling with bad performance this should be one of the first sliders to lower down.
- **Special effects** should be activated to ensure you hear sound effects.

## LIGHTING MENU
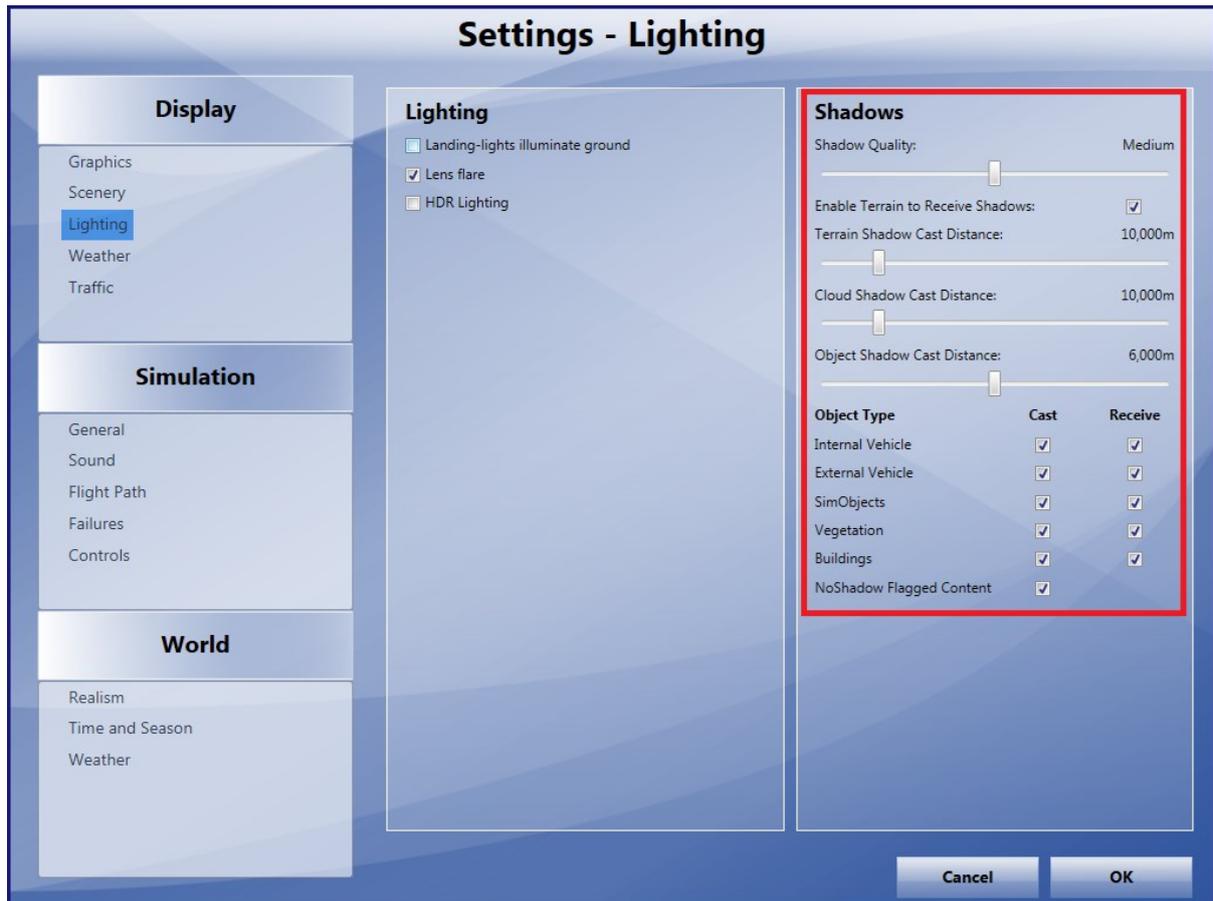


- **Shadow settings** as shown above worked best on our test systems. But this depends a lot on your hardware configuration and like the water setting slider those settings should be among the first to lower if you are struggling with performance problems.

## 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 512MB video cards, which is the reason why we recommend a minimum of 1024MB memory on your video card (see system requirements). Although we haven't had any reports of problems with 1024MB video cards some people may still encounter problems with budget video cards or the like. In the past we have discovered that Windows 7 (and higher) 64 bit systems seem to have a much lower risk of running into "out of memory" crashes when using detailed sceneries. The Scenery Density Tool will also help you to keep the performance impact at a minimum if necessary.

Another important information: Although they do not have a major impact on FPS, autogen buildings and vegetation have a major influence on memory used! If using the scenery density tool doesn't help we highly recommend lowering your autogen settings!

## SOUND EFFECTS

There are sounds (highway traffic, city traffic, gulls…) around the city and airports. 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.

## COMPATIBILITY WITH OTHER ADD-ONS

Please note that USCX Boston (US Cities X – Boston) is NOT planned to be compatible with all those innumerable AFCAD freeware files available out there! They should be removed before/after installing USCX Boston to avoid conflicts.

**FlyTampa Boston Logan: (**refers to version published before 2015 in case there is a new one coming in the future). If FlyTampa's KBOS has been installed before the installation of USCX Boston, the USCX installer will do all the necessary steps to ensure both addons are compatible.

- It will replace USCX Boston's up to date airport layout by one that matches FlyTampa's scenery. In reference to the real world location this is a bit offset and runways and taxiways are not up to date. This is because FlyTampa's scenery is a few years old already.
- USCX will exclude (remove/suppress) objects and buildings outside the airport boundaries to make room for the more detailed and up to date models that come with USCX.

It you install FlyTampa's KBOS after USCX Boston, please use the Scenery Density Tool to make the sceneries compatible and ensure that USCX Boston is placed on top of FlyTampa's KBOS in your P3D/FSX scenery library.

**Night Environment Massachusetts:** No problems reported so far. Keep in mind that NE will need some additional performance, which may bring your system to its limits.

**Ultimate Terrain X USA/Canada (V1 and V2**): Tested both with V1 and V2, no problems found. Seems to work pretty well together.

**FTX Global Vector**: No known compatibility issues to far. Coloring might be slightly different though.

**Mega Scenery Earth Massachusetts**: No known compatibility issues to far. Coloring might be slightly different though.

## FAQS

**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 flight 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% there are still some objects 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:** After I selected an elevated helipad, my aircraft is placed BELOW the ground/helipad!
**A:** Reload the flight and everything should be good again.
Please note that - for whatever reason - when using Prepar3D, this might not solve the problem. The only possibility to access those helipads will be to approach them manually.

**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 it as follows: First select the desired aircraft, time and weather and last select the airport/helipad in the city and start the flight.

**Q:** Are there any extensions for this city planned? 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 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 although in 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 4,000 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. Please note however that this bug is even more persistent when having FTX/ORBX sceneries activated! Ensure to deactivate their regional scenery settings for North America using their FTX Tool before using a US City X.

**Q:** Why is the volume traffic etc. 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:** There are hovering buildings in the city!
**A:** See the settings chapter (mesh settings)

**Q:** I miss some helipads, e.g. Boston Globe's rooftop heliport!
**A:** See the heliports chapter.