# CAM

Colossus Addon Mod

Version 1.0 (July 2007)

By RippleJet
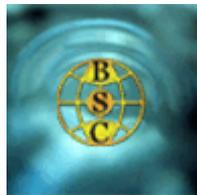
The Colossus Addon Mod: Take the game to a higher stage

Table of content

Acknowledgement

I want to thank everybody at BSC for the encouragement that made this mod possible in the first place.

A very special thank you goes to the following persons:

- Indisguise   for all encouragement in the beginning and for initial testing

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- Andreas   for making the installer package

- Callagrafx   for making all graphics and logos for CAM

- Tropod   for making the first post about growable stage 9 buildings

Basics

Development of growable (RCI) lots in SimCity 4 is based on a property called growth stage.

In SimCity 4 (Vanilla and Rush Hour) residential and commercial lots are available in growth stages 1 through 8. Industrial (including agricultural) lots grow in stages 1 through 3.

The Colossus Addon Mod extends these growth stages to:

- Residentials: 1 through 15   (9 through 15 are new)

- Commercials: 1 through 15   (9 through 15 are new)

- Industrials: 1 through 10   (4 through 10 are new)

- Agriculturals: 1 through 7   (4 through 7 are new)

Installation

Don't even think about asking questions regarding your installation if you didn't read this section before installing!

For best gaming experience, it is recommended to install the Colossus Addon Mod before starting a new region. If you want to install it in an existing region, please read "Using Existing Regions with the CAM" on page 6 thoroughly as well.

Before installing, it is highly recommended to run Cleanitol with the CAM_Cleanitol.txt file that is included in this download. When running Cleanitol with the CAM_Cleanitol.txt the following conflicting files will be removed from your plugins:

- officestagecaps.dat
- residentialstagecaps.dat
- industry-quadrupler-2.dat
- Farming Jobs Doubler.dat
- Farming Jobs x5.dat
- Farming Jobs x10.dat
- Farming Jobs x50.dat
- EvenStageFarms.dat
- NoPedrianaFarms.dat
- LessCO$$$Abandonment.dat
- LessCO$$Abandonment.dat
- LessCS$$$Abandonment.dat
- LessCS$$Abandonment.dat
- LessR$$$Abandonment.dat
- LessR$$Abandonment.dat

- LessHighTechAbandonment.dat
- TSB_BlockAll_R$.dat
- TSB_BlockAll_R$$.dat
- TSB_BlockAll_R$$$.dat
- TSB_BlockAll_CS$.dat
- TSB_BlockAll_CS$$.dat
- TSB_BlockAll_CS$$$.dat
- TSB_BlockAll_CO$$.dat
- TSB_BlockAll_CO$$$.dat
- TSB_BlockAll_IM.dat
- TSB_BlockAll_IHT.dat
- TSB_BlockAll_ID.dat
- TSB_BlockAll_IR.dat
- Plugin_No_Dilapidation.dat

If you are not running BSC Cleanitol™, please make sure none of the above files are present in any of your plugins folders before installing the CAM.

For optimum development throughout all growth stages, it is recommended not to leave any old stage 8 buildings in your plugins folders. Most stage 8 residential and commercial buildings that were made for Rush Hour, usually have too high an occupancy to fit into stage 8 for CAM. It is recommended only to use CAMpatible buildings and lots (available at the BSC LEX).

Options

For help with installing options, please read about "Revised Traffic Pathfinding" on page 5 and "Census Drives (Demand of Workforce)" on page 11.

Revised Traffic Pathfinding

With the population density being a lot higher, both in residential buildings as well as in commercial and industrial buildings, the need for higher capacities and speeds of all networks was obvious. For this purpose a new traffic pathfinder has been developed.

There are three optional pathfinding plugins included with the CAM.

If you choose not to install any of them, then you will keep whatever pathfinding plugin you may have installed with NAM, or the default pathfinding included in Rush Hour.

All three pathfinding plugins increase the capacity and the commute speed for all networks. The following list shows the network capacities in Rush Hour (NAM) and CAM:

	NAM	CAM
Streets	100	1,000
Roads	1,000	6,000
One-way roads	2,000	8,000
Avenues	2,500	10,000
ANT (RHW)	2,000	12,000
Highways	4,000	16,000
Rails	3,000	20,000

As said above, the speed of the different traffic types has been increased as well. The list below shows the speed of the different traffic types in Rush Hour (NAM) and in CAM:

	NAM	CAM
Cars	21/31/40/80/82 km/h	40/50/80/110/120 km/h
Buses	31/46/60/90/100 km/h	40/50/80/110/120 km/h
Trucks	21/31/40/80/82 km/h	30/40/60/90/100 km/h
Freight Train	150 km/h	150 km/h
Passenger Train	110 km/h	200 km/h
Subway & El-Train	150 km/h	150 km/h
Monorail	200 km/h	250 km/h

The speed for cars, buses and trucks are given for five different network type, streets/roads/avenues/ant(rhw)/highways. Roads include one-way roads.

The difference between the three optional pathfinders is in the pedestrian speed:

- Promote Nothing - walking speed set to 5 km/h
- Promote Walking - walking speed set to 10 km/h
- Promote Biking   - walking speed set to 15 km/h

The higher your pedestrian speed is, the more people will be walking to/from work.

Using Existing Regions with the CAM

If you want to install the CAM and continue to play on an existing region, with all existing RCI buildings, please read this carefully.

Beta testing showed that it may be possible to continue playing on an existing region after installing CAM. However, some precautions need to be taken.

Since most existing stage 8 buildings are not CAMpatible and often have a much higher occupancy than they should have, you may experience a situation where existing stage 8 buildings won't upgrade to higher stages, until your city size has become large enough to support the growth of stage 12-13 buildings, which should have a denser population than most existing stage 8 buildings.

If you region has any problems with demand, those problems will probably be more difficult to handle after the CAM has been installed. The CAM is especially sensitive to "Eternal Commuters" (see below).

Eternal Commuters

For successfully running the CAM, you must be sure not to have eternal commuters in your region.

Eternal commuters are best visualized by the following example. Consider that you have a region with four cities. Each city has 200 inhabitants and 100 industrial jobs.

The residential areas are located close to the corner that all four cities share, and the industrial districts are located in the middle of each city (far away from the residential areas).
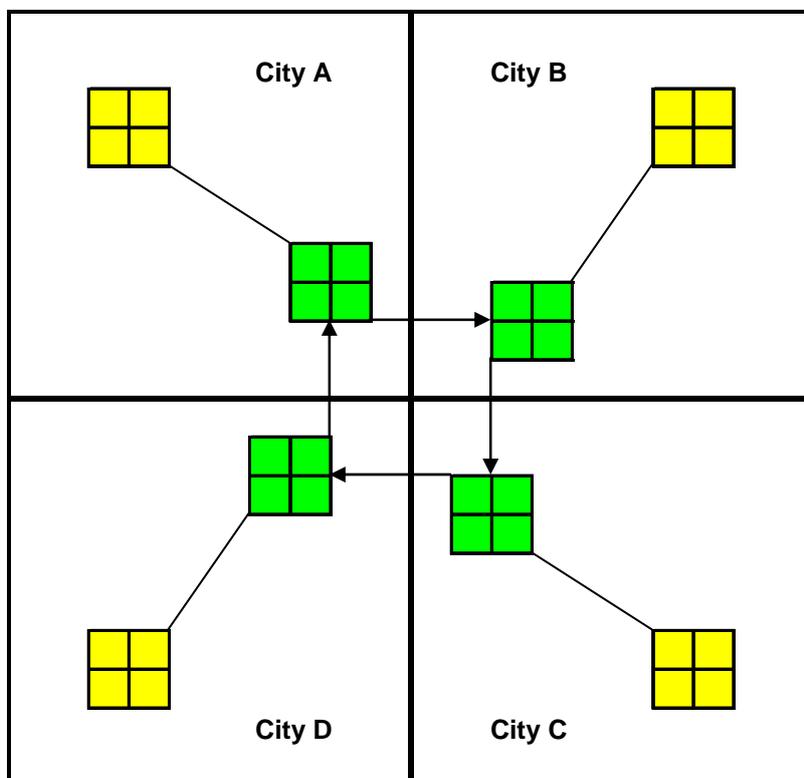
Consider playing city A for a while. The workforce (about 100 persons, 50% of the population) starts looking for jobs. They consider the industry in their own city to be farther away than the industrial jobs in city B. The jobs in city B are considered to be situated just across the border crossing from city A, so all 100 workers head for city B.

Now, consider playing city B for a while. That city has a workforce of 100 plus 100 commuters coming from city A. All these workers consider the industry in city B to be farther away than the industrial jobs in city C. The jobs in city C are considered to be situated just across the border crossing from city B, so all 200 workers head for city C.

Now, consider playing city C for a while. That city has a workforce of 100 plus 200 commuters coming from city B. All these workers consider the industry in city C to be farther away than the industrial jobs in city D. The jobs in city D are considered to be situated just across the border crossing from city C, so all 300 workers head for city D.

Now, consider playing city D for a while. That city has a workforce of 100 plus 300 commuters coming from city C. All these workers consider the industry in city D to be farther away than the industrial jobs in city A. The jobs in city A are considered to be situated just across the border crossing from city D, so all 400 workers head for city A.

Now we're coming back to city A to play for a while. And now you probably understand the problems we're seeing. The regional population is still only 400, but city A already sees a workforce of 500, 100 living in the city and 400 commuting from city D. These would once again commute to city B. However, sooner or later it will be obvious that there are less jobs available in city B than there are commuters going across the border.

This leads to a high job demand all around the region, and for quite a while the simulation will allow the situation to continue. However, the longer you play and the more skewed the situation becomes, the more difficult will it be to achieve a healthy development.

Those commuters going around in circles through cities A –> B -> C -> D -> A -> etc. will never disappear. Commuters only increase in numbers, they never decrease. Thus you will soon have traffic and pollution problems around that corner.

Before long, you will also face a situation where residential buildings start to dilapidate, since all jobs in the neighbouring cities are "taken" by the eternal commuters and those living in the city will suffer from unemployment.

This situation has proven to be more serious if using the CAM. The problems appear earlier, and are more severe than without the CAM.

Be sure not to build border crossing close to a corner shared by several cities. You may have border crossings from each city in one direction, but not connecting to two cities close to a corner.

E.g. in the example above you could have had border crossings between A and B, as well as between C and D, but not between B and C, nor between D and A in those cases.

Growth Stages

The basis for development of RCI lots is the population density. Each higher stage must have a denser population than any lower one. Otherwise lots won't upgrade. This applies to all RCI lots except agricultural lots, which won't upgrade.

In order for the development to work as intended, it is essential that the growth stages for all RCI lots in the game follow the same rules.

As an example, the density of residential lots is shown in the graph below:
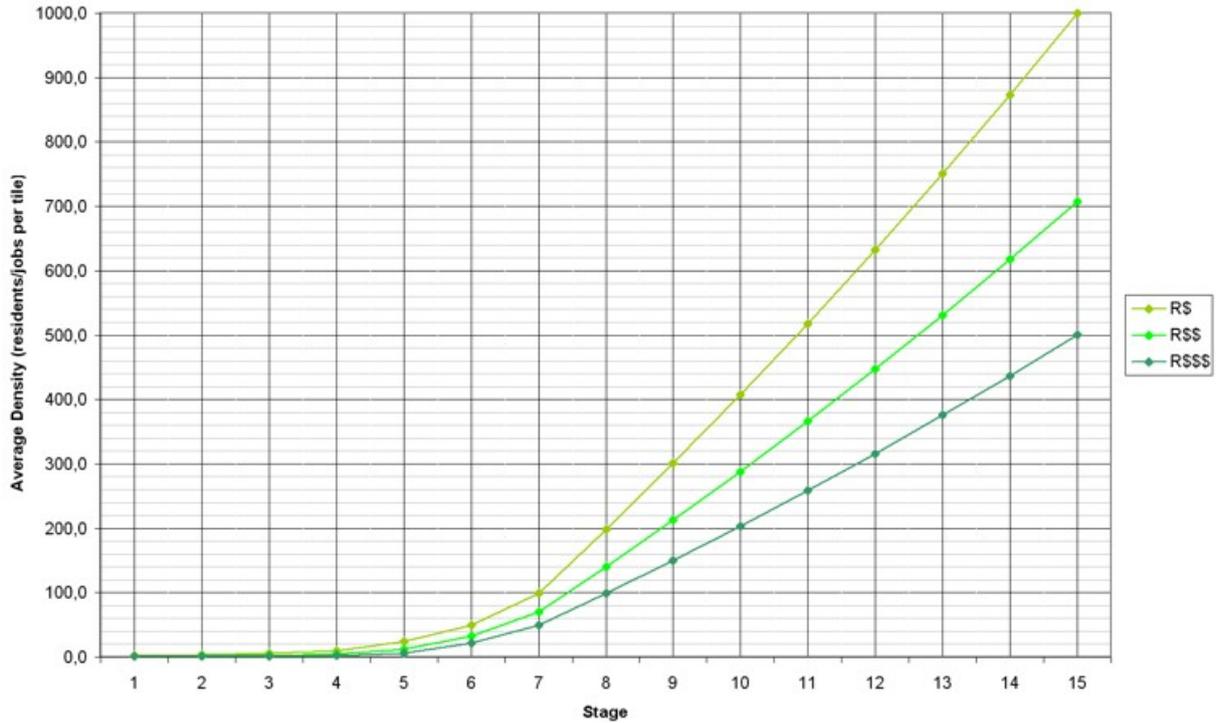
This graph is very visual on showing how much further the CAM stages take the game, compared to stage 8 which is the highest available residential stage in Vanilla and Rush Hour.

A similar extrapolation has been adopted for commercial and industrial lots as well.

For a complete technical description of all growth stage properties, please refer to the CAM threads at www.sc4devotion.com.

Stage versus Size

These properties determine when certain stage buildings start to appear.

In the tables below only those thresholds are given that need to be surpassed in order to enable buildings of each growth stage.

For a complete technical description and listing of these properties, including the percentage distribution between buildings of different growth stages that appear depending on the thresholds, please refer to the CAM threads at www.sc4devotion.com.

Residential Growth Stage Thresholds

The residential stages are dependent on the total regional residential capacity:

Growth Stage	R§ Thresholds	R§§ Thresholds	R§§§ Thresholds
1	-	-	-
2	800	900	1,000
3	1,250	1,406	1,563
4	2,443	2,748	3,054
5	5,966	6,710	7,458
6	14,568	16,383	18,210
7	35,568	39,999	44,460
8	55,575	62,499	69,469
9	86,836	97,655	108,545
10	135,681	152,586	169,601
11	212,001	238,416	265,001
12	331,251	372,525	414,064
13	517,580	582,070	646,975
14	808,719	909,485	1,010,899
15	1,263,624	1,421,070	1,579,530

Commercial Growth Stage Thresholds

The commercial stages are dependent on the total regional commercial capacity (CO+CS):

Growth Stage	CO§§ Thresholds	CO§§§ Thresholds	CS§ Thresholds	CS§§ Thresholds	CS§§§ Thresholds
1	-	-	-	-	-
2	400	500	300	400	500
3	625	781	469	625	781
4	1,220	1,525	916	1,220	1,525
5	2,979	3,724	1,431	1,906	2,383
6	7,274	9,093	3,494	4,655	5,819
7	17,760	22,200	8,531	11,366	14,208
8	27,750	34,688	20,829	27,750	34,688
9	43,360	54,200	32,545	43,360	54,200
10	67,750	84,688	50,851	67,750	84,688
11	105,860	132,325	79,455	105,860	132,325
12	165,406	206,758	124,149	165,406	206,758
13	258,448	323,060	193,983	258,448	323,060
14	403,825	504,781	303,099	403,825	504,781
15	630,976	788,720	473,593	630,976	788,720

Industrial Growth Stage Thresholds

The industrial stages are dependent on the total regional industrial capacity (ID+IM+IHT). Note that the thresholds do not include the agricultural capacity:

Growth Stage	I-R Thresholds	I-D Thresholds	I-M Thresholds	I-HT Thresholds
1	-	-	-	-
2	-	200	300	400
3	-	391	586	781
4	500	955	1,431	1,906
5	2,723	2,916	4,368	5,819
6	14,830	8,899	13,330	17,760
7	250,000	21,726	32,545	43,360
8		53,044	79,455	105,860
9		129,501	193,983	258,448
10		252,931	378,874	504,781

Demand Ranges

In Rush Hour the demand range is from -6,000 to +6,000 for all types of RCI.

In order to be able to grow buildings with capacities considerably higher than 6,000, the demand ranges have been extended for the CAM.

- The residential demand range is: from -6,000 to +24,000

- The commercial demand range is: from -6,000 to +24,000

- The industrial demand range is: from -6,000 to +12,000

- The agricultural demand range is: from -6,000 to   +6,000

Census Drives (Demand of Workforce)

The census drives tell us what kind of workforce (residential working population) is required for different kinds of jobs.

The table below should be read from top to bottom, for each column separately.
Eg. the column named CO§§ tells us that middle-class offices employ 10% R§§§, 50% R§§ and 40% R§.

Employer: Employs	CO§§§	CO§§	CS§§§	CS§§	CS§	I-HT	I-M	I-D	I-R
R§§§	15 %	10 %	8 %	5 %	0 %	10 %	5 %	0 %	0 %
R§§	65 %	50 %	30 %	27 %	**(5 %)**	80 %	45 %	**(5 %)**	**(1 %)**
R§	20 %	40 %	62 %	68 %	100 %	10 %	50 %	100 %	20 %

This table can also be found in the tutorial "Workforce and Occupation Demands (Drives)" at http://sc4devotion.com/forums/index.php?topic=963.0.

The table is unchanged from Rush Hours, with the exception of the red figures in brackets. Those numbers indicate optional plugins in CAM. At installation you may choose to include any or all of the following options:

- **5% R$$ working in CS$**
  If you choose to install this plugin, all low-wealth commercial services employ 5% R§§ and 95% R§.

- **5% R$$ working in I-D**
  If you choose to install this plugin, all dirty industries employ 5% R§§ and 95% R§.

- **5% R$$ working in I-R**
  If you choose to install this plugin, all farms employ 1% R§§ and 19% R§.

If you choose to install any of these, you will notice that middle-wealth residents will move into your city sooner than otherwise would be the case.

Workforce Drives (Demand of Occupation)

The workforce drives tell us what kind of occupation (commercial and industrial) is accepted by the workforce (population), based on their wealth and education.

In order to get a smooth development through all stages, it was necessary to increase the demand of occupation for the low-wealth uneducated sims, but also to decrease the demand of occupation for the high-wealth educated sims.

The table below should be read from left to right for each row separately. Eg. the row named R§§ 150…200 tells you that well-educated middle-class residents may be working in CO§§§ (45%), CO§§ (15%), CS§§§ (10%), CS§§ (30%), and I-HT (45%).

The total of each row varies between 140% for well educated rich people to 165% for less educated poor people, telling you that people can accept more than one type of occupation. Farming (I-R) is treated in its own way and separately from the others.

Wealth	Education	CO§§§	CO§§	CS§§§	CS§§	CS§	I-HT	I-M	I-D	I-R
R§§§	150…200	70 %		35 %			35 %			
	100…150	60 %	30 %	30 %	5 %		20 %			
	50…100	45 %	60 %	23 %	15 %			7 %		
	0…50	22 %	60 %	10 %	23 %	10 %		15 %	15 %	16 %
R§§	150…200	45 %	15 %	10 %	30 %		45 %			
	100…150	22 %	22 %		38 %		38 %	30 %		
	50…100	10 %	40 %		30 %	10 %		50 %	15 %	16 %
	0…50		30 %		25 %	20 %		55 %	30 %	160 %
R§	150…200	22 %	68 %		15 %	23 %	22 %			
	100…150		22 %		10 %	30 %		53 %	40 %	16 %
	50…100					40 %		40 %	80 %	160 %
	0…50					50 %			115 %	1600 %

The corresponding table that is applicable for Rush Hour can be found in the tutorial "Workforce and Occupation Demands (Drives)" at
http://sc4devotion.com/forums/index.php?topic=963.0.

Stage CAPs

There are four stage CAPs used in the CAM. If an RCI type is capped at a certain stage, the development cannot surpass that stage without getting what is capped:

RCI Type	Power CAP	Water CAP	Park CAP	Fire CAP	Max. Stage
R§	0	3	12	-	15
R§§	0	3	9	12	15
R§§§	0	0	3	9	15
CS§	0	3	-	-	15
CS§§	0	3	12	-	15
CS§§§	0	0	9	12	15
CO§§	0	3	12	-	15
CO§§§	0	0	9	12	15
I-R	0	3	5	4	7
I-D	0	1	-	5	10
I-M	0	1	-	5	10
I-HT	0	0	6	3	10

The Power CAP tells which growth stage can develop without supplying power. This is well known since Vanilla and Rush Hour. All RCI types are capped at stage 0 and require power to start developing.

The Water CAP tells which growth stage can develop without supplying water. This is also well known since Vanilla and Rush Hour. All high-wealth RCI types are capped at stage 0 and require water to start developing. I-D and I-M require water to surpass stage 1. All other RCI types require water to surpass stage 3.

The Park CAP tells which growth stage can develop without having a park within 20 tiles of the lot. In Vanilla and Rush Hour only R§§§ are capped at stage 3. In CAM only CS§, ID and IM can develop throughout all stages without having a nearby park. A nearby park is required by IR to surpass stage 5, IHT to surpass stage 6, R§§, CS§§§ and CO§§§ to surpass stage 9 and R§, CS§§ and CO§§ to surpass stage 12.

The Fire CAP tells which growth stage can develop without having a nearby fire station providing fire protection. In order for a lot to surpass the capped stage, it must lie within the coverage area of a fire station. This CAP is completely unused un Vanilla and Rush Hour. In CAM only R§, CS§, CS§§ and CO§§ can develop throughout all stages without having a nearby fire station. Fire protection is required by IR to surpass stage 4, by ID and IM to surpass stage 5, by R§§§ to surpass stage 9 and by R§§, CS§§§ and CO§§§ to surpass stage 12.

Desirability Thresholds

Since development in CAM is likely to be faster than you are accustomed to by using Rush Hour, the desirability thresholds have been set to the same values as used in the Less Dilapidation Mod by bones1.

The purpose with tweaking these thresholds is to make it more difficult for middle- and high-wealth RCI types to develop in areas where they might soon be abandoned due to too low a desirability.

Desirability can obtain values between 0 and 200. The desirability dataview in the game can be used to estimate the desirability for different kinds of RCI types around your city.

RCI Type	Desirability Threshold Decline	Desirability Threshold Growth (Maxis)	Desirability Threshold Growth (CAM)
R§	50	50	50
R§§	50	50	90
R§§§	50	50	120
CS§	50	50	50
CS§§	50	50	90
CS§§§	50	50	120
CO§§	50	50	90
CO§§§	50	50	120
I-R	50	50	50
I-D	50	50	50
I-M	50	50	50
I-HT	50	50	90

Desirability Threshold Decline:
Tracts with desirability greater than this value never abandon

Desirability Threshold Growth:
Tracts with desirability less than this value never develop

Crime Attenuation versus Police Protection

There has always been a problem in SimCity 4 Vanilla and Rush Hour with too high criminality in mega lots. This is especially noticeable in the in-game airports and other large lots, e.g. the golf course and the university.

Placing police stations nearby simply won't help, since the default crime attenuation of police stations is rather low, unless you place the police station dead on the spot of criminality, which of course is impossible in the middle of an airport.

RalphaelNinja made a mod called Crime Doesn't Pay, which greatly increases the crime attenuation of police stations.

A not so radical version of the Crime Doesn't Pay is included in the CAM. The graph below shows a comparison of the crime attenuation as set by Maxis (Rush Hour), RalphaelNinja (Crime Doesn't Pay) and the CAM.

Police protection is 255 at the point where a police station with 100% funding is placed, and is reduced linearly to zero from the centre to the rim of its coverage circle.

If a more radical crime attenuation is desired, RalhaelNinja's Crime Doesn't Pay can still be used with the CAM. However, in that case it has to be loaded after the CAM.

Grand Railroad Station Fix

The Grand Railroad Station is a reward which in Rush Hour is offered if:

- Residential + Commercial Capacity > 172,000

- Average Train Station Utilization > 4000% (which is impossible)

With the CAM, the latter has been fixed so that the requirements are:

- Residential + Commercial Capacity > 172,000

- Average Train Station Utilization > 40%

Civic buildings and the CAM

If you are planning on building true metropolises, you will probably soon notice that all in-game civic facilities and mass transit stations are too small capacity-wise.

You may want to download larger civic facilities and stations from the BSC LEX.

The **Opera House Fix** by Toroca is also required if you want to build the Opera House in a metropolis: http://www.simtropolis.com/modding/index.cfm?p=details&id=339.

CAMeLots

Lots that possess a growth stage above those currently available in Vanilla or Rush Hour are called CAMeLots. They can only be used with the Colossus Addon Mod (CAM). All CAMeLots available for download at the BSC LEX are certified to follow the growth stage versus population density that were developed for the CAM.

Lots with a growth stage available in Vanilla or Rush Hour, but which are still made in accordance with the settings developed for the CAM are called CAMpatible. They can be used both with and without the CAM.

The CAM changes the growth stage of a number of in-game lots in order to get a good development through all available stages. Especially stage 8 commercial and residential buildings are too diversified in Rush Hour, to really fit into one single stage. A complete list of all in-game lots that have been rearranged into CAM stages can be found in Appendix 1 through Appendix 10.

All true CAMeLots can also be counted. If you want to keep track of how many CAMeLots you have had growing in your cities, you should download the CAMeLot Counter, soon available at the BSC LEX.

Farming in CAM

The CAM may be thought of as a mod for those wanting to build huge cities with as many skyscrapers as possible. This is true, but not the whole truth.

The agricultural development has probably gone through an even more extensive facelift. The first three stages (which were available in Rush Hour as well) grow right from the beginning. This should give a larger diversity among farms that grow and also reduce the appearance of the only in-game stage 3 farm, the Pedriana Plant.

Note that there are no farms of stages 4 through 7 included in the CAM itself. These farms have to be downloaded separately.

Stage 4

Stage 4 farms are larger than normal farms. They may start developing as soon as the regional industrial capacity has reached 500. However, since stage 4 farms are water capped, you have some control over where you want these farms to appear. You need to provide water for them to grow.

Stage 5

Stage 5 farms are really large farming industries. They may start developing as soon as the regional industrial capacity has reached 2,723. However, since stage 5 farms are fire capped, you have some control over where you want these farms to appear. They need fire protection to grow.

Stage 6

Stage 6 farms are woodland preserves. They may provide fewer jobs than normal farms, but instead provide recreation for your citizens. They may start developing as soon as the regional industrial capacity has reached 14,830. However, since stage 6 farms are park capped, you have some control over where you want these farms to appear. They need a nearby (20 tiles) park to grow.

Stage 7

Stage 7 farms are very special. They are historical landmarks, acting just like ploppable landmarks, providing different desirability effects and CAP relieves. They may start developing as soon as the regional industrial capacity has reached 250,000.

They will not grow in a skyscraper city, since education and traffic effectively kills all farming demand. However, since the region must have an industrial capacity of at least 250,000 for them to grow, you will never see them grow in a small region either.

Thus, e.g. the Stonehenge would grow only in quiet, rural outskirts of a metropolis.

Incompatible Mods

Since the CAM changes a large number of simulator exemplars, it is inevitable that there are a number of conflicting mods out there. This section lists the most used ones, but there are still most likely a number of mods which conflict with the CAM and haven't been included in here.

Every mod that changes any RCI developer exemplars or RCI lots are incompatible with the CAM, including:

1. **Stage Limit Mod** V1.0 by Toroca

2. **Industry Quadrupler** V2.1 by Toroca

3. **Farming Jobs Multiplier** by RalphaelNinja

4. **Cheat/Radical Mods Set 1** by karybdis

5. **Industry Doubler** by bones1

6. **Less Abandonment** by bones1

7. **Dilapidation Modd** (part of Abandonment Modd v1.2) by RalphaelNinja

8. **Lower Pedriana Farms Frequency** by bones1

9. **Block All Maxis Mod** by DuskTrooper

10. **PEG-MTP Residential Replacement Mod** by Pegasus

11. **PEG-MTP CS$ Replacement Mod** by Pegasus

12. **PEG-MTP CS$$ Replacement Mod** by Pegasus

The following two mods are CAMpatible, but only if loaded after the CAM:

1. **Crime Doesn't Pay** by RalphaelNinja
http://www.simtropolis.com/modding/index.cfm?p=details&id=272

2. **No Maxis Files** by BSC (use this one instead of DT's Block All Maxis Mod)
http://sc4devotion.com/csxlex/lex_filedesc.php?lotGET=897

Appendix 1. In-game R§ CAMeLots

The following Low-Wealth Residential (R§) CAMeLots are available within the CAM itself:

Stage 9

Lot Size 3×2	Hi-Rise Tenements	1433 residents
Lot Size 3×2	Concrete Manor	1565 residents
Lot Size 3×2	Hi-Rise Tenements	1609 residents
Lot Size 3×2	Preston's Housing Projects	1609 residents
Lot Size 4×2	Bennet Apartments	1944 residents
Lot Size 4×2	Bunker Towers	2280 residents
Lot Size 4×2	Long Tilt Tower	2714 residents
Lot Size 4×2	New Beginning Apartments	2780 residents
Lot Size 4×2	Rock Bottom Terrace	2812 residents
Lot Size 3×3	Brown Hi-Rise	2533 residents
Lot Size 3×3	Impeccable Tenements	2680 residents
Lot Size 3×3	Large Tenement	2863 residents
Lot Size 3×3	Project Feelgood	3120 residents

Stage 10

Lot Size 4×4	Hamster Tenements	5703 residents
Lot Size 4×4	Project Bootstrap	6260 residents
Lot Size 4×4	Project Hope	6517 residents
Lot Size 4×4	Salvation Tower	6978 residents
Lot Size 4×4	Simland Hi-Rise	8060 residents
Lot Size 4×4	Tina's Tenements	8146 residents

Appendix 2. In-game R§§ CAMeLots

The following Medium-Wealth Residential (R§§) CAMeLots are available within the CAM itself:

Stage 9

Lot Size 3×2	Jolly Manor	982 residents
Lot Size 3×2	Simon Manor	1158 residents
Lot Size 3×2	The Pratt	1257 residents
Lot Size 3×2	Grossman Apartments	1290 residents
Lot Size 3×2	Graham Apartments	1312 residents
Lot Size 3×2	Beigestone Hi-Rise	1488 residents
Lot Size 4×2	Hi-Rise Apartments	1232 residents
Lot Size 4×2	O'Hare Apartments	2204 residents
Lot Size 4×2	Ryan Apartments	2231 residents
Lot Size 4×2	Zubecker's High Rise Apartments	2325 residents
Lot Size 3×4	Copur Apartments	1899 residents
Lot Size 3×4	Reed Place	1993 residents
Lot Size 3×4	Tri-Tip Towers	2692 residents
Lot Size 3×4	Wallace Manor	3767 residents
Lot Size 4×4	Leonid Apartment Complex	3037 residents
Lot Size 4×4	The Knight Building	3491 residents
Lot Size 4×4	The Wilkinson	4244 residents
Lot Size 4×4	Zaidi Apartments	4603 residents

Stage 10

Lot Size 3×3	Copur Apartments	1899 residents
Lot Size 3×3	Reed Place	1993 residents
Lot Size 3×3	Tri-Tip Towers	2692 residents
Lot Size 3×3	Wallace Manor	3767 residents

Appendix 3.   In-game R§§§ CAMeLots

The following High-Wealth Residential (R§§§) CAMeLots are available within the CAM itself:

Stage 9

Lot Size 4×2	The Long Building	631 residents
Lot Size 4×2	The Hogan	885 residents
Lot Size 4×2	Bilyk Towers	911 residents
Lot Size 4×2	Bell Towers	1624 residents
Lot Size 4×2	Colin Condos	1749 residents
Lot Size 4×3	Kauker Manor	803 residents
Lot Size 4×3	Quigley Place	2083 residents
Lot Size 4×3	Sky Rise Deluxe Condos	2723 residents
Lot Size 4×3	McCarthy Condos	2790 residents

Stage 10

Lot Size 4×4	McCormick Place	1367 residents
Lot Size 4×4	Twin Peak Towers	3712 residents
Lot Size 4×4	Byall Towers	4203 residents
Lot Size 4×4	Walkup Tower	4419 residents
Lot Size 4×4	Ong Condos	5039 residents

Appendix 4.   In-game CO§§ CAMeLots

The following Medium-Wealth Commercial Office (CO§§) CAMeLots are available within the CAM itself:

Stage 9

Lot Size 2×3	Kanarowski & Co.	909 office jobs
Lot Size 2×3	Talin Tower Suites	1612 office jobs
Lot Size 3×2	Kanarowski & Co.	909 office jobs
Lot Size 3×2	Talin Tower Suites	1612 office jobs
Lot Size 4×4	Vu Financial	4343 office jobs
Lot Size 4×4	Chong Inc.	3307 office jobs
Lot Size 4×4	Lucky Lizards	4595 office jobs
Lot Size 5×4	Fisk Insurance	5752 office jobs

Stage 10

Lot Size 3×4	Vu Financial	4343 office jobs
Lot Size 3×4	Chong Inc.	3307 office jobs
Lot Size 3×4	Lucky Lizards	4595 office jobs
Lot Size 4×3	Vu Financial	4343 office jobs
Lot Size 4×3	Chong Inc.	3307 office jobs
Lot Size 4×3	Lucky Lizards	4595 office jobs
Lot Size 4×4	Fisk Insurance	5752 office jobs

Stage 11

Lot Size 4×4	McClellan Inc.	6798 office jobs
Lot Size 4×4	Calvin's Happy Place Plaza	5404 office jobs
Lot Size 4×4	Waco Co.	6536 office jobs
Lot Size 4×5	McClellan Inc.	6798 office jobs

Appendix 5.   In-game CO§§§ CAMeLots

The following High-Wealth Commercial Office (CO§§§) CAMeLots are available within the CAM itself:

Stage 9

Lot Size 2×3	Graber Corporate Suites	1003 office jobs
Lot Size 2×3	Barthelet Corporation	1203 office jobs
Lot Size 2×3	Yates Real Estate	1203 office jobs
Lot Size 2×3	Simon and Frank Associates	1987 office jobs
Lot Size 2×3	Wren Insurance	1401 office jobs
Lot Size 3×2	Wren Insurance	1401 office jobs
Lot Size 3×4	Cameron Cameras	2453 office jobs
Lot Size 4×3	Cameron Cameras	2453 office jobs

Stage 10

Lot Size 4×4	Lind Entertainment	5796 office jobs
Lot Size 4×4	Van Prooijen Trading	4533 office jobs
Lot Size 4×4	Cahalene Communications	5339 office jobs
Lot Size 4×4	Hogan Wallace & White Insurance	5709 office jobs
Lot Size 4×4	Hurt Enterprise Headquarters	7146 office jobs

Stage 11

| Lot Size 4×4 | Pedriana Pharmaceuticals | 7103 office jobs |

Stage 13

Lot Size 5×3	Bank of America	7872 office jobs
Lot Size 4×4	Bank of China	8343 office jobs
Lot Size 4×4	Chrysler Building	8735 office jobs

Stage 14

| Lot Size 6×4 | John Hancock Center | 16012 office jobs |
| Lot Size 8×4 | Empire State Building | 19565 office jobs |

Appendix 6.   In-game CS§§§ CAMeLots

The following High-Wealth Commercial Service (CS§§§) CAMeLots are available within the CAM itself (please note that the Coit Tower is not a CAMeLot, but it has been made into a CAMpatible growable stage 6 lot):

Stage 6

Lot Size 3×3   Coit Tower   156 service jobs

Stage 10

Lot Size 3×3   Smith Tower   386 service jobs

Lot Size 6×6   Seafirst Tower   1725 service jobs

Stage 15

Lot Size 7×6   CN Tower   5776 service jobs

Appendix 7.   In-game I-R Lots

All in-game industrial resource (agricultural) buildings and lots have been edited.
The occupancies have been updated to reflect a more consistent approach.
All lots have been redistributed into growth stages 1 through 3.

The table below lists all in-game IR lots with their occupancies and growth stages:

Agricultural Building	Jobs in SC4	Jobs in CAM	Growth Stages
Pumkin Acres	2	3	1
Farhan's Farm	4	11	1
Barthelet Stables	8	16	2
Jez Knight Acres	10	27	2
Llama Ag	6	36	2
Alvin's Acres	6	38	2
Pedriana's Plant	13	88	3

Appendix 8.   In-game I-D Lots

All in-game industrial dirty buildings and lots have been edited.
The occupancies have been updated to reflect a more consistent approach.
All lots have been redistributed into a lot wider range of growth stages.

The table below lists all in-game ID lots with their occupancies and growth stages:

Industrial Building	Jobs in SC4	Jobs in CAM	Growth Stages
Farley's Foundry	9	9	1, 3
Dao Chemicals	23	171	4, 5, 6
MPR Metals	18	82	3, 4, 5
Creighton Bricks	17	72	2, 3, 4
Eyler Refining	18	73	2, 3, 4
Dolan Dye	28	40	1
Vu's Tank and Vat	46	110	3, 4
Graber Smelter	66	351	5, 6
Grundstrom Copper	67	355	5, 6
Broquard's Cement Plant	119	248	5, 6, 7
Wallace Petroleum	158	639	7
Dead Forest Paper	150	541	5, 6
Yard	21	3	1
Burner	6	5	1
Petroleum Tank	15	64	3, 4
Smoke Stack	12	30	4
Chemical Tanks	34	60	4
Chemical Tank	13	21	2, 4
Burner	30	40	5
Collection Unit	28	34	2, 3
Refining Unit	92	159	5
Burning Unit	74	78	5, 6
Mixer	100	206	5, 6
Mixing Unit	41	110	4, 5
Processing Unit	77	90	4, 5
Shed	5	5	1
Furnace	11	54	4, 5
Warehouse	10	40	2, 3
Steel Shed	18	15	2, 4
Sorting Shed	25	43	3, 5
Distribution Shed	29	107	4, 5
Sorting Shed	57	65	4, 6
C. Wallace Plaster	58	69	4, 6
Cooling Unit	76	167	5, 7
Finishing Warehouse	94	344	6, 8

Appendix 9.   In-game I-M Lots

All in-game industrial manufacturing buildings and lots have been edited.
The occupancies have been updated to reflect a more consistent approach.
All lots have been redistributed into a lot wider range of growth stages.

The table below lists all in-game ID lots with their occupancies and growth stages:

Industrial Building	Jobs in SC4	Jobs in CAM	Growth Stages
Bella Barium	23	21	1, 2
Goth Mechanics	19	19	1, 2
Go Gyro Plant	23	33	1, 3
Flyte's Motor Works	25	43	2, 3
Solar Panel U-Store It	34	114	4, 5
Patch's Paint	32	88	3
Patch's Paint	43	237	5, 6
Wright Widgets	57	133	2, 3, 4
Drying Unit	24	38	6, 7
Heating Unit	24	39	4, 6
Mixing Tanks	43	41	4, 6
Cogg and Shuffle	45	75	5, 6
Processing Center	48	83	5, 6
Storage Unit	18	22	1, 3
Crunching Facility	21	30	2, 3
Zaidi Sprockets	25	57	3, 4
Packaging Facility	27	75	4, 5
Vilett Textiles	25	53	3
Vilett Textiles	34	147	4, 5
Zambel Assembly Line	46	86	2, 3
Running Blade Manufacturing	58	191	4, 5, 6
B. Powers Cloth	53	142	3, 4
Willmott Widget Assembly	72	388	5, 6
Kiwi Flooring Co.	58	192	4, 5, 6
Zeno's Truck Parts	78	504	7

Appendix 10. In-game I-HT Lots

All in-game industrial high-tech buildings and lots have been edited.
The occupancies have been updated to reflect a more consistent approach.
All lots have been redistributed into a lot wider range of growth stages.

The table below lists all in-game ID lots with their occupancies and growth stages:

Industrial Building	Jobs in SC4	Jobs in CAM	Growth Stages
Havoc Bioenhancement	20	28	1, 2
Kane Tiberium	20	28	1, 2
Lee Avionics	32	126	5, 6
Andrews Semiconductor	33	52	2, 3
Stratton Biotech	39	95	3, 4
Tsvirkunov Electronics	73	193	4, 5
Jenquai Alchemy	72	185	4, 5
Max's Microchips	71	172	3, 4
Grounds	7	3	1
Quantum Dish	21	38	3
Grinding Unit	29	39	4, 6
Receiver Unit	31	46	4, 6
Barth Compression Services	55	64	2, 4, 5
Transformer Facility	49	59	2, 4, 5
Accelerator	22	46	4, 6
Testing Bays	18	26	2, 5
Cryo Testing	30	140	5, 6, 8
Corrugating Unit	27	96	4, 5, 7
Larva Breeding	30	132	5, 6
Pedriana Perpetuator Systems	44	182	5, 6, 7
Tubing Facility	51	290	6, 7, 8
Tubing Facility	67	191	5
Progen Production	68	202	4, 5
Hsu Accelerators	91	530	8, 9
Venkatrama Pharmaceuticals	94	589	7, 8
Spline Testing	97	652	6, 7