

SID MEIER'S CIVILIZATION IV



TABLE OF CONTENTS

Chapter 1

IN THE BEGINNING 3

Introduction.....	4
The Civlopedia.....	6
System Requirements.....	7
Installation.....	8
The Tutorial.....	9
Starting a Game.....	9
The <i>Civilization IV</i> Web Site.....	16
Saving and Loading a Game.....	17

Chapter 2

THE BASICS 21

Introduction.....	22
<i>Civilization IV</i> Turn Structure.....	22
The Interface.....	23
Terrain.....	29
Units.....	32
Combat.....	39
Cities.....	45
Cultural Borders.....	63
Technology.....	65
Workers.....	71
Work Boats.....	76
Religion.....	77
Civics.....	82

Great People.....	91
Golden Ages.....	94
Wonders.....	95
Diplomacy	99
Victory.....	105

Chapter 3

ADVANCED RULES **107**

Introduction.....	108
Terrain	108
Resources.....	112
Units.....	123
Cities.....	146
Civilizations.....	159
Difficulty Levels.....	166
The Options Screen	168
The Custom Game Screen	169
Multiplayer Games.....	172
Mods.....	174
Afterwords.....	175

APPENDIX **189**

Reference Charts.....	190
Credits.....	216
Limited Software Warranty and License Agreement.....	221
Warranty	223
Product Support.....	224

Chapter 1

IN THE BEGINNING

INTRODUCTION

Welcome to *Sid Meier's Civilization IV*®, the game in which you match wits against the greatest leaders of all time in a battle of warfare, diplomacy, religion, commerce and technology. If you fail you will be destroyed, your empire just a pathetic and sad footnote in the annals of history. But if you succeed, your glory will live on forever, and you will build a civilization to stand the test of time!

Civilization IV is the latest iteration of *Sid Meier's Civilization*, first released in the early 1990's. From its inception the *Civilization* series has been acknowledged as the first and best world history simulation, lauded for its incredible depth of play and its extraordinary addictive nature.

We believe that *Sid Meier's Civilization IV* lives up to the quality of its predecessors. Herein you'll find greatly-enhanced graphics and sound, new technologies, units and other game elements, improved multiplayer capacity, and increased "moddability" (gamer modifications). We hope you enjoy it!

NEW PLAYERS:

WELCOME TO *CIVILIZATION IV*

In *Civilization IV*, you start with a tiny group of settlers in the middle of a vast and unexplored world. From these humble beginnings you will build a new city, creating workers to improve the land, scouts to explore the world, settlers to build new cities, and warriors to protect what's yours.

Soon you will meet other civilizations. Some you will coexist with peacefully, trading goods, wealth, and even new advancements in technology. Others you will fight – perhaps to the death!

A game of *Civilization IV* can span the entirety of human history. You begin at the dawn of the Stone Age, your people primitive hunter-gatherers armed with stone weapons and clad in the skins of animals, on the verge of extinction from starvation, animal attack, or from the encroachment of hostile tribes. It's your job to see to it that they prosper and grow: expand their territory, build and mold mighty cities, discover new

technologies, found religions, dominate their neighbors, and so forth.

Under your guidance your citizens will learn how to construct tools and weapons of bronze and how to domesticate wild animals. They'll learn how to read and write, how to sail on the oceans, how to harvest metals from beneath the earth. Your cities will begin to expand, filled with barracks, libraries and temples.

Eventually your people will discover the compass, the printing press, and gunpowder. Their railroads will cross the country, while their mighty frigates dominate the world's oceans. Eventually their military will battle with their neighbors not with muskets and cannon, but with rifles, artillery, bombers and battleships - and perhaps someday with tanks, stealth bombers and nukes! By game's end they'll have achieved all of the wonders of the 21st century – and more!

If they survive, that is. And that's up to you.

In fact, pretty much everything is up to you. *Civilization IV* is a game of choices. There are always decisions to be made, ranging from grand strategy to day-to-day city-management. And they're all important. That's one explanation for the game's addictive quality. You are in charge – not the computer. Your civilization rises or falls according to your wisdom or folly.

It's *good* to be ruler!

Good luck, and enjoy.

FANS OF PREVIOUS CIVILIZATION TITLES: WELCOME TO *CIVILIZATION IV*

We've made a lot of changes in this version of *Civilization*. In addition to the dramatic improvements to the game's audio and graphic components, we have added many cool new technologies, units, buildings and wonders. We have improved and expanded the ways you control your cities and government. We have streamlined or removed many time-consuming elements of the previous games, especially in less enjoyable areas like pollution control and civil disorder.

We have greatly enhanced *Civilization IV's* multiplayer capacity by adding many new gameplay options and vastly improving game stability and connectivity. We have programmed the game using XML (Extensible Markup Language) and Python (a scripting language), which allows for much easier game modification.

The best way to find out what we've done to improve *Civilization IV* is, of course, to play it. But if you dislike surprises, you can check out the "Comparisons with Previous Civilization Games" section of the *Civilization IV* web site, at www.CivIV.com

ABOUT THIS MANUAL

This manual will tell you everything you need to know in order to enjoy *Civilization IV*. The manual is divided into four sections: In the Beginning, The Basics, Advanced Rules, and Appendix. The section you're reading now, "In the Beginning," introduces the game to you. "The Basics" contains everything you need to know to manage and mold your civilization during the first millennia or so. "Advanced Rules" contains additional game rules, while the "Appendix" contains, well, the appendix.

Perhaps the best way to learn how to play *Civilization IV* is to go through the in-game tutorial, read "The Basics," and then start playing. You can check out the "Advanced Rules" section later on, if you find that you need more information. Of course we know that many of you will dive into the game head-first, counting on your native intelligence and gaming experience to guide you, referring to this manual only as a last, desperate resort. Hey, go for it! It's your game, after all. But be warned: the leaders of the other civilizations are tricky – especially at higher difficulties – and they know all the rules.

THE CIVILOPEDIA

The Civlopedia is accessible by pressing [F12] or by clicking the Help icon at the top right of the main screen. The "Civlopedia" is an incredibly helpful in-game resource. It con-

tains much of the information found in this manual, but organized for easy reference. The Civlopedia contains entries on virtually every item and concept in the game, and each entry contains hyperlinks to other related entries, which allows you to quickly navigate to the precise info you're looking for.

The Civlopedia is accessible from the "Main Screen" or via "hotkey" (see later in this manual). Use it early and often – it will quickly make you a *Civilization IV* master!

SYSTEM REQUIREMENTS

MINIMUM SYSTEM REQUIREMENTS

1.2GHz Intel Pentium 4 or AMD Athlon processor or equivalent
256MB RAM
64 MB Video Card w/ Hardware T&L (GeForce 2/Radeon 7500 or better) DirectX7 compatible sound card
CD-ROM Drive
1.7GB of free hard drive space
DirectX9.0c (included)

RECOMMENDED SYSTEM REQUIREMENTS

1.8GHz Intel Pentium 4 or AMD Athlon processor or equivalent/better
512 MB RAM
128 MB Video Card w/ DirectX 8 support (pixel and vertex shaders)
DirectX7 compatible sound card
CD-ROM Drive
1.7GB of free hard drive space
DirectX9.0c (included)

SUPPORTED OPERATING SYSTEMS

Windows 2000 (plus Service Pack 1 or higher), Windows XP (Home or Professional) (plus Service Pack 1 or higher)

INSTALLATION

Insert your *Sid Meier's Civilization IV* Disc 1 CD-ROM (or DVD ROM, no disc number) into your drive. On the setup screen, [Click] Express Install for a default installation without further prompting. Advanced users can choose Custom Install to customize the installation path.

If you experience issues upon installation or when playing the game, please visit the support section of the Civilization IV website for a list of documented solutions:

www.2kgames.com/civ4/support.htm

THE TUTORIAL

Civilization IV is a big game. To ease the learning curve, we have provided a tutorial to teach you the basics of controlling your empire. We seriously suggest that you check it out, especially if you're new to the world of Civilization.

WHAT'S IN THE TUTORIAL

The tutorial is designed to teach the novice to play *Civilization IV*. The tutorial describes the interface, explains the basic concepts in the game, and shows you what you need to do to win. You'll learn how to manipulate your forces and your cities, and you'll get some strategy tips as well.

HOW TO START THE TUTORIAL

You must first install *Civilization IV* onto your computer as described in the previous section. Once the game is installed, follow the instructions in "Starting a Game" (the next chapter), until you reach the Main Menu. One of the buttons on the Main Menu says, "Tutorial." Click on this button to begin.

STARTING A GAME

To play *Sid Meier's Civilization IV* you must first install the game on your computer's hard drive. See page 8 for installation instructions. Once *Civilization IV* is installed, you are ready to play.

To begin a game, insert the *Civilization IV* Disc 1 CD or DVD-ROM into your computer's CD-ROM or DVD-ROM drive. Then double-click on the *Civilization IV* icon on your desktop, or navigate to the folder where you installed the game and double-click on the program, which is titled "Civilization4.exe". The game should begin immediately. If it does not do so, see the "Tech Support" section of this manual.

THE MAIN MENU

Once the opening sequence is complete, you will be at the Main Menu screen. This screen gives you the following options:

Tutorial: Click on this button to begin the *Civilization IV* tutorial. See the previous chapter for details on the tutorial.

Single Player: Click on this button to begin a standard “solo” game of *Civilization IV* – just you against the computer. Click here also to resume a saved single-player game. Upon clicking here you are taken to the “Single Player Game Menu.” See below for details.

Multiplayer: Click on this button to begin a “multiplayer” game of *Civilization IV*. In a multiplayer game, you play against one or more human players. You may do so by taking turns at one computer, or against others sharing a LAN (local area network), by email, or over the Internet.

Multiplayer gaming can be incredibly fun. However, it can also be incredibly cutthroat and high-pressure. We recommend that new players play solo against the computer a few times before venturing into multiplayer gaming.

Game experience may change during online play.

Upon clicking on the “Multiplayer” button you are taken to the “Multiplayer Game Menu.” See the “Multiplayer Games” section of this manual for details.

Hall of Fame: Takes you to the *Civilization IV* Hall of Fame. Soon your own exploits will be recorded here!

Advanced Menu: Takes you to the “Advanced Menu.” See following.

Exit Game: Click here to exit the program and return to your desktop.

THE SINGLE PLAYER GAME MENU

You come to this screen when you click on the “Single Player” button on the “Main Menu.” This screen contains the following buttons:

Play Now!: Click on this to begin a new single player game. Once you do so you will begin the “Game Options” sequence, where you will design the world in which you will play. See “Game Setup,” below.

Load Game: Click this button to load a previously-saved

game of *Civilization IV*. See “Saving and Loading a Game” for details.

Custom Game: Click here to “customize” your game. See the section on “Custom Games” in the Advanced section of this manual for details.

Scenario: Click here to load a *Civilization IV* scenario. Scenarios are pre-created situations designed to present new and interesting challenges. A scenario might allow you to play on a realistic map of Earth, for example. Or it might show the Mediterranean basin and limit civilizations, technologies and units to those that actually existed during the period of the Roman Empire.

You can download scenarios from the official *Civilization IV* website or other fan sites. Eventually you may even create your own scenarios and share them online for others to download and enjoy!

Check for Updates: This verifies that you are running the most up-to-date version of *Civilization IV* and, if not, downloads and installs available patches. (This requires that you be connected to the Internet.)

Go Back: Click on this to return to the Main Menu.

THE ADVANCED MENU

You get to this menu from the Main Menu (see above). The Advanced Menu contains the following:

About this Build: View version information about the game. This is useful when looking for technical support on *Civilization IV*.

Load a Mod: Load a “module” – pre-designed scenario – for *Civilization IV*. See “Modules,” page 174, for details.

Options: Go to the Options Menu. (See “Options,” page 168.)

Movies: Click here to go to the “Movies Menu,” where you can view the animated movies to be found in *Civilization IV*.

Check for Updates: Click here to find out if any *Civilization IV* updates have been released. (You must be connected to the Internet to use this option.)

Visit Civilization IV Web Site: Click here to visit the *Civilization IV* web site, where you'll find a lot of Civ-related news, updates, scenarios, and more. (You must be connected to the Internet to use this option.)

Credits: Click here to roll the credits for this game.

Go Back: Click here to return to the Main Menu.

GAME SETUP

Once you click on the "Play Now" button on the "Single Player Game Menu" (see above), you begin the process of creating the world your people will inhabit. There are several steps to this process:

Select a Map

There are many world templates available to play upon. Each creates a different kind of landscape. The "Continents" template, for instance, creates a world with a number of sizable continents, not unlike the planet we occupy. Pangaea, on the other hand, creates a world with a single, massive continent surrounded by endless water. (Note: While each template generates specific types of worlds when chosen, each individual world created will be different from game to game.)

When you click on a template, an image of a sample world will appear on the screen next to the menu. This does not display the actual world that you will be playing on, of course.

WORLD TYPES

Worlds may be of one of the following types:

"Terran" Worlds are very similar in layout to Earth.

"Continental" Worlds are multiple landmasses separated by oceans.

"Archipelago" Worlds consist of many small areas of land completely isolated by the surrounding oceans.

"Pangea" Worlds contain one giant landmass.

"Ice Age" creates a world in which every civilization involved must make the best use of its available resources in slightly rough terrain.

"Oasis" Worlds include a vast desert dotted by oases and surrounded by jungle.

"Lake" Worlds consist of one large landmass containing many lakes.

"New World" Most civilizations start out on a single land mass. To the east or perhaps west lies an uncharted new continent.

WORLD SIZE

After you have selected a map-type, you next choose the size world on which you will play. World sizes run from "Duel" to "Huge."

The size of the world will have important effects on the game. For one thing, it limits the number of civilizations that will be in the world. A "Duel"-sized world can hold up to three civilizations, for example, while a "Standard" can hold eight, and a "Huge" world a whopping twelve civilizations.

As a general rule, the larger the world, the longer the game will take to complete. Civilizations will be larger and thus take more effort to conquer. A larger world generally means that there are more units and cities in play, and this means that each turn will take longer to complete. It may be fun to conquer a huge world, but it may also be a big time commitment.

We recommend that for your first few games you stick with "Standard"-sized maps or smaller.

Once you have selected a world size, click "OK" to proceed. Or click "Go Back" to return to the "Select a Map" screen.

CLIMATE

The world's climate affects the type of "terrain" in the game. There are five different climates to choose from:

Temperate: The world will have about the same climate as our world does. There will be a mixture of plains, forest, desert, jungle and tundra. This is a good climate to start with.

Tropical: The world will be warmer than our world. It will have more jungles and less tundra.

Arid: The world will be quite dry. It will have few rivers and lakes and more deserts.

Rocky: The world will be covered with lots of hills and mountains, rich in metal resources but perhaps poor in good places to plant crops.

Cold: The world will be cold, perhaps having recently emerged from an Ice Age. There will be more ice and tundra and fewer deserts and jungles.

Once you have selected a climate, click “OK” to proceed. Or click “Go Back” to return to the “World Size” screen.

SEA LEVEL

There are three possible sea levels to choose from. A “Low” sea level indicates that the world will have larger continents and smaller oceans. “Average” indicates that the ocean to continent ratio will be comparable to our world. A “High” level means that you are creating a world with larger oceans and smaller land masses.

Once you have selected a sea level, click “OK” to proceed, or click “Go Back” to return to the “Climate” screen.

DIFFICULTY

The difficulty level you choose has a number of subtle but important effects on play. We’ll discuss this more in the “Advanced” section of the manual; for now suffice it to say that at easier difficulties you build cities and units faster and the AI civilizations build them slower, while at higher difficulties you build them slower and the AIs faster.

Important: The game gives you useful play tips at “Settler” difficulty – the easiest level. You should consider playing at this difficulty for your first several games.

Once you have chosen a difficulty level, click “OK” to proceed, or “Go Back” to return to the “Sea Level” screen.

GAME SPEED

The “Game Speed” determines how many turns it takes to

construct units, buildings and wonders, how many it takes to research technologies, build “improvements” and so forth. These settings let you experience the full epic sweep of time inherent in Civ while allowing you to customize the game based on how much time you have available and other preferences. Game Speed DOES NOT have any effect upon the amount of time you have to complete a turn – you always have as much time as you want in a single-player game.

There are three game speeds to choose from:

Epic: It takes a longer number of turns to construct, research, and improve.

Normal: It takes an average number of turns to construct, research, and improve. (We recommend this for your first several games.)

Quick: It takes fewer turns to construct, research, and improve.

Once you have chosen a game speed, click “OK” to proceed, or “Go Back” to return to the “Difficulty” screen.

CIVILIZATION AND LEADER

On this screen you pick the civilization you want to play. Or you can pick “Random” and let the Fates decide. Some civilizations have more than one leader to pick from: if you choose a civilization with multiple leaders you’ll then need to choose which leader you want to portray.

There are eighteen civilizations and 26 leaders to choose from. Each civilization has its own unique unit and each leader has two specialties allowing him or her to excel in certain areas within the game. These are described in the “Advanced” section of the manual. You should definitely check them out at some point, but for your first few games you might just want to pick civilizations and leaders that you find particularly cool.

Once you have chosen a civilization and leader, click “OK” to launch the game. Or click “Go Back” to return to the “Game Speed” screen.

THE *CIVILIZATION IV* WEB SITE

WHERE TO FIND IT

www.CivIV.com

WHAT IT OFFERS

The *Civilization IV* website is a valuable resource for detailed game features and tips, information on the various civilizations in the game, developer blogs, community details and much more. The website also serves as a central destination for the most popular mods and scenarios available for you to download, opening up the world of *Civilization* beyond the box. Also check the website for the latest news, patches and information about future *Civilization* products.

SAVING AND LOADING A GAME

It's easy to save and load games in *Civilization IV*. You can do so at any point during the game.

SAVING A GAME

To save a game, get rid of any menus that are waiting for a response from you (the “City Build” menu, for instance) and then hit [Ctrl-s]. This will bring up the “Save Game” screen. (Alternatively, hit [Esc] and then click on “Save Game.”)



Save Game Screen

Press [OK] to save the game in the default location with the default name. You can rename the save if you wish: to do so simply type in the new name. You can also save the file in a different location; use the navigation box on the left-hand side of the Save Game screen to navigate to the place where you want to save the file. Once at the correct location, click [OK] to save the game. The game will be saved and you will return to the Main screen.

LOADING A GAME

At the Start of the Game

Click “Load Game” rather than “Play Now” during the game-creation sequence (see “Starting a Game” on page 9). This will bring up the “Load Game” screen.

During Play

Once again, get rid of any menus waiting for a response from you, and then type [Ctrl-I]. (Alternatively, hit [Esc] and then click on “Load Game.”) This will bring up the “Load Game” screen.



Load Game Screen

Once on the Load Game screen, click on the name of the game you wish to load and then click [OK]. Or, if you saved the game in a different location, navigate to the correct folder, click on the game, and then click [OK]. The game will load and you'll resume play at the point where you saved the game.

Saved Game Locations

Games are saved in two locations: single games are saved in “My Documents\My Games\Sid Meiers Civilization 4\Saves\single,” multiplayer are saved in “My Documents\My Games\Sid Meiers Civilization 4\Saves\multi.” The “single” and “multi” folders will contain sub-folders holding the special “auto” and “quick” saves.



SPECIAL SAVES

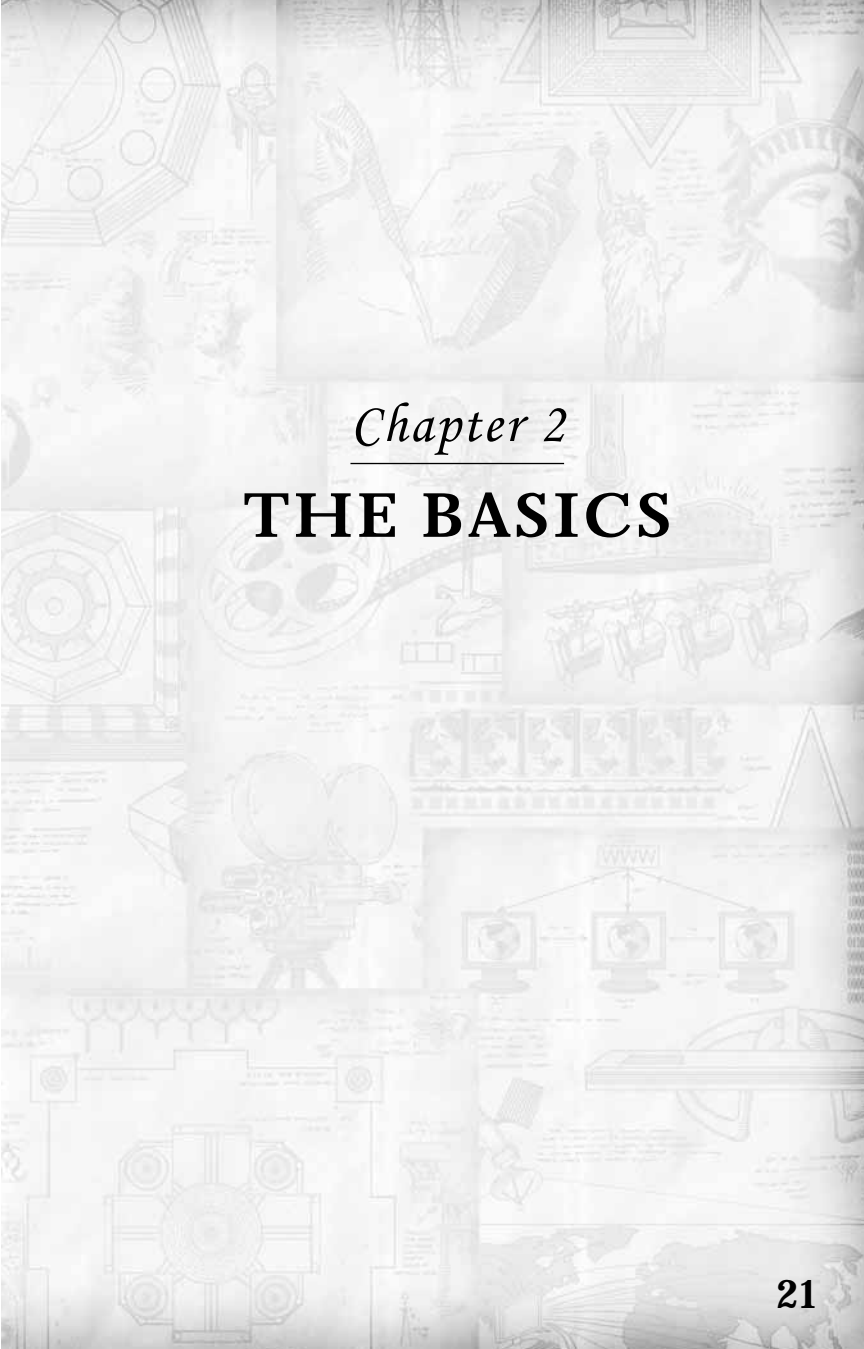
Auto-Save

The program automatically saves the game every four turns. To load an auto-saved game, bring up the “Load Game” screen and then use the navigation box to open the appropriate “auto” folder (see box). Once you're in the correct folder, click on the name of the game you want to load, and then click [OK].

Quick Save

One other save/load option is available to you: “Quick Save,” which is particularly useful when you're in a hurry. Type [Shift-F5] to “Quick Save” your game. The game will be automatically saved without requiring further input from you. Only one game can be quick-saved at a time; a future quick-save will overwrite the current one.

Type [Shift-F8] to load the quick-saved game.



Chapter 2

THE BASICS

INTRODUCTION

This section of the manual provides an overview of *Sid Meier's Civilization IV*. This is all you need to get started; look this section over and then start playing. Then check out the “Advanced Rules” section if you’re seeking more in-depth info.

Don’t forget about the in-game online “Civlopedia,” either! That is loaded with lots of very useful info. See page 6 for more details on the Civlopedia.

CIVILIZATION IV TURN STRUCTURE

OVERVIEW

Civilization IV can be played in several different turn formats. The standard single-player game is “turn based” (see below), while multiplayer games can be played in one of two ways.

TURN BASED GAMES

A solo game of *Civilization IV* is “turn based:” you take your turn – move your units, conduct diplomacy, build and manage your cities, and so forth – then each of your opponents take their turns, then you take another turn, and so on until somebody wins. (In other words, you play it just like chess or Risk.) You can take as long as you want to complete your turn.

Multiplayer games can be played this way, as well. However in a multiplayer game you can use a “Turn Timer” to limit the amount of time each player has to make his move. (See the advanced section on “Multiplayer Games,” page 172, for more information.)

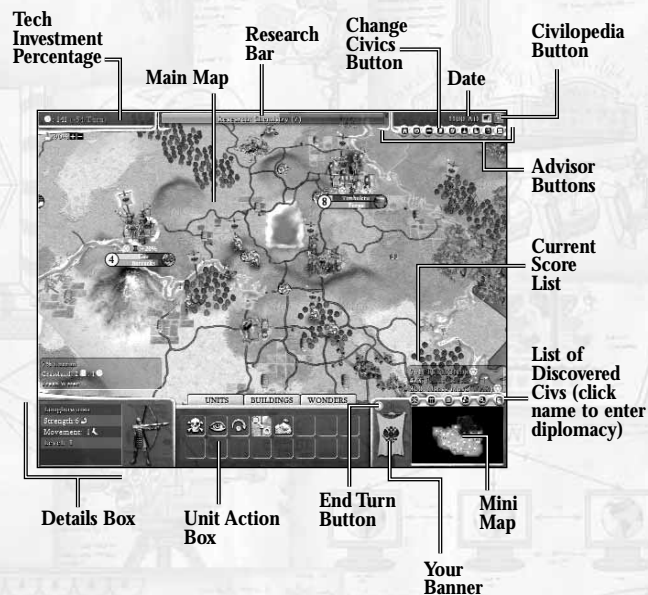
SIMULTANEOUS TURNS GAMES

During a simultaneous turn game (available only during multiplayer games), you and your opponents take your turns simultaneously. Everybody moves units, manipulates cities, conducts diplomacy and so forth at the same time. When everybody’s done everything they want to do, the turn ends and another begins. You can use a “Turn Timer” when playing simultaneous games, as well.

THE INTERFACE

OVERVIEW

In *Civilization IV*, we have strived to create an interface that is attractive and easy to use. We have followed standard gaming conventions – right-click to move a unit, action icons for active units, and so forth – where possible, hopefully making the game easy for experienced gamers to pick up, but we have also been willing to break conventions when necessary.



THE MAIN SCREEN

During a game of *Civilization IV*, you will spend most of your time on the Main Screen. It is here that you move your units, build cities and improvements, launch attacks against your neighbors, and so forth. The Main Screen has the following elements:

Main Map

This is where the action takes place. The Main Map displays all of your “Known World” – therein you can see your cities, terrain, improvements, resources and units, and all neutral/foreign lands that are “visible” to you.

NAVIGATING THE MAIN MAP

There are a number of ways that you can change your point of view on the Main Map:

Zoom In and Zoom Out: Use your mouse wheel or press [PageUp] and [PageDown] to zoom in and out on the Main Map.

Scroll: Move your cursor to the edge of the screen to scroll the Main Map in that direction.

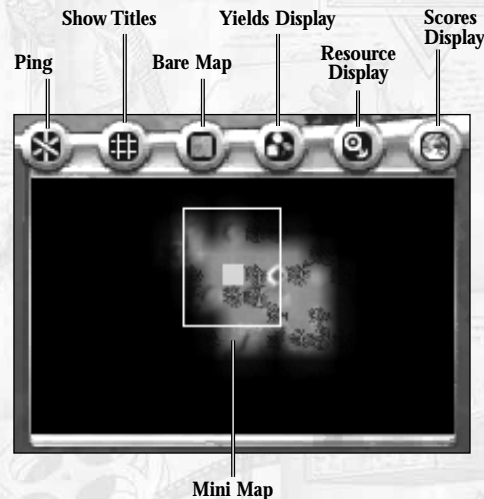
Re-Center: Click on a space on the Main Map to center the Main Map on that space.

Change Viewing Angle: Press [Ctrl-left arrow] and [Ctrl-right arrow] to change your viewing angle by 45 degrees.

Auto-Center Upon Unit Activation: When a unit becomes “active” during your turn the Main Map automatically centers upon that unit.

Manually Center Upon Active Unit: press [c] to center on the current active unit (sometimes necessary after scrolling around during your turn).

Mini Map: Click on a space on the Mini Map to center the Main Map’s view on that space.



Mini Map

The Mini-Map is a much smaller representation of the world. As described above, you can re-center the Main Map by clicking on a location in the Mini Map.

BUTTONS ATOP THE MINI-MAP

There are a number of buttons along the top edge of the Mini Map; these allow you to manipulate what is displayed on the Main Map. These buttons “toggle” – click once to turn on a display, click again to turn it off.

Ping: This function is useful only during multiplayer games. It allows you to mark a location on the map that is visible only to players on your team. (See the section on Multiplayer Games for more details.)

Show Tiles: This places a visible grid atop the tiles on the Main Map.

Bare Map: This hides all units on the Main Map.

Yields Display: This displays the commerce, food and production “yields” of each tile.

Resource Display: This highlights all “resources” on the Main Map.

Scores Display: This hides/reveals the scores display which is atop the Mini Map.

Your Banner

This displays your civilization’s war banner. Roll your cursor atop your banner to see details about your civilization and your leader. Click on the banner to open your civilization’s capital city.

End Turn Button

Click on this button to end your current turn.

Unit Action Box

When a unit is “active,” this displays its available “action icons” (see “Units,” page 32). Roll your cursor over an action icon to learn more about it; click on an icon to order the unit to perform the action.

Details Box

The “Details Box” displays information about the currently active unit.

Tech Investment Percentage

This displays how much of your civilization’s income is presently invested in researching new technologies. Click on the “+” (plus) symbol to raise that percentage; click on the “-” (minus) symbol to lower that percentage.

Culture Investment Percentage (Not Visible)

The Culture Investment Percentage appears when you learn the “Drama” technology. It allows you to dedicate income to culture, as the Tech Investment Percentage button (above) allows you to invest in research. Note that the two investments cannot exceed 100% – if you’re investing 70% of your income in technology, you can invest a maximum of 30% in culture. Each 10% invested in culture will add one “happy face” to your cities.

Research Bar

The Research Bar shows what technology you are currently researching and how many turns until research is completed. [Left-click] on the bar to open the available research list and then right-click on an icon to open the “Technology Tree.” (See “Technology” on page 65.)

Date

This shows the current turn date. Note that the amount of time that passes each turn changes over the course of the game. Early turns consume as many as 40 years, while later turns consume five years or fewer.

Civilopedia Button

Click on this button to access the online “Civilopedia” (see the “Civilopedia” section of this manual on page 6).

Advisor Buttons

These buttons allow you to access the various advisor and information screens which help you manage your growing empire:

Domestic Advisor

Finance Advisor

Civic Advisor

Foreign Advisor

Military Advisor

Technology Tree

Religion Advisor

Victory Screen

Palace Screen

Current Score List

This list shows the names and scores of all leaders currently known to you. Click on a name to open diplomatic discussions (or declare war) with that leader.

THE KEYBOARD

The keyboard contains a number of “shortcut keys” which allow you to perform various functions at the stroke of a button (or buttons). If your keyboard is equipped with a number pad, even better. The number pad controls unit movement, among other things. See the “Shortcut Keys” diagram for a list of all keyboard controls and shortcuts.

Conventions

KEYBOARD

This *Sid Meier's Civilization IV* manual uses the following conventions to indicate keystrokes:

[s] or [S] press “s”

[Shift-S] press “Shift” and “S” buttons simultaneously

[Ctrl + t] press the “Control” button and “t” simultaneously.

[Num 5] press the “5” on the keyboard's number pad.

[Num Ins] press the Insert (or “0”) key on the number pad.

MOUSE

This manual uses the following conventions to indicate mouse actions:

[Rollover] move your cursor atop the indicated item on the game screen.

[Left-Click] place your cursor on the indicated spot and press and then release your left mouse button.

[Right-Click] place your cursor on the indicated spot and press and then release your right mouse button.


[Drag Left-Click] place your cursor at the indicated spot and press and hold the left mouse button. While pressing the button, drag the cursor to the appropriate location.

[Double Left-Click] place cursor at the indicated spot and then press/release your left mouse button twice.

THE MOUSE

Sid Meier's Civilization IV plays best when you use a combination of keystrokes and mouse-clicks to control the game. We highly recommend that you use a mouse with two buttons and a scrolling wheel when playing.

THE CIVILOPEDIA

As described earlier in the manual, *Sid Meier's Civilization IV* contains an online database called the “Civlopedia.” This contains a lot of useful information about the game. To reach the Civlopedia, [Left-Click] on the “?” (question-mark) icon on the Main Screen, or press .

TERRAIN

OVERVIEW

In *Civilization IV*, the world is made up of land and sea “tiles” (also known as “squares” or “plots”). Press the “Toggle Show Tiles” button atop the Mini Map (see page 25) to make this clearer. Each square has a number of classifications, including height, terrain type, features, resources, and bordering. Thus you might have a jungle square atop a hill adjacent to a river with the ivory (elephant) resource, or a simple grassland square, or anything in-between.

These elements help determine the usefulness of the square as a place to build a city, as well as how easy or difficult it is to move through the square. And a square's terrain may have important effects on any combat taking place there.

[Rollover] a square to see what kind it is: info about that square will appear above the “Unit Info” box.

LAND OR SEA

All squares are either land or sea squares. Sea units cannot enter land spaces (except for coastal cities), and land units cannot enter sea squares, unless they are carried aboard “transport vessels” (see page 124). Some air units can enter both land and sea squares. (See “Air Units” on page 128.)

TERRAIN CHARACTERISTICS

Each square has a number of characteristics:

Movement Point (mp) Cost: This determines how quickly units can move in that square. A square's mp cost will be 1, 2, or Imp (impassable).

Defensive Bonus: These are combat bonuses many units receive when they are attacked while in a space. Terrain defensive bonuses run from 0 to 75%.

Productivity: Productivity determines how useful a space is to a city built on or near to that space. A space's productivity is measured in three separate categories, each of which will have a value of 0 to 3.

- **Commerce:** How much wealth the space provides.
- **Productivity:** How much raw materials (used to create buildings and units) the space provides.
- **Food:** How much food the space provides.



Commerce



Food



Productivity

Health: How much "health" a city will receive if it is built on that space. A space may have a health rating of 0 (normal) or +2 (adjacent to fresh water).

Resources: A space may provide a special "resource" such as rice, spices, or iron. Note that you may need knowledge of special technologies to utilize (or even see!) certain resources.

(See "Resources" below for more details on resources.)

PEAKS

Peaks are tall mountains. Peaks are impassable: units cannot move into peaks, and cities cannot draw production from them.

RIVERS

Rivers run alongside land squares, not in them. Crossing a river negates the movement benefit of roads until the discovery of "Construction" (see "Roads," page 71). Rivers also reduce an attacker's combat strength when the target is on the other side of the river. Rivers improve adjacent squares' health and commerce as well. Finally, rivers can be used as part of your "trade network" (see page 72).

SEA SQUARES

There are two different kinds of sea squares: ocean and coast. Some naval units must stay in coastal squares and cannot enter ocean squares, while other units can move freely through both. Land units cannot enter sea squares – ocean or coast.

RESOURCES

The land and sea are filled with various "resources" that can aid in a civilization's growth and development. During a game, you will want to build your cities near to resources so that they can take advantage of the resources' bonuses. In order for a civilization to utilize a resource, a "worker" must build an improvement on it – for instance, the gold resource requires construction of a mine. A city will get the benefits of an improved resource if that resource is within the city's "city radius." If not, the improved resource must be connected to the city by a "transport network" of roads, rivers and coastlines for that city to gain its benefits.

Some resources are visible at the start of a game, while others won't become visible until your civilization has mastered the appropriate technology. The iron resource, for instance, isn't visible until your civilization has learned the "Ironworking" technology.

See "Advanced Resources" for a full list of resources.

TERRAIN EFFECTS

Terrain effects are more fully described in the "Advanced Terrain" portion of this manual. However, the easiest way to learn about terrain is to [Rollover] your cursor on various spaces on the Main Map.

UNITS

OVERVIEW

In *Civilization IV*, the term “unit” refers to anything that can move around the map. There are a number of different types of units in play – military units, workers, settlers, missionaries and so forth – with military units forming the bulk of them. At the start of the game, you’ll probably have two units: a settler and a warrior or scout.

UNIT CATEGORIES, STATISTICS AND ABILITIES

In *Civilization IV*, units are divided into several categories. These include “melee units,” “mounted units,” “air units,” and the like. In addition, all units have two basic statistics (or “stats”): movement speed and combat strength. Many units have one or more special abilities, as well. You can find out a unit’s classification, stats and abilities by [Rolling Over] the unit or by checking it out in the Civopedia.

UNIT CATEGORIES

Units are grouped into 11 different categories. During the early part of the game you are likely to run into the first seven. The categories are:

Civilian (Non-Combat) Units: settlers, workers, work boats, etc.

Recon Units: scouts, explorers, etc.

Archery Units: archers, longbowmen, crossbowmen, etc.

Mounted Units: chariots, horsemen, war elephants, etc.

Melee Units: warriors, axemen, spearmen, swordsmen, etc.

Siege Weapons: Catapults, cannon, etc.

Naval Units: Work boats, galleys, caravels, ironclads, carriers, etc.

Gunpowder Units: Musketmen, riflemen, infantry, etc.

Armored Units: Tanks, panzers, modern armor.

Air Units: Fighters, bombers, etc.

Helicopter Units: Gunships.

MOVEMENT SPEED

A unit’s movement speed determines how quickly the unit can move around the map. Movement speeds range from 1 to 8 (though early units most often have movements of 1 or 2).

Air units have special rules governing their movement. See the “Air Units” section (page 128) for details.

COMBAT STRENGTH

A unit’s combat strength determines how tough the unit is when fighting an enemy unit. Early unit combat strengths range from 1 to 6, while modern units have strengths of up to 40.

Some units have combat strengths of 0, which indicates that the unit cannot fight or has special rules governing its combat. See later sections for more details.

UNIT ABILITIES

As discussed above, many units have special abilities in addition to movement and combat. Military units most often have combat-related abilities – bonuses when attacking specific kinds of units or when defending in specific terrain, for instance. Once again, check the unit’s entry in the Civopedia or [roll over] a unit to see its special abilities.

EARLY UNIT CATEGORIES, STATS AND ABILITIES

Following are the units you are most likely to possess and/or run into during the early turns in a game:



WARRIOR

Melee Unit, Strength 2, Movement 1

Special Abilities: None.



ARCHER

Archery Unit, Strength 3, Movement 1

Special Abilities:

1 First Strike: When attacked, the archer has a chance to damage the attacker before the attacker can do any damage. This is negated if the other combatant has first strike as well.

+50% City Defense: When attacked while in a city, the archer's current strength is increased by 50%. A fully healthy archer's base defensive strength in a city would be 4.5.

+25% Hills Defense: When attacked while atop a hill, the archer's current strength is increased by 25%.



SPEARMAN

Melee Unit, Strength 4, Movement 1

Special Abilities:

+100% versus Mounted Units: When in battle against mounted units (horsemen, chariots, elephants, etc.), the Spearman's current base strength is doubled from 4 to 8.



AXEMAN

Melee Unit, Strength 5, Movement 1

Special Abilities:

+50% versus Melee Units: When in battle against melee units (warriors, spearmen, axemen, and so forth), the axeman's strength is increased by half.



CHARIOT

Mounted Unit, Strength 4, Movement 2

Special Abilities:

20% Chance of Withdrawing from Attack: When a chariot makes an unsuccessful attack, there's a 20% chance that it will cease the attack before it is destroyed.

Doesn't Receive Defensive Bonuses: Receives no bonuses for defending in good defensive terrain or in cities. Cannot "fortify" (see below).



SCOUT

Recon Unit, Strength 1, Movement 2

Special Abilities:

Better Results from Tribal Villages: Scouts will not rouse "angry villagers" when they enter tribal villages (see below).

+100% versus Animals: Scouts' combat strength is doubled when fighting animals.

Can Only Defend: Scouts cannot attack other units.

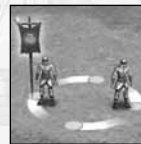


SETTLER

Civilian Unit, Strength 0, Movement 2

Special Abilities:

Can Build a City: This unit can build a new city. See "Building Cities," page 45, for details.



WORKER

Civilian Unit, Strength 0, Movement 2

Special Abilities:

Can Build Improvements: This unit can build farms, mines, roads, and so forth. See "Workers," page 71, for details.



WORK BOAT

Civilian Naval Unit, Strength 0, Movement 2

Special Abilities:

Can Build Sea Improvements: This unit can build fishing boats, whaling boats, offshore platforms. See "Work Boats," page 76, for details.

ACTIVATING UNITS

A unit must be "active" to do anything. An active unit is indicated by a blinking cursor at the unit's feet. During your turn, the computer will activate each unit one by one, until all of your units have been given orders. However, the computer will not activate units that are "fortified," "asleep," or in the middle of carrying out previous orders – such as "explore," "heal," or

“go to.” See below for descriptions of these and other orders. Once a unit has used up all of its movement points it can do nothing else during that turn.

You can also activate any unit by clicking on it, even if that unit is in the middle of carrying out other orders. If one unit is active, you can click on another and it will become active; you can then return to the previously-activated unit later.

MOVING YOUR UNITS

During play you'll spend a lot of time moving your units around the map. You'll send units out to explore the unknown world; you'll send military units off to conquer enemy cities; you'll send out settlers to build cities and claim more terrain for your civilization, and you'll use your workers to improve the land around your new cities.

Where You Can Move Your Units

Your land units can move onto any land space (except for peaks). Land units cannot move into coastal and ocean squares (see “Terrain,” page 29).

Note to Veteran Players: Unlike prior Civilization games, you may move onto the same space as a unit from another civilization without declaring war. When you do so a popup will appear asking if you want to attack the other unit or just move peacefully into the space. (If you're at war with the unit's civ already, you automatically attack the unit when you move into its space.)

How to Move Your Units

To move a unit you must make sure that it is “active” (see above) and it cannot have used up all of its movement points that turn. You can move an active unit with your mouse or your keyboard.

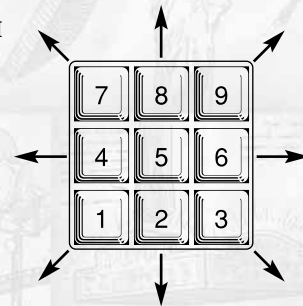
MOVING A UNIT WITH YOUR MOUSE

[Right-Click] on the space that you want the active unit to move to. The unit will figure out the fastest route to that space and then proceed on its way. If the unit reaches the target space and still has movement points remaining, it will remain active and await further orders.

If the unit cannot reach the target space in one turn, it will go as far as it can. During subsequent turns it will continue to move on its own until it reaches the target. If the unit cannot find a path to its target space, it will cease movement and await further orders. You can also interrupt a unit's journey by activating the unit and giving it new orders.

MOVING A UNIT WITH YOUR KEYBOARD

You can direct an active unit's movement with the keyboard. The number pad is pre-configured to move units: see the diagram. You can only move a unit one space at a time with the keyboard.



Cultural Borders and Movement

When civilizations construct cities (see below), they gain control of the areas surrounding the cities. The bigger and more cultured the city, the larger area it dominates. Land under a civ's domination is said to be within its “cultural borders.”

A unit cannot cross another civ's cultural borders unless the civs have the “Open Borders” diplomatic agreement (see page 103). Otherwise, such movement is an act of war. If you order a unit to cross a cultural border, a pop up will appear asking if you want to declare war on that civ. If you say “no,” your movement orders are canceled. If a unit occupies a space that becomes part of another civ's cultural borders, the unit will be displaced to the closest friendly or neutral space – unless the two civs are at war or have the Open Borders agreement.

If you're at war with another civilization, your units will not get the movement benefits of that civilization's road (and later, rail) network. If you have an Open Borders agreement with the other civ, your units will be able to use that civ's road/rail net.

UNIT ACTIONS

In addition to moving and attacking, many units can perform special “actions” during their turn. If an active unit is eligible

to perform special actions, “action icons” appear in the “Unit Action Box” on the Main Screen.

[Rollover] an action icon to see what it does. Below is a list of the military unit actions you’re likely to run into in the early stages of the game. (Worker and Settler actions appear in later sections.)

Flashing Action Icons

If an action icon is flashing, the computer is telling you that action is particularly useful. For example, the “fortify” action will flash if an archer is in an empty city. (But remember that the computer doesn’t know about your strategic situation – that archer may very well be more needed elsewhere.)

Early Unit Action List

Remember that not all units can perform all of the listed actions. If a unit can perform an action, that action will appear in the “Action Box” on the Main Screen.



Delete the Unit: Remove the unit from play.



Go To Mode: Order the unit to move to a square.



All Units Go To: Order all units in the square to move to a square.



All Units of the Same Type Go To: Order all units of the same type in the square to move to a square.



Explore: Order the unit to explore unexplored portions of the map. The unit will stop exploring when it can no longer reach any unexplored spaces.



Skip Turn: Order the unit to do nothing for the remainder of the current turn.



Fortify: The unit “digs in” to better resist attack. The unit gains a 5% defensive bonus per turn, to a maximum bonus of 25%. The unit will remain fortified

until you give it new orders. (Some units – notably mounted units – cannot fortify.)



Sleep: The unit goes inactive. It remains where it is until you activate it. This action is used by units that are ineligible for the “fortify” action.



Sentry: The unit remains inactive until an enemy unit enters an adjacent square.



Pillage: The unit destroys an improvement in the space it occupies. If there is more than one improvement in the space, the unit will destroy the most valuable. (In other words it would take two actions to destroy both a farm and a road in a space.)



Promotions: If a unit has earned a promotion, icons for all available promotions will appear in the unit’s action box. See “Promotions” for more details.



Fortify/Sleep Until Healed: An injured unit will fortify or sleep until it has regained all of its combat strength; then it will reactivate.

UNIT MAINTENANCE COSTS

Depending upon the size of your civilization and the civics you are employing, you may have to pay “maintenance costs” each turn to support some or all of your units. If you are running low on cash you may want to disband units to reduce this cost. Check out the “Financial Advisor” screen ([click] on the button on the Main Screen or press [F2]) to see how much your units are costing you.

COMBAT

There are several different kinds of combat in *Civilization IV*: standard combat, bombardment, and bombing. Bombing will not occur very early in the game; for now we’ll concentrate on standard combat and bombardment.

Standard combat occurs when a unit attempts to enter a space occupied by a hostile unit. When this occurs the computer compares the combat strengths of the two opponents (modi-

fied as appropriate for terrain and special abilities) and generates a result. If the defender is victorious, the attacker is destroyed and the defender remains where it was. If the attacker is victorious the defender is destroyed and if the space is now vacant of hostile units the attacker moves into it. Certain special abilities may allow for different outcomes; we'll discuss these later.

HOSTILE UNITS

Units are considered “hostile” if their two civilizations are at war with each other. Otherwise, the units are neutral, and can occupy the same space without combat. Barbarian and animal units are always hostile to everybody.

HOW TO ATTACK

To attack another unit, order one of your units to enter its space. If that unit is hostile, combat will ensue immediately. If that unit is neutral, the program asks if you want to attack the unit or move peacefully into its space. If you choose to attack, you declare war on the unit's civilization and fighting begins.

Note that some special rules come into effect if you are attacking a space containing more than one defending unit (see below).

Most Units Can Make Only One Attack per Turn

In general, units can make only one attack, per turn, even if the unit has movement points left after the first attack. The “Blitz” promotion (see page 137) allows a unit to make more than one attack in a single turn.

A unit can defend against any number of attacks in the same turn, as long as it survives.

DETERMINING THE ODDS

Basically, if an attacker and defender have the same (modified) combat strength at the start of a battle, each has an equal chance of winning the combat. If one unit has double the strength of the other, it has a 2-1 chance of obtaining victory. And so on.

However, as discussed, a variety of things might modify a unit's strength during a combat. Here are some of the most important:

INJURY

When a unit takes damage in battle, its combat strength is reduced until that unit “heals” (see below).

FORTIFICATION

Some units can “fortify” – build temporary defenses such as trenches or light walls. A fortified unit gains a defensive bonus of 5% per turn it remains motionless, to a maximum bonus of 25%. A unit loses this bonus if it attacks or moves from its square.

FORT

If a unit occupies a space in which a worker has built the “fort” improvement, it gains a defensive bonus of 25%.

DEFENSIVE TERRAIN

Many units gain bonuses when they are attacked while occupying certain kinds of terrain. Melee, archer and recon units get a defensive bonus of 50% when defending in forest or jungle, for instance, while mounted and siege units do not.

CITY DEFENSES

Units defending inside cities may get defensive bonuses for a city's fortifications or for its “cultural defensive bonus” (see “Cities,” page 45).

UNIT TYPE BONUSES

Some units receive bonuses when fighting specific unit types. For example, spearmen units receive a hefty +100% bonus when facing mounted units.

PROMOTIONS

A unit may have received one or more “promotions” (see below) which give it combat bonuses.

MULTIPLE UNIT COMBAT

If a unit is attacking a space containing more than one defender, the computer figures out which defending unit has the best odds of defeating the attacker, and then those two units fight it out.

Multiple Unit Combat Results

If the attacker loses the combat, that unit is destroyed as usual. If the attacker wins, the defender is destroyed. However, the attacker cannot occupy the defender's space if other combat units still survive there. All defenders must be destroyed before the attacker can occupy the space.

SPECIAL UNITS

Certain units have special rules governing their combat.

Catapults – Bombards and Barrages

Catapults are “siege weapons.” Catapults have the special “bombard” attack which they can employ against enemy cities. In a bombardment, the catapult attacks the enemy's defensive works, decreasing their effectiveness by 10% or more (the amount depending on the unit's promotions). Bombardment attacks are always successful. A catapult cannot bombard an enemy city once its defenses have been reduced to zero. Bombardment never affects units inside the city.

Catapults can also engage in melee combat like other military units. Catapults have a special “barrage” ability, allowing them to damage more than one unit during an attack (if multiple units are in the defending space). Catapults can receive promotions allowing them to increase the collateral damage of their attacks.

Settlers and Workers in Combat

If an attacker moves into a space containing a worker, the worker is captured. If the attacker moves into a space containing a settler, the settler turns into a worker and is captured.

Invisible Units

Some units such as spies are invisible. They cannot be harmed in combat, even if an enemy unit moves into their space.

Air or Naval Units in Cities

If a ground unit attacks a city, any naval or air units in that city do not take part in the combat. If the city is captured, the naval and air units are destroyed.

Mounted Unit Withdrawal

Mounted units have a special “withdraw” ability which comes into play when a mounted unit attacks a non-mounted unit. If the mounted unit is losing the battle and is about to be destroyed, that unit has a small chance to “withdraw” from the unsuccessful battle, stopping the fight before it is destroyed. Note that mounted units can withdraw only when attacking; they cannot withdraw when defending.

COMBAT INJURIES

A unit which survives combat may have sustained “injuries” which temporarily lower the unit's combat strength. The unit's strength remains lowered until the unit “heals” the damage.

Recovering from Injuries

If an injured unit doesn't move during a turn, it will heal a certain portion of the damage it has sustained. If a unit stays still long enough, it will eventually return to full strength.

The “Heal” Order

If you give an injured unit the “heal” order, the unit will fortify (or sleep) and remain where it is until it is fully healed. You can give the heal order by clicking on the action icon, or by typing [h] on the keyboard.

Recovery Speed

Units heal fastest when they are inside their cultural borders. The healing process is slowed somewhat if the unit is in neutral lands, and it is slowed even more if the unit occupies enemy territory.

MEDIC PROMOTIONS

Units who have received the “Medic” promotion heal 10% faster, as do other friendly units occupying the same space. (The more advanced “Medic II” promotion extends this benefit to units in adjacent spaces.)

PROMOTIONS

When a unit has gained a certain amount of experience in battle, it becomes eligible for “promotion.” Promotions give the unit special abilities, making the unit stronger, faster, or better

in some other way. Some promotions are available only to certain unit types; some require that the unit possess other promotions before they are available.

There's no limit to the number of promotions a unit can receive.

EXPERIENCE POINTS

When a unit wins a battle, it gains one or more "experience points" (xps). A unit may begin the game with xps if it is constructed in a city containing a barracks, and certain "civics" (see page 82) will give new units xps as well. When the unit has accrued enough xps, it is eligible for promotion.

A unit receives the first promotion when it has 2 xps. The second requires 5 xps, the third 10, the fourth 17, and so on.

The Details Box displays how many xps the currently-active unit has, and how many are needed for the next promotion.

COMBAT EXPERIENCE POINTS

The amount of xps you get for winning a battle depends upon whether you're attacking or defending and the relative strengths of the units involved. A unit gets twice as many xps for attacking as it does when defending. Further, if you defeat a stronger opponent you get more xps than you do for defeating a weaker opponent.

Note that units get NO xps for defeating non-combat units (like settlers and workers).

XP LIMITS WHEN FIGHTING BARBARIANS AND ANIMALS

Animals: A unit with five or more xps gets NO additional xps for defeating animals. A unit with four or fewer xps does get xps for defeating animals.

Barbarians: A unit with 10 or more xps gets NO additional xps for defeating barbarians. A unit with nine or fewer xps does get xps for defeating barbarians.

NON-COMBAT EXPERIENCE POINTS

The following are cumulative.

Barracks: Units start with 2 xps if constructed in cities with barracks.

Vassalage Civic: Units start with 2 xps if constructed by civilizations using the "Vassalage" legal civic.

Theocracy: Units start with 2 xps if constructed in a city with the state religion while the civilization is employing the "Theocracy" civic.

PICKING THE PROMOTION

When your unit is eligible for a promotion, the available promotions appear in the unit's action buttons. Click on a button to acquire that promotion.

PROMOTIONS LIST

See page 136 for a complete list of promotions available to units.

CITIES

Cities are vital to your civilization's success. They allow you to build units, buildings and wonders. They allow you to gain wealth and research new technologies. They allow you to dominate terrain. Cities are fairly complex entities, and a good deal of your time will be spent on their maintenance and management. You cannot win without powerful, well-situated cities.

BUILDING CITIES

Cities are built by settler units. If the settler is in a place where a city can be built (see next), the "build city" action will appear in the settler's action box. Simply click on the action button and the settler will disappear, to be replaced by the new city. The program suggests a name for this city, or you can give it any name you want. (Once built, city names cannot be changed.)

WHERE TO BUILD CITIES

A city's ultimate success or failure will depend greatly upon where it is constructed. Determining the best site is complex, and must take into account the availability of food, production, commerce and resources, your transportation network, and the

proximity to friendly cities as well as to potential enemies. Though cities are usually sited to expand one's borders and to take the best advantage of local resources, a city may also be built for purely geopolitical reasons – to obstruct another civilization's expansion, for instance.

Where You Can't Build Cities

Cities cannot be constructed within two spaces of another city. Cities cannot be constructed in impassable spaces. Cities cannot be built in another civilization's territory.

Tips for Finding Good City Sites

Consider building cities in the following locations:

- Near resources.
- On or near rivers.
- On coastlines, especially on the mouths of rivers or near ocean resources.
- Near a variety of terrain types, including hills and grassland.
- About 4 to 5 spaces away from your existing cities. This allows each city to access all spaces within their "city radius" (see below) with little or no overlap.
- To obstruct other civilizations. Other civilizations' units cannot pass through your territory without your permission. It's often extremely useful to build cities to block their expansion.

YOUR CAPITAL CITY

The first city you construct becomes your civilization's "capital" and the heart of your nation. The government of your nation is here, residing in the "Palace," a special building that is built automatically when the capital city appears.

Corruption: The "Distance Penalty"

City governments tend towards corruption, and the problem grows worse the farther the city is from the capital city. This effect is called the "distance penalty" and it reduces a city's commerce. Cities built near to the capital city suffer little from corruption, while distant cities suffer greatly.

COUNTERING CORRUPTION

The distance penalty can be countered in a number of fashions. The "National Property" civic removes the distance penalty entirely. The "courthouse" building decreases corruption in the city where it is built. The Versailles and Forbidden Palace wonders cause their cities to become additional centers of government, greatly decreasing corruption in themselves and surrounding cities.

Trade

International trade routes are traced from your capital city to the other civ's capital city. If that path is blocked, the two civs cannot engage in trade. Further, your resources must be connected via trade route to your capital to be able to be traded with other civs. Likewise, your cities gain the benefit of resources acquired from trade only if they are connected to the capital.

Changing Your Capital

You can move your capital from the original city to another by building a Palace in the new city. Upon completion, the original Palace disappears and the new city becomes your nation's capital.

Losing Your Capital

If your capital city is captured or destroyed, another city in your civilization is assigned as your capital and provided with a Palace.

CAPTURING CITIES

You can capture barbarian cities or cities belonging to civilizations that you are at war with. To do so you must enter the city with a military unit; this usually involves destroying the enemy units defending the city. When you capture an enemy city you have the option of destroying the city or installing a new governor. If you choose to destroy the city, it and everything it contains is done away with. If you choose to install a new governor, the captured city will usually go through several turns of "resistance" (see following) before joining your civilization. If the captured city has a population size of 1 or has no cultural value, you will automatically destroy the city.

Resistance

After you capture a city, it may be a while before its citizens recognize their good fortune in having gained such a wise and benevolent leader as yourself. In the meantime, they may “resist” your rule. Further, cities under great cultural pressure may go into resistance before revolting and “flipping” to another civilization’s control (see “Cultural Borders,” page 63).

Note that your cities are more likely to flip if their religion is different from your state religion and the same as the state religion of the civilization putting pressure on them.

Effects of Resistance

No Production, Commerce or Food: If a city is in resistance, its population refuses to work. Thus the city produces no food, production, or commerce for the duration of the resistance.

No Cultural Radius: The city has no “cultural radius” (see page 61).

No Cultural Defensive Bonus: The city receives no defensive bonus for size or culture (see “City Defenses,” page 49).

Duration of Resistance

The duration of a city’s resistance is based upon the city’s similarity or dissimilarity to your civilization. If you recapture one of your own cities shortly after it was taken from you, you’ll see little or no resistance. A foreign city that has been under a lot of cultural pressure from your civilization will tend to spend less time in resistance, as will a city that shares your civilization’s religion. A large, established foreign city with a lot of culture and a different religion will resist longer.

You cannot do much to shorten the duration of resistance once it is in progress. However once the resistance ends you can lessen the chances of the city returning to that state by passing your state religion to that city and building temples and such, and by raising the city’s culture and reducing any outside cultural pressure on that city. It is also a good idea to have one or two units garrisoning a city in resistance.

A “Great Artist” (see “Great People,” page 91) can instantly end resistance in a city by creating a Great Work in it – but be warned that this will consume the Artist.

CITY DEFENSES

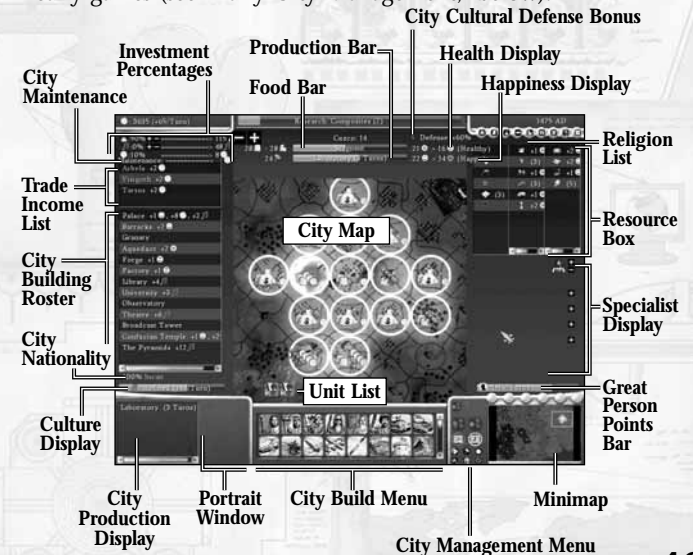
Cities are defended from capture by the units inside them. Archer units get a defensive bonus (see page 138) when defending inside cities; this makes them particularly good choices for early garrisons. You can construct a number of buildings to enhance a city’s defense: walls and castles, for example.

A city with a high “cultural value” (see page 50) will give a defensive bonus to the units defending the city. However, the physical and cultural defensive bonuses are NOT cumulative: the units receive whichever of the two bonuses is higher.

Note: Modern military units – musketeers and later – get no benefit from man-made defenses (walls and castles). They do get cultural defensive bonuses, however.

THE CITY SCREEN

To get to a city’s city screen, double-click on the city on the Main Map. The city screen contains a number of important elements to aid you in managing the city. It looks quite complicated at first, but you can ignore a whole lot of it in your early games (see “Early City Management,” below).



UNIT LIST

The unit list displays all of the units that currently occupy the city. You can activate a unit by clicking on its icon in this list.

CITY PRODUCTION DISPLAY

The city production display tells you what is currently being produced in the city and the number of turns until completion.

CITY BUILD MENU

The city build menu lists all of the military units and buildings that can be constructed there. You can change a city's current production by clicking on an item in the list. Buildings that appear greyed out have been "unlocked" but cannot currently be built. [Rollover] the grey button to get popup help about why that building cannot be constructed at this time.

CITY MANAGEMENT MENU

The city management menu has a variety of functions. It allows you to "hurry" city production (if you have the appropriate civics). It allows you to "automate" your city's production (see page 152 for details). It allows you to tell your city to emphasize food, production, commerce, research, the creation of great people, or force the governor to avoid growth in that city.

The City Management Menu is discussed in detail in the "Advanced Cities" section of the manual.

CULTURE DISPLAY

The culture display shows you how many "culture points" your city is generating. It also tells you what your city's current cultural "rank" is. The ranks are poor, fledgling, developing, refined, dominant, and legendary. See "Culture Points" below.

CITY BUILDING ROSTER

The city building roster displays what buildings you have constructed in your city. The roster also displays how much culture, happiness, gold, production, and other assets the buildings provide. [Rollover] a building to get more info on it.

CITY CULTURAL DEFENSE BONUS

This displays the cultural defense bonus your units get from the city.

CITY NATIONALITY

This displays the nationality breakdown of the city: what percentage of the population is your nationality, and what percentage represents other nationalities. Cities with high foreign nationalities are more likely to revolt and "flip" to that nationality, and they suffer greater "war weariness" unhappiness if you go to war against that nationality.

CITY MAINTENANCE

This displays the city's current "maintenance" cost to your civilization.

RELIGION LIST

This tells you what religions are present in the city, and what percentage of the population worships each.

FOOD BAR

This shows you how much food your city currently has in storage, and how long until the city's population expands.

PRODUCTION BAR

This shows you how much production your city currently has in storage, and how long until the city completes its current project.

HEALTH AND HAPPINESS DISPLAYS

These displays show you how "healthy" and "happy" your city is. (See below.)

TRADE INCOME LIST

This displays any cities that this city is regularly trading with, and the income the city is getting from that trade.

SPECIALIST DISPLAY

This shows you if any of your population has been assigned to be a "specialist" and how many specialist slots are still open. See below.

RESOURCE BOX

The resource box displays what resources your city has access to – including local, national, and trade-based resources.

THE CITY MAP

In the center of the city screen is the “city map.” It displays your city in the center and the “city radius” – the area around your city that your city’s population can work. (See below for more details on the city radius.) The map shows which of the squares are currently being worked – these are indicated by circles around the square.

The city automatically assigns its population to work squares that provide it a balanced supply of commerce, food and production. You can change a city’s priorities in a number of ways; see “Advanced Cities” for details.

The City Screen “Lite”

You can access a simplified version of the city screen by clicking on the city’s name on the Main Screen, rather than on the city itself. This is an important distinction: double-click on the city itself to reach the City Screen; click on the city’s name to reach the “Lite” City Screen.

CITY MANAGEMENT

As said above, cities are somewhat complex entities in *Sid Meier’s Civilization IV*. However, they’re also heavily automated, and to a large degree they’ll govern themselves. For the first few games all you really need to think about is what the city will build and how to protect the city and connect it to your other cities.

Once you have a few games under your belt you might want to check out “Advanced Cities” to learn how all of the buttons, levers and dials work. In the meantime, here are a few things that affect the success of your city. If you have questions, check the Civlopedia or the “Advanced City Rules” section.

City Growth and Starvation

The “Food Bar” on the Main Screen (as well as on the City Screen) tells you if your city is growing, stagnant, or declining.

A city survives on the food it gathers from the surrounding countryside. If the city takes in more food than it is using, the

city’s population will grow. If the city takes in less food than it needs, the city’s population will decline. Your workers can increase a city’s food supply by “improving” the land around the city with farms and by clearing forests and jungles.

City Commerce

Each of your cities generates a certain amount of “commerce” each turn. The base amount is determined by the land surrounding the city: e.g., gold mines generate a lot of commerce, as do squares bordering rivers, while desert squares produce no commerce. This base amount is modified by a large number of factors, including your civilization’s civics, whether or not the city is located on a coast, and so forth.

Your civilization’s income is the sum of all commerce generated by your cities plus commerce generated through trade with other civilizations, minus your expenses and losses from corruption (see “Corruption,” page 46).

You expend your income in a variety of ways: to support military units, to hurry production of units (under certain civics), to purchase items from other civilizations and so forth, and a large portion of your income is spent on technology research. You can see how all of your money is being spent by opening the “Financial Advisor” screen [F2].

INCREASING CITY INCOME

There are several things you can do to increase a city’s income. Your workers can build improvements such as “cottages” and “mines” around the city. They can also connect your cities with roads to produce trade routes and increase commerce. You can construct income-generating (or expense-reducing) buildings like Courthouses, Markets and Harbors in the cities. If there are unhappy citizens in the city, you can build temples and such to get them happy and back to work. And a variety of Wonders improve a city’s income, as well. Check ‘em out.

In addition, to improve your civilization’s overall cashflow, you can change “civics,” some of which can have great effects on your commerce. You can also reduce the amount of income you spend on technology research by clicking on the [-] minus symbol of the “Technology Research Percentage” button on the Main Screen.

For further information on this subject, see “Advanced Cities.”

City Health

The City Health/Happiness Display on the City Screen tells you how healthy your city is. Further, if a city is unhealthy, an “Unhealthy City” icon (see diagram) will appear next to the city’s name on the Main Screen.

A city can be healthy or unhealthy. In general, the larger a city is, the more unhealthy it is. Cities sited near jungles or floodplains tend to be unhealthier than ones surrounded by grasslands. Cities near to rivers or freshwater lakes are healthier than ones that aren’t. Cities with factories are less healthy than cities without them, and so on.

A city’s poor health has a number of detrimental effects. Most importantly, an unhealthy city requires more food to sustain its population, and cities that are too unhealthy may begin to starve. You can improve a city’s health by clearing jungles, producing certain buildings, and by accessing more kinds of food resources.

City Happiness

The City Health/Happiness Display on the City Screen tells you how happy your city is. Further, if a city is unhappy, an “Unhappy City” icon (see diagram) will appear next to the city’s name on the Main Screen. Unhappiness is caused by a number of factors, including overpopulation and war.

If a city’s inhabitants are unhappy, some of them will refuse to work. These slackers continue to consume food, however, but they bring in no food, production, or commerce.

You can increase a city’s happiness by constructing certain buildings – temples and coliseums, to name two. Various resources will increase a city’s happiness, as will certain civics.

WE LOVE THE KING!

If a city is especially well-run, your happy people may reward you with a “We Love the King” celebration.

REQUIREMENTS

We Love the King occurs randomly to eligible cities. In order to be eligible, the city must meet the following criteria:

- The city’s population must be greater than 7.
- The city must have no angry citizens.
- The city must not be losing any food because of unhealthiness (see “Advanced Cities” for details on city health).

EFFECTS

A city that loves the king pays no maintenance costs that turn, which can be a significant financial boost to your empire.

Specialists

When your city has grown a bit in size, you might want to consider creating one or more “specialists” in that city. Specialists are created by taking a population point of the city and assigning that population to a specific job: priest, engineer, artist, and so forth. Each of these specialists provides a specific bonus to the city; in addition, specialists allow the city to generate those incredibly useful “Great People” (see page 91). The more specialists a city has, the faster that city will generate a great person.

WHEN YOU CAN APPLY A SPECIALIST

A fresh new city doesn’t have the population or facilities to support a specialist. Each specialist removes one population point from the workforce: thus, if your city has a size of 1 and you create a specialist, no one will be working the fields and the city will starve. As the city reaches medium size, you may be able to assign a specialist without starving your city, and once a city becomes large enough, it will have excess population who can be turned into specialists without much ill effect on the city’s intake of food, commerce or production. In addition, the city must have a certain level of infrastructure

to support specialists. You cannot create a priest in a city that has no religious buildings, for example, or a scientist in a city without libraries, universities and so forth. These and other buildings will support one or more associated specialists. In addition, certain wonders allow the creation of specialists, as do certain civics. See the Civlopedia for more details.

SPECIALIST TYPES

Artist: +1 Research, +4 Culture, +3 Great Person Birth Rate
Artists increase the odds of a city generating a Great Artist.

Engineer: +2 Production, +3 Great Person Birth Rate
Engineers increase the odds of a city generating a Great Engineer.

Merchant: +3 Gold, +3 Great Person Birth Rate
Merchants increase the odds of a city generating a Great Merchant.

Priest: +1 Production, +1 Gold, +3 Great Person Birth Rate
Priests increase the odds of a city generating a Great Prophet.

Scientist: +3 Research, +3 Great Person Birth Rate
Scientists increase the odds of a city generating a Great Scientist.

Citizen: +1 Production

The citizen is the “default” specialist. If your city has more population than it needs to work the lands, all excess population is put into this category. If you create another kind of specialist, the city will use a citizen if available, rather than a population point working the fields.

ASSIGNING A SPECIALIST

If you are eligible to create a specialist in a city, a small “+” (plus sign) will appear next to the specialists you are able to create. Click on the plus sign to assign a citizen or population point to that specialty. You can remove a specialist by clicking on the “-” (minus sign) next to the specialist.

Note that some wonders automatically create specialists in cities. You cannot remove those specialists from their assigned tasks. Certain civics and wonders also grant free specialists in all of your cities; you can choose to make them whatever specialists you like, but you cannot turn them back into population.

City Symbols

One or more icons may appear next to a city’s name on the Main Map. Here’s what they mean:



Some citizens in the city are unhappy.



The city is unhealthy



The city is connected to the capital by a trade route.



Buddhism is practiced here.



Christianity is practiced here.



Confucianism is practiced here.



Hinduism is practiced here.



Islam is practiced here.



Judaism is practiced here.



Taoism is practiced here.



The city is in revolt. (The number tells for how many turns it will remain in revolt.)



This city produces the most research points for your civ.



This city produces the most wealth for your civ.



This city produces the most production for your civ.



This city has a “center of government” in it, either the Palace, Forbidden Palace national wonder or the Versailles world wonder.

CONSTRUCTING UNITS AND BUILDINGS IN A CITY

When you first build a city, the “City Build” menu appears on the screen. This menu displays all of the buildings and units that this city can produce at this moment in time. Each entry is followed by a number in parentheses; this number tells you how many turns the unit or building will take to produce. The computer may “recommend” one or two units or buildings it thinks might be useful at this time. It also tells you why it is recommending that unit – to improve your “military,” “economy,” etc. You do not have to follow the computer’s recommendations of course. Just click on the entry you want the city to build and it will start production. You can [Rollover] the selection to see hints on what they do.

If you click on the “Examine City” button, that city’s “City Screen” will open up. The City Build menu is at the bottom-center of the City Screen; click on an item there to begin construction.

Changing Construction Orders

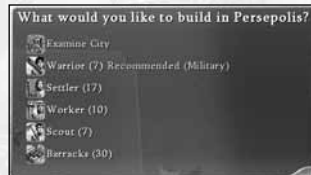
If you want a city to temporarily halt production on one item and begin production on another, go to that city’s City Screen and click on the new item in the City Build menu. Production on the new item will begin immediately; once the new item is completed the city will resume production on the earlier item. If you realized you made a mistake and never want to return to construction of the first item, click on its name where it appears in the bottom-left corner of the city screen to remove it from the building queue.

Completing Construction

Once your city has completed construction, the city’s City Build menu will appear again, asking you what the city should construct next.

Constructing Workers and Settlers

When a city is constructing workers and settlers, the city’s excess food is consumed, as well as the city’s production. Thus cities building workers and settlers will not grow in population until the units are complete.



EARLY BUILDINGS AND UNITS

The units and buildings you construct should reflect your objectives. Your specific objectives will vary from game to game and over time during a game, but the “Early Objectives” list is a good place to start.

Build a Warrior

The “Early Objectives” list suggests that the very first thing you need to do is protect your city. To do this you need to build a military unit to garrison your new city – otherwise the city will be captured by the first barbarian or enemy unit that finds it. Generally, at the start of the game the warrior unit is the only one available to you. Build it right away; once it’s complete, “fortify” the unit right in the city.

Build a Unit to Explore

You need to see what’s out there. After you’ve built your warrior, you should build another unit that will go out and take a look around. You might want to build a scout (if one is available to you), otherwise you’ll want to build a warrior or archer.

Build a Worker

You can build a worker to start “improving” the lands around your city. You’ll need to know certain “technologies” in order for your worker to do many of the improvements; if you don’t have these techs, you might want to hold off on building the worker just yet. (And keep in mind that your city isn’t growing while it’s building the worker.)

Build a Settler

If you've discovered a good place to build a second city, you might want to build a settler. It's usually a good idea to have a military unit accompany a settler who is going off into the wild; if you don't have such a unit available, you might want to build it first. (And keep in mind that your city isn't growing while it's building the settler.)

Build Barracks and Walls

It's a good idea to protect your cities with walls once you have the "masonry" technology. They make your cities significantly harder to capture. Constructing a barracks will improve all subsequent military units you build in that city.

And You're Off!

Once you've got several cities on the map, have a few military units protecting them and exploring the world, and a worker or two improving the land and building roads between your cities, the game begins to open up, and your subsequent builds depend upon circumstances, your technologies and your style of play. If you've got "religion," temples are very useful. Granaries store food, which increases the rate at which your cities grow. Libraries increase the rate at which your civilization learns new technologies. Work boats harvest fish and crabs. Galleys explore the coastline. Military units protect your cities and menace your neighbors. At this point the best advice we can give is, "Try stuff out and see what happens."

EARLY OBJECTIVES

Upon building your first city, your objectives probably should be something like:

1. Protect the city.
2. Explore the world, looking for other city sites as well as for loot and for other civilizations.
3. Improve the land around the city.
4. Build additional cities and expand your nation.
5. Connect your cities and resources with transport and trade networks.
6. Crush your enemies beneath the wheels of your mighty chariots.
7. Improve the city's cultural value.

CITY RADIUS

As described above, the "city radius" represents the area around the city that the city's population can "work." When first created, a city radius consists of the city's square and the nine adjacent squares. When a city's culture grows enough to expand the city's borders, the city's radius will expand as well. The radius expands one space in each direction, except the direct diagonal spaces, resulting in a "fat cross" shaped radius.

Important: A city's population can work only on the "fat cross" area surrounding the city, even if the city's radius expands to encompass additional squares.



New City Radius



Expanded City Radius (the "fat cross")

FOREIGN BORDERS AND CITY RADII

A nearby civilization's borders may extend into the squares that would normally be part of your city's radius. Spaces under foreign control cannot be worked and they are not part of a city radius.

CULTURAL BORDERS

Your civilization's cultural borders will appear once you have created your first city. Within these borders lies the territory dominated by your cities. Your cities' populations can work the land inside your borders and workers can build "improvements" to access "resources" and increase city production.

Basically, the bigger your civilization's borders are, the more powerful your civilization is.

CREATING AND EXPANDING BORDERS

Your civilization's borders appear automatically once you have created your first city. At first these borders will be small, encompassing only the eight squares surrounding the city. As the city's "cultural value" grows, that city's cultural borders will expand. The city's borders will eventually merge with the borders surrounding other cities you've built nearby, giving you one contiguous border.

There is a limit as to how large any city's cultural borders will expand. So if you build (or capture!) one or more cities that are far away from the rest of your empire, you may have two or more separate lands to deal with for the rest of the game. This of course is also the case if you build cities on far-away continents or islands.

EFFECTS OF CULTURAL BORDERS

Cultural borders have a bunch of effects on play.

Crossing Borders

Units cannot cross another civilization's borders without having an "Open Borders" diplomatic agreement with that civ – or they must declare war against that civilization to enter. Animals will never cross into a civilization's land (except to attack a unit just inside the borders). Barbarians will, however, since they're at war with everybody all the time.

Movement Inside Foreign Borders

If the civilizations have an Open Borders agreement, then units can use each others' road and rail networks. If not, units do not get the benefits of the other civilization's roads/rails.

City Construction

No one but you can build a city on land inside your borders.

Resources

You can get the benefit of “resources” only if they’re within your borders.

Improvements

Your workers build improvements only on squares inside your cultural borders (except for roads/rails, which they can build anywhere).

CLASH OF BORDERS

When you have a city that is near another civilization’s city, the two will compete for “cultural control” over the squares between them. Generally, if the square is equidistant from both cities, the city with the highest culture value will have control over it. It is important to keep in mind that the earlier a city begins producing culture, the more difficult it will be for a rival city to dislodge the tiles it controls.

Cities are not guaranteed to control a certain number of tiles; if one city’s cultural value greatly exceeds the other city’s, its control may extend to squares closer to the other city and possibly to the squares directly adjacent to it. Since a city can draw sustenance only from squares within its cultural borders, this may greatly limit the city’s growth and possibly lead to starvation or even to the city switching sides and changing its allegiance to the encroaching civilization.

CAPTURED CITY BORDERS

When you capture an enemy city, that city loses all of its previously-earned culture and must begin producing culture from square one. It is not unusual for newly-captured cities to have control of very few tiles until the conqueror begins producing culture in them. Note that a captured city will not begin producing new culture until all “resistance” within the city has ended. (See “Capturing Cities,” page 47.)

TECHNOLOGY

There are over 80 technologies available in *Civilization IV*, each representing an important advance in mankind’s ability to manipulate his environment. Each technology provides your civilization with some cool new ability. Some allow you to build new units and/or buildings. Some allow you to conduct diplomacy with your neighbors. Some provide you with new “civics” (forms of government). Others may allow you to access new resources, or allow your workers to construct new improvements.

It’s critically important to keep up with your fellow civilizations in the technology race. Otherwise they’ll clobber you. There’s nothing worse than going to war against somebody who has the technological edge on you – as the sword-wielding Aztecs discovered when they found themselves facing Spanish soldiers with muskets and cannon.

ACQUIRING TECHNOLOGY

Each civilization begins the game with knowledge of several primitive technologies. This list varies from civilization to civilization: one may know The Wheel and Agriculture, while another may know Mysticism and Fishing. Beyond the original technologies, there are a number of ways to acquire new ones:

Friendly Villages

As your units explore the world, they may encounter tribal villages. These villages may attack your explorers, or they may provide maps, money, or new technology. You need to find the villages quickly, however; there are only a limited number of tribal villages on the map, and all civilizations want them.

Diplomacy

As the game progresses, you will be able to acquire technologies from other civilizations through trade. See “Diplomacy” (page 99) for details.

Research

You can discover new technologies on your own, through research. This is the most common way to acquire technologies. You can begin research once you have constructed your first city.

CHOOSING TECHS TO RESEARCH

After you have built your first city, the “choose a technology” menu appears. This menu lists all of the technologies that you can research at the moment, as well as the time necessary to complete your research. Click on the tech you want your civilization to study. [Rollover] the technology to see a brief description of its benefits and what future technologies it provides access to.

Tech Availability

Not all technologies are available to you at the start of a game. Many techs have “prerequisite technologies” that you must know before you can learn the new technology – for instance, you need to know the Animal Husbandry tech before you can study Horseback Riding and get those cool horse archer units.

Some technologies have multiple prerequisites; other technologies require one tech OR another tech to research. A tech will appear on your list only when you have learned the necessary prerequisite technologies.

The Tech Tree

The extremely useful Technology Tree displays all of the technologies in the game and how they are interrelated. Press [F6] to check out the Technology Tree. You can select which tech to research from the tree. If that technology is not yet available to you, your civilization will study the necessary prerequisite techs in order. If multiple paths lead to a tech, your civilization will pick the fastest.

CHANGING RESEARCH

You are free to change what your civilization is researching at any point in time. You can do this by clicking on the research bar at the top of the main game screen, or by opening up the Tech Tree (see above) and selecting a different tech there.

Note to Veteran Civilization Players: Unlike previous Civilization games, there is no immediate penalty for changing research paths. You can research half of one technology, change to a second technology and finish it, then return to the first one and pick up right where you left off before. Just make sure

you return quickly as your people will start to “forget” what they have learned as time passes.

COMPLETING RESEARCH

When you have completed your research and learned a new technology, you are then asked what you want to study next. All of the just-learned tech’s benefits are immediately available to you.

HOW LONG TO RESEARCH A NEW TECH?

Each turn your civilization generates “research points” which go toward acquiring new technologies. The more research points generated, the faster your civilization will learn new technologies. The Tech Tree and Choose a Technology screen lists the number of turns it will take to learn each technology – at your CURRENT research rate. This rate may change as research progresses.

Generating Research Points

The number of “research points” that you create each turn is determined by the amount of “commerce” the laborers (population) in your cities generate (see “City Commerce,” above). As your cities work the land around them, they earn food, production, and commerce. You use the “research button” to set how much of that commerce you want to turn into research and how much you want in gold. Only commerce generated by your cities can be turned into research: monies you earn from trading, pillaging and looting, merchant activities, and so forth are not available for this purpose.

The Research Button

The research button on the game’s main screen displays the current percentage of commerce you are dedicating to research. At game start it is set at 100%; you can change this at any time.

If your treasury is running low and your current research percentage would cost more commerce than you can spend, the game automatically lowers your research percentage to the highest percentage that you can afford. (You can manually

adjust it even lower, of course.) Note that the game does not ever automatically INCREASE your research percentage; you must take care of that yourself.

SPEEDING RESEARCH

To get the maximum possible research points, first turn your research percentage up as far as it will go without bankrupting yourself. After that, there are a number of other things you can do. These include:

Construct Libraries and Other Buildings

Buildings such as Libraries and Monasteries will increase a city's research.

Assign Scientist Specialists

Change some of your city's populace into Scientist Specialists (see "Advanced Cities"). Wonders such as the Great Library allow you to change more of your populace into scientists.

Civics

Civics like Free Religion and Representation increase your civilization's research.

Increase Commerce

Another way to speed up research is to increase the amount of commerce that your cities are generating. Building cottages with workers, settling more cities on the coast, and signing "Open Borders" agreements (see "Diplomacy" on page 99) with other civilizations will all generate more commerce in your cities. Buildings like Markets and Banks will increase your cities' wealth, thus allowing your civilization to afford a higher research rate.

EARLY TECHNOLOGY LIST

Following is a description of the technologies you are likely to run into in the early game. See the Civlopedia, Tech Tree or poster included with the game to look at the complete Technology list.

Agriculture

Prerequisites: None

Leads To: Pottery, Animal Husbandry

Agriculture allows your workers to construct "farm" improvements. These improve a square's food output, and provide access to rice, wheat, and corn resources. Farm improvements must be built adjacent to "fresh water:" rivers, oases, or lakes. (Note: the later "Civil Service" tech allows workers to build "chains" of farms stretching from the initial fresh water source across the landscape.)

Animal Husbandry

Prerequisites: Hunting OR Agriculture

Leads To: Writing and Horseback Riding

Allows your workers to build the "pasture" improvement. This allows your civ to access horse, cow, pig, and sheep resources.

Archery

Prerequisites: Hunting

Leads To: None

Archery allows you to build archer units (and later, longbowmen, crossbowmen, and horse archers).

Fishing

Prerequisites: None

Leads To: Pottery, Sailing

Fishing enables you to build the "work boat" unit – in coastal cities only, of course. Your cities can now "work" (draw commerce, production and food from) water tiles.

Hunting

Prerequisites: None

Leads To: Archery, Animal Husbandry

Hunting allows you to build scout and spearmen units. Hunting also allows your workers to build "camp" improvements, which provide access to deer, fur (beaver) and ivory (elephant) resources.

Masonry

Prerequisites: Mining OR Mysticism

Leads To: Monotheism, Construction

Masonry allows workers to build “quarry” improvements, which allow your civilization to utilize stone and marble resources. Masonry allows your cities to construct walls, aqueducts (with mathematics), the Pyramids wonder, and the Great Lighthouse wonder (in a city with a lighthouse).

Meditation

Prerequisites: Mysticism

Leads To: The Priesthood, Philosophy

The first to discover this technology founds the “Buddhism” religion. Meditation also allows your cities to build monasteries (in cities with religion).

Mining

Prerequisites: None

Leads To: Masonry, Bronze Working

Mining allows your workers to build “mine” improvements, which increase the production output of hills, and allow your civilization to access copper, iron, gold, silver, and gems (and later aluminum, coal, and uranium).

Mysticism

Prerequisites: None

Leads To: Meditation, Polytheism, Masonry

Mysticism allows your cities to construct obelisks, as well as the Stonehenge wonder. More importantly, this technology leads to meditation and polytheism, both of which provide their first discoverer with a religion.

Polytheism

Prerequisites: Mysticism

Leads To: Priesthood, Monotheism, Literature

The first person to discover polytheism founds the religion of Hinduism.

Pottery

Prerequisites: The Wheel and Agriculture OR Fishing

Leads To: Writing, Metal Casting

Pottery allows your workers to construct “cottages,” which increase the commerce in their space. (Over time, cottages grow to the even more valuable villages and towns). Pottery also allows you to build granaries in your cities.

Sailing

Prerequisites: Fishing

Leads To: Calendar, Compass

Sailing allows you to build the galley naval unit and the lighthouse building. It enables you to run your trade network along the coast.

The Wheel

Prerequisites: None

Leads To: Pottery

The wheel allows your workers to construct roads. It also allows you to construct chariot units (if you have the horse resource).

WORKERS

Workers are non-military units that can “improve” the land and build roads and railroads. Although they cannot fight a lick, workers are among the most powerful units in the game. Once you have a city or two and enough military units to protect them, you’ll want to start cranking out workers – during the early game you may want as many as one per city.

WORKER MOVEMENT

Workers have 2 movement points.

CONSTRUCTING ROADS

Workers can build roads, which speed up your units’ movement. It’s critically important to connect your cities with roads as soon as possible to allow you to rapidly move units to defend threatened cities.

Also, roads between cities and resources create a “trade network”. This too is really important.

Locations of Roads

Workers can create roads on any land squares (except impassable ones). Workers can build roads even in neutral and foreign territory.

The “Build Road” Order

Click on the “build road” action icon (see below), or press the shortcut key [r] to order an active worker to build a road in its current square.

Click on the “Route To” action icon (or press [Alt - r]) to order your worker to build a road to a location, and then click on the space you want the worker to build the road to.

City Spaces

City spaces have roads in them already. Workers do not need to improve the city space itself.

Roads and Resources

If an improved resource is within a city’s “city radius,” that city will get the benefit of the resource, roads or no roads. However, cities further away must be connected to the resource’s space via roads, rails, rivers, or coastline to get the benefits. And your capital city must be likewise connected before you can trade the resource to another civ. (This is another excellent reason to build roads between your cities as early as possible.)

IMPROVING LAND

Workers can “improve” land tiles. They can construct mines, pastures, farms, and other extremely useful things.

Where Improvements Can Be Built

Improvements can be built only in spaces inside your civilization’s “cultural radius” (see page 63). Within that limitation, improvements can be built in any appropriate space. Workers will not construct improvements where they won’t do any good – they’ll not build a mine improvement, for instance, unless they’re on a hill or a space with a resource that requires mines.

Blue Circles

If a worker is within a city’s “city radius,” when the worker is activated the computer may display blue circles on one or more squares within the city radius. The blue circles indicate spaces that the computer thinks could use improving. Note that the computer is only looking at the city the worker is near; another city elsewhere may need more help than that one.

WORKER ACTION ICONS

An action icon will appear in the Action Box only if the action can be performed in the square the worker currently occupies.

Flashing Action Icons

If an action icon is flashing, it means that the computer believes that the flashing action would be quite useful in the space the worker occupies. If two different actions are flashing, either one would be appropriate. (Remember once again that the computer doesn’t know your strategy; you might have other ideas in mind....)

Grey Action Icons

If an action icon is grey, it means that the worker is not able to perform the indicated action, possibly because your civilization doesn’t yet know the required technology.

Changing Improvements

During Construction: If you wish to change an improvement that is under construction, click on the workers involved and give them new orders. They’ll cease work on the original improvement and begin work on the new one.

After Construction: You can also order a worker to replace an existing improvement with a new one. Move the worker to the space and give them orders to build the new improvement; they’ll replace the existing improvement with the new one.

ACTION LIST

Following is the list of actions that a worker can make.



Build Road: Order the worker to build a road (and later, railroad) in the square it occupies. Roads can be built on any land space (except for impassable spaces).



Route To Mode: Order the worker to build a road (and later, railroad) from the square it occupies to a specific space. The worker will find the shortest route and begin construction. The worker will take advantage of any existing road/railroads that would cut its work.



Build a Camp: Construct a camp in the space. Camps provide access to the deer, fur (beaver), and ivory (elephant) resources. They can only be built in spaces containing those resources.



Build a Cottage: Construct a cottage. Cottages increase the commerce output of a space. Cottages eventually grow into hamlets, villages and then towns, each of which further increases the space's commerce output.



Build a Farm: The worker builds a farm improvement in the space. Farms improve the food output of a space. Farm improvements must be built adjacent to "fresh water sources:" rivers, oases, or lakes. (Note: the later "Civil Service" tech allows workers to build "chains" of farms stretching from the initial fresh water source to spaces across the landscape.)

Farms can also be built atop corn, rice or wheat, providing access to those resources.



Build a Fort: Construct defensive fortifications. Units in spaces with forts get a 25% defensive bonus.



Build a Lumbermill: Construct a lumbermill in the space. Lumbermills increase the production output of the space. If the space is adjacent to a river, lumbermills also increase the commerce of the space. Lumbermills can be built only in forest spaces.



Build a Mine: Construct a mine improvement in the space. Mines can be built on hills, where they improve the hill's production output. They can also be built on spaces containing copper, iron, gems, gold, and silver (and later, aluminum, coal, and uranium), providing access to these resources.



Build a Pasture: Build a pasture in the space. Pastures provide access to horse, cow, pig and sheep resources; they can only be built in spaces containing those resources.



Build a Plantation: Build a plantation in the space. Plantations provide access to bananas, dyes, incense, silk, spices, and sugar resources and can be built only in those spaces.



Build a Quarry: Build a quarry in the space. Quarries provide access to stone and marble resources and can be built only in those spaces.



Build a Watermill: Construct a watermill in the space. Watermills increase production. Watermills can be built only in flat (non-hill) spaces bordering a river.



Build a Windmill: Build a windmill in this space. Windmills increase food, commerce and production on a space. They can be built only on hills.



Build a Winery: Build a winery in this space. This improvement provides access to the wine resource. It can be built only in a space with that resource.



Build a Workshop: The worker builds a workshop. Workshops increase the production yield of a space, but decrease its food output. Workshops can only be built on flat land spaces, not hills.



Chop Down a Forest: Remove the forest.



Clear Fallout: Remove fallout (damage caused by nuclear weapons).



Automated Build Improvements: The worker will move about your civilization, building any improvements the computer thinks would be the most useful.



Automated Build Trade Network: The worker will build roads/railroads between all of your cities and resources.



Automated Improve Nearest City: The worker will build improvements for the nearest city only.

WORK BOATS

Work boats are similar to workers, except that they can build improvements on water spaces. Unlike the land-based workers, work boats are destroyed when they build an improvement.

CONSTRUCTING WORK BOATS

Work boats can be constructed in any coastal city (once you have the fishing technology).

MOVING WORK BOATS

Work boats can move in coastal squares or in ocean squares inside your “cultural borders.” If you have an “open borders” agreement with another civilization, work boats can enter their cultural waters as well.

WORK BOAT ACTIONS

Remember that the work boat is consumed when it performs an action. Here are the actions that a work boat can perform:

Create Fishing Boat

The work boat can turn into a fishing boat when atop a clam, crab, or fish resource. This increases food production on that square +2, and provides access to those resources.

Create Whaling Boat

The work boat can turn into a whaling boat when atop a whale resource. This increases the square’s production +1, and its commerce +2, as well as providing access to the whale resource.

CREATE OFFSHORE PLATFORM

A work boat can turn into an offshore platform when atop an oil resource. This increases the square’s production +2 and its commerce +1, as well as providing access to the all-important oil resource.

RELIGION

Through religion, man has sought to make sense of the universe around him and to determine his place in it. Religion has always played a critical part in human history. Religion has inspired, enlightened and ennobled man; in its name men have erected beautiful buildings, written books of great wisdom, and made music of surpassing beauty. In its name men have also murdered and enslaved their fellows.

RELIGION IN THIS GAME

We know that people have extremely strong opinions about religions – in fact, many a war has arisen when these beliefs collide. We at Firaxis have no desire to offend anyone. However, given the importance that religions have had in human development, we didn’t want to just leave them out of the game altogether; instead we have tried to handle them in as respectful, fair and even-handed manner as possible. (All religions in the game have the same effects, the only difference being their technological requirements.)

There are seven religions in *Civilization IV* (testing having determined that seven is the optimal number for gameplay). When determining which seven to include, we picked those religions that we thought would be most familiar to our audience. We do not mean to imply that these religions are more important, better or worse than any other religions.

We offer no value judgments on religion; we mean no disrespect to anyone’s beliefs. We’re game designers, not theologians.

THE RELIGION ADVISOR

Press [F7] or click on the “Religion Advisor” button on the Main Screen to access the Religion Advisor screen. This screen displays your civilization’s current religious status – which cities have which religions, the percentage of population in each city which follow each religion, and so forth. On this screen you can adopt or change your “state religion” (see below).

FOUNDING A RELIGION

If you are the first civilization to discover the associated technology, the religion is founded in one of your cities. It is extremely useful to have a city where a religion has been founded; it allows a prophet to create a “shrine” in that city (see below).

ACQUIRING RELIGION FROM OTHER CIVILIZATIONS

You can acquire religions from other civilizations that possess them. This occurs without any specific actions from you – though it is more likely to occur if you have Open Borders with the civ. Acquired religions are just like founded religions, except that since they were founded elsewhere, you cannot build a “shrine” for that religion (unless you capture the founding city, of course).

STATE RELIGIONS

When any cities in your civilization possess one or more religions, you may choose to assign one as the “state” religion. Having a state religion tends to make your cities possessing that religion happier and more productive; it also increases the effects of many religious buildings and religious civics.

SPREADING RELIGIONS

Religions spread from two sources. Religions spread from holy cities to other cities they come in contact with (via trade route, for instance). Some religious buildings (see below) increase the speed at which a religion will spread, and a civilization’s religious civic (see “Civics,” page 82) can have a great effect upon the spread of religions, as well. “Missionaries” allow you to increase the spread of a state religion (see next section).

MISSIONARIES

Civilizations can construct special “missionary” units to spread the state religion. A civilization can have only a limited number of missionary units in play at any one time.

Building Missionaries

Civilizations using the “Organized Religion” civic (see page 90) can construct missionaries in any city with the state religion; if a civilization is not following Organized Religion, it can build missionaries only in cities with “Monasteries.”

Moving Missionaries

Once constructed, missionaries can move about the map like any other unit. Your missionaries can freely enter your territory or neutral territory; they cannot enter another civilization’s territory until you have an “Open Borders” agreement with that civ (see “Diplomacy,” page 99).

How Missionaries Spread Religion

When the missionary is in the target city, click on the “spread religion” order in the missionary’s action box (see “Units,” page 32); if the attempt is successful the missionary’s religion is now in the target city.

Note that you can spread religion into your own cities as well as foreign cities; in fact, religions spread more easily into other cities within the missionary’s civilization. It is easier to spread a religion into a city with few or no religions already present; each resident religion decreases the odds of success. There is no limit to how many religions may be present in a single city.

The missionary is consumed in the conversion attempt, successful or not.

BENEFITS OF RELIGION

City Benefits

All cities that possess your state religion receive one extra happy face and produce one additional culture per turn. Spreading your state religion is thus a good way to expand cultural borders in the early stages of your civilization. The holy city for your state religion also receives an additional bonus of five cultures per turn, allowing it to expand its borders very quickly.

Buildings

Without a religion in a city, that city cannot construct religious buildings like Temples and Cathedrals (see below). Cities without religions also cannot create Priest “Specialists” (see page 55).

Intelligence from Cities with Your Religion

If you control the holy city for a religion, you can see what’s going on in any city with that religion, as well as all spaces that city can see.

Shrine Income

If you control the holy city for a religion and generate a Great Prophet, you can build the Shrine for that religion in the holy city. A shrine earns income for every city in the world that possesses your religion (see below).

RELIGIOUS CIVICS

The religious “Civics” describe how religion affects your civilization. There are five religious civics in the game. You begin the game knowing only Paganism, the most basic religious civic; the other four become available when you learn their associated technologies. See “Civics” (page 82) for details.

RELIGIOUS BUILDINGS

There are a number of religious buildings available to be constructed. Religious buildings are dedicated to specific religions and can only be built in cities which have that religion. A city with more than one religion can have religious buildings for each religion: for example, a city with Judaism and Confucianism could construct both a Jewish Temple and a Confucian Temple.

Temples

The most primitive religious building. Temples boost a city’s culture and happiness. They allow 1 population point to be turned into a priest “specialist.”

Monasteries

Monasteries increase a city’s research by a small amount. More importantly, they allow the city to build missionaries to spread your religion.

Cathedrals

Cathedrals drastically increase a city’s culture. They increase happiness if their religion is the civilization’s state religion. They allow two population points to be turned into priests. Your civilization can only build one cathedral for every three temples that your civilization possesses; for example, a civilization with seven temples could build two cathedrals.

Note that “Cathedral” is a generic name for a religion’s grander houses of worship – Jewish synagogues, Islamic mosques, Christian cathedrals, etc., all have the same effects in the game.

Shrines

Shrines can be built only in cities in which a religion has been founded. Shrines are constructed by “Great Prophets” (see page 93); a great prophet is the only unit that can build a shrine, and the prophet is consumed in the process. Shrines increase the spread of the religion, as well as the home city’s culture. They increase the city’s chance of generating prophets and allow the city to assign three population as priests.

Best of all, shrines generate one gold each turn for every city on the map that has the shrine’s religion. Each religion has a different name for its shrine.

RELIGIONS IN THE GAME

The religions are:

Buddhism

The first civilization to discover “Meditation” will found Buddhism.

Christianity

The first civilization to discover “Theology” will found Christianity.

Confucianism

The first civilization to discover “Code of Laws” will found Confucianism.

Hinduism

The first civilization to discover “Polytheism” will found Hinduism.

Islam

The first civilization to discover “Divine Right” will found Islam.

Judaism

The first civilization to discover “Monotheism” will found Judaism.

Taoism

The first civilization to discover “Philosophy” will found Taoism.

CIVICS

Civics represent the various forms of government available in *Civilization IV*. Are you a despot or a king, a democratically-elected ruler or a theocrat? Does your civilization have open markets or closed? Do you have trial by jury, or trial by fire? Many possibilities are available to you.

EFFECTS IN PLAY

The civics you choose to employ have great effect upon the character and success of your civilization. Some civics increase your cities’ productivity. Others increase their wealth. Some civics make it easier to create and maintain standing armies. Others help you to export your religion to other nations. There are no “best” civics in the game: all are potentially very useful in different situations.

THE CIVICS SCREEN

Go to the Civics Screen [F3] to review your current civics, to see which other civics are available to you, and to learn about other as-yet undiscovered civics.

ACQUIRING CIVICS

You begin play with the most primitive civics: despotism, tribalism, and so forth. You acquire other civics through technological advances: the “Hereditary Rule” civic requires that your civilization master the Monarchy technology, for example, while Mercantilism requires Banking. (In addition, the

Pyramids wonder makes all “government” civics available.)

CATEGORIES OF CIVICS

There are five different categories of civics, each controlling a certain aspect of your civilization: Government, Legal, Labor, Economy, and Religion. You will always have one civic of each type in operation. You can change one category of civics without affecting the others.

UPKEEP

Each civic type has an “upkeep” cost associated with it: no upkeep, low upkeep, medium upkeep, and high upkeep. This represents the relative amount of gold that your civilization must pay each turn to employ that civic. In general, the more useful a civic is, the higher its upkeep. The actual cost in gold per turn of civics varies according to the size of your civilization: the more cities you have and the larger your population, the higher the upkeep cost for any and all civics.

If you are considering changing a civic, go to the Civics Screen. Check the Upkeep/Turn value on this screen – it represents your current ongoing civic outlay – then click on the civic you are considering. The Upkeep/Turn value will change to show what your upkeep will become if you change to that civic.

Be careful about changing over to civics with high upkeep costs; they are often powerful, but can put a real strain on your treasury. Some civics may be desirable simply because they have no upkeep costs! It’s often a good idea to check your Financial Advisor screen before changing civics.

CHANGING CIVICS

When you acquire the technology that allows you to use a new civic, a screen will pop up asking if you want to change to that civic. At any other time you want to change civics, you need to go to the Civics Screen by clicking on the icon in the top-right corner of the screen (or type [F3]). Once on the Civics screen, click on the civic or civics you want to change to, then click on the “Revolution” button in the bottom-right corner. (If you decide to keep things as they are and not change any

civics, click on “Exit Screen” rather than “Revolution.”) You may experience a period of “anarchy” (see below); when that passes you will be employing your new civics.

Revolution and Anarchy

Changing civics can be difficult for your loyal citizens, particularly if you are changing multiple civics at once. Your civilization may undergo a number of turns of “anarchy,” during which chaos will reign: your citizens will cease gathering food, treasure, and production materials, cities will halt production, and your income may well plummet precipitously. (Fortunately your units will still respond to orders.) Eventually, things will settle down and return to order.

When contemplating changing civics, go to the Civics Screen and click on the civics you would like to change to. The “Turns for Revolution” display will tell you how long the anarchy will last once you begin the Revolution.

Incidentally, certain civilizations are immune from anarchy: they can change civics any time they want without suffering any disruption (see “Advanced Civilizations,” page 159).

Delay Period

Your citizens can only endure so much change – once you have changed civics you must wait a few turns before you can change them again. This can be awkward – particularly if you discover that you can’t afford to maintain the new civic – but perhaps you should have thought of that before you got everybody so riled up in the first place, huh?

CIVICS LIST

See the Civopedia for an in-depth description of each civic.

Government Civics

DESPOTISM

Tech Requirement: None

Upkeep: Low

Effect: None. This is the basic government civic.

Despotism is a form of government characterized by a ruler who wields absolute power over his people.

HEREDITARY RULE

Tech Requirement: Monarchy

Upkeep: Medium

Effect: +1 happiness per military unit in a city.

Hereditary Rule is a form of government wherein the rulership is passed down from one member of the family to the next.

REPRESENTATION

Tech Requirement: Constitution

Upkeep: Low

Effect: +3 research per specialist, +3 happiness in five largest cities.

In a representative government the population elects “representatives” to run the State on their behalf.

POLICE STATE

Tech Requirement: Fascism

Upkeep: High

Effect: +25% military unit production, -50% war weariness.

Under a police state the government maintains strict control over its populace by means of a police force (and often a “secret” police force).

UNIVERSAL SUFFRAGE

Tech Requirement: Democracy

Upkeep: Medium

Effect: +1 production from town, can spend gold to complete production of a unit/building in a city.

Universal suffrage means extending the vote to everyone, regardless of race, creed, or gender.

Legal Civics

BARBARISM

Tech Requirement: None

Upkeep: Low

Effect: No effect.

Barbarism is the most primitive legal system. Under barbarism, the strong take what they want from the weak.

VASSALAGE

Tech Requirement: Feudalism

Upkeep: High

Effect: New military units receive +2 free experience points; lower unit support costs.

Vassalage is a feudal term referring to the system in which a person enters a contract with his or her lord, agreeing to serve and protect the lord in return for monetary rewards or sovereignty over a parcel of land.

BUREAUCRACY

Tech Requirement: Civil Service

Upkeep: Medium

Effect: +50% production and gold income in capital city.

Bureaucracy is a form of government in which a professional class manages the day-to-day operations of the state.

NATIONHOOD

Tech Requirement: Nationalism

Upkeep: Low

Effect: Can “draft” (see “Advanced Cities”) 3 units per turn, barracks provide +2 happiness.

A “nation” is a group of people sharing some kind of common identity. Nations may be united by language, location, custom, history, or religion (or any combination of them).

FREE SPEECH

Tech Requirement: Liberalism

Upkeep: None

Effect: +2 gold from towns, +100% culture in each city.

The term “free speech” describes a legal system in which a person cannot be stopped from saying anything he or she wants, as long as the speech doesn’t cause immediate harm to those around him or her.

Labor Civics

TRIBALISM

Tech Requirement: None

Upkeep: Low

Effect: None. The default labor civic.

Tribalism is a form of organization which emphasizes the tribe as the sole unit of importance. Individuals have no rights; each man, woman and child exists only to support the tribe.

SLAVERY

Tech Requirement: Bronze Working

Upkeep: Low

Effect: Can sacrifice population to complete building/unit production in a city.

Slavery is a system whereby some people are judged far inferior to others and are treated as possessions.

SERFDOM

Tech Requirement: Feudalism

Upkeep: Low

Effect: Workers build improvements 50% faster.

Serfdom is a more “enlightened” form of slavery in that the power of the master is not absolute and the serfs are accorded a few rights – the right to marry whom they want, perhaps, or the right to own a goat.

CASTE SYSTEM

Tech Requirement: Code of Laws

Upkeep: Medium

Effect: Unlimited artist, merchant and scientist specialists in a city.

The caste system is one where one’s parentage determines one’s place in society.

EMANCIPATION

Tech Requirement: Democracy

Upkeep: None

Effect: Cuts in half the time it takes for cottages to turn into hamlets, then villages, then towns; gives an unhappiness penalty for civilizations not employing this civic.

Emancipation refers to the abolition of slavery, serfdom, and caste system.

Economic Civics

DECENTRALIZATION

Tech Requirement: None

Upkeep: Low

Effect: None. This is the default economic civics.

Decentralization describes an economy in which the central government doesn’t attempt to manage the nation’s production.

MERCANTILISM

Tech Requirement: Banking

Upkeep: Medium

Effect: +1 free specialist per city, no foreign trade routes.

Mercantilism refers to government policy that strictly manages the nation’s economy. The nation may ban all foreign imports.

FREE MARKET

Tech Requirement: Economics

Upkeep: Low

Effect: +1 trade route per city.

A free market system is similar to a decentralized system except that the state maintains some minimal control over the system.

STATE PROPERTY

Tech Requirement: Communism

Upkeep: None

Effect: No maintenance costs from distance from palace, +1 food from workshops and watermills.

The citizens have no private property: everything belongs to the State.

ENVIRONMENTALISM

Tech Requirement: Ecology

Upkeep: High

Effect: +5 health in all cities, +1 happiness from forest and jungle spaces.

Environmentalism describes a society in which every effort is made to remain in balance with nature.

Religious Civics

PAGANISM

Tech Requirement: None

Upkeep: Low

Effect: None. The default religion civic.

“Paganism” describes religions that believe in the holiness of all things around them – rocks, trees, animals, clouds and so forth – rather than in specific concepts or beings.

ORGANIZED RELIGION

Tech Requirement: Monotheism

Upkeep: High

Effect: Can build missionaries without monasteries, cities with state religion construct buildings +25% faster.

An organized religion is one in which there is a central authority which determines theology.

THEOCRACY

Tech Requirement: Theology

Upkeep: Medium

Effect: new units get +2 free experience points when constructed in cities with state religion, no spread of non-state religion in civilization's cities.

A theocracy is a form of government where holy men or women are in charge of the State.

PACIFISM

Tech Requirement: Philosophy

Upkeep: None

Effect: +100% birth rate of great people in cities with state religion, +1 gold support cost per military unit.

Pacifism is the religious belief that all conflict is against the will of God. Man must not fight against his fellow man.

FREE RELIGION

Tech Requirement: Liberalism

Upkeep: Low

Effect: The civilization has no state religion, +1 happiness per religion in a city, +10% research in all cities.

Free religion refers to a society in which no single religion is dominant, in which people are free to worship or not worship as they please. There is no state religion; the government is totally secular.

GREAT PEOPLE

Time and again through history, there have arisen men and women who have profoundly changed the world around them – artists, scientists, prophets and others whose genius sets them head and shoulders above the rest. In *Civilization IV*, such visionaries are called “Great People.”

There are five different kinds of great people in the game: Great Prophets, Great Merchants, Great Artists, Great Scientists, and Great Engineers. Each has a special ability.

GENERATING GREAT PEOPLE

Great people are generated in cities. Each city generates a separate pool of “great people points” – when the city has earned enough points, it will generate a great person. The cost of generating a great person escalates throughout the game: the first great person costs 100 great people points, the second costs 200, and so forth. (The number of points needed to produce a great person is different on the Quick and Epic game speeds.)

The first civilization to discover certain technologies will also receive a free great person in their capital city. For example, the first civ to discover Music receives a Great Artist.

GREAT PEOPLE POINTS

A city generates great people points in a number of ways: by constructing Wonders, by assigning citizens to be specialists, and by choosing certain “civics.”

Wonders

A wonder will generate a certain number of great people points each turn. Further, some wonders can increase a city's (or entire civilization's!) great people point generation significantly (see the “Parthenon” for an example). Like specialists (see next), some wonders increase the chances of generating a specific type of great person in their city.

Specialists

In each city you can assign citizens to be “specialists.” Each specialist provides some kind of production bonus to its city; in addition, most generate great people points (the citizen spe-

cialist being the sole exception). Further, the kinds of specialists you have in a city determine which great people you generate: if all of your specialists in a city are priests, when that city generates a great person, he or she will be a great prophet. If half the specialists are merchants and the other half artists, you'll have a fifty-fifty chance of generating a great artist or great merchant. [Rolling over] the Great Person Points bar will display the percentage chance of getting each type of great person.

Civics

Some civics (see page 82) increase the speed at which you generate great people.

GREAT PEOPLE CHARACTERISTICS

As mentioned above, there are five types of great people. Each type has its own special abilities, but they all share some characteristics:

Can Discover New Technologies

You can expend a great person to discover a new technology. Typically this technology will be in the great person's area of expertise (prophets will usually discover religious technologies and so on), but not always. Once all of the relatively inexpensive technologies have been discovered, the great person may not be able to entirely discover a new tech, but he or she can dramatically decrease the time it takes you to discover it.

Golden Ages

You can expend two or more great people to start a "Golden Age;" see page 94 for more details.

Settling in Cities

All great persons have the ability to settle in a city as a sort of "super-specialist." Settling a great person in a city will add certain bonuses to that city each turn; for example, a Great Prophet will add 2 production and 5 gold to the city he or she settles in.

SPECIAL ABILITIES

In addition to the abilities they share in common, each great person type has unique abilities.

Great Artists

Great Artists can create great works of art in a city; this immediately gives that city +4000 culture points. This is extremely useful if a city is under cultural threat from a neighbor (or if you wish to culturally attack the neighboring cities!). Great Artists can also permanently settle in a city, providing a continuing large cultural and small research boost to the city.

Great Engineers

Great Engineers can "hurry" a city's production, greatly speeding up the creation of whatever the city is presently constructing. Most early wonders can be completed in a single turn by Great Engineers, and later ones can be sped up dramatically. Great Engineers can permanently settle in a city, providing a continuing large production and small research boost to that city.

Great Merchants

A Great Merchant can conduct a "trade mission" which will immediately give you a whole bunch of gold. Trade missions can ONLY be carried out in foreign cities. To conduct a trade mission, first move the merchant to a wealthy and powerful city as far away from your capital as possible. When the merchant reaches the target city you'll be able to conduct the mission. The value of the mission increases the further away and wealthier the target city is. Great Merchants can also settle permanently in a city, providing a continuing large commerce and small food boost to the city.

Great Prophets

Great Prophets can create religious shrines (see "Religion," page 77). However, Great Prophets can create religious shrines ONLY in a city where a religion was founded. Using a Great Prophet is the only way to build a religion's shrine. Great Prophets can also settle in a city, providing a continuing large commerce and small production boost to that city.

Great Scientist

Great Scientists can construct an "academy," a building which greatly boosts a city's scientific research as well as its culture. Great Scientists can also settle permanently in a city, providing a large research and small production boost to the city.

GOLDEN AGES

During certain periods of time, some civilizations seem to burst with energy and creativity. The civilization's people become increasingly productive; technological advances come easy to the civilization; and its culture is the envy of the world. Italy during the Renaissance is one such example, and Great Britain in the 19th century another. In *Civilization IV*, such periods are called "Golden Ages."

ENTERING A GOLDEN AGE

There are two ways to begin a golden age:

The Taj Mahal Wonder

A civilization enters a golden age when it constructs the Taj Mahal wonder.

Sacrificing Great People

A civilization can sacrifice Great People (see previous chapter) to enter a golden age. The first golden age costs two great people, who each must be of different types. The second golden age costs three great people of different types, and so on.

EFFECTS OF GOLDEN AGES

During a golden age, your civilization greatly increases its output of production and commerce, meaning faster build times and increased commerce. (In game terms, every space within your cities' radii that provides commerce produces an extra commerce, and every space that provides production now produces an additional one.)

DURATION OF GOLDEN AGES

Golden ages last eight turns. If you achieve another golden age while in the midst of one already, the eight additional turns are tacked onto the end of the present golden age (meaning that the two ages will last a combined total of 16 turns).

THE END OF THE AGE

Once the golden age ends, your civilization's commerce and production return to their normal levels.

WONDERS

Wonders are the spectacular buildings, inventions, and concepts that have stood the test of time and changed the world forever. The Pyramids, Notre Dame Cathedral, the Statue of Liberty and Hollywood are all examples of wonders. Wonders require much time and energy from your cities, but once completed, they provide your civilization with many benefits.

There are two basic types of wonders: great wonders and national wonders.

GREAT WONDERS

Great wonders are unique; only one of each can be constructed during a game. For example, the Great Lighthouse is a great wonder; whoever completes it first is the only one who may possess its benefits. Great Wonders tend to be quite powerful indeed, but also extremely time-consuming to build.

NATIONAL WONDERS

National wonders may be built once by each civilization in the game. That is, each civilization can have the Wall Street national wonder (though no civilization can have two of them). Each city may only build two national wonders, so be sure to plan ahead where you wish to put them.

CONSTRUCTING WONDERS

Wonders are constructed in cities, like any other building. If you can build a wonder, it will appear in your city build menu; just click on the wonder to get started. Note that only one city in your civilization can be building a single wonder at a time.

Losing the Construction Race

If another civilization completes a great wonder while you are in the process of building it, your construction ceases, and a certain amount of your production efforts are converted into gold. (This does not occur with national wonders, since each civilization can build its own copy of those.)

Wonders and Resources

Certain resources will allow cities to produce wonders at double the usual speed. For example, a civilization that has Stone connected to its trade network can build the Pyramids at a much faster rate.

Industrious Leaders

Leaders who possess the Industrious trait build all wonders at twice the usual rate. (See “Advanced Civilizations” for details.)

Great Engineers

You can sacrifice a Great Engineer in a city to complete (or greatly speed up) that city’s construction of wonders (or any other building or space ship part, for that matter).

EFFECTS OF WONDERS

Wonders have a broad range of effects. Some increase productivity; others increase income from trade. Some improve research, others make your workers build improvements faster. All wonders improve their home city’s cultural output as well as the speed at which the city generates Great People.

CAPTURING WONDERS

If you capture a city with a great wonder, you gain possession of that wonder. If you capture a city with a national wonder, the national wonder is destroyed. If a city is destroyed, all wonders in that city are destroyed along with it. Great wonders can never be rebuilt once they are destroyed.

WONDER OBSOLESCENCE

Some wonders can become obsolete over time. This obsolescence is caused when any civilization learns a specific technology. When that occurs, the wonder’s special effects vanish, but it still continues to produce culture. For example, the Great Lighthouse wonder provides a trade benefit to all coastal cities, as well as +8 culture to the city where it is constructed. The Great Lighthouse is rendered obsolete once any civilization gains the “steam power” technology, at which point the owner loses the Lighthouse’s trade benefit but retains its +8 cultural output.

EARLY WONDERS

Here’s a list of the wonders that you may be able to construct during the early part of the game. Check out the Civlopedia for a complete list of wonders.

Stonehenge

Type: World Wonder

Tech Requirement: Mysticism.

Production Cost: 120

Production Time Halved By: Stone

Obsolete By: Calendar

Cultural Output: 8

Great People Points: +2 (increases chance of producing Great Prophets)

Effects: Free Obelisk building in every city. Centers the world map.

The Parthenon

Type: World Wonder

Tech Requirement: Polytheism

Production Cost: 400

Production Time Halved By: Marble

Obsolete By: Chemistry

Cultural Output: 10

Great People Points: +2 (increases chance of generating Great Artist)

Effects: +50% Great Person birth rate in all cities.

The Pyramids

Type: World Wonder

Tech Requirement: Masonry

Production Cost: 450

Production Time Halved By: Stone

Obsolete By: Nothing

Cultural Output: 6

Great People Points: 2 (increases chance of generating Great Engineer)

Effects: Allows owner to use all government civics.

The Great Lighthouse

Type: World Wonder

Tech Requirement: Masonry

Building Requirement: Lighthouse

Production Cost: 200

Production Cost Halved By: Nothing

Obsolete By: Corporation

Cultural Output: 6

Great People Points: 2 (increases chance of generating Great Merchant)

Effects: +2 Trade Routes in all coastal cities.

The Oracle

Type: World Wonder

Tech Requirement: Priesthood

Production Cost: 150

Production Cost Halved By: Marble

Obsolete By: Nothing

Cultural Output: 8

Great People Points: 2 (increases chances of generating Great Prophet)

Effects: Gain a free technology upon completion of the Oracle.

DIPLOMACY

As *Civilization IV* progresses and your units explore the world, you will meet the leaders of the other civilizations around you. Each leader is different: some are warlike; others, peaceful. Some are backstabbing liars; others are (usually) honest. You'll have to learn how to deal with these characters: some you'll fight right away; others you'll negotiate with – at least until it's time to destroy them a few centuries down the line.

You can accomplish a lot through diplomacy. You can trade technologies, resources, maps, gold, and even cities. You can form mutual protection pacts; you can declare war; you can negotiate peace settlements. Success in *Civilization IV* depends as much on your diplomatic skills as it does on your martial and management prowess.

LEADERS

Each leader has his or her own agenda. They, too, seek to achieve victory – some through force of arms, others through technological prowess, others through cultural domination. You'll get clues to their intentions as the game progresses – the more warlike leaders will usually not trade anything of military value, the knowledge-focused leaders will seek advanced technologies, and so forth. See “Advanced Civilizations” and the Civopedia for more details about each leader.

Leader Attitudes

During the game, each leader will form an opinion of you: how great a threat you are to their civilization, whether you have fought them in the past, whether you have allied with their enemies, how much you can be trusted to keep your word, etc.

Leader attitudes come in five flavors: **friendly**, **pleased**, **cautious**, **annoyed**, and **furious**. The more a leader likes you, the more likely he or she is to be willing to trade with you, and the better deal he or she will give you. You may be able to trade with hostile leaders, but you're likely to pay a stiff price for whatever you get. You can check your relations with any leader with whom you have contact by [rolling over] that leader's

name on the Main Screen's "score box." This will display the leader's attitude and the reasons why they feel that way.

Refusing to Talk

Sometimes a particularly angry leader won't speak to you at all. This occurs most often when your civilizations are at war. Check back again in several turns – by then he or she may have cooled off enough to be willing to speak, especially if the military situation has changed.

OPENING DIPLOMACY

You can open diplomacy from the Foreign Advisor screen [F4], or by clicking on the leader's name in the "score box" on the main screen. Occasionally, a leader might open negotiations with you – you can agree or refuse to see the other leader as you like. When diplomacy begins, the Diplomacy Screen appears.

DIPLOMATIC OPTIONS

When diplomacy opens, you (and the other leaders) usually have several choices available:

Declare War

The polite way to open hostilities.

Offer Peace

Available only if you're at war.

Trade

Try to trade stuff with the other civilization. This takes you to the Trade Table (see following page).

Review Ongoing Deals

Some "annual" deals continue over time (see below). This option lets you review any such deals you have in place with the leader.

Exit

End the diplomatic session.

MAKING TRADE OFFERS

On the Trade Table, all of your tradable items are listed in the right-hand column, while the other leader's stuff is in the left-hand column. To make an offer, click on one (or more) items in your column, and one (or more) items in the other leader's column, and then click on the "make offer" button. If the leader agrees, the deal is done. If not, you can exit diplomacy or try another deal.

If you click only on an item in the other leader's column but not on anything in your column, you are "demanding tribute," ordering the leader to give you the item for free. He may refuse, of course, and his opinion of you will probably decline. If you click only on an item in your column but none in the other leader's, you are giving the leader that item for free, as a "goodwill gesture." Leaders never refuse goodwill gestures. Goodwill gestures often cause the leader to raise his or her opinion of you.



RESPONDING TO OFFERS

When another leader makes you an offer, you must choose to refuse or accept the offer. If you accept, the trade occurs immediately. If you decline, the other leader may ask you to make a counter-offer, may end diplomacy, or may declare war on you.

UNTRADEABLE ITEMS

Often you will see items in the leader's column that are colored red. This indicates that the leader will not (or cannot) trade these items with you, so don't bother asking.

TECHNICAL REQUIREMENTS FOR TRADE

At the beginning of the game, your diplomatic options are quite limited. You'll need to acquire certain technologies before you can expand your interactions with your neighbors. You cannot trade technology, for instance, until either you or your partner knows the "Alphabet" technology. Both sides do not need to know the required technology, but at least one of the traders must.

CATEGORIES OF TRADABLE ITEMS

There are two distinct kinds of items you can trade: "immediate" items or "annual" items. Immediate items can only be traded for other immediate items, and annuals only for other annuals. You are free to trade any items within a group – technology for gold and a world map, for instance, since they're all immediate items – but you can't trade an immediate item or items for one or more annuals.

Immediate Items

These are items that are exchanged immediately. That is, the deals have no duration. Immediate items include: lump sum of gold, maps, technology, peace treaties, cities, and so on.

Annual Trade Items

Annual trades last for a minimum of 10 turns. They can continue for longer than 10 turns if both sides agree, but neither side can cancel an annual trade before 10 turns are up – except by declaration of war. Annual items include resources and gold per turn.

TRADABLE THINGS

Here's a list of things that can be traded.

Gold, Lump Sum - Immediate Trade

A chunk of gold. 1 gold. 15 gold. A billion-billion gold.

Gold, Per Turn - Annual Trade

A certain number of gold per turn: 2 gold/turn. 30 gold/turn. This lasts a minimum of 10 turns. Note that you are obligated to pay this gold no matter what: empty treasury, anarchy, etc. Your treasurer will automatically disband units as necessary to fulfill your obligations.

World Map - Immediate

All of the territory explored by your partner is now visible on your main map and vice versa.

Open Borders - Annual

Your units can now move freely through your partner's territory, and vice versa. If you declare war against a civilization you have an Open Borders agreement with, all of your units are removed from his territory, and all of his units are removed from yours.

Furthermore, your cities' trade routes extend to include those civs which whom you have Open Borders. Since foreign trade routes are much more lucrative than domestic ones, signing Open Borders can significantly increase the commerce of your cities. Various buildings and civics can increase this income even more.

Defensive Pact - Annual

If either of your civilizations is attacked by a third party, the other civilization automatically declares war on the attacker. This agreement is nullified if either of the signatories attacks anybody.

Permanent Alliance - Immediate

Your two civilizations essentially become one nation with two rulers. You each continue to have control over your units and cities, but you share everything else: resources, technologies, maps, and victory or defeat. If one declares war, the other automatically does so as well. If one signs a treaty, the other is bound by it.

Technology - Immediate

You immediately learn the technology that has been traded to you.

Resources - Annual

If a resource is traded to you, you get all of its benefits for as long as the agreement is in place. The trader loses all of the benefits, unless he or she has more than one. (For instance, if somebody trades you iron, you can then construct any military unit that requires iron. The trader can no longer produce such units, unless he's got another source of iron.)

Declare War With - Immediate

One civilization asks another to declare war on a third. A leader can ask another leader to declare war on a civilization that the first civilization is not at war with, but the other leader will usually charge through the nose for doing so.

Cities - Immediate

Your opponent agrees to give you one or more of his or her cities. If you have open borders with the other civilization, all units remain in place. If not, the units in the city are shifted back to their own territory. It is extremely rare for a leader to give up a city unless under great duress.

Declare Peace - Special

Peace breaks out between you and your opponent. All units are immediately vacated from each other's terrain. Peace lasts for a minimum of 10 turns. You can only trade peace for gold or technology.

Declare Cease Fire - Special

Peace breaks out between you and your opponent. All units are immediately vacated from each other's terrain. There is no duration for this cease fire – either side can immediately declare war again. Nothing can be combined with a cease fire deal.

Change Civics or Religion - Immediate

You can ask another civilization to change its religion or civics to match yours.

VICTORY

There are multiple paths to victory in *Civilization IV*. You can win by achieving political, cultural or technological dominance, and of course, by the ever-popular “crushing everyone else into dust beneath the wheels of your chariot” method.

EFFECTS OF VICTORY

You win. Everybody else loses. Game over (but see below). If your victory was spectacular enough, your exploits might be recorded on the *Civilization IV* Hall of Fame screen.

Continuing a Game After Victory

You can continue playing after winning the game, but any further accomplishments will not be recorded on the Hall of Fame screen. It is also impossible to win another victory type after victory or defeat has initially taken place.

DEFEAT

If you are wiped off the map or if one of your opponents achieves one of the victories listed below, you lose. The game is over. All of the other leaders will mock you. It's time to start a new game and try again.

VICTORY CONDITIONS

Following is a list of the ways you can achieve victory in *Civilization IV*. For more details, press [F8] to go to the “Victory Conditions” screen. There you will see a list of the roads to victory available in the present game and how close you are to achieving each of them. (Note that if a specific type of victory is not listed on the Victory Conditions screen, it means that this particular victory was excluded during game setup.)

Time Victory

The game ends at a specific turn, usually 2050 AD. The civilization with the highest score at the end of that turn wins.

Conquest Victory

The game ends when one civilization eliminate all rivals. A civilization is eliminated when its last city is captured or destroyed – even if it still has units in play.

Domination Victory

The game ends when one civilization controls an overwhelming percentage of the world's land area and population. To be precise, you need to control two-thirds of the land spaces and have 25% greater population than any of your rivals.

Cultural Victory

The game ends when a civilization has three cities with "Legendary Culture" (in "Normal" game speed, 50,000 culture points per city).

Space Race

The game ends when you construct all of the components for your space ship, launch it and successfully reach Alpha Centauri. You can keep track of the space race with rival civs by monitoring the [F8] Victory Conditions screen. This screen lists all of the components needed to build the spaceship and how many you have completed so far.

Diplomatic Victory

Once the United Nations is built, a Secretary-General is voted upon. The Secretary-General can then periodically call for votes on a variety of resolutions. One of these resolutions is for "Diplomatic Victory;" the winner of that vote wins the game.

The background of the page is a dense, light-colored collage of various technical and architectural drawings. It includes floor plans, elevations, and diagrams of mechanical parts. A prominent feature is a large, detailed drawing of the Statue of Liberty's head and crown in the upper right quadrant. Other elements include a camera-like device, a globe, and various geometric shapes and lines.

Chapter 3

**ADVANCED
RULES**

INTRODUCTION

This section of the manual contains advanced rules for *Sid Meier's Civilization IV*. The advanced manual includes sections on terrain, units, cities, technology, difficulty levels, the Options Screen, multiplayer games, and mods.

TERRAIN

In this section you'll find a description of all of the terrain-types in the game, followed by a list of the resources.

TERRAIN TYPES

Coast

Food: 1
Production: 0
Commerce: 2
Defensive Bonus: 10%

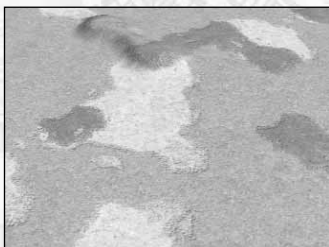
Cannot build cities on coastal squares.



Desert

Food: 0
Production: 0
Commerce: 0
Defensive Bonus: 0%

+1 commerce adjacent to river; improvements take 25% longer to build.



Grassland

Food: 2
Production: 0
Commerce: 0
Defensive Bonus: 0%

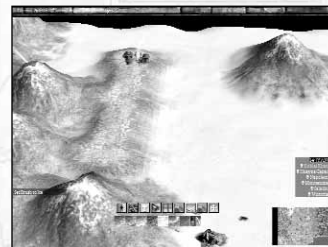
+1 commerce adjacent to river.



Snow

Food: 0
Production: 0
Commerce: 0
Defensive Bonus: 0%

Improvements take 50% longer to build.



Ocean

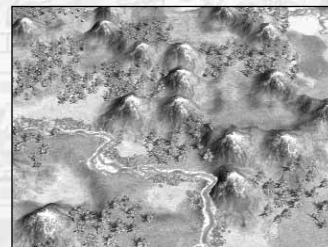
Food: 1
Production: 0
Commerce: 1
Defensive Bonus: 0%



Peak

Food: 0
Production: 0
Commerce: 0
Defensive Bonus: 0%

Impassable terrain.



Plains

Food: 1
Production: 1
Commerce: 0
Defensive Bonus: 0%

+1 commerce adjacent to river.



Tundra

Food: 1

Production: 0

Commerce: 0

Defensive Bonus: 0%

+1 commerce adjacent to river; improvements take 25% longer to build.



TERRAIN FEATURES

Fallout

Food: -3

Production: -3

Commerce: -3

Defensive Bonus: 0%

Costs 2 mp to enter; cannot build improvements until Fallout is cleared.



Floodplains

Food: +3

Production: 0

Commerce: 0

Defensive Bonus: 0%

+1 commerce adjacent to river; -0.4 health in nearby cities.



Forest

Food: 0

Production: +1

Commerce: 0

Defensive Bonus: 50%

Costs 2 mps to enter; +0.5 health in nearby cities.



Hills

Food: -1

Production: +1

Commerce: 0

Defensive Bonus: 25%

Costs 2 mp to enter; +1 commerce adjacent to river.



Ice

Food: 0

Production: 0

Commerce: 0

Defensive Bonus: 0%

Impassable terrain



Jungle

Food: -1

Production: 0

Commerce: 0

Defensive Bonus: 50%

Costs 2 mp to enter; -0.25 health in nearby cities.



Oasis

Food: +3

Production: 0

Commerce: +2

Defensive Bonus: 0%

Costs 2 mp to enter; fresh water source; cannot build cities or improvements here.



RESOURCES

Following is a list of all of the resources in the game.



Aluminum

Tech Revealed By: Industrialism

Tech Required to Access: Mining

Improvement Required: Mine

Base Bonus: 0 Food, +1 Production, 0 Commerce

Improved Bonus: 0 Food, +3 Production, +1 Commerce

Units Requiring this Bonus: Jet Fighter (and oil), Modern Armor (and oil), Stealth Bomber (and oil)

Construction Speed Halved:

Space Elevator, Apollo Program, SDI



Banana

Tech Revealed By: Always Visible

Tech Required to Access: Calendar

Improvement Required: Plantation

Base Bonus: +1 Food, 0 Production, 0 Commerce

Improved Bonus: +2 Food, 0 Production, 0 Commerce

Additional Effects: +2 Health with Plantation



Clam

Tech Revealed By: Always Visible

Tech Required to Access: Fishing

Improvement Required: Net

Base Bonus: +1 Food, 0 Production, 0 Commerce

Improved Bonus: +2 Food, 0 Production, 0 Commerce

Additional Effects: +1 Health with Fishing Boats



Coal

Tech Revealed By: Steam Power

Tech Required to Access: Mining

Improvement Required: Mine

Base Bonus: 0 Food, +1 Production, 0 Commerce

Improved Bonus: 0 Food, +3 Production, 0 Commerce

Units Requiring this Bonus: Ironclad (and iron)

Additional Effects: Required for construction of Railroad improvement.



Copper

Tech Revealed By: Bronze Working

Tech Required to Access: Mining

Improvement Required: Mine

Base Bonus: 0 Food, +1 Production, 0 Commerce

Improved Bonus: 0 Food, +3 Production, 0 Commerce

Units Requiring this Bonus: Axeman (or iron), Maceman (or iron), Phalanx (or iron), Spearman (or iron)

Construction Speed Halved: Buddhist Stupa, Confucian Academy, Taoist Pagoda, Colossus, Statue of Liberty, Internet



Corn

Tech Revealed By: Always Visible

Tech Required to Access: Agriculture

Improvement Required: Farm

Base Bonus: +1 Food, 0 Production, 0 Commerce

Improved Bonus: +2 Food, 0 Production, 0 Commerce

Additional Effects: +1 Health with Farm



Cow

Tech Revealed By: Always Visible

Tech Required to Access: Animal Husbandry

Improvement Required: Pasture

Base Bonus: +1 Food, 0 Production, 0 Commerce

Improved Bonus: +1 Food, +2 Production, 0 Commerce

Additional Effects: +1 Health with Pasture



Crab

Tech Revealed By: Always Visible

Tech Required to Access: Fishing

Improvement Required: Net

Base Bonus: +1 Food, 0 Production, 0 Commerce

Improved Bonus: +2 Food, 0 Production, 0 Commerce

Additional Effects: +1 Health with Fishing Boats



Deer

Tech Revealed By: Always Visible

Tech Required to Access: Hunting

Improvement Required: Camp

Base Bonus: +1 Food, 0 Production, 0 Commerce

Improved Bonus: +2 Food, 0 Production, 0 Commerce

Additional Effects: +1 Health with Camp



Dye

Tech Revealed By: Always Visible

Tech Required to Access: Calendar

Improvement Required: Plantation

Base Bonus: 0 Food, 0 Production, +1 Commerce

Improved Bonus: 0 Food, 0 Production, +4 Commerce

Additional Effects: +1 Happiness with Plantation



Fish

Tech Revealed By: Always Visible

Tech Required to Access: Fishing

Improvement Required: Fishing Boats

Base Bonus: +1 Food, 0 Production, 0 Commerce

Improved Bonus: +3 Food, 0 Production, 0 Commerce

Additional Effects: +1 Health with Fishing Boats



Fur

Tech Revealed By: Always Visible

Tech Required to Access: Hunting

Improvement Required: Camp

Base Bonus: 0 Food, 0 Production, +1 Commerce

Improved Bonus: 0 Food, 0 Production, +3 Commerce

Additional Effects: +1 Happiness with Camp



Gems

Tech Revealed By: Always Visible

Tech Required to Access: Mining

Improvement Required: Mine

Base Bonus: 0 Food, 0 Production, +1 Commerce

Improved Bonus: 0 Food, +1 Production, +5 Commerce

Additional Effects: +1 Happiness with Mine



Gold

Tech Revealed By: Always Visible

Tech Required to Access: Mining

Improvement Required: Mine

Base Bonus: 0 Food, 0 Production, +1 Commerce

Improved Bonus: 0 Food, +1 Production, +6 Commerce

Additional Effects: +1 Happiness with Mine



Hit Movies

Tech Revealed By: Hollywood Wonder

Tech Required to Access: None

Wonder Required: Hollywood

Base Bonus: 0 Food, 0 Production, 0 Commerce

Improved Bonus: 0 Food, 0 Production, 0 Commerce

Additional Effects: +1 Happiness



Hit Musicals

Tech Revealed By: Broadway Wonder

Tech Required to Access: None

Wonder Required: Broadway

Base Bonus: 0 Food, 0 Production, 0 Commerce

Improved Bonus: 0 Food, 0 Production, 0 Commerce

Additional Effects: +1 Happiness



Hit Singles

Tech Revealed By: Rock 'n Roll Wonder

Tech Required to Access: None

Wonder Required: Rock 'n' Roll

Base Bonus: 0 Food, 0 Production, 0 Commerce

Improved Bonus: 0 Food, 0 Production, 0 Commerce

Additional Effects: +1 Happiness



Horse

Tech Revealed By: Always Visible

Tech Required to Access: Animal Husbandry

Improvement Required: Pasture

Base Bonus: 0 Food, +1 Production, 0 Commerce

Improved Bonus: 0 Food, +2 Production, +1 Commerce

Units Requiring this Bonus: Cavalry, Chariot, Conquistador (and iron), Cossack, Horse Archer, Immortal, Keshik, Knight (and iron), War Chariot



Incense

Tech Revealed By: Always Visible

Tech Required to Access: Mining

Improvement Required: Mine

Base Bonus: 0 Food, 0 Production, +1 Commerce

Improved Bonus: Food, 0 Production, +5 Commerce

Additional Effects: +1 Happiness with Plantation



Iron

Tech Revealed By: Iron Working

Tech Required to Access: Mining

Improvement Required: Mine

Base Bonus: 0 Food, +1 Production, 0 Commerce

Improved Bonus: 0 Food, +3 Production, 0 Commerce

Units Requiring this Bonus: Axeman (or copper), Cannon, Cho-Ko-Nu, Conquistador (and horses), Crossbowman, Frigate, Ironclad (and coal), Knight (and horses), Maceman (or copper), Phalanx (or copper), Pikeman, Praetorian, Samurai, Spearman (or copper), Swordsman

Construction Speed Halved: Eiffel Tower



Ivory

Tech Revealed By: Always Visible

Tech Required to Access: Hunting

Improvement Required: Camp

Base Bonus: 0 Food, +1 Production, 0 Commerce

Improved Bonus: 0 Food, +1 Production, +1 Commerce

Units Requiring this Bonus: War Elephant

Additional Effects: +1 Happiness with Camp



Marble

Tech Revealed By: Always Visible

Tech Required to Access: Masonry

Improvement Required: Quarry

Base Bonus: 0 Food, +1 Production, 0 Commerce

Improved Bonus: 0 Food, +1 Production, +2 Commerce

Construction Speed Halved: Hindu Mandir, Islamic Mosque, Hermitage, Heroic Epic, National Epic, Great Library, Hagia Sophia, Oracle, Parthenon, Sistine Chapel, Taj Mahal, Versailles



Oil

Tech Revealed By: Scientific Method

Tech Required to Access: Combustion

Improvement Required: Well, Offshore Platform

Base Bonus: 0 Food, +1 Production, 0 Commerce

Improved Bonus: 0 Food, +2 Production, +1 Commerce

Units Requiring this Bonus: Battleship (or uranium), Bomber, Carrier (or uranium), Destroyer (or uranium), Fighter, Gunship, Jet Fighter (and aluminum), Modern Armor (and aluminum), Panzer, Stealth Bomber (and aluminum), Submarine (or uranium), Tank, Transport (or uranium)



Pig

Tech Revealed By: Always Visible

Tech Required to Access: Animal Husbandry

Improvement Required: Camp

Base Bonus: +1 Food, 0 Production, 0 Commerce

Improved Bonus: +3 Food, 0 Production, 0 Commerce

Additional Effects: +1 Health with Pasture



Rice

Tech Revealed By: Always Visible

Tech Required to Access: Agriculture

Improvement Required: Farm

Base Bonus: +1 Food, 0 Production, 0 Commerce

Improved Bonus: +1 Food, 0 Production, 0 Commerce

Additional Effects: +1 Health with Farm



Sheep

Tech Revealed By: Always Visible

Tech Required to Access: Animal Husbandry

Improvement Required: Pasture

Base Bonus: +1 Food, 0 Production, 0 Commerce

Improved Bonus: +2 Food, 0 Production, +1 Commerce

Additional Effects: +1 Happiness with Pasture



Silk

Tech Revealed By: Always Visible

Tech Required to Access: Calendar

Improvement Required: Plantation

Base Bonus: 0 Food, 0 Production, +1 Commerce

Improved Bonus: 0 Food, 0 Production, +3 Commerce

Additional Effects: +1 Happiness with Plantation



Silver

Tech Revealed By: Always Visible

Tech Required to Access: Mining

Improvement Required: Mine

Base Bonus: 0 Food, 0 Production, +1 Commerce

Improved Bonus: 0 Food, +1 Production, +4 Commerce

Additional Effects: +1 Happiness with Mine



Spices

Tech Revealed By: Always Visible

Tech Required to Access: Calendar

Improvement Required: Plantation

Base Bonus: 0 Food, 0 Production, +1 Commerce

Improved Bonus: +1 Food, 0 Production, +2 Commerce

Additional Effects: +1 Happiness with Plantation



Stone

Tech Revealed By: Always Visible

Tech Required to Access: Masonry

Improvement Required: Quarry

Base Bonus: 0 Food, +1 Production, 0 Commerce

Improved Bonus: 0 Food, +2 Production, 0 Commerce

Construction Speed Halved: Christian Cathedral, Jewish Synagogue, Mount Rushmore, Oxford University, West Point, Angkor Wat, Chichen Itza, Hanging Gardens, Kremlin, Notre Dame, Pyramids, Spiral Minaret, Stonehenge



Sugar

Tech Revealed By: Always Visible

Tech Required to Access: Calendar

Improvement Required: Plantation

Base Bonus: +1 Food, 0 Production, 0 Commerce

Improved Bonus: +1 Food, 0 Production, +1 Commerce

Additional Effects: +1 Happiness with Plantation



Uranium

Tech Revealed By: Physics

Tech Required to Access: Mining

Improvement Required: Mine

Base Bonus: 0 Food, 0 Production, 0 Commerce

Improved Bonus: 0 Food, 0 Production, +3 Commerce

Units Requiring this Bonus: Battleship (or oil), Carrier (or oil), Destroyer (or oil), ICBM, Submarine (or oil), Transport (or oil), nukes

Construction Speed Halved: Manhattan Project



Whale

Tech Revealed By: Always Visible

Tech Required to Access: Optics

Improvement Required: Net

Base Bonus: +1 Food, 0 Production, 0 Commerce

Improved Bonus: 0 Food, +1 Production, +2 Commerce

Additional Effects: +1 Happiness with Whaling Boats



Wheat

Tech Revealed By: Always Visible

Tech Required to Access: Agriculture

Improvement Required: Farm

Base Bonus: +1 Food, 0 Production, 0 Commerce

Improved Bonus: +2 Food, 0 Production, 0 Commerce

Additional Effects: +1 Health with Farm



Wine

Tech Revealed By: Always Visible

Tech Required to Access: Meditation

Improvement Required: Winery

Base Bonus: 0 Food, 0 Production, +1 Commerce

Improved Bonus: +1 Food, 0 Production, +2 Commerce

Additional Effects: +1 Happiness with Winery

UNITS

The following units require a bit more explanation than can be found in “The Basics” portion of this manual.

NAVAL UNITS

Throughout history, mankind has made great use of the seas. For millennia fishing boats have harvested the oceans’ bounty. Trading vessels have carried goods to every corner of the world. Exploration ships have sought out the oceans’ secrets. And mighty warships have fought great battles to decide the fates of nations. In *Civilization IV* the seas are places of great opportunity and peril.

Constructing Naval Units

Naval units can be constructed in any city adjacent to a coastal space. They are built like any other unit – they require specific technologies (and sometimes resources) to be constructed.

DRYDOCKS

The drydock building increases the speed at which a city constructs naval units by 50%. Further, naval units constructed in a city with a drydock begin the game with 4 experience points. (You must have the “steel” technology to construct drydocks.)

Moving Naval Units

Some early naval units must remain in coastal spaces or any water spaces within their builder’s cultural boundaries. These units can move within other nations’ cultural boundaries if their civilizations have an Open Borders agreement with those nations or if they’re at war with them. (See work boat and galleys, pages 126 and 128.)

CROSSING CULTURAL BORDERS

A naval unit cannot enter another civilization’s cultural borders unless its civilization has an Open Borders agreement with that civ. Otherwise, such a movement constitutes an act of war. (Exception: see caravels and submarines, pages 125 and 127.)

Naval Combat

Naval units can only fight other naval units; they cannot attack land units – though some can “bombard” coastal cities (see page 42). See “Air Units” to learn how naval and air units interact.

Naval combat occurs when a naval unit attempts to enter an enemy naval unit's space – in other words, exactly like land combat. The results too are like those from land combat – if the attacker loses, the attacking unit is destroyed. If the defender loses, the attacker occupies the defender's space, unless other enemy units still occupy that space.

Naval units cannot enter enemy cities, nor can they battle any enemy naval units lurking within.

Naval Transport

Several naval units can “transport” land units. These include galleys, galleons, and transports (a modern unit). Each transport has a different “cargo capacity” that determines how many units it can carry.

LOADING UNITS

To load a land unit onto a transport, move the unit into the transport's space. If the transport occupies a coastal space, the unit loads automatically upon arrival. If the transport is in a city, click on the “load transport” action icon. If the transport is already at its maximum capacity, the unit will not load.

MOVING UNITS

Transporting units has no effect upon the transports; they move like any other naval units.

UNLOADING UNITS

Units can be unloaded into any land square (but see “Amphibious Assault,” below). To unload all units onto a single land square, order the transport to move into that square. Or you can activate transported units and order them to unload individually. A transport can pick up and drop off land units at any point during its move.

AMPHIBIOUS ASSAULTS

If a land unit attempts to unload into a space containing an enemy unit, the two units fight it out. If the attacker is successful and the land space is now empty, the attacker occupies that space. If other defenders remain in the target space, the attacker remains aboard the transport.

Land units attacking from transports have their combat

strengths reduced by 50%. However, the “Amphibious” promotion negates that penalty.

NAVAL COMBAT WITH TRANSPORTS

If a naval transport is destroyed in combat, all units it carries are destroyed as well. Land units aboard a transport have no effect upon the naval combat.

NAVAL UNIT LIST

Battleship

Tech Requirement: Industrialism

Resource Requirement: Oil or uranium

Strength: 40

Movement: 6

Special Abilities: Causes collateral damage – can damage multiple units when attacking (just like catapult “barrages”). Can bombard city defenses (-20%/turn).



Caravel

Tech Requirement: Optics

Resource Requirement: None

Strength: 3

Movement: 3

Special Abilities: Can carry one scout, explorer, missionary, spy or Great Person. Can enter rival civilizations' territory without triggering war.



Carrier

Tech Requirement: Flight

Resource Requirement: Oil or uranium

Strength: 16

Movement: 5

Special Abilities: Can carry 3 fighter or jet fighter units (see “Air Combat”).



Destroyer

Tech Requirement: Combustion

Resource Requirement: Oil or uranium

Strength: 30

Movement: 8

Special Abilities: Can see submarines. Can intercept aircraft (30%). Can bombard city defenses (-15%/turn).



Frigate

Tech Requirement: Astronomy and chemistry

Resource Requirement: Iron

Strength: 8

Movement: 4

Special Abilities: Can bombard city defenses (-10%/turn).



Galleon

Tech Requirement: Astronomy

Resource Requirement: None

Strength: 4

Movement: 4

Cargo Space: 3



Galley

Tech Requirement: Sailing

Resource Requirement: None

Strength: 2

Movement: 2

Cargo Space: 2

Movement Limits: Must stay on coastline or within friendly cultural waters.



Ironclad

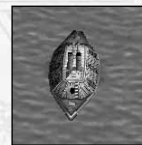
Tech Requirement: Steel and steam power

Resource Requirement: Iron and coal

Strength: 12

Movement: 2

Movement Limits: Must stay on coastline or within friendly cultural waters.



Submarine

Tech Requirement: Radio and combustion

Resource Requirement: Oil or uranium

Strength: 24

Movement: 6

Special Abilities: Invisible to most units except destroyers and other submarines. Can carry one scout, explorer, missionary, spy or Great Person. Can enter rival civilization's territory without triggering war. Can withdraw from combat (50% chance).



Transport

Tech Requirement: Combustion

Resource Requirement: Oil or uranium

Strength: 16

Movement: 5

Cargo Space: 4



Work Boat

Tech Requirement: Fishing

Resource Requirement: None

Strength: 0 (non-combat unit)

Movement: 2

Movement Limits: Must stay on coastline or within friendly cultural waters.

Special Abilities: Can create fishing boats, whaling boats, and offshore platforms.



AIR UNITS

First seeing widespread military use in World War I as unarmed reconnaissance vehicles, over the next half-century aircraft would become the most versatile and powerful part of the modern army.

There are two different categories of air units in *Civilization IV*: rotary-wing aircraft and fixed-wing aircraft.

Rotary Wing Aircraft - Gunships

Gunships are heavily armed and armored helicopters. These powerful modern units are especially adept at destroying enemy tanks and vehicles.

GUNSHIP MOVEMENT

Gunships move like land units, except that they pay 1 movement point to enter all land spaces. Gunships cannot enter water spaces (except when carried aboard a naval transport unit).

GUNSHIP COMBAT

A gunship fights like any other land unit: if it moves into a space containing an enemy unit, it attacks that unit. If an enemy unit moves into its space, it attacks the gunship.

GUNSHIPS VS. CITIES

Gunships can attack and destroy units in cities, but gunships cannot capture enemy cities.

Fixed-Wing Aircraft

There are two categories of fixed-wing aircraft in the game: fighters and bombers.

FIGHTERS

Fighters are proficient at attacking enemy naval units and intercepting enemy fighters. Further, fighters can be based on aircraft carriers. Fighters can attack land units and bombard enemy city defenses (though not as effectively as bombers). There are two types of fighters: fighters and jet fighters.

BOMBERS

Bombers can bombard enemy city defenses. Further, bombers have a powerful attack against enemy land units. They can attack naval units, as well, but they are less effective when doing so. Bombers can also attack improvements. Bombers cannot be based on aircraft carriers. Bomber units include bombers and stealth bombers.

Fixed-Wing Aircraft Movement

Fixed-wing aircraft are based in cities (fighters can also be based aboard aircraft carriers). They cannot begin or end a turn elsewhere. Fighters and bombers can "rebase" to another city (or carrier) during their turn. The city can be anywhere on the map, but it must be owned by you or by a civilization you have an Open Borders agreement with. If an aircraft rebases, it can do nothing else during that turn.

Fixed-Wing Missions

When not rebasing, fixed-wing aircraft can perform a variety of different missions. An aircraft can perform only one mission per turn. Each fixed-wing air unit has a "mission range" rating. An aircraft can perform missions in any space within this range.

AIR STRIKE MISSION

A fixed-wing unit can be ordered to attack any enemy-held space within its mission range.

RECON MISSION

An aircraft can be ordered to perform a recon mission. Click on a space within the unit's range and all units/improvements within range of the recon space will be revealed.

AIR BOMB MISSION

Units can be ordered to bombard enemy city defenses or improvements within their mission range. Bombers are far better at these kinds of missions than are fighters.

INTERCEPT MISSION

Fighter units can be ordered on "intercept" missions. They then have a chance to attack any enemy air units that enter their mission range.

LAND UNIT/SEA UNIT INTERCEPTION OF FIXED WING AIRCRAFT

Some land units – SAM infantry and mechanized infantry, to name two – have a chance to intercept enemy air units when the air units attack their square OR an adjacent square. At sea, destroyers have the same opportunity.

AIR UNIT LIST

Bomber

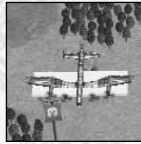
Technology Requirements: Radio and Flight

Resource Requirements: Oil

Air Strength: 16

Mission Range: 8

Special Abilities: Can cause collateral damage. Can bombard city defenses (-15%/turn). Can destroy improvements. -50% when attacking naval units.



Fighter

Technology Requirements: Flight

Resource Requirements: Oil

Air Strength: 12

Mission Range: 6

Special Abilities: Can intercept aircraft (40% chance). Can destroy tile improvements. Can bombard enemy city defenses (-15%/turn).



Gunship

Technology Requirements:

Rocketry and flight

Resource Requirements: Oil

Strength: 20

Movement: 4

Special Abilities: +100% strength when attacking armored units. 25% chance to withdraw from combat. Pays 1 mp to enter all land spaces. Cannot capture cities. Cannot enter sea spaces (except aboard naval transport). Receives no defensive bonuses for terrain.



Jet Fighter

Technology Requirements:

Composites and flight

Resource Requirements: Oil and aluminum

Air Strength: 24

Mission Range: 10

Special Abilities: Can intercept aircraft (60% chance). Can destroy tile improvements. Can bombard enemy city defenses (-10%/turn).



Stealth Bomber

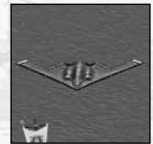
Technology Requirements: Composites and flight and robotics

Resource Requirements: Oil and aluminum

Air Strength: 20

Mission Range: 12

Special Abilities: 50% chance to evade interception. Can cause collateral damage. Can bombard city defenses (-20%/turn). Can destroy improvements. -50% when attacking naval units.



SPIES

Spies are special “invisible” units which can sneak around the map and have a variety of special abilities. Spies also function defensively by increasing the odds of an enemy spy being exposed if it performs a mission in a nearby tile.

Constructing Spies

Spies may be built only in a city with the Scotland Yard national wonder.

Invisible

Spy units are invisible. They cannot be seen, attacked, or otherwise interacted with.

Movement

Spies move like other units, except that they do not cause an automatic declaration of war when crossing foreign cultural borders. Being invisible, spies can move through neutral, friendly and enemy territory without risk.

Investigate City

When a spy enters a foreign city, you are able to see that city's city screen. This is not a “mission” (see below) and the spy is at no risk.

Spy Missions

Spies may perform a variety of missions, some of which are automatically fatal and others of which contain a chance of destruction. Spies can perform these missions anywhere on the map, including in territory belonging to allies or to civilizations you are at war with.

DESTROY PRODUCTION

A spy performs this mission in a city. If successful, the spy survives and the city loses all production points towards whatever it is currently producing. (This can be quite devastating if the city is just a couple of turns from completing construction of a wonder.) If the mission is unsuccessful, no production is lost and the spy is destroyed.

SABOTAGE IMPROVEMENT

This is performed on any space containing an improvement. If

successful, the improvement is destroyed and the spy survives. If unsuccessful, the spy is destroyed and the improvement survives.

STEAL PLANS

This mission has a much higher chance of success in one of a civilization's “centers of government” – a city containing a Palace, Forbidden Palace or Versailles wonder. If successful, the spy survives and you get to see everything that is visible to the foreign civilization. This includes everything in its territory or within sight of its units and borders. If unsuccessful, the spy dies and you don't get to see anything.

Determining Success or Failure of a Spy Mission

The odds of success or failure of a spy's mission depend upon the number of units the other civilization has in the space the mission takes place. If a space is unoccupied, the chances of success are quite high. The chances of detection and failure increase with each unit in the target space.

USING SPIES TO CATCH SPIES

Spies are especially adept at catching and foiling enemy spies. If a spy is in the target space, the chance of exposure increases significantly.

Diplomatic Effects of Missions

If a mission is successful, the target civilization will not know who performed the mission; thus that civilization's opinion of you will not change (see “Diplomacy,” page 99). If the mission is a failure, the target civilization will know exactly who is responsible for the outrage and will adjust its opinion of you appropriately. It is quite possible for a failed spy mission to cause the victim civilization to declare war on your civilization!

ICBMS

ICBMs (intercontinental ballistic missiles), also known as “nukes,” can ruin a leader’s whole day. These are the ultimate weapons available in *Civilization IV*, and they are extremely potent.

Acquiring Nukes

To build nuclear weapons, you need the following:

THE MANHATTAN PROJECT WONDER

Someone in the game must have built the Manhattan Project wonder. It needn’t be you; once anybody has built the Manhattan Project, everyone can build nukes (if they meet the other requirements).

ROCKETRY AND FISSION

You need to know the Rocketry and Fission technologies to construct nukes.

URANIUM

You need access to the Uranium resource to build nukes. Uranium is revealed by the Physics tech.

Constructing Nukes

You build nukes in a city, just like any other unit.

Launching a Nuke

Nukes have unlimited range: they can reach any space on the map. Once launched, nukes reach their target space and detonate immediately.

Area of Effect

Nukes are “area of effect” weapons; when detonated they cause damage in their target square, but they also cause damage to the eight squares that are adjacent to the target square. In fact, the eight adjacent squares get hit just as hard as the target square.

Damage Effects

BUILDINGS

If a nuke detonates in or adjacent to a city, the computer makes a “kill check” against each building; if the building passes the check, it emerges unharmed. If the target building fails, it is destroyed (but see “bomb shelters,” below). Wonders cannot be destroyed by nukes!

UNITS

The computer makes a “kill check” against each unit; if the unit fails the check it is destroyed. If the unit passes the check, it may emerge damaged or unscathed.

IMPROVEMENTS

If a nuke detonates on top of or adjacent to an improvement, that improvement is destroyed.

Fallout

A nuclear detonation may produce “fallout” – radioactive debris – in any of the target squares. Fallout makes the space totally unworkable; in other words, a nearby city cannot draw food, commerce, production, or resources from a square damaged by fallout.

SCRUBBING FALLOUT

Once you have discovered the Ecology technology, your workers can “scrub” (or clean) fallout. Scrubbing fallout is like any other worker action: multiple workers can scrub a space simultaneously to speed the job up; certain civics and wonders may cause workers to scrub fallout faster; and so forth.

SDI and Nukes

The SDI project has an excellent chance of intercepting any nukes targeted at your territory.

Bomb Shelters and Nukes

A bomb shelter in a city reduces damage by 75%.

Diplomatic Penalties

There are serious diplomatic penalties attached to using nukes. Relations with other civilizations are almost certain to drop precipitously, and you may find yourself at the receiving end of someone else’s nuclear arsenal. You have been warned!

Global Warming

Use of nuclear weapons may cause Global Warming to begin, turning previously fertile tiles into useless desert. Prolonged nuclear exchanges may eventually transform the world into an uninhabitable wasteland.

PROMOTIONS

As described in “The Basics” portion of the rules, promotions are special abilities awarded to units that are victorious in battle. In addition, some units begin the game with one or more special abilities.

Here’s a list of the promotions in *Civilization IV*. Remember that not all promotions are available to all units.



Accuracy

Available To: Siege weapons

Prerequisites: Barrage I

Leads To: Nothing

Effects: +10% city bombard damage



Ambush

Available To: Siege, gunpowder, armor, and helicopter units

Prerequisites: Combat II

Leads To: Nothing

Effects: +25% vs. armored units



Amphibious

Available To: Recon, archery, mounted, melee, siege, and gunpowder units.

Prerequisites: Combat II

Leads To: Nothing

Effects: No combat penalty for attacking from sea. No combat penalty for attacking across a river.



Barrage I

Available To: Siege and armored units.

Prerequisites: None

Leads To: Accuracy, Barrage II

Effects: +20% collateral damage



Barrage II

Available To: Armored units

Prerequisites: Barrage I

Leads To: Barrage III

Effects: +30% collateral damage. +10% vs. melee units.



Barrage III

Available To: Armored units

Prerequisites: Barrage II

Leads To: Nothing

Effects: +50% collateral damage. +10% vs. gunpowder units.



Blitz

Available To: Mounted, armor, and helicopter units

Prerequisites: Combat III

Leads To: Nothing

Effects: Can attack multiple times per turn.



Charge

Available To: Mounted, melee, armored, and helicopter units.

Prerequisites: Combat II

Leads To: Nothing

Effects: +25% vs. siege weapons



City Garrison I

Available To: Archery, gunpowder units

Prerequisites: None

Leads To: City Garrison II

Effects: +20% city defense.



City Garrison II

Available To: Archery and gunpowder units.

Prerequisites: City Garrison I

Leads To: City Garrison III

Effects: +25% city defense.



City Garrison III

Available To: Archery and gunpowder units.

Prerequisites: City Garrison II

Leads To: Nothing

Effects: +30% city defense. +10% vs. melee units.



City Raider I

Available To: Melee, siege, and armored units.

Prerequisites: None

Leads To: Accuracy, City Raider II

Effects: +20% city attack.



City Raider II

Available To: Melee, siege, and armored units.

Prerequisites: City Raider I

Leads To: City Raider III

Effects: +25% city attack.



City Raider III

Available To: Melee, siege, and armored units.

Prerequisites: City Raider II

Leads To: Nothing

Effects: +30% city attack. +10% vs. gunpowder units.



Combat I

Available To: Recon, archery, mounted, melee, siege, gunpowder, armored, helicopter, and naval units.

Prerequisites: None

Leads To: Medic I, Combat II

Effects: +10% strength



Combat II

Available To: Recon, archery, mounted, melee, siege, gunpowder, armored, helicopter, and naval units.

Prerequisites: Combat I

Leads To: Amphibious, Combat III, Formation

Effects: +10% strength



Combat III

Available To: Recon, archery, mounted, melee, siege, gunpowder, armored, helicopter, and naval units.

Prerequisites: Combat II

Leads To: Combat IV, Sentry

Effects: +10% strength



Combat IV

Available To: Recon, archery, mounted, melee, siege, gunpowder, armored, helicopter, and naval units.

Prerequisites: Combat III

Leads To: Combat V, Commando

Effects: Heals additional 10% damage/turn in neutral lands. +10% strength.



Combat V

Available To: Recon, archery, mounted, melee, siege, gunpowder, armored, helicopter, and naval units.

Prerequisites: Combat IV

Leads To: Nothing

Effects: Heals additional 10%/turn in enemy lands. +10% strength.



Commando

Available To: Recon, archery, mounted, melee, gunpowder, and armored units.

Prerequisites: Combat IV

Leads To: Nothing

Effects: Can use enemy roads.



Cover

Available To: Melee and gunpowder units.

Prerequisites: Combat I

Leads To: Nothing

Effects: +25% vs. archery units.



Drill I

Available To: Archery, siege, armored, helicopter, and naval units.

Prerequisites: None

Leads To: Drill II

Effects: +1 additional first strike chance.



Drill II

Available To: Archery, siege, armored, helicopter, and naval units.

Prerequisites: Drill I

Leads To: Drill III

Effects: 1 extra first strike



Drill III

Available To: Archery, siege, armored, helicopter, and naval units.

Prerequisites: Drill II

Leads To: Drill IV

Effects: +2 first strike chances



Drill IV

Available To: Archery, siege, armored, helicopter, and naval units.

Prerequisites: Drill III

Leads To: Nothing

Effects: 2 first strikes. +10% vs. mounted units



Flanking I

Available To: Mounted, armored, helicopter and naval units.

Prerequisites: None

Leads To: Flanking II, Navigation I

Effects: +10% withdrawal chance.



Flanking II

Available To: Mounted, armored, helicopter and naval units.

Prerequisites: Flanking I

Leads To: Mobility

Effects: +20% withdrawal chance. Immune to first strikes.



Formation

Available To: Archery, mounted, melee, and gunpowder units.

Prerequisites: Combat II

Leads To: Nothing

Effects: +25% vs. mounted units.



Guerilla I

Available To: Recon, archery, and gunpowder units.

Prerequisites: None

Leads To: Guerilla II

Effects: +20% hills defense.



Guerilla II

Available To: Recon, archery, and gunpowder units.

Prerequisites: Guerilla I

Leads To: Nothing

Effects: Double movement in hills. +30% hills defense.



March

Available To: Recon, archery, mounted, melee, siege, and gunpowder units.

Prerequisites: Medic I

Leads To: Nothing

Effects: Can heal while moving.



Medic I

Available To: Recon, archery, mounted, melee, siege, gunpowder, and naval units.

Prerequisites: Combat I

Leads To: Medic II, March

Effects: Heals units in same tile +10% damage per turn.



Medic II

Available To: Recon, archery, mounted, melee, siege, gunpowder, and naval units.

Prerequisites: Medic I

Leads To: Nothing

Effects: Heals units in same and adjacent tile +10% damage per turn.



Mobility

Available To: Mounted and armored units.

Prerequisites: Flanking II

Leads To: Nothing

Effects: All terrain costs 1 mp to enter.



Navigation I

Available To: Naval units

Prerequisites: None

Leads To: Navigation II

Effects: +1 movement range.



Navigation II

Available To: Naval units

Prerequisites: Navigation I

Leads To: Nothing

Effects: +1 movement range.



Pinch

Available To: Mounted, gunpowder, armored, and helicopter units.

Prerequisites: Combat I

Leads To: Nothing

Effects: +25% vs. gunpowder units.



Sentry

Available To: Recon, mounted, helicopter and naval units.

Prerequisites: Combat III

Leads To: Nothing

Effects: +1 visibility range.



Shock

Available To: Archery, mounted, melee, and siege weapons

Prerequisites: Combat I

Leads To: Nothing

Effects: +25% vs. melee units.



Woodsman I

Available To: Recon, melee, and gunpowder units.

Prerequisites: None

Leads To: Woodsman II

Effects: +20% jungle defense. +20% forest defense.



Woodsman II

Available To: Recon, melee, and gunpowder units.

Prerequisites: Woodsman I

Leads To: Nothing

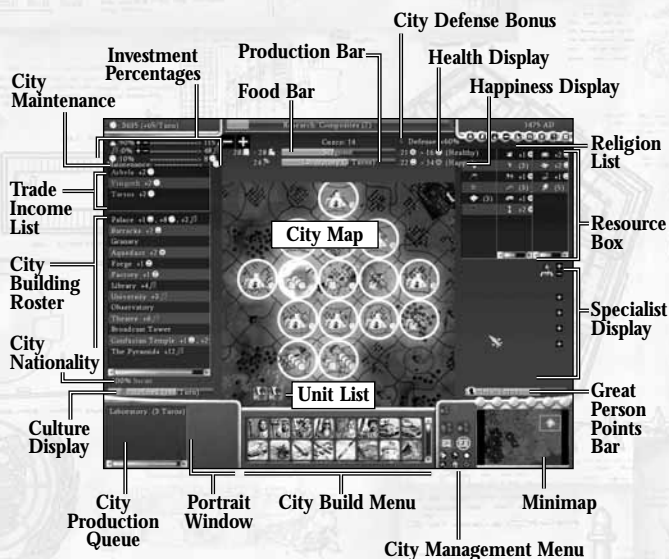
Effects: Double movement in jungle and forest. +30% jungle and forest defense.

CITIES

Players new to *Civilization IV* and its predecessors might want to play a couple of games before taking on this section. Once you've had a chance to poke around a bit on the City Screen, you should be familiar enough to tackle advanced management of cities. Veterans of previous *Civilization* games may feel comfortable enough to jump right in and start reading.

THE CITY SCREEN

To open the City Screen, [double-click] on a city on the main map. (Click on the city artwork itself, not on the city's name – the name brings up a “lite” version of the City Screen.) This is where most city management take place. The following diagram demonstrates a typical city in *Civilization IV*:



City Name

The name of the city is listed at the top of the city screen. Displayed next to it is the city's current size. For each population point that a city has, it possesses one citizen who can either work the land (by selecting any tile in the City Map at the center of the screen) or become a specialist (by using the Specialist Display on the right side of the city screen).

Food Bar 28 - 28 Stagnant

Directly underneath the city's name is the Food Bar. On the left side of the bar is displayed the amount of food that is currently being produced and the amount currently being eaten by the people of the city. Each population point requires two food under normal circumstances; if a city has become unhealthy, it may require additional food (see below). If the city's food supply exceeds the amount needed to feed its people, the Food Bar will begin to fill up and the city will begin to grow. When the Food Bar is completely full, the city gains one population point. (Conversely, if a city does not have enough food to support its population, the Food Bar will shrink and starvation will occur if it is completely empty!)

The Food Bar will usually show the number of turns needed for the city to increase in size; moving the mouse over the Food Bar will show the exact amount of food stored at the moment and the amount needed to grow.

Production Bar 24 Laboratory (3 Turns)

Underneath and accompanying the Food Bar is the Production Bar. On the left side of the bar is displayed the current amount of production that the city creates each turn. The center of the bar shows what the city is currently producing (which could be a unit, building, or wonder) and how many turns it will take for the current project to be completed. [Rolling over] the Production Bar will also show the exact amount of production carried out on the current project so far, and the amount needed for completion.

As each turn passes, the Production Bar will fill up until what-

ever the city is working on is completed. You will then be prompted to select a new project for the city to begin working on, and the process begins all over again.

City Defense Bonus



Listed to the right of the City Name is the city's Defense Bonus. This is the bonus that all units defending in the city will receive. Remember that the city gets a defensive bonus from constructing walls and castles, and it also gets a defensive bonus from advanced culture. Units inside the city get the higher of the two bonuses, and that's what's displayed here.

Health Display 21 > 16 (Healthy)

To the right of the Food Bar is the city's Health Display, showing both the amount of Health and Unhealthiness in the city. In *Civilization IV*, each additional population point adds one point of unhealthiness (indicated by the green unhealthy face icon) to a city. Constructing certain buildings such as forges and factories or founding a city in terrain such as jungles or floodplains will also add unhealthiness to a city. [Roll over] the green unhealthy face to see where all of the unhealthiness is coming from.

To combat unhealthiness, a city must possess corresponding health points, indicated by a "Red Cross" icon. Cities receive health from being constructed on fresh water, from certain buildings like aqueducts and hospitals, and from health resources like wheat and cows. [Roll over] the health icon to learn where the current sources of health are coming from.

A city that has more health than unhealthiness or an equal number of both suffers no unusual effects. A city with more unhealthiness than health requires one additional food point for each unhealthy face beyond the health limit. For example, a city of size 10 would usually require 20 food to feed all of its citizens; if the city has two more unhealthy faces than health points, it would require 22 food to feed all of its people. Be careful about growing cities larger than their health will support: cities that are too unhealthy will not have enough food to support them and will begin to starve.

Happiness Display 22 > 14 (Happy)

Below the Health Display is the Happiness Display, showing both the number of Happy Faces and Unhappy Faces in the city. In a process similar to unhealthiness, each population point adds one unhappy face (indicated by the red unhappy face icon) to a city. Fighting long wars or possessing cities with peoples of foreign nationalities in them may also cause unhappy faces to appear in a city. [Rolling over] the red unhappy face icon will show all of the sources of unhappiness in a city.

You will want to combat unhappiness with additional happy faces, which are indicated by a smiling yellow face next to the unhappy face icon. Cities can receive extra happy faces from having a religion in the city, from certain buildings like temples and colosseums, from happiness-producing resources like furs or dyes, and from many other sources. (Remember you can get resources from trade as well as from domestic sources.) [Roll over] the happy face icon to see where a city's happiness is coming from.

A city with more happy faces than unhappy ones or equal numbers of both suffers no unusual effects. Cities with more unhappy faces than happy ones will result in unhappy citizens, one for each unhappy face in excess of the number of happy faces (a city with 7 happy faces and 9 unhappy ones will have 2 unhappy citizens). Unhappy citizens eat food just like regular ones, but they refuse to do any work and contribute nothing to your civilization. In extreme cases, this may result in starvation as the unhappy citizens refuse to work the fields and bring in additional food. Since unhappy citizens are nothing more than a drain on your cities, it is rarely a good idea to let your cities exceed their happiness limit, even if the city has the food to do so.

Religion List

To the right of the City Defensive Bonus is the city's Religion List, showing all of the religions that are present in the city. If this city is the Holy City for a religion, that religion will have a gold star next to its icon. You can see all of the effects that a religion is having in the city by [rolling over] its icon.

Resource Box

Below the Religion List is the Resource Box. This box is divided into three sections, showing (from left to right) all of the strategic, health, and happiness resources that the city has access to. In order to have access to a resource, the resource must be improved and within the city's "city radius" or directly connected to the city by road, rail, river or coast. To receive the benefits of resources gained through trade, the city must be connected to your civilization's capital via a trade network (see page 72). An icon will appear in the resource box for each resource that is present in the city; if you have more than one of the same kind of a resource, a number will appear next to it telling you how many your civilization possesses.



Specialist Display

Directly below the Resource Box is the Specialist Display. This consists of six faces which may or may not have plus (+) and minus (-) signs next to them; from top to bottom the specialists are the Engineer, the Merchant, the Scientist, the Artist, the Priest, and the Citizen. If you have merged any Great People into a city to function as a super specialist (see section on Great People, page 91), they will appear just below the pictures of the normal specialists.



At the start of a game, the only specialist that can be created is the Citizen, which adds one point of production to the city. As your city creates additional buildings, you will gain access to the other specialists; for example, the Library allows a city to create two Scientists, and a Temple allows a city to create a Priest. Also note that the Caste System civic allows a city to create unlimited numbers of Merchants, Scientists, and Artists, regardless of whether or not the city has the buildings it would normally take to create them.

In order to create a specialist, click on one of the tiles being worked on the City Map (these tiles have large white circles around them). This will remove one of the city's population points from working the land and create a Citizen specialist. You can then click on the plus (+) sign next to one of the other specialists and the Citizen specialist will become that specialist. To remove a specialist, click on the minus (-) sign next to its name; this will turn the specialist back into a Citizen (and you can then click on a map tile to put that citizen back to work).

It is important to keep in mind that specialists still require two units of food, so creating too many specialists can drop a city into starvation. Generally speaking, cities with lots of food will be able to run the most specialists.

All specialists except for Citizens also create Great Person points; see the following section for more information on how this works.

Great Person Points Bar

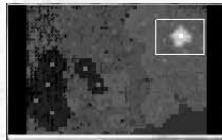
Directly below the Specialist Display is the Great Person Points Bar, which keeps track of a city's progress towards generating a Great Person. All specialists except the Citizen generate points towards the creation of Great People, with the type of points generated matching the type of the specialist. In other words, Engineers generate points towards the creation of Great Engineers, Priests towards Great Prophets, etc. Under ordinary conditions, each specialist generates 3 great person points each turn, although this can be increased by certain leader traits, wonders, and civics. Wonders also generate great person points in small amounts.

The Great Person Points Bar shows how far along your city is towards generating a Great Person. The bar begins at 0, and when it fills up all the way, a great person is generated in the city. The bar displays how many great person points are being produced each turn; [roll over] the bar to find out exactly how many points have been generated so far and how many are still needed, as well as what the odds are of generating each type of great person. If you want to generate a specific type of great

person, try creating more of the specialists associated with that great person (for example, merchants for a great merchant or artists for a great artist).

Minimap

The standard minimap from the main game screen also appears on the city screen, below the Great Person Points Bar. The minimap will show you where the city you are looking at is located.



City Management Menu

The small box just to the left of the minimap contains the City Management Menu, which has two distinct functions. First of all, it contains the “hurry” production options for the city, and secondly it holds the city’s governor controls.



The topmost button on the City Management Menu is the Draft button; clicking on this button will draft a free unit to help defend the city. Drafting requires the Nationhood civic, reduces the city’s population, and causes unhappiness, so it should not be used frivolously.

Below the Draft button are the two hurry production options. The button on the left requires the Slavery civic and sacrifices some of the city’s population to complete production. The button on the right requires the Universal Suffrage civic and requires the expenditure of gold to hurry production. Each of these buttons will be lit up only if the appropriate civics are being employed; otherwise they are greyed-out and cannot be used. [Roll over] each button to see additional information about their costs.

The bottom eight buttons allow you to interact with the city’s governor and issue instructions on how you would like the city to be run. The button with a hammer in the middle of a circle is the Production Automation control; by clicking this button, you give the governor control over production in the city. (Be

warned that the governor may not make the same choices that you would!) The circular button to the right of this is the Citizen Automation control; clicking this button gives the governor permission to manage the city’s population points as it sees best.

The governor will usually try to adopt a balanced mix of food, production, and commerce, but you can give it further instructions with the six small buttons at the bottom of the City Management Menu. The Emphasize Food button tells the governor to concentrate on growth, the Emphasize Production button will focus on providing the maximum number of hammers, and the Emphasize Commerce button will concentrate on bringing in the most total commerce. Below these are the Emphasize Research button (which naturally focuses on science), Emphasize Great People (which will try to run the maximum amount of specialists to bring in more great people), and finally Avoid Growth (which will halt the city’s growth at the current level; it may sometimes be preferable to stop a city from growing and producing unhappy citizens). You can also combine these buttons to give multiple commands to the governor; it is possible to tell the governor to both Emphasize Great People and Avoid Growth at the same time, for example.

City Build Menu

The City Build Menu is located at the bottom of the city screen, to the left of the



City Management Menu. This is where you can select what the city should construct next: a unit, a building, or a wonder. The City Build menu is scrollable; it contains a list of icons showing everything that the city can build, starting with units and then proceeding through buildings, wonders, and (eventually) spaceship parts. Some of these icons may be grayed out, indicating that your city lacks a certain requirement to build it. [Roll over] over the icon to learn what your city needs in order to produce it. (You can also [roll over] any of the lighted icons to learn more info about them.)

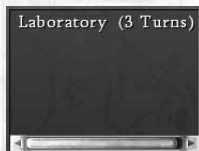
Portrait Window

To the left of the City Build Menu is the Portrait Window, which shows a three-dimensional image of whatever the city is building.



City Production Queue

Located to the left of the Portrait Window in the bottom-left corner of the city screen is the Build Queue. This is a list of all of the different projects that the city has assigned to it, with the current project listed at the top. Ordinarily a city will only have one task assigned to it, but you can set a build list for the city's governor to follow by [Shift-clicking] on items in the City Build Menu. As each project is completed, the next one in the queue will move up to take its place. To remove a project from the Production Queue, click on it with the mouse.



Culture Display

Refined (448/Turn)

Above the Portrait Window and City Production Queue is the city's Culture Display, an indicator of how much culture the city is producing. The culture display lists the rate at which culture is being accumulated each turn, and displays a word indicating the city's current cultural level – None, Poor, Fledgling, etc. – each cultural level grants the city a 20% defensive bonus. [Roll over] the Culture Display to see exactly how much culture exists in the city and how much is necessary to reach the next cultural level.

City Nationality

100% Incan

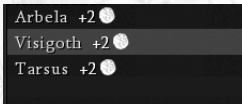
Directly above the Culture Display is the City Nationality, a percentage indicator of how many citizens of your nationality the city contains. (Remember that people of foreign nationalities will become unhappy if you go to war with their civilization.)

City Building Roster

Most of the left side of the city screen is taken up by the City Building Roster, a list of all buildings and wonders present in the city. The city building roster displays any culture, gold, or happy faces added by each individual building/wonder; you can get additional information about each by [rolling over] it.



Trade Income List



Above the City Building Roster is the Trade Income List, a display of all of the trade routes that the city possesses. Trade routes in *Civilization IV* are generated automatically between cities, with each city forming the most profitable trade routes possible. At the beginning of the game, each city can only have one trade route, but additional technologies, buildings, wonders, and certain civics increase the amount of trade routes that a city can have. Trade routes can run to the cities of your own civ or to those of foreign civilizations; foreign trade routes are almost always more lucrative, but require an Open Borders agreement with the other civs. Certain buildings like harbors can increase revenue from trade routes.

Trade routes increase the base commerce of a city (see page 156 for more information on how base commerce gets converted into gold and science beakers). If a city has three trade routes that are each bringing in 10 commerce, that city has an additional 30 base commerce that can be applied to science, wealth, or culture. If your civilization signs a number of Open Borders agreements, trade route income can be extremely profitable and help speed along the progress of your civ's scientific research.

City Maintenance Maintenance: ----->

Just above the Trade Income List is the City Maintenance display. In a nutshell, this tells you how much it costs your civilization to maintain this city. Your capital city starts out with a maintenance cost of 0, but as you found more cities they will begin costing your civilization gold. Maintenance costs arise from two different sources: the distance of the city from the capital and the total number of cities in your civilization. [Roll over] the City Maintenance display to see what is driving this city's maintenance costs.

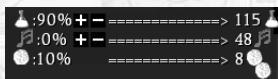
There are several ways to deal with city maintenance costs. One of the best is to build courthouses in most cities. Each courthouse reduces its city's maintenance costs by 50%. Building enough courthouses will also allow your civilization to build the Forbidden Palace, which acts as a second capital and helps control the maintenance costs created by your cities' distance from the capital.

Finally, the State Property civic removes all maintenance costs caused by distance from the capital.

Note that courthouses and State Property are not easily accessible during the early game, and you always should be careful of growing your civilization beyond its means. Expanding too far too fast will drain your treasury of gold and reduce the rate at which your civilization conducts research.

Investment Percentages

In the top left corner of the City Screen are the investment percentages, one for research, one for gold, (and later on) one for culture. These are the same investment percentages that appear on the Main Screen (they can be adjusted here on the City Screen as well as on the Main Screen). The City Screen shows exactly how many research points, gold, and culture are being generated in this particular city using the current investment percentages. The percentages dictate how much of the city's total commerce is going into each category.

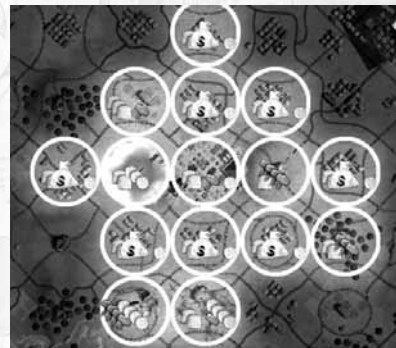


As usual, [roll over] each investment percentage to get a more detailed breakdown of how the city's commerce is being spent. For example, let's say a city has 30 total commerce, running 80% science and 20% wealth, with a library (+25% research) and one scientist specialist (+3 research points). [Rolling over] the investment percentages will inform you that the city is producing 6 gold each turn (20% of 30 = 6) and producing 24 base research points (80% of 30 = 24), with a total of 34 research points after the scientist and library are factored in ((24 + 3) x 1.25 = 33.75).

Increasing the amount that your civilization invests in culture adds 1 happy face to each of your cities, more if the cities contain theatres, broadcast towers, or coliseums.

City Map

The large map that takes up most of the center of the screen is the City Map. Here you can manually pick which tiles of the city's land that you want its population to be working. Careful management of what tiles your cities are working can be of huge benefit to the growth and development of your civilization. For every population point that the city possesses, you can pick one tile for its people to work (you can also assign specialists if desired, see above). Working tiles are indicated by large white circles.



Every tile produces a certain amount of food, production, and commerce. More food will let your city grow faster, more production lets it build things faster, more commerce speeds along research – it is up to you to decide which is most important at any one point in time.

Remember that you aren't required to manually assign your populace to work tiles; the city governor does that for you

automatically. Left alone, governors generally try to choose a balanced approach between food, production, and commerce, but you can issue additional instructions to the governor using the City Management Menu (see page 152).

To change the tiles that a city is working, click on one of the tiles with a white circle around it. This will remove that population from working the tile and create a Citizen specialist. Then click again on whichever tile you want the city to work, and the Citizen specialist will go back to working the land on the new tile you have selected.

Unit List



Any units that are stationed inside a city will appear at the bottom of the City Map. You can see each unit's stats by [rolling over] its icon. If there are more units than can fit on the screen, click on the plus (+) and minus (-) signs to scroll through them all.

CIVILIZATIONS

Following is a list of all of the civilizations appearing in the game, as well as each civilization's unique units, leaders, and leader traits.

LEADER TRAITS

Each leader has two "traits" which give him or her special abilities in the game. The traits are:

Aggressive

Effect: Free promotion (Combat I) for all melee and gunpowder units.

Construct at 1/2 Production Cost: Barracks, Drydocks

Creative

Effect: +2 culture per turn per city.

Construct at 1/2 Production Cost: Colloseum, Theatre

Expansive

Effect: +2 health per city

Construct at 1/2 Production Cost: Granary, Harbor

Financial

Effect: +1 commerce on spaces generating 2 or more commerce.

Construct at 1/2 Production Cost: Bank

Industrious

Effect: +50% wonder production.

Construct at 1/2 Production Cost: Forge

Organized

Effect: -50% civic upkeep cost.

Construct at 1/2 Production Cost:

Courthouse, Lighthouse

Philosophical

Effect: +100% Great People birth rate.

Construct at 1/2 Production Cost: University

Spiritual

Effect: No anarchy

Construct at 1/2 Production Cost: Temples

CIVILIZATION LIST

See the Civopedia for historical backgrounds on each civilization.



American Empire

Starting Technologies: Agriculture, Fishing

Unique Unit: Navy Seal (replaces marine)

Leader 1: Roosevelt

Trait: Industrious

Trait: Organized

Favorite Civic: Universal Suffrage

Leader 2: Washington

Trait: Financial

Trait: Organized

Favorite Civic: Universal Suffrage



Arabian Empire

Starting Technologies: Mysticism, The Wheel

Unique Unit: Camel Archer (replaces knight)

Leader: Saladin

Trait: Philosophical

Trait: Spiritual

Favorite Civic: Theocracy



Aztec Empire

Starting Technologies: Mysticism, Hunting

Unique Unit: Jaguar (replaces swordsman)

Leader: Montezuma

Trait: Aggressive

Trait: Spiritual

Favorite Civic: Police State



Chinese Empire

Starting Technologies: Agriculture, Mining

Unique Unit: Cho-Ko-Nu (replaces crossbowman)

Leader 1: Mao Zedong

Trait: Philosophical

Trait: Organized

Favorite Civic: State Property

Leader 2: Qin Shi Huang

Trait: Industrious

Trait: Financial

Favorite Civic: Police State



Egyptian Empire

Starting Technologies: The Wheel, Agriculture

Unique Unit: War Chariot (replaces chariot)

Leader: Hatshepsut

Trait: Spiritual

Trait: Creative

Favorite Civic: Hereditary Rule



English Empire

Starting Technologies: Fishing, Mining

Unique Unit: Redcoat (replaces rifleman)

Leader 1: Elizabeth

Trait: Philosophical

Trait: Financial

Favorite Civic: Free Religion

Leader 2: Victoria

Trait: Expansive

Trait: Financial

Favorite Civic: Representation



French Empire

Starting Technologies: The Wheel, Agriculture

Unique Unit: Musketeer (replaces musketeer)

Leader 1: Louis XIV

Trait: Industrious

Trait: Creative

Favorite Civic: Hereditary Rule

Leader 2: Napoleon

Trait: Aggressive

Trait: Industrious

Favorite Civic: Representation



German Empire

Starting Technologies: Hunting, Mining

Unique Unit: Panzer (replaces tank)

Leader 1: Bismarck

Trait: Expansive

Trait: Industrious

Favorite Civic: Representation

Leader 2: Frederick

Trait: Philosophical

Trait: Creative

Favorite Civic: Universal Suffrage



Greek Empire

Starting Technologies: Fishing, Hunting

Unique Unit: Phalanx (replaces spearman)

Leader: Alexander

Trait: Philosophical

Trait: Aggressive

Favorite Civic: Hereditary Rule



Incan Empire

Starting Technologies: Agriculture, Mysticism

Unique Unit: Quechua (replaces warrior)

Leader: Huayna Capac

Trait: Aggressive

Trait: Financial

Favorite Civic: Hereditary Rule



Indian Empire

Starting Technologies: Mysticism, Mining

Unique Unit: Fast Worker (replaces worker)

Leader 1: Asoka

Trait: Spiritual

Trait: Organized

Favorite Civic: Universal Suffrage

Leader 2: Gandhi

Trait: Spiritual

Trait: Industrious

Favorite Civic: Universal Suffrage



Japanese Empire

Starting Technologies: Fishing, The Wheel

Unique Unit: Samurai (replaces maceman)

Leader: Tokugawa

Trait: Aggressive

Trait: Organized

Favorite Civic: Mercantilism



Malinese Empire

Starting Technologies: The Wheel, Mining

Unique Unit: Skirmisher (replaces archer)

Leader: Mansa Musa

Trait: Spiritual

Trait: Financial

Favorite Civic: Free Market



Mongolian Empire

Starting Technologies: Hunting, The Wheel

Unique Unit: Keshik (replaces horse archer)

Leader 1: Genghis Khan

Trait: Aggressive

Trait: Expansive

Favorite Civic: Police State

Leader 2: Kublai Khan

Trait: Aggressive

Trait: Creative

Favorite Civic: Hereditary Rule



Persian Empire

Starting Technologies: Agriculture, Hunting

Unique Unit: Immortal (replaces chariot)

Leader: Cyrus

Trait: Expansive

Trait: Creative

Favorite Civic: Representation



Roman Empire

Starting Technologies: Fishing, Mining

Unique Unit: Praetorian (replaces swordsman)

Leader: Julius Caesar

Trait: Expansive

Trait: Organized

Favorite Civic: Representation



Russian Empire

Starting Technologies: Hunting, Mining

Unique Unit: Cossack (replaces cavalry)

Leader 1: Catherine

Trait: Creative

Trait: Financial

Favorite Civic: Hereditary Rule

Leader 2: Peter

Trait: Philosophical

Trait: Expansive

Favorite Civic: Police State



Spanish Empire

Starting Technologies: Fishing, Mysticism

Unique Unit: Conquistador (replaces knight)

Leader: Isabella

Trait: Spiritual

Trait: Expansive

Favorite Civic: Police State

DIFFICULTY LEVELS

As you improve at playing the game, you may want to increase the difficulty level to provide greater challenges for your civilization to overcome. This section details what actually takes place when you change the difficulty level.

SETTING DIFFICULTY

The difficulties range from Settler (used for the Tutorial) up through Noble (the default difficulty level) eventually to Deity (a nearly impossible level!). You choose which difficulty to play at during the game setup. There is no way to change the difficulty once a game has begun. (For a Custom Game, you can select the difficulty by changing your own difficulty setting in the drop-down menu.)

EFFECTS OF HIGHER DIFFICULTY

Increasing the difficulty level will have the following effects.

Barbarians

On the lower difficulties, your units enjoy substantial advantages in combat against barbarian animals and units. As the difficulty increases, these combat bonuses decrease until they disappear entirely. Barbarians appear more often and are more numerous on the higher difficulties as well – and they start appearing sooner too.

Free Units

You receive a larger number of “free units” on the lower diffi-

culties; in other words, you can build more units before having to pay gold to support them. This number declines as the difficulty level increases.

Research

Techs are cheaper to research on the lower difficulty levels, more expensive on the higher ones.

Maintenance Costs

Maintenance costs, civic costs, and inflation also all increase with difficulty level. The net result is that you will have a much more strained budget on the higher difficulties.

Health and Happiness

All of your cities always start with a certain amount of health and happiness. This amount decreases as the difficulty increases; for example, cities start with 3 health and 6 happiness on Chieftain, but only 1 health and 3 happiness on Deity. Your cities thus hit the health and happiness limits much sooner on the higher difficulties.

Artificial Intelligence Penalties

The difficulty level affects how quickly the AI civilizations develop and expand. On the lowest difficulty levels, it takes the AI civs longer to train units, construct buildings and wonders, grow their cities and research technologies. On Noble difficulty they play under the same conditions as the human players, and on higher difficulties they receive discounts on these items.

AI Freebies

On the higher difficulty levels, the AI begins receiving extra units to start the game. Notable jumps in difficulty come from the free worker that the AI civs start with on Monarch, the 2 free workers they get on Immortal, and the free settler they get on Deity. The AI civs also start with additional technologies on the higher difficulties.

Tribal Villages

The results that you get from entering tribal villages also scale by difficulty; in other words, you are more likely to get something really good on the lower difficulties. Note that it is only possible to get a Settler or a Worker from a village on Warlord or lower difficulties.

THE OPTIONS SCREEN

The “Options Screen” allows you to customize many aspects of *Civilization IV*, including game information displayed, unit activation, shortcut keys, graphic and audio details, and the game clock.

GETTING TO THE OPTIONS SCREEN

Press [Ctrl-o] to go to the Options Screen. Or press [Esc] (the “Escape” key) while on the Main Screen and then [click] on the “Options Screen” button.

OPTIONS SCREEN ORGANIZATION

There are four separate sections to the Options Screen – Game, Graphics, Audio, and Clock. When you first arrive at the Options Screen you are in the “Game” section. [Click] on the labeled buttons at the top of the screen to move between sections. In addition to the section buttons, you’ll also find a button leading to the “Profile Management” menu.

PROFILE MANAGEMENT

If you share your computer with others, each player can create a separate “profile,” allowing each to set up and save their own options settings.

THE GAME SCREEN

This screen allows you to turn on and off various display and help options. Active options have a check mark on their buttons; inactive options have blank buttons. [Click] on an option button to turn on and off that option.

[Roll over] an option to learn more about it.

GRAPHICS MENU

This menu allows you to adjust the game’s graphics to better suit your computer and graphics card. [Roll over] the options to learn more about them.

AUDIO SCREEN

The Audio Options Screen allows you to adjust the game’s audio output to suit your personal preferences. Once again, [roll over] the options to learn more about them.

CLOCK SCREEN

The Clock Options Screen lets you turn on and off a clock to time how long you’ve been playing, as well as set an alarm to let you know when you should stop playing and go to work. Or eat. [Roll over] the entries to see how they work.

THE CUSTOM GAME SCREEN

The Custom Game Screen allows you to “fine-tune” your *Civilization IV* game experience. Though primarily intended to assist in creating multiplayer games, you can do some fairly cool stuff in a solo game, as well.

THE PLAYERS MENU

The Players Menu allows you to choose how many civilizations will appear in your game. You can also choose which civilizations you’ll be facing, as well.

Player Menu

Your name always appears in the top slot (assuming that you created the game). You can set the following slots to one of three settings:

Open: Available for other human players. See “Multiplayer Games” for more details.

AI: To be played by an artificial intelligence (standard in a single-player game).

Closed: Nobody will play that slot.

GAME SIZE LIMITATIONS

The maximum number of civilizations in a game is determined by the size of the map. You can play against fewer AIs by setting one or more of the player slots to “closed.”

Team Assignment Menu

This allows you to “lock” several civilizations into permanent alliances. To do so, assign both civilizations the same “Team Number.” For example, you could play a six-civilization game where there are three teams of two civs each.

LOCKED ALLIANCES

During play, team-members share line of sight, wonder effects, and technology research. They also share victory and defeat. Team-members always have Open Borders with each other, and they cannot declare war on one-another. If any team-member declares war on another civilization, all are at war. Though of especial use in multiplayer games, this can make for an interesting single-player experience as well.

Choose Leader Menu

You can choose which leaders will appear in the game. You can also leave some choices random.

Choose Difficulty Menu

Here’s where you choose the difficulty of the game. You can only choose difficulty levels for human players (those marked as “open”).

Additional Buttons

Certain maps or scenarios may allow you to make other decisions about your game. See the *Civilization IV* website to download new maps and scenarios.

GAME PROFILE

This area of the screen is divided into two sections: “Settings” and “Options.” [Click] on the tabs to move between the sections.

Settings

Here you can choose exactly what style of game you will play (like you do when setting up a standard game). “Settings” has the following categories:

MAP

Pick the style of map you want to play on.

MAP SIZE

Determine the size of the map.

CLIMATE

Determine the climate of your world.

GAME ERA

Decide in what historical period you want the game to begin. (Standard games begin in the “Ancient” period. Pick a later period to start play with all civilizations possessing more advanced technologies.)

GAME SPEED

Play an “Epic,” “Normal,” or “Quick” game.

Options

This screen allows you to modify certain rules of play to provide a different style of gaming experience. For instance, if you choose to play a game with the “Always War” option, all civilizations will always be at war with one-another. There will be no Open Borders agreements, no technology trading, no peace treaties, etc. – just unending battle.

[Roll over] each option to learn more about it.

EXITING THE SCREEN

“Go Back” Button

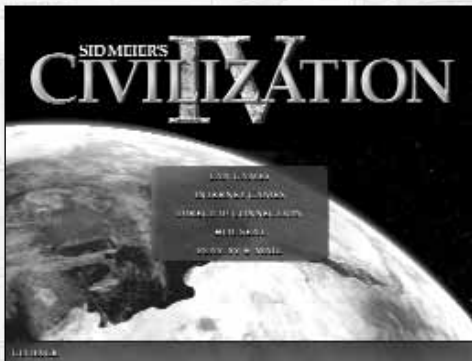
[Click] this to return to the Main Menu. No custom game will begin.

“Launch” Button

[Click] this button to launch your custom game!

MULTIPLAYER GAMES

Multiplayer games allow you to test your skills against real, live human opponents in a variety of formats. Depending on how much time you are willing to spend and the proximity of your playing partners, you choose to play on your LAN, on the Internet, via email, or all on the same machine. For LAN and Internet games, you also have the choice of traditional turns or simultaneous movement.



THE MULTIPLAYER MENU

On the Main Menu, [Click] on Multiplayer to open this menu. Here, you will find the following entries:

LAN Games

[Click] on this option to play a game on your LAN (Local Area Network). When you reach the setup screen, you can either use the buttons on the left to start a new game or scenario or load to load a previous game. If you are trying to join a game, the list to the right will display all visible games on your network. [Click] on the game you would like to join to highlight it and then [Click] the "Join Game" button to proceed. [Click] on "Refresh List" to update the game list

Internet Games

[Click] on this option to play a game on the Internet via GameSpy. The first time you choose this option you will be

asked to login to GameSpy. You may either use an existing account or you may choose to sign up for a new one. When you reach the setup screen, you can either use the buttons on the left to start a new game or scenario or load to load a previous game. If you are trying to join a game, the list to the right will display all visible games on your network. [Click] on the game you would like to join to highlight it and then [Click] the "Join Game" button to proceed. [Click] on "Refresh List" to update the game list. The bottom left of the screen will display chat from people in the lobby and the display on the right will show you who is currently in the lobby. There is also a tab to keep track of your buddies.

Direct IP Connection

[Click] on this option to play on the Internet bypassing the GameSpy lobby screens. The next screen will provide you with the opportunity to either host a new game or scenario or to load a previous save. To join a game, players will have to know the IP address of the host's computer and enter it in the text box on the right.

Hot Seat

[Click] on this option to play a game where everyone takes turns on the same computer. At the end of a turn, the active player will get up from the "Hot Seat" and allow the next player to take their turn.

Play by E-mail

[Click] on this option to play a Hot Seat type game where everyone is on different machines in different locations. Upon completion of a turn, the game state is sent to the next player who then sends the game state on to the next.

After the initial screen(s) for each game type are navigated, players will be able to make game settings on a screen just like the "Custom Game" screen. See the previous section for a description of how this screen works.

MODS

Sid Meier's Civilization IV has been designed to be the most moddable version of *Civ* ever. For the first time ever, we will be providing you, the player, with all of the tools we use internally to make the game what it is. Depending on your skill level, you will be able to do as much as you want to make the scenario or mod of your dreams. There are four levels to fit anyone's level of experience and comfort:

XML

Anyone that is comfortable editing a text file can easily jump in and use the XML (Extensible Markup Language) files to easily change game text and simple rules. You could rewrite all of the diplomacy text, add a new *Civ*, or simply tweak the combat or movement value for a unit.

Python

If you are somewhat comfortable with simple scripting, you can add events to the game. You could make a certain square give your units experience points or have an "Earthquake" destroy a mountain range.

World Builder

You can access the World Builder interface anytime from the game. Here, you can edit the map, placing terrain, rivers, resources, and improvements as you see fit. You can also drop units or cities on the map. You can even adjust the size of cities, place starting locations, or edit starting technologies before saving the map out as a simple scenario you can share with your friends.

Game and AI SDK

In early 2006, we will be delivering this incredibly powerful tool that will allow experienced programmers to "get down to the metal" and tweak the AI or how the game functions.

These descriptions are just the tip of the iceberg. Check the game folder for last-minute updates as well as documents detailing how to use these features and other exciting things. Also, keep checking the *Civ IV* home page for new updates, fan-created content, and new official mods.

AFTERWORDS

BY SOREN JOHNSON

Opportunities like this don't come along every day.

Many, many years ago, when I was probably ten years old, I used to spend the lazy days of summer imagining games with my cousin, Kjell. One week, we wrote up a design for a game about the history of the world. You could create a new world from scratch! And you could play as the Chinese, or the Romans, or the Americans! There would be diplomacy, and combat, and technology, and exploration. Wow, that would just be the coolest game ever – imagine if someone ever made that for our little Apple or Commodore computers!

Of course, we weren't the only ones dreaming of such a game. In fact, there was a palpable sense after Will Wright's *SimCity* that someone just had to take the next step to include the whole world. It was no surprise that Sid Meier – an already famous game designer – was the one who made it happen. *Civilization* was born in 1991, and the world was hooked.

I started playing the game heavily my first year of college. Somehow, the game was both everything that I had hoped for and also an inspiration for what else might be possible. Being a game about all of human history, nothing was off-topic. Shortly after my graduation, Firaxis Founder & CEO Jeff Briggs gave me an opportunity to help out with his design for *Civilization III*. It was a fantastic experience – one I could never have been prepared for – and we brought some great new elements to the series, especially resources and culture. However, as soon as the game made its rounds, creating a new generation of fans, the questions began: "What about *Civilization IV*?"

Well... that's a fair question.

There are a thousand ways to make a game about all of civilization – we only get to make one of them. To begin with, we wanted to make a game that stood on its own. Although the game was a sequel, everything in the design was up for grabs. The codebase began from scratch, so we could choose which elements of the series should be kept and which parts could be left behind.

Why did people love *Civ*? It is, of course, no one thing. However, certain patterns do emerge: “If I research Gunpowder, I can build a stronger military;” “If I capture that city, I’ll get a new luxury;” “If I build the Pyramids, my cities will blossom;” and – of course – “If I play just one more turn...” The turn-based gameplay is key to a series of overlapping mini-goals which usually lead to the same result: a very late night of gaming. Thus, we knew that the turn – as opposed to the “real-time” structure used by some strategy games – was an essential part of the *Civ* formula.

Conversely, what didn’t people like about *Civ*? Too much micro-management was high on the list. City riots were the first to go. Instead of having to monitor your cities each turn to make sure they didn’t suddenly go into disorder, we simply made angry citizens unwilling to work. Instead of a one-time event which punished you for not balancing out a complicated equation every turn, angry citizens simply became a balancing factor of your civilization’s growth. The effect was the same but without the micro-management.

Similarly, we added research and production overflow – meaning that on the turn your city finishes a new building extra production will “spill over” onto your next project. In previous versions, this overflow was wasted, which encouraged players to bounce around their citizens each turn to prevent waste. Once again, a simple change could maintain the old turn-based system minus the micro-management.

We also looked at what game mechanics tripped up new players. One common example involved settlers and workers consuming population – cities could be finished building the units, but they wouldn’t pop out unless the city was the correct size. In *Civ IV*, cities simply stop growing while settlers and workers are created (with the food now turned into production). This small difference took out one more little gameplay trap for first-timers.

Next, we examined which base mechanics could be improved or cut. Pollution, for example, was an easy one to take out – everyone hated having to keep stacks of workers around for “whack-a-mole” pollution cleanup in the modern age. Instead, by creating a comprehensive health system, we could deepen the trade system with the addition of “food” resources while presenting the player

with a new challenge to tackle. It did put a lot of workers out of a job, though.

Similarly, corruption and waste had never been popular, but we had always assumed they were a necessary drag on player growth. We decided to start from scratch, simply remove the feature and then see how the game evolved without it. This choice led us down some interesting and unexpected paths.

The term “ICS” is a well-known one among our Internet fan base. It stands for “Infinite City Sprawl,” meaning that the best strategy in *Civ* games had always been to build as many cities as possible. Corruption and waste were meant to discourage city-building by adding diminishing returns to expansion – your 20th city would be much less productive than your 10th. In the first version of *Civ III* we turned corruption up significantly to – in our minds – once and for all kill ICS.

We were both right and wrong; the change did put an end to building as many cities into as tight a space as possible, but it was also the number one complaint raised against the game. Gamers simply didn’t like having their production taken away from them – there was nothing fun about founding a city and then finding out that it can only ever produce one shield per turn.

Once we removed corruption and waste (or – more accurately – never coded them to begin with), some new possibilities emerged. First, a revamped maintenance system could provide a subtle resistance against building more cities being the “only best choice.” Instead of tying maintenance to buildings – which actually penalized more developed cities as opposed to the smaller, underdeveloped cities of a classic ICS strategy – we made maintenance a flat cost per city that went up based on empire size. Because each city might be costing you ten gold per turn, underdeveloped ones would be a net loss to your economy. An empire with a strong core could support a number of “colony” cities like this, but basing your whole game around ICS would be very difficult.

However, maintenance created its own new issues. Like all penalties, there is the danger of it becoming “unfun” – a burden to the player that might balance the game but suck the enjoyment out of it. To solve this problem, we harkened back to a similar

problem during the development of *Civ III*. The Golden Ages of that game – a very popular feature – originally began life as Dark Ages! We had wanted to show how the power of empires wax and wane over the centuries, so we implemented a decline phase for each civilization. It wasn't a whole lot of fun, though. Rather than dropping the feature, we just flipped the concept around. We replaced 20 turns of decline with 20 turns of increased productivity, giving the game a sense of history's cyclical nature while still being fun for the player.

Similarly, we needed a positive feature which also encouraged fewer, larger cities. Otherwise, we would have to turn up maintenance very high – to dangerously “unfun” levels. City specialization was our solution. In fact, we had always wanted to encourage this type of gameplay; we thought people would enjoy focusing one city on research while focusing another on military and a third on trade. Simply put, if city specialization became a positive feature, we could lead the game away from ICS by giving players a new, fun goal.

Linking the improvements and resources was our first step. *Civilization* had always had improvements, like mines and farms, as well as resources, like iron and wheat. However, we had never taken the logical next step of combining the two. In *Civ IV*, farms and wheat would both still add +1 food on their own, but a farm combined with wheat would now produce +4 food. The result was that city placement near resources would define their flavor. A city near hills with iron and horses would make a great place for a forge and barracks to crank out knights. Founding along a river near spices and silk would mean increased trade and commerce, encouraging markets and harbors. A settlement in fertile grasslands with wheat and cattle would allow for a high population encouraging city specialists.

Specialists, in fact, needed a major overhaul, and they would be an important key to city specialization. First, we increased their potency – now, scientists would produce three beakers, engineers two hammers, artists four culture and one gold. More importantly, though, they would provide the backbone of the new Great People system.

Like many of the new features of *Civ IV*, we had always wanted to experiment with this idea, tying in great historical figures like Einstein and Plato and Michelangelo. We grouped these individuals into five broad categories: great artists, engineers, merchants, prophets, and scientists. The system was quite simple – every specialist you created in your city produced great people points each turn. Once enough points accumulated, one of these special units would be born in your city. If your city had focused on artists, you might end up with Beethoven. If the focus was merchants, Marco Polo might appear.

The great people would be powerful, one-use units which could change the course of the game. They could discover a new technology or be combined to trigger a Golden Age. Great engineers could finish a wonder in one turn. Great artists could create a cultural boom in one city. They could also be added as “super-specialists” to a city to permanently increase its output. A great scientist producing extra beakers in your research capital could make a huge difference over the course of an entire game.

Finally, city specialization was solidified by the National Wonders, which every civilization can build one each. This concept existed in *Civ III* but we have adjusted the building effects to encourage specialization. Wall Street doubles a city's gold output, Oxford doubles the beaker rate, the Hermitage doubles culture points, etc. Other effects include giving extra experience to new military units and increasing the great people birth rate. Each city, however, can only contain two National Wonders, which forces players to spread them out across many cities.

Thus, powerful tools exist for increasing the output of highly developed cities, particularly if they specialize in one area or another. At a higher level, these increased player choices – or as Sid would put it, “interesting decisions” – are a theme which can be found throughout *Civ IV*. A good example is the worker unit, which has commonly been accused of creating late-game tedium. Many fans have even lobbied for eliminating the unit altogether, which certainly is always an option to consider when micro-management becomes a concern.

When we looked at the issue more closely, however, we felt that the problem was not necessarily the unit management but the lack

of interesting decisions. (Still, we made one very small change which made a big difference in worker management – by giving them two moves, players could move the workers AND give them an order on the same turn, helping decrease the amount of task juggling.) In previous versions of *Civ*, worker options were mostly limited to farms or mines, increasing food or production. The tedium came from the fact that there were only two choices – and often one of them was the obvious best choice.

Therefore, we added a slew of new worker options. Workshops, windmills, and watermills became new choices for increasing food, production, or commerce depending on the local environment. Cottages created an interesting option for commerce – over time, they would grow into hamlets, then villages, and finally towns, with each level producing more and more commerce. A number of new improvements were created to match the resources, such as pastures for cattle, plantations for silk, and wells for oil.

Another area of the game in which we drastically increased user choice was the civic system, which replaces the old monolithic governments. Instead of static choices, like despotism or republic, the player can now select from a variety of options in five general categories. Free Trade or Environmentalism– Universal Suffrage or Hereditary Rule– Theocracy or Freedom of Religion– This system was obviously inspired by Alpha Centauri although we wanted the choices to be more distinct this time around, encouraging unique playing styles. Representation, for example, gives extra research for all specialists while Mercantilism provides a free specialist in each city, which creates a powerful combination.

The tech tree layout was also drastically changed to increase player choice. We dropped the distinct eras of *Civ III*, which often hemmed in the player by limiting research options. Further, we introduced “or” gates into the tree. All previous versions of the game had used “and” gates exclusively (you must have Code of Laws AND Philosophy to research the Republic). *Civ IV* allows alternate paths via “or” gates (you only need Guilds OR Education to research Gunpowder). This one change breathed new life into the tech tree – each trip through it could be radically different.

This development was exciting from a historical point of view as well – *Civilization* is a game about alternative histories, yet too often the tree mapped out only what did happen instead of what could have happened. Does a civilization actually need Flight to discover Rocketry, or could scientists simply be inspired by Artillery? Playing a game of *Civilization* should inspire the imagination to consider the alternative paths history could have taken, and the new, more open tech tree explores many of these possibilities.

Speaking of alternative histories, the introduction of real world religions to *Civ IV* created some other interesting possibilities. What if the Aztecs founded Buddhism? What if Rome had not adopted Christianity, helping to spread it in the classical age? What if Judaism had developed a missionary tradition? For *Civ IV*, the introduction of religion creates a new gameplay vector which stands on its own while also interacting with the other systems. A civilization with multiple religions can build multiple temples, allowing extra priest specialists. A well-spread state religion could enable a powerful army of holy warriors with the civic Theocracy or a burst of building construction via Organized Religion.

Like many game systems that we have experimented with, though, religion did not become fun until the player was given a level of control over it. Our first attempt at modeling religion involved a complicated, under-the-hood algorithm to model its spread along trade routes from centers of devotion to new lands. This system may have accurately shown how little control political leaders often have over religious fervor, but it was frustrating for players not to have a say in a system so important to the game. Thus, we introduced the missionary unit, allowing players to devote resources to spreading their religion throughout the world.

The most important reason to be proactive in the spread of religion is diplomacy. A problem that diplomacy suffered from in previous *Civ* games was a lack of motive – it often felt quite arbitrary that one civilization might like you while another hated you. Religion provides a useful back-story to give diplomatic dealings more logic. Choosing a different state religion than your neighbor may lead to animosity and possibly war. However, some well-placed missionaries in their largest cities could sway their people to your own religion, winning a long-term ally.

Indeed, the new leader personalities in *Civ IV* provide many other diplomatic challenges. Many leaders have a favorite civic and might pressure you to follow their lead. Gandhi may encourage you to adopt Universal Suffrage while Mao Zedong pressures you to adopt State Property. Further, the leaders will develop their own allies and enemies, often demanding that you join them in a war or an embargo. It takes quite some skill – especially at the higher difficulty levels – to maintain good diplomatic relations with all the major powers. Indeed, one often has to make a long-term choice of trading partners, knowing that trying to make everyone happy may leave you with no friends at all.

Inevitably, diplomacy will break down with one of your rivals, and war is on. Combat in *Civ IV* has undergone a major overhaul from its predecessors. In fact, combat may have undergone the most radical changes of all. To begin, the old attack and defense values have been combined into a single unit strength value. This change was made to create design space for significant new complexity. Combat units now have special modifiers which are situational. Archers, for example, are stronger when defending a city or a hill; spearmen are stronger when fighting mounted units; horse archers get a bonus when attacking catapults; and so on.

This gameplay encourages a combined-arms approach to combat. Focusing solely on any one specific unit will create an Achilles' heel which can be exploited by an adaptive opponent. Reconnaissance and espionage become increasingly important as knowing your enemy's force-mix ahead of time can provide the edge you need once hostilities begin.

However, as we developed this system, a loophole emerged. Actually, it's an old loophole known within our fan community as the Stack-of-Doom (SoD). Basically, if every unit has a counter, the best strategy is simply to put all of your units in a giant stack. That move will guarantee that – if the stack is attacked – the best possible defender will always be available, thus negating the delicate balance of counter units.

To solve this problem, we drew inspiration from *Civ I*, which had a collateral damage system that killed every unit sharing a tile with a losing defender. While that system was so harsh that we removed it entirely for *Civ III*, a lesser version of this system could

solve the SoD problem. Thus, catapults, cannons, and artillery units are not a counter for any one type of unit; instead, they are a counter for a style of play. They are the stack-killers, which creates a great tension between keeping units together for mutual defense and spreading units out to avoid collateral damage.

The other great change to the combat system was the introduction of promotions. Customizing your units was an idea introduced in Alpha Centauri via the Unit Workshop, but its complexity intimidated many players. Further, we wanted a system that felt more “Civ-like” – meaning that special abilities should unlock slowly over time as rewards for the player.

In fact, the system that we wanted sounded very similar to a traditional RPG leveling system. We've never been afraid to borrow a good idea when available – especially from a genre with which many of our fans would already be familiar. Thus, the promotion system was born; units acquire experience points from successful battles, which can then be spent on unique upgrades to specialize the unit.

A swordsman with the City Raider promotion could become a city-killer. A pikeman with the Medic promotion might not only provide protection against knights but also help heal wounded units in the same stack. The units finally develop a personality; players start to think twice before throwing high-ranked troops into the breach. More importantly, the system is simple yet hot and deep – certainly, a strong guiding principle for game design in general.

So... What about *Civ IV*? Well, the time for reading is over. It's best to crack it open yourself. We only hope that you have as much fun playing as we had making.

Before signing off, though, I must take this opportunity to thank the people who made *Civ IV* possible. Every great game has a great team behind it, and I'm afraid they'll never know how much I was humbled by the effort and passion they devoted to the project. Mustafa Thamer, our lead programmer, did an amazing job with making all of my crazy ideas about modding *Civ IV* work. I didn't let on to him when I originally pushed the idea but having a stand-alone game core DLL was always – to me – more a dream than a reality. Thanks, Moose.

Steve Ogden, our lead artist, took on the intimidating task of leading our art team from prototype to production to finished product. It's not easy making art for a game that must be playable from day one, but he was always ready to meet our needs, no matter how big or small. Dorian Newcomb, our lead animator, was the man who brought the units to life – he taught us that nothing sells an idea like a moving piece of concept art. Further, Dorian has a gift for pointing out great ideas that should have been obvious to everyone but somehow weren't – you know, like metals and mines actually working together!

Our two producers, Barry Caudill and Jesse Smith, somehow found a way to ship this colossus of a product on time – Barry's experience and Jesse's energy were a good match to keep the team moving forward. Tim McCracken, our QA manager, organized and led some 20 testers split between opposite coasts, always keeping us on top of the game's pulse. Paul Murphy, our writer with a gift for the witty aside, wrote and wrote and then wrote some more – not many games top 100,000 lines of text!

Jeff Briggs and Mark Cromer worked together to create the hours of original music filling the game; we are especially proud of the diplomacy music and hope our long-time fans recognize some old themes brought back to life. Michael Curran brought the world to life with a great collection of sound effects.

Our programming team built an amazing world for me to play in as a designer. Tom Whittaker led the effort to create the first ever 3D *Civilization* and always showed patience when my limited graphical background betrayed me. He discovered a way to make tiles work in a 3D environment, creating a world both beautiful and playable – a neat trick. Bart Muzzin built our animation system, gracefully handling one of the biggest shifts during the project – multi-entity units. Sid showed us that they could work in *Sid Meier's Pirates!* and Bart made it happen in a world of much, much larger scale. Nat Duca made contributions both large and small, literally speaking. The epic globe view and the close-up detail of cities and improvements came from his hard work. Jason Winokur created our flexible camera system with a secret ambition – We didn't plan on letting the player fly through the world but Jason made it impossible to resist.

Dan McGarry wrote our multiplayer code, which is quite a challenge for a game that could be played in hours or in months. Emphasizing multi-player so early in the process really paid off; we expect to surprise quite a few people with a game as addictive in multi-player as it has always been in single-player. Pat Dawson, a veteran of the old *Civ III* days, built our interface, finally bringing us up-to-date with what modern gamers expect – information at their fingertips and the high-level controls to beat the micro-management. Further, he built the first-ever in-game tech tree built purely dynamically. Hard-coding, be gone!

Eric MacDonald, who created our in-game world-builder, was the man who convinced us that XML was the best way to store data. Modders everywhere should send him a thank you. Alex Mantzaris created the advisor screens and *Civilopedia*, tasks where his passion for and knowledge of *Civ* played an invaluable role. His eye for detail made all of the pop-up formulas possible. Jon Shafer worked hard with Mustafa to build the infrastructure that makes *Civ IV* a dream for modders – we can hardly wait to watch the fans blow us away.

As for our team of artists, who responded with professionalism and fierce determination to the monumental task before them, I can only offer my thanks. Justin Thomas single-handedly improved the look and feel of the interface with his beautiful, hand-illustrated icons and buttons. 1,500 of them, in fact! Tom Symonds, who grew from an intern to a full-time employee during the development of *Civ IV*, proved to be a problem solver, a prolific production artist, and a seriously nice guy who really cared about Doing Things Right for the player. He helped develop the resource and improvement system and worked exhaustively to improve the terrain right up until we shipped. Mike Bates was one of the first artists on the project and one of the last to leave, and touched almost every aspect of it. His major contribution, though, was the gorgeous city system he worked to develop with programmer Nat Duca. Greg Cunningham worked tirelessly to help develop the resources and improvements and did some really nice unit animation to boot. Jerome Atherholt was the Hand of the Master, contributing the classic pencil sketches which adorn so many parts of the game. These sketches came to represent the elegant, civilized

nature of *Civ IV*. Rob Cloutier, who has an extensive background in cinematics, helped develop many of the movies in the game. He worked with Mike Bates to come up with the opening cinematic and designed the system that allowed us to do the time-lapse construction animations that suit the wonder movies so well. Ed Lynch rose to the mammoth task of developing a facial animation system and animating over half the leaders in the game. He brought an incredible amount of life and character to them, elevating the AI leaders from mere heads to actual personalities. Ryan Murray built several of our units before progressing to creating leader-heads. His Tokugawa measures you with a particularly arresting gaze. Mark Shahan helped develop the leader-head modeling pipeline, creating efficient models that looked much more polygonally intense than they actually were. He also worked with Bart Muzzin to develop a normal-map shader and skin shader, extra touches that make the difference between the appearance of a well-made model and a real-life historical figure. Megan Quinn constructed many a city building and defined the elegant, ornamental look of the religious buildings. Alex Kim made some beautiful animal models early on and progressed to doing some excellent animation as well. His scruffy-necked wolf is a delight to look at. Nick Rusko-Berger painstakingly researched and built all the Wonders, Shrines, and Cathedrals, and helped us optimize all the buildings. Marc Hudgins created the concept sketches for all the leaders and most of the units in the game, eventually animating some of the latter as well. He also helped design the look and feel for half of the victory movies. Dennis Moellers designed the other half and also worked with Ed Lynch on the rest of the leader animations, extending their emotional range to match the AI personalities. Greg Foertsch tremendously improved the terrain, trees, icebergs and mountains, working with Tom Whittaker to come up with a terrain system that allows this tile-based, dynamic game to look completely organic. Brian Busatti, our unit lead, did an incredible job turning the units from bloated, generic blurs into efficient, crisp, clean fighting machines (or in some cases, settling, evangelizing, laboring, or exploring machines...). Mike Bazzell contributed some stunning sea units (what else would you expect from the man who brought you such breathtaking ships in *Pirates!*) Also, the special effects you see in the game are all his, lending sparkle, fire, smoke, and even

nuclear blasts to the game. Interns Darren Gorthey, Chris Sulzbach and Kevin Bradley also lent capable and much-needed hands. Darren helped out with various interface elements, Chris helped out with units and damage states, and Kevin created some fantastic unit animations. Last but not least, art director Mike Gibson kept the art team rolling smoothly, always with an eye towards the Big Picture, always with an eye towards Firaxis Quality. He believed the look and feel of *Civilization* is easy to grasp: it's Sid's World.

Ed Piper worked as our mod designer, building the excellent *Crusades* and *Alexander the Great* scenarios. He also worked on the Tutorial, which is a great starting point for old and new alike.

With every version of *Civilization*, we have made a point to thank the fans who make all of this possible by supporting the game for so many years. This time, however, we mean it quite literally. *Civ IV* was built hand-in-hand with the fan community. Early on in the project, we assembled a crack team of the best *Civ* players in the world, looking for equal representation from the worlds of single-player, multi-player, and modding. The backbone of this team of volunteers came from the two big-tent *Civ* fan-sites, Apolyton (www.apolyton.net) and CivFanatics (www.civfanatics.com).

Led by our three session leads, Sirian (single-player), Friedrich Psitalon (multi-player), and Isak (modding), our group grew slowly from 10 to 20 to 50 and more. Game design cannot happen in a vacuum, and the input from the forums made *Civ IV* a fundamentally better game than we possibly could have made on our own. Indeed, a few of the testers “crossed over” to the development team – Alex Mantzaris and Jon Shafer are both better known as Alexman and Trip, respectively – and made huge contributions. Bob Thomas (Sirian) redesigned our map script system while creating many new favorites for the rotation, such as Great Plains and Oasis. Michael Soracoe (Sulla) became a valuable member of our on-site testing team, lending a hand also with the manual and in-game help text.

The modding group kept us honest by offering to build some scenarios for the actual release. Rhye, Locutus, and Dale joined Isak to stress our system so that we were certain that we had built the foundation for a thriving mod community. The efforts and

contributions of our small group was inspiring, and I hate to single anyone out for fear of who I might neglect to mention, but I can't finish without thanking Aeson, Rob, Vondrack, notyoueither, ColdFever, Solver, and Dominae for their efforts. They were but a few of a larger group of dedicated volunteers who put up with terrible crash bugs, gaps in communications, system incompatibilities, invisible terrain, and worse; simply because they loved the game. Your work can never be properly rewarded, but you have my sincere thanks. I know the difference that you made.

Finally, I have to give my personal thanks to the two people who made this whole endeavor possible, who entrusted me with the keys to the family car, so to speak. They gave our team the room we needed to make our mistakes, hit some dead-ends, and come out the other end with a game that we can't wait to get into the hands of our fans.

Thanks, Jeff and Sid. I hope *Civ IV* will inspire another ten-year-old out there somewhere who likes to dream big. Real big.

Soren Johnson

September 5, 2005



APPENDIX

Reference Charts

KEY FUNCTION

Units

[B]	Bombard
[B]	Build city (with settler)
[C]	Center on unit
[E]	Explore with unit (automated)
[F]	Fortify
[G]	Go-to mode
[L]	Load (onto ship)
[S]	Sentry
[U]	Unload (off ship)
[W]	Wait
[Alt-Click]	Group all units on a tile together
[Ctrl-# Key]	Bind selected unit or group to that number key
[Ctrl-Click]	Group all units of the same type on a tile together
[Delete]	Delete unit
[Shift-Click]	Tile context menu
[Spacebar]	Skip turn

Worker Commands

[A]	Build improvements (automated)
[H]	Build camp
[I]	Build farm
[K]	Build workshop
[L]	Build lumbermill
[M]	Build mine
[N]	Build trade network (automated)
[Q]	Build quarry

[R]	Build road/railroad
[T]	Build cottage
[Alt-C]	Remove forest or jungle
[Alt-R]	Road-to mode
[Ctrl-C]	Improve nearest city (automated)
[Ctrl-F]	Build fort
[Shift-P]	Build pasture, plantation
[Shift-W]	Build watermill (on river), windmill (on hill)
[Shift-W]	Build winery (on wine), well (on oil)

Work Boats

[F]	Build fishing nets
[O]	Build offshore platform
[Shift-W]	Build whaling boats

Air Units

[B]	Air bomb mode (enemy cities/tiles)
[R]	Recon mode
[S]	Air strike mode (enemy units)
[Alt-R]	Rebase mode

Advisors

[F1]	Domestic advisor
[F2]	Financial advisor
[F3]	Civics advisor
[F4]	Foreign advisor
[F5]	Military advisor
[F6]	Technology advisor
[F7]	Religion advisor
[F8]	Victory
[F9]	Demographics
[F10]	Capital City

[F11]	Globe View
[F12]	Civilopedia

General

[P]	Ping the map
[Alt-I]	Remove interface
[Alt-Q]	Retire (give up)
[Alt-W]	Access Worldbuilder
[Alt-D]	Change Player Name/E-mail
[Ctrl-# Key]	Save a production queue (in city screen)
[Ctrl-B]	Toggle bare map on/off
[Ctrl-I]	Minimize interface
[Ctrl-L]	Load game
[Ctrl-M]	Turn music on/off
[Ctrl-O]	Options menu
[Ctrl-R]	Flag resources on/off
[Ctrl-S]	Save game
[Ctrl-T]	Turn grid on/off
[Ctrl-Y]	Turn tile yields on/off
[Ctrl- Left Arrow]	Lock camera angle 45 degrees clockwise
[Ctrl- Right Arrow]	Lock camera angle 45 degrees counterclockwise
[Enter]	Cycle units, advance to next turn
[N]	Cycle to previous selected unit
[Escape]	Exit current screen/bring up menu
[.]	Cycle to previous unit (same tile)
[.]	Cycle to next unit (same tile)

[/]	Cycle through active workers
[Home], [End]	Cycle through cities
[Insert]	Open nearest friendly city screen
[Left/Right Arrows]	Jump to next city (in city screen)
[PageDown]	Zoom camera out
[PageUp]	Zoom camera in
[Pause]	Pause game
[PrintScreen]	Take screenshot
[Shift-Enter]	Force turn to end
[Shift- Left Arrow]	Rotate camera clockwise
[Shift- Right Arrow]	Rotate camera counterclockwise
[Tab]	Chat to team
[Shift-Tab]	Chat to all
[Ctrl-Tab]	Chat/Event Log
[Scroll Lock]	Voice Chat to team
[Shift- Scroll Lock]	Voice Chat to all
[Ctrl- Scroll Lock]	Voice Chat in Diplo Screen

CIVIC NAME **UPKEEP COST** **REQUIRED TECHNOLOGY**

Government

	UPKEEP COST	REQUIRED TECHNOLOGY	EFFECT ONE	EFFECT TWO
Despotism	Low	None	None	None
Hereditary Rule	Medium	Monarchy	+1 happy per military unit stationed in city	None
Representation	Low	Constitution	+3 beakers per specialist	+3 happy in 5 largest cities
Police State	High	Fascism	+25% military unit production	-50% war weariness
Universal Suffrage	Medium	Democracy	+1 hammer from town	Can spend gold to finish production in a city

Legal

Barbarism	Low	None	None	None
Vassalage	High	Feudalism	New units receive +2 experience points	Lower unit support costs
Bureaucracy	Medium	Civil Service	+50% hammers, +50% commerce in capital	None
Nationhood	Low	Nationalism	Can draft 3 units per turn	+2 happy per Barracks
Free Speech	None	Liberalism	+2 gold from town	+100% culture in all cities

CIVIC NAME **UPKEEP COST** **REQUIRED TECHNOLOGY**

Labor

Tribalism	Low	None	None	None
Slavery	Low	Bronze Working	Can sacrifice population to finish production in a city	None
Serfdom	Low	Feudalism	Workers build improvements +50% faster	None
Caste System	Medium	Code of Laws	Unlimited Artist, Scientist, Merchant	None

Emancipation	None	Democracy	+100% growth for cottage, hamlet, village	Unhappiness penalty for civs without Emancipation
--------------	------	-----------	---	---

Economy

Decentralization	Low	None	None	None
Mercantilism	Medium	Banking	+1 free specialist per city	No foreign trade routes
Free Market	Low	Economics	+1 trade routes per city	None
State Property	None	Communism	No maintenance costs from distance to palace	+1 food from workshop, +1 food from watermill

CIVIC NAME **UPKEEP COST** **REQUIRED TECHNOLOGY**

 Environmentalism High Ecology **EFFECT ONE** **EFFECT TWO**
 +6 health in all cities +1 happy from jungle, forest

Religion

Paganism	Low	None	None	None
Organized Religion	High	Monotheism	Can build missionaries without monastery	Cities with state religion construct buildings +2.5% faster
Theocracy	Medium	Theology	+2 experience points in cities with state religion	No non-state religion spread
Pacifism	None	Philosophy	+100% great person birth rate in cities with state religion	+1 gold support cost per military unit
Free Religion	Low	Liberalism	+1 happy per religion in a city	+10% Research in all cities

TERRAIN **FOOD** **PRODUCTION** **COMMERCE** **DEFENSIVE BONUS** **MOVEMENT COST** **COMMENTS**
Base Terrain

Coast	1	0	2	10%	1	
Desert	0	0	0	0%	1	
Grassland	2	0	0	0%	1	
Snow	0	0	0	0%	1	
Ocean	1	0	1	0%	1	
Peak	0	0	0	0%	Impassable	
Plains	1	1	0	0%	1	
Tundra	1	0	0	0%	1	

Terrain Features

Fallout	-3	-3	-3	0%	2	-50 health
Floodplains	+3	0	0	0%	1	-0.4 health
Forest	0	+1	0	50%	2	+0.4 health
Hills	-1	+1	0	25%	2	
Ice	0	0	0	0%	Impassable	
Jungle	-1	0	0	50%	2	-0.25 health
Oasis	+3	0	+2	0%	2	Fresh water source

UNIT NAME	STRENGTH	MOVEMENT	COST	UNIT CATEGORY	TECHNOLOGY REQUIREMENT(S)	RESOURCE REQUIREMENT(S)	SPECIAL ABILITIES
Archer	3	1	25	Archery	Archery	None	1 first strike, +50% city defense, +25% hills defense
Artillery	18	1	150	Siege	Artillery	None	No defensive bonus, 25% withdraw chance, collateral damage, +50% vs. siege, bombard city defenses (-25% per turn)
Axeman	5	1	35	Melee	Bronze Working	Bronze OR Iron	+50% vs. melee
Battleship	40	6	225	Naval	Industrialism	Oil OR Uranium	Bombard city defenses (-20% per turn), collateral damage
Bomber	16	8	140	Air	Radio, Flight	Oil	Collateral damage, -50% vs. naval, can destroy tile improvements, bomb city defenses (-15% per turn)
Camel Archer	10	2	90	Mounted	Guilds, Horseback Riding, Archery	None	Arabian unique unit (Knight), immune to first strikes, no defensive bonus, 25% withdraw chance
Cannon	12	1	100	Siege	Steel	Iron	No defensive bonus, 25% withdraw chance, collateral damage, bombard city defenses (-20% per turn)
Caravel	3	3	60	Naval	Optics	None	Cargo space 1 (can transport missionaries, scouts, explorers, spies, great people), can explore rival territory

UNIT NAME	STRENGTH	MOVEMENT	COST	UNIT CATEGORY	TECHNOLOGY REQUIREMENT(S)	RESOURCE REQUIREMENT(S)	SPECIAL ABILITIES
Carrier	16	5	175	Naval	Flight	Oil OR Uranium	Cargo space 3 (carries fighters)
Catapult	5	1	40	Siege	Construction	None	No defensive bonus, 25% withdraw chance, collateral damage, bombard city defenses (-15% per turn)
Cavalry	15	2	120	Mounted	Military Tradition, Gunpowder, Horseback Riding	Horses	No defensive bonus, 30% withdraw chance, +50% attacking vs. cannon
Chariot	4	2	25	Mounted	The Wheel	Horses	No defensive bonus, 20% withdraw chance
Cho-Ko-Nu	6	1	60	Archery	Machinery, Archery	Iron	Chinese unique unit (Crossbow), 2 first strikes, collateral damage, +50% vs. melee
Conquistador	10	2	90	Mounted	Guilds, Horseback Riding	Iron, Horses	Spanish unique unit (Knight), immune to first strikes, +50% vs. melee
Cossack	18	2	120	Mounted	Military Tradition, Gunpowder, Horseback Riding	Horses	Russian unique unit (Cavalry), no defensive bonus, 30% withdraw chance, +50% attacking vs. cannon, +50% vs. mounted
Crossbowman	6	1	60	Archery	Machinery, Archery	Iron	1 first strike, +50% vs. melee

UNIT NAME	STRENGTH	MOVEMENT	COST	UNIT CATEGORY	TECHNOLOGY REQUIREMENT(S)	RESOURCE REQUIREMENT(S)	SPECIAL ABILITIES
Destroyer	30	8	200	Naval	Combustion	Oil OR Uranium	Can see submarines, 30% chance to intercept aircraft, bombard city defenses (-15% per turn)
Explorer	4	2	40	Recon	Compass	None	Better results from tribal villages, can only defend, ignores terrain movement costs, starts with Guerilla I, Woodsman I
Fast Worker	0	3	60	Special	None	None	Indian unique unit (Worker), can improve tiles
Fighter	12	6	100	Air	Flight	Oil	Can intercept aircraft (50% chance), destroy tile improvements, bomb city defenses (-5% per turn)
Frigate	8	4	90	Naval	Astronomy, Chemistry	Oil	Bombard city defenses (-10% per turn)
Galleon	4	4	80	Naval	Astronomy	None	Cargo space 3
Galley	2	2	50	Naval	Sailing	None	Cargo space 2, cannot enter ocean squares
Great Artist	0	2	0	Special	None	None	Can start a golden age, discover a technology, create a great work (+4000 culture), join a city

UNIT NAME	STRENGTH	MOVEMENT	COST	UNIT CATEGORY	TECHNOLOGY REQUIREMENT(S)	RESOURCE REQUIREMENT(S)	SPECIAL ABILITIES
Great Engineer	0	2	0	Special	None	None	Can start a golden age, discover a technology, hurry production of a building or wonder, join a city
Great Merchant	0	2	0	Special	None	None	Can start a golden age, discover a technology, conduct a trade mission, explore rival territory, join a city
Great Prophet	0	2	0	Special	None	None	Can start a golden age, discover a technology, construct a religious shrine, join a city
Great Scientist	0	2	0	Special	None	None	Can start a golden age, discover a technology, construct an academy, join a city
Grenadier	12	1	100	Gunpowder	Chemistry	None	+50% attacking vs. rifleman
Gunship	20	4	160	Helicopter	Rocketry, Flight	Oil	Cannot capture cities, no defensive bonus, flies over terrain, 25% withdraw chance, +100% vs. armored
Horse Archer	6	2	50	Mounted	Horseback Riding, Archery	Horses	Immune to first strikes, no defensive bonus, +50% attacking vs. catapult
ICBM	0	0	400	Special	Rocketry, Fission	Uranium	Can nuke enemy land, requires Manhattan Project world wonder

UNIT NAME	STRENGTH	MOVEMENT	COST	UNIT CATEGORY	TECHNOLOGY REQUIREMENT(S)	RESOURCE REQUIREMENT(S)	SPECIAL ABILITIES
Immortal	4	2	25	Mounted	The Wheel	Horses	Persian unique unit (Chariot), 30% withdraw chance, +50% vs. archery
Infantry	20	1	140	Gunpowder	Assembly Line, Rifling	None	+25% vs. gunpowder
Ironclad	12	2	100	Naval	Steel, Steam Power	Iron, Coal	Cannot enter ocean squares, can bombard city defenses (-10% per turn)
Jaguar	5	1	40	Melee	Iron Working	None	Aztec unique unit (Swordsman), +25% jungle defense, +10% city attack
Jet Fighter	24	10	150	Air	Composites, Flight	Oil, Aluminum	Can intercept aircraft (70% chance), destroy tile improvements, bomb city defenses (-10% per turn)
Keshik	6	2	50	Mounted	Horseback Riding, Archery	Horses	Mongol unique unit (Horse Archer), 1 first strike, no defensive bonus, ignores terrain movement costs, +50% attacking vs. catapult
Knight	10	2	90	Mounted	Guilds, Horseback Riding	Iron, Horses	Immune to first strikes, no defensive bonus
Longbowman	6	1	50	Archery	Feudalism, Archery	None	1 first strike, +25% city defense, +25% hills defense
Maceman	8	1	70	Melee	Civil Service, Machinery	Copper OR Iron	+50% vs. melee

UNIT NAME	STRENGTH	MOVEMENT	COST	UNIT CATEGORY	TECHNOLOGY REQUIREMENT(S)	RESOURCE REQUIREMENT(S)	SPECIAL ABILITIES
Machine Gun	18	1	125	Siege	Railroad	None	Can only defend, 1 first strike, +50% vs. gunpowder
Marine	24	1	160	Gunpowder	Industrialism, Rifling	None	Starts with Amphibious, +50% attacking vs. machine gun, +50% attacking vs. artillery
Mechanized Infantry	32	2	200	Gunpowder	Robotics, Rifling	None	Starts with March, 20% chance to intercept aircraft
Missionary	0	2	40	Special	None	None	Can spread religion, requires monastery
Modern Armor	40	2	240	Armored	Composites, Flight, Computers	Oil, Aluminum	1 first strike, no defensive bonus, starts with Blitz
Musketeer	9	2	80	Gunpowder	Gunpowder	None	French unique unit (Musketman)
Musketman	9	1	80	Gunpowder	Gunpowder	None	
Navy SEAL	24	1	160	Gunpowder	Industrialism, Rifling	None	American unique unit (Marine), 1-2 first strikes, +50% attacking vs. machine gun, +50% attacking vs. artillery, starts with Amphibious and March
Panzer	28	2	180	Armored	Industrialism, Rifling	Oil	German unique unit (Tank), no defensive bonus, +50% vs. armored, starts with Blitz

UNIT NAME	STRENGTH	MOVEMENT	COST	UNIT CATEGORY	TECHNOLOGY REQUIREMENT(S)	RESOURCE REQUIREMENT(S)	SPECIAL ABILITIES
Phalanx	5	1	35	Melee	Hunting	Copper OR Iron	Greek unique unit (Spearman), +25% hills defense, +100% vs. mounted
Pikeman	6	1	60	Melee	Engineering	Iron	+100% vs. mounted
Pratetorian	8	1	40	Melee	Iron Working	Iron	Roman unique unit (Swordsman)
Quechua	2	1	15	Melee	None	None	Incan unique unit (Warrior), +25% city defense, +100% vs. archery
Redcoat	16	1	110	Gunpowder	Rifling	None	English unique unit (Rifleman), +25% vs. mounted, +25% vs. gunpowder
Rifleman	14	1	110	Gunpowder	Rifling	None	+25% vs. mounted
SAM Infantry	18	1	150	Gunpowder	Rocketry	None	40% chance to intercept aircraft, +50% vs. helicopter
Samurai	8	1	70	Melee	Civil Service, Machinery	Iron	Japanese unique unit (Maceman), 2 first strikes, +50% vs. melee
Scout	1	2	15	Recon	Hunting	None	Better results from tribal villages, can only defend, +100% vs. animals
Settler	0	2	100	Special	None	None	Can found a new city
Skirmisher	4	1	25	Archery	Archery	None	Mali unique unit (Archer), 1-2 first strikes, +50% city defense, +25% hills defense

UNIT NAME	STRENGTH	MOVEMENT	COST	UNIT CATEGORY	TECHNOLOGY REQUIREMENT(S)	RESOURCE REQUIREMENT(S)	SPECIAL ABILITIES
Spearman	4	1	35	Melee	Hunting	Copper OR Iron	+100% vs. mounted
Spy	0	2	80	Special	Communism	None	Requires Scotland Yard national wonder, invisible to all units, can explore rival territory, can expose rival spies, starts with Sentry, costs 4 gold/turn
Stealth Bomber	20	12	200	Air	Composites, Flight, Robotics	Oil and Aluminum	50% chance to evade interception, collateral damage, -50% vs. naval, can destroy tile improvements, bomb city defenses (-20% per turn)
Submarine	24	6	150	Naval	Radio, Combustion	Oil OR Uranium	Cargo space 1 (can transport missionaries, scouts, explorers, spies, great people), invisible to most units, 50% withdraw chance
Swordsman	6	1	40	Melee	Iron Working	Iron	+10% city attack
Tank	28	2	180	Armored	Industrialism, Rifling	Oil	No defensive bonus, starts with Blitz
Transport	16	5	125	Naval	Combustion	Oil OR Uranium	Cargo Space 4
War Chariot	5	2	25	Mounted	The Wheel	Horses	Egyptian unique unit (Chariot), immune to first strikes, no defensive bonus, 20% withdraw chance

UNIT NAME	STRENGTH	MOVEMENT	COST	UNIT CATEGORY	TECHNOLOGY REQUIREMENT(S)	RESOURCE REQUIREMENT(S)	SPECIAL ABILITIES
War Elephant	8	1	60	Mounted	Construction	Ivory	No defensive bonus, +50% vs. mounted
Warrior	2	1	15	Melee	None	None	+25% city defense
Work Boat	0	2	30	Special	Fishing	None	Cannot enter ocean squares, can create fishing boats, whaling boats, offshore platforms
Worker	0	2	60	Special	None	None	Can improve tiles

NAME

Buildings

NAME	COST	CULTURE	REQUIREMENT(S)	EFFECT
Academy	Special	4	Great Scientist unit	+50% research
Airport	250		Flight (use tech icons)	-1 health, +1 trade routes, can airlift 1 unit per turn
Aqueduct	100		Mathematics, Masonry	+2 health
Bank	200		Banking	+50% gold
Barracks	60		None	New land units receive +4 experience points
Bomb Shelters	100		Electricity, Manhattan Project	-75% damage from nukes
Broadcast Tower	175	+50%	Mass Media	+1 happy per 10% culture rate, can turn 2 citizens into Artist, +1 happy from movies, music, or drama
Buddhist Stupa <small>(double w/copper)</small>	300	+50%	Music, Buddhism, three Buddhist temples	+2 happy if Buddhism is state religion, can turn 2 citizens into Priest, +1 happy from incense
Bunker	100		Electricity	-75% damage from air units
Castle	100 <small>(double w/stone)</small>	1	Engineering, walls	+50% defense (pre-gunpowder units)
Christian Cathedral <small>(double w/stone)</small>	300	+50%	Music, Christianity, three Christian temples	+2 happy if Christianity is state religion, can turn 2 citizens into Priest, +1 happy from incense
Coal Plant	150		Assembly Line, factory	Provides power with Coal for a factory, -2 health
Coliseum	120		Construction	+1 happy face, +1 happy face per 20% culture rate

NAME	COST	CULTURE	REQUIREMENTS(S)	EFFECT
Confucian Academy	300 <small>(double w/copper)</small>	+50%	Music, Confucianism, three Confucian temples	+2 happy if Confucianism is state religion, can turn 2 citizens into Priest, +1 happy from incense
Drydock	120	Steel		New water units receive +4 experience points, build water units 50% faster, -1 health
Factory	250	Assembly Line		+25% hammers, +50% hammers with power, can turn 2 citizens into Engineer, -1 health
Forge	120	Metal Casting		+25% hammers, can turn 1 citizen into Engineer, +1 happy from gems, gold, or silver, -1 health
Granary	60	Pottery		Stores 50% of food after growth, +1 health from corn, rice, or wheat
Grocer	150	Guilds, Currency		+25% gold, can turn 2 citizens into Merchant, +1 health from bananas, spices, sugar, or wines
Harbor	80	Compass		+50% trade route yield, +1 health from clam, crab, or fish
Hindu Mandir <small>(double w/marble)</small>	300	+50%	Music, Hinduism, three Hindu temples	+2 happy if Hinduism is state religion, can turn 2 citizens into Priest, +1 happy from incense
Hospital	200	Medicine		+3 health, heals units in city an extra 10% damage per turn
Hydro Plant	200	Plastics, factory		Provides power for a factory
Islamic Mosque <small>(double w/marble)</small>	300	+50%	Music, Islam, three Islamic temples	+2 happy if Islam is state religion, can turn 2 citizens into Priest, +1 happy from incense

NAME	COST	CULTURE	REQUIREMENTS(S)	EFFECT
Jail	120	Constitution		-25% war unhappiness
Jewish Synagogue <small>(double w/stone)</small>	300	+50%	Music, Judaism, three Jewish temples	+2 happy if Judaism is state religion, can turn 2 citizens into Priest, +1 happy from incense
Laboratory	250	Computers, observatory		+25% research, +50% spaceship production, can turn 1 citizen into Scientist, -1 health
Library	90	2	Writing	+25% research, can turn 2 citizens into Scientist
Lighthouse	60	Sailing		Water tiles +1 food
Market	150	Currency		+25% gold, can turn 2 citizens into Merchant, +1 happy from fur, ivory, silk, or whales
Monastery <small>(1 for each religion)</small>	60	2	Meditation, monastery's religion	+10 research points, can train religion's missionaries in city
Nuclear Plant	250	Fission, factory		Provides power for a factory with Uranium, small chance of nuclear meltdown
Obelisk	30	1	Mysticism	
Observatory	150	Astronomy		+25% research, can turn 1 citizen into Scientist
Recycling Center	300	Ecology		No unhealthiness from buildings
Supermarket	150	Refrigeration		+1 health from cow, deer, pigs, or sheep

NAME	COST	CULTURE	REQUIREMENTS(S)	EFFECT
Taoist Pagoda	300 <small>(double w/copper)</small>	+50%	Music, Taoism, three Taoist temples	+2 happy if Taoism is state religion, can turn 2 citizens into Priest, +1 happy from incense
Temple <small>(1 for each religion)</small>	80	1	Priesthood, temple's religion	+1 happy, can turn 1 citizen into Priest
Theatre	50	3	Drama	+1 happy per 10% culture rate, can turn 2 citizens into Artist, +1 happy from dyes
University	200	3	Education, library	+25% research
Walls	50 <small>(double w/stone)</small>		Masonry	+50% defense (pre-gunpowder units)

National Wonders (Max 2 per City)

Forbidden Palace	200	4	6 courthouses, 8 or more cities	Reduces maintenance in nearby cities
Globe Theatre	300	6	Drama, 6 theatres	No unhappiness in city, can turn 3 citizens into Artist.
Hermitage	300 <small>(double w/marble)</small>	+100%	Nationalism	
Heroic Epic	200 <small>(double w/marble)</small>	4	Literature, barracks in city, a unit of level 4 experience	+100% military unit production in city
Ironworks	700		Steel, 6 forges	+50 hammers in city with iron, +50% hammers in city with coal, can turn 3 citizens into Engineer, -2 health
Mount Rushmore	500 <small>(double w/stone)</small>	4	Fascism	-25% war unhappiness in all cities

NAME	COST	CULTURE	REQUIREMENTS(S)	EFFECT
National Epic	250 <small>(double w/marble)</small>	4	Literature, library in city	+100% great person birth rate in city
Oxford University	400 <small>(double w/stone)</small>	4	Education, 6 universities	+100% research in city
Palace	160	2	4 or more cities	Makes this city the capital, reduces maintenance in nearby cities, +1 happy
Red Cross	600	2	Medicine, 6 hospitals	Free Medic I promotion for units built in city
Scotland Yard	500		Communism	City can build Spy units.
Wall Street	600		Corporation, 6 banks	+100% gold, can turn 3 citizens into Merchant
West Point	800 <small>(double w/stone)</small>		Military Tradition, a unit of level 5 experience	+4 experience points for new units trained in city

World Wonders

Angkor Wat	500 <small>(double w/stone)</small>	8	Philosophy	+1 hammer from Priest in all cities, can turn 3 citizens into Priest
Broadway	800	+50%	Electricity	Provides 5 hit musicals (+1 happy face)
Chichen Itza	500 <small>(double w/stone)</small>	6	Code of Laws	+25% defense in all cities
The Church of the Nativity	Special	4	Christian Holy City, Great Prophet	+1 gold per turn for every city with Christianity, spreads Christianity, can turn 3 citizens into Priest

NAME	COST	CULTURE	REQUIREMENTS(S)	EFFECT
The Colossus	250 <small>(double w/copper)</small>	6	Metal Casting, forge, coastal city	All water tiles +1 gold
The Dai Miao	Special	4	Taoist Holy City, Great Prophet	+1 gold per turn for every city with Taoism, spreads Taoism, can turn 3 citizens into Priest
The Eiffel Tower	1250 <small>(double w/iron)</small>	6	Radio, forge	Free broadcast tower in every city
The Great Library	350 <small>(double w/marble)</small>	8	Literature, library	2 free Scientists in city
The Great Lighthouse	200	6	Masonry, lighthouse, coastal city	+2 trade routes in all coastal cities
The Hagia Sophia	550 <small>(double w/marble)</small>	8	Engineering	Workers build improvements 50% faster
The Hanging Gardens	300 <small>(double w/stone)</small>	6	Mathematics, aqueduct	+1 health in all cities, +1 population in all cities
Hollywood	1000	+50%	Mass Media	Provides 5 hit movies (+1 happy)
The Kashi Vishwanath	Special	4	Hindu Holy City, Great Prophet	+1 gold per turn for every city with Hinduism, spreads Hinduism, can turn 3 citizens into Priest
The Kong Miao	Special	4	Confucian Holy City, Great Prophet	+1 gold per turn for every city with Confucianism, spreads Confucianism, can turn 3 citizens into Priest

NAME	COST	CULTURE	REQUIREMENTS(S)	EFFECT
The Kremlin	1000 <small>(double w/stone)</small>		Communism	-50% hurry production cost
The Mahabodhi	Special	4	Buddhist Holy City, Great Prophet	+1 gold per turn for every city with Buddhism, spreads Buddhism, can turn 3 citizens into Priest
The Masjid al-Haram	Special	4	Islamic Holy City, Great Prophet	+1 gold per turn for every city with Islam, spreads Islam, can turn 3 citizens into Priest
Notre Dame	650 <small>(double w/stone)</small>	10	Music	+1 happy for all cities on this continent
The Oracle	150 <small>(double w/marble)</small>	8	Priesthood	1 free technology
The Parthenon	400 <small>(double w/marble)</small>	10	Polytheism	+50% great person birth rate in all cities
The Pentagon	1250		Assembly Line	+2 experience points for new units trained in all cities
The Pyramids	450 <small>(double w/stone)</small>	6	Masonry	Enables all Government civics
Rock 'n Roll	800	+50%	Radio	Provides 5 hit singles (+1 happy)
The Sistine Chapel	600 <small>(double w/marble)</small>	10	Theology	+2 culture per specialist in all cities
The Space Elevator	2000 <small>(double w/aluminum)</small>		Robotics	+50% spaceship production in all cities

NAME	COST	CULTURE	REQUIREMENTS(S)	EFFECT
The Spiral Minaret	550 <small>(double w/stone)</small>	8	Divine Right	+1 gold from all state religion buildings
The Statue of Liberty	1500 <small>(double w/copper)</small>	6	Democracy, forge	+1 free specialist in all cities on this continent
Stonehenge	120 <small>(double w/stone)</small>	8	Mysticism	Free obelisk in every city, centers world map
The Taj Mahal	700 <small>(double w/marble)</small>	10	Nationalism	Starts a golden age
The Temple of Solomon	Special	4	Jewish Holy City, Great Prophet	+1 gold per turn for every city with Judaism, spreads Judaism, can turn 3 citizens into Priest
The Three Gorges Dam	1750		Plastics	Provides power for all cities on this continent
The United Nations	1000		Mass Media	Triggers global elections, guarantees eligibility for diplomatic votes
Versailles	800 <small>(double w/marble)</small>	10	Divine Right	Reduces maintenance in nearby cities

Projects

Apollo Program	1000 <small>(double w/aluminum)</small>		Rocketry	Required to build spaceship parts
The Internet	2000 <small>(double w/copper)</small>		Fiber Optics	Grants all technologies acquired by any 2 known civilizations.
NAME	COST	CULTURE	REQUIREMENTS(S)	EFFECT
The Manhattan Project	1500 <small>(double w/uranium)</small>		Fission	Enables nukes, bomb shelters for all players
SDI	500 <small>(double w/aluminum)</small>		Satellites	+75% chance of intercepting nukes
SS Casing	400 <small>(double w/aluminum)</small>		Rocketry, Apollo Program	Space Race Victory (5 required)
SS Thrusters	600 <small>(double w/aluminum)</small>		Satellites, Apollo Program	Space Race Victory (3 required)
SS Engine	1000		Fusion, Apollo Program	Space Race Victory (1 required)
SS Docking Bay	1200 <small>(double w/aluminum)</small>		Robotics, Apollo Program	Space Race Victory (1 required)
SS Cockpit	800 <small>(double w/copper)</small>		Fiber Optics, Apollo Program	Space Race Victory (1 required)
SS Life Support	600 <small>(double w/copper)</small>		Ecology, Apollo Program	Space Race Victory (1 required)
SS Stasis Chamber	1000 <small>(double w/copper)</small>		Genetics, Apollo Program	Space Race Victory (1 required)

SID MEIER'S CIVILIZATION®

Credits

Firaxis Games

Original Creator of Civilization
Sid Meier

*Lead Designer and
AI Programmer*
Soren Johnson

Lead Programmer
Mustafa Thamer

Lead Artist
Steve Ogden

Senior Producer
Barry Caudill

Producers
Jesse Smith

Dan Magaha

Quality Assurance Manager
Tim McCracken

Programming Group
Alex Mantzaris
Bart Muzzin
Dan McGarry
Eric MacDonald
Jason Winokur
Jon Shafer
Mike Breitreutz
Nat Duca
Pat Dawson

Rob McLaughlin
Tom Whittaker
Casey O'Toole
Dave Evans
David McKibbin
Don Wuenschell
Jacob Solomon
Nathan Mefford
Theresa Bogar

Additional Programming
Jesse Smith
Andy Szybalski
Robert Thomas
Sergey Tiraspolksy

Art Group
Lead Modellers
Brian Busatti
Mark Shahan

Lead Animator
Dorian Newcomb

Animators
Dennis Moellers
Ed Lynch
Greg Cunningham
Alex Kim

Artists
Alex Kim
Brian Busatti

Chris Sulzbach
Dorian Newcomb
Greg Cunningham
Greg Foertsch
Jerome Atherholt
Justin Thomas
Marc Hudgins
Mark Shahan
Mike Bates
Mike Bazzell
Nick Rusko-Berger
Rob Cloutier
Ryan Murray
Steve Ogden
Tom Symonds
Steve Chao
Ben Harris
Benoit Regimbal
Brandon Blackwell
Darren Gorthey
Jack Snyder
Kevin Bradley
Megan Quinn
Nathan Wright
Russel Vaccaro

Digital Steamworks
(Dave Thompson)
Sound Group

Lead Audio Designer
Mark Cromer

Sound Designer
Michael Curran

Narrator
Leonard Nimoy

Composers
Jeffery L. Briggs

Mark Cromer
Michael Curran
Christopher Tin
John Adams
Allegri
Bach
Beethoven
Brahms
Brumel
De La Torre
Desprez
Dvorak
Lassus
Mozart
Ockeghem
Palestrina
Praetorius
Sheppard

Vocals
Talisman

Word Smiths
Lead Writer
Paul Murphy

Writers
Barry Caudill
Jesse Smith
Michael Soracoe
Rex Martin

Scenario and Tutorial Designers
Ed Piper
Jesse Smith
Jon Shafer
Martin "Isak" Isaksen
Wouter "Locutus" Snijders
Dale "Dale" KentA
Sergey Tiraspolksy

Additional Design
All Firaxians

Firaxis Management
President / CEO,
Jeffrey L. Briggs

Chief Creative Officer
Sid Meier

Chief Operating Officer
Steve Martin

Technology Director
Bretton Wade

Art Director
Mike Gibson

Director of Marketing
Deborah Briggs

Manager, Marketing and Media
Kelley Gilmore

Manager, Online Marketing
Dennis Shirk

Web Associate
Jason Cohen

Human Resources Manager
Susan Meier

Office Manager
Donna Rubb

IT Manager
Josh Scanlan

2K Games Testers
James Copestake
Kevan Killion
Michael Soracoe

Patrick Glascoe
Rex Martin
Scott Wittbecker
Sergey Tiraspolksy

Play Session Leads
Jesse "Friedrich Psitalon"
Fletcher
Martin "Isak" Isaksen
Robert "Sirian" Thomas

AI & Gameplay Consultant
Robert "Sirian" Thomas

Additional Production
James Copestake
Clint McCaul

Beta Testers
Sirian
Friedrich
Isak
Rob
Notyoueither
CanuckSoldier

Vondrack
Nolan
Aeson
ColdFever
Chieftess
Gramphos
Thamis
danthrax
Solver
Rhye
Kal-El
Thunderfall
Dominae
Curtsibling
Sulla
Civrules

Onan
Dale
Ainwood
Locutus
Frank
Kring
DeepO
Pfeffersack
Islonian
Wolfsbane
Asterix
Warpstorm
Alva
Alski
Griselda
TheDohr
MarkG
Arrian
Bluminator
Wtiberon
Cyrene
Doc Tsiolkovski
Earl Harewood
WarningU2
bobT
Reptile
Dexters
Bsarsgard
Krill
Homegrown
Srayman
GBM
Asleepathewheel
Kemal
Maxfin
SirPartyMan
Loulong
Heroic
StrictlyRockers

Unimatrix_zero
Funkychicken
Trayk
Yoda Power
ME0003
MagicNo3
LotharBot
PeteT
Randy
DonaldKipper
Avogadro
Whiplash
Craigbob

Special Thanks
Ryan Meier
Heather Dyer
Darren Bartlett
Kurt Squire
Kai Fiebach
Sergey Tiraspolksy
Apolyton
Civ Fanatics

Published by 2K Games

Publishing Director
Ryan Brant

Managing Director
Christoph Hartmann

VP Product Development
Greg Gobbi

VP New Business & Product
Planning
Susan Lewis

VP Business Affairs
David Ismailer

VP Sales & Licensing

Steve Glickstein

VP Marketing

Sarah Anderson

Development Manager

Jon Payne

Associate Producer

James Pacquing

Technical Manager

Dylan Bromley

Senior Product Manager

Tom Bass

Director of PR

Marci Ditter

Associate PR Manager

Jason Bergman

Director of Marketing Services

Dorian Rehfield

Art Director

Lesley Zinn

Web Manager

Gabe Abarcar

Web Designer

John Kauderer

Game Analysts

Walt Williams

Jim Yang

Production Manager

Jack Scalici

QA Managers

Michael Motoda

Lawrence Durham

QA Leads

Michael Chang

Sebastian Jennings

QA Seniors

Angel Gonzalez

Dave Miao Astremitzkov

QA

Steve Allstead Jr.

Steve Bianchi

Caleb Cervenka

James Copestake

Jon Debiase

Patrick Glascoe

Andy Goble

Owen Hopson

Michael Huang

Nikola Kantar

Tracy Kazaleh

Kristin Kerwitz

Kevan Killion

Jesse Kude

Lucas Marsh

Rex Martin

Dawn Owens

Michael Soracoe

Sergey Tirasoplsky

Scott Wittbecker

Special Thanks

Marc Berman

David Boutry

Dan Einzig

Xenia Mul

Matt Schlossberg

Nan Teh

Natalya Wilson

Peggy Yu

LIMITED SOFTWARE WARRANTY AND LICENSE AGREEMENT

YOUR USE OF THIS SOFTWARE IS SUBJECT TO THIS LIMITED SOFTWARE WARRANTY AND LICENSE AGREEMENT (THE "AGREEMENT") AND THE TERMS SET FORTH BELOW. THE "SOFTWARE" INCLUDES ALL SOFTWARE INCLUDED WITH THIS AGREEMENT, THE ACCOMPANYING MANUAL (S), PACKAGING AND OTHER WRITTEN, ELECTRONIC OR ON-LINE MATERIALS OR DOCUMENTATION, AND ANY AND ALL COPIES OF SUCH SOFTWARE AND ITS MATERIALS. BY OPENING THE SOFTWARE, INSTALLING, AND/OR USING THE SOFTWARE AND ANY OTHER MATERIALS INCLUDED WITH THE SOFTWARE, YOU HEREBY ACCEPT THE TERMS OF THIS LICENSE WITH [TAKE-TWO INTERACTIVE SOFTWARE, INC.] ("LICENSOR").

LICENSE. Subject to this Agreement and its terms and conditions, LICENSOR hereby grants you the non-exclusive, non-transferable, limited right and license to use one copy of the Software for your personal use on a single console. The Software is being licensed to you and you hereby acknowledge that no title or ownership in the Software is being transferred or assigned and this Agreement should not be construed as a sale of any rights in the Software. All rights not specifically granted under this Agreement are reserved by LICENSOR and, as applicable, its licensors.

OWNERSHIP. LICENSOR retains all right, title and interest to this Software, including, but not limited to, all copyrights, trademarks, trade secrets, trade names, proprietary rights, patents, titles, computer codes, audiovisual effects, themes, characters, character names, stories, dialog, settings, artwork, sounds effects, musical works, and moral rights. The Software is protected by United States copyright law and applicable copyright laws and treaties throughout the world. The Software may not be copied, reproduced or distributed in any manner or medium, in whole or in part, without prior written consent from LICENSOR. Any persons copying, reproducing or distributing all or any portion of the Software in any manner or medium, will be willfully violating the copyright laws and may be subject to civil and criminal penalties. Be advised that Copyright violations are subject to penalties of up to \$100,000 per violation. The Software contains certain licensed materials and LICENSOR's licensors may protect their rights in the event of any violation of this Agreement.

LICENSE CONDITIONS

You agree not to:

- (a) Commercially exploit the Software;
- (b) Distribute, lease, license, sell, rent or otherwise transfer or assign this Software, or any copies of this Software, without the express prior written consent of LICENSOR;
- (c) Make copies of the Software or any part thereof;
- (d) Except as otherwise specifically provided by the Software or this Agreement, use or install the Software (or permit others to do same) on a network, for on-line use, or on more than one console at the same time;
- (e) Copy the Software onto a hard drive or other storage device and must run the Software from the included CD-ROM or DVD-ROM (although the Software may automatically copy a portion of itself onto your console during installation in order to run more efficiently);
- (f) use or copy the Software at a computer gaming center or any other location-based site; provided, that LICENSOR may offer you a separate site license agreement to make the Software available for commercial use;
- (g) Reverse engineer, decompile, disassemble or otherwise modify the Software, in whole or in part;
- (h) Remove or modify any proprietary notices or labels contained on or within the Software; and
- (i) transport, export or re-export (directly or indirectly) into any country forbidden to receive such Software by any U.S. export laws or accompanying regulations or

otherwise violate such laws or regulations, that may be amended from time to time.

LIMITED WARRANTY: LICENSOR warrants to you (if you are the initial and original purchaser of the Software) that the original storage medium holding the Software is free from defects in material and workmanship under normal use and service for 90 days from the date of purchase. If for any reason you find a defect in the storage medium during the warranty period, LICENSOR agrees to replace, free of charge, any Software discovered to be defective within the warranty period as long as the Software is currently being manufactured by LICENSOR. If the Software is no longer available, LICENSOR retains the right to substitute a similar program of equal or greater value. This warranty is limited to the storage medium containing the Software as originally provided by LICENSOR and is not applicable to normal wear and tear. This warranty shall not be applicable and shall be void if the defect has arisen through abuse, mistreatment, or neglect. Any implied warranties prescribed by statute are expressly limited to the 90-day period described above.

Except as set forth above, this warranty is in lieu of all other warranties, whether oral or written, express or implied, including any other warranty of merchantability, fitness for a particular purpose or non-infringement, and no other representations or warranties of any kind shall be binding on LICENSOR.

When returning the Software subject to the limited warranty above, please send the original Software only to the LICENSOR address specified below and include: your name and return address; a photocopy of your dated sales receipt; and a brief note describing the defect and the system on which you are running the Software.

IN NO EVENT WILL LICENSOR BE LIABLE FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM POSSESSION, USE OR MALFUNCTION OF THE SOFTWARE, INCLUDING DAMAGES TO PROPERTY, LOSS OF GOODWILL, COMPUTER FAILURE OR MALFUNCTION AND, TO THE EXTENT PERMITTED BY LAW, DAMAGES FOR PERSONAL INJURIES, EVEN IF LICENSOR HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. LICENSOR'S LIABILITY SHALL NOT EXCEED THE ACTUAL PRICE PAID FOR USE OF THE SOFTWARE. SOME STATES/COUNTRIES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS AND/OR THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES. SO THE ABOVE LIMITATIONS AND/OR EXCLUSION OR LIMITATION OF LIABILITY MAY NOT APPLY TO YOU. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY HAVE OTHER RIGHTS THAT VARY FROM JURISDICTION TO JURISDICTION.

TERMINATION: This Agreement will terminate automatically if you fail to comply with its terms and conditions. In such event, you must destroy all copies of the Software and all of its component parts. You can also end this Agreement by destroying the Software and all copies and reproductions of the Software and deleting and permanently purging the Software from any client server or computer on which it has been installed.

U.S. GOVERNMENT RESTRICTED RIGHTS: The Software and documentation have been developed entirely at private expense and are provided as "Commercial Computer Software" or "restricted computer software." Use, duplication or disclosure by the U.S. Government or a U.S. Government subcontractor is subject to the restrictions set forth in subparagraph (c)(1)(ii) of the Rights in Technical Data and Computer Software clauses in DFARS 252.227-7013 or as set forth in subparagraph (c)(1) and (2) of the Commercial Computer Software Restricted Rights clauses at FAR 52.227-19, as applicable. The Contractor/ Manufacturer is the LICENSOR at the location listed below.

EQUITABLE REMEDIES: You hereby agree that if the terms of this Agreement are not specifically enforced, LICENSOR will be irreparably damaged, and therefore you agree that LICENSOR shall be entitled, without bond, other security, proof of damages, to appropriate equitable remedies with respect any of this Agreement, in addition to any other available remedies.

INDEMNITY: You agree to indemnify, defend and hold LICENSOR, its partners, licensors, affiliates, contractors, officers, directors, employees and agents harmless from all damages, losses and expenses arising directly or indirectly from your acts and

omissions to act in using the Software pursuant to the terms of the Agreement.

MISCELLANEOUS: This Agreement represents the complete agreement concerning this license between the parties and supersedes all prior agreements and representations between them. It may be amended only by a writing executed by both parties. If any provision of this Agreement is held to be unenforceable for any reason, such provision shall be reformed only to the extent necessary to make it enforceable and the remaining provisions of this Agreement shall not be affected. This Agreement shall be construed under New York law as such law is applied to agreements between New York residents entered into and to be performed within New York, except as governed by federal law and you consent to the exclusive jurisdiction of the state and federal courts in New York, New York.

IF YOU HAVE ANY QUESTIONS CONCERNING THIS LICENSE, YOU MAY CONTACT IN WRITING TAKE-TWO INTERACTIVE SOFTWARE, INC. 622 BROADWAY, NEW YORK, NY 10012.

WARRANTY

2K Games, a division of Take-Two Interactive Software, Inc., warrants to the purchaser only that the disc provided with this manual and the software program coded on it will perform in accordance with the description in this manual when used with the specified equipment, for a period of 90 days from the date of purchase.

If this program is found to be defective within 90 days of purchase, it will be replaced. Simply return the disc to 2K Games or its authorized dealer along with a dated proof of purchase. Replacement of the disc, free of charge to the original purchaser (except for the cost to return the disc) is the full extent of our liability.

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, WHETHER ORAL OR WRITTEN, EXPRESSED OR IMPLIED. ALL IMPLIED WARRANTIES, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, IF APPLICABLE ARE LIMITED IN DURATION TO 90 DAYS FROM THE DATE OF PURCHASE OF THIS PRODUCT.

2K Games shall not be liable for incidental and/or consequential damages for the breach of any express or implied warranty including damage to property and, to the extent permitted by law, damage for personal injury, even if 2K Games has been advised of the possibility of such damages. Some states do not allow the exclusion or limitation of any incidental or consequential damages or limitations on how long an implied warranty lasts, so the above limitations or exclusions may not apply to you. This warranty shall not be applicable to the extent that any provision of this warranty is prohibited by any federal, state, or municipal law, which cannot be pre-empted. This warranty gives you specific legal rights and may also have other rights, which may vary from state to state.

You may not reproduce, prepare derivative work based on, distribute copies of, offer for sale, sell, transfer ownership of, rent, lease, or lend to others the Program or accompanying documentation, or any portion or component of the Program or accompanying documentation; provided, however, that you may transfer the entire Program and accompanying documentation on a permanent basis as long as you retain no copies (including archival or backup copies) of the Program, accompanying documentation, or any portion or component of the Program accompanying documentation, and the receipt agrees to the terms of the agreement. Further you may not modify, reverse engineer, disassemble, decompile or translate the Program or accompanying documentation, or any portion or component of the Program or accompanying documentation, nor may you make any copies of the Program modules for use with other programs. This program is intended for private use only.

2K GAMES, 575 BROADWAY, NEW YORK, NY 10012

PRODUCT SUPPORT

For U.S. Support

Phone: 1-866-219-9839

Email: usa@take2support.com

For Canadian Support:

Phone: 1-800-638-0127

Email: Canada@take2support.com

<http://www.take2games.com/support>

Classical selections in the public domain courtesy of Naxos of America Inc.

John Adams publishers:	John Adams masters:
Boosey and Hawkes	Nonesuch Records
Music Sales West	E M I Classics
Associated Music Publishers	Naxos of America Inc.

Portions of this software are included under license. ©2005 Numerical Design, LTD. All rights reserved.

Uses Bink Video. Copyright ©1997-2005 by RAD Game Tools, Inc.

Uses Miles Sound System. Copyright ©1991-2005 by RAD Game Tools, Inc.

Portions of this software are included under license: ©2005 Scaleform Corporation. All rights reserved.



POWERED BY
gameSPY

This product contains software technology licensed from GameSpy Industries, Inc. © 1999-2005 GameSpy Industries, Inc. All rights reserved.

Orchestral samples included in this recording from the Vienna Symphonic Library

Main Menu Earth based on Earth Image Blue Marble: Reto Stöckli, NASA Earth Observatory Cinematics courtesy of Liquid Development, LLC and Brain Zoo Studios

Pen Tools Scripts courtesy of Paul Neale (www.paulneale.com)

Speex Codec © 2002-2003, Jean-Marc Valin/Xiph.Org Foundation

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- Neither the name of the Xiph.org Foundation nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.