

AN ALTERNATE ECONOMICS SYSTEM FOR 4E

King Arthur Pendragon RPG

By W. F. Hostman

Rationale

I needed, for my own purposes, a system that let me know what went where and how big it was. Moreover, I wanted more reasons to spend PC money, and needed it in a system that was relatively easy for me to grasp. So, I did some research, and hybridized elements of *Lordly Domains* and *Noble's Book*.

While not mentioned, each major building takes 1-2 acres, and each ring of wall also takes 1 acre per 10 acres enclosed, and adds to the space taken by the town/city.

This work is subject to frequent tweaking.

Income

Type	Income	Residential size	Fields Size	Notes
City Pop	1£G per own pop 0.5£G per subordinate town Pop	1-3 acres per pop	1 hyde per pop.	Minimum size = 8. Subordinate towns must have total pop between to the city pop and twice the city pop. City must also have their own villages as well.
Town Pop	1£G per pop	2-3 acres per pop	1 hyde per pop.	Total Villages must be between TP+1 and 5*TP, excess are lost. Note that 5 of every 6 TP are working the town's fields.
Farming Villages	1£F each	2-4 acres per pop	2 hydres each.	(50% fallow)
Fishing Villages	1£F each	2-4 acres per pop	1 hyde each.	10-20 boats. Must be along water.
Herding Villages	1£F each	2-4 acres per pop	6 hydres each.	Mostly graze land. Rocky, scrub, or moorland at double field size.
Mining Villages	1£C each	2-4 acres per pop	1 hyde each.	
Town Rights	$\sqrt{\text{Town Pop}}$ £C per town	none	None	
City Rights	$\sqrt{\text{CityPop}}$ £C + $\sum(\text{Town's Pops})$ £C	none	None	
Lord's Portion	1£F each.	None	1 per each	Usually by the Manor. Must Not Exceed Total Town Pop plus Total Villages

Extra Goods and Extra Rights can be developed, neither can exceed the town/city Pop.

Residents: Each town or city pop is roughly 120 people, or 24 families. Each village is roughly 100 people, or 20 families.

Work Limit: a lord can build no more than his Town Pop in £ of skilled labor projects per year. A lord may build without penalty no more than his town pop in £ of unskilled labor projects per year; each village which is used produces no income that year, but allows spending an extra £.

Expenses

General Expenses

Category	Annual	Notes
Upkeep of Lands:	TP+CP	
Upkeep of Castles:	DV/10	
Tithe:	10%	May be waived if only a single manor is held with total income under £7
Tax:	10%	
Lord's Upkeep:	Variable	
Household Knights Upkeep:	variable	
Men At Arms Upkeep:	1£ per 10	
Extra Squires:	1£ ea	
Officers	Variable	See Below

Upkeep, Tithes and taxes should be rounded to ½£. At the GM's option the nearest shilling.

Knight Maintenance	Normal	Minimum	KV	Modifiers
Impoverished	1£F/1£G	0.5£F/0.5£G	0.2	-15 CB/CS/AS
Poor	2£F/2£G	1£F/1£G	0.5	-3 CB/CS/AS
Average	3£F/3£G	2£F/2£G	1	Default
Wealthy	4£F/4£G	3£F/3£G	1	+1 CB, +0 CS, +0 HS
Rich	5£F/5£G	4£F/4£G	2	+3 CB, +1 CS, +0 HS
Superlative	6£F/6£G	5£F/5£G	3	+5 CB, +3 CS, +2 HS

Minimum can only be used for a Landed Knight or Castellan if the wife has the gentlewoman bonus. Household Knights can be funded at that rate at all times. Special additional costs, like tournaments, may be stipulated in the holding.

Officers

Pay Class	Key Skill					Typical officers
	5-15	16-20	21-25	26-30	31-35	
Peasant	¼£	½£	¾£	£1	£1	Crier, baliff, reeve
Standard	1£	2£	3£	4£	5£	Steward, Herald, Marshal, Mistress, Clerk, Marshal, Castellan, Musician, Lawyer
Elite	2£	3£	4£	5£	6£	Chirurgion, Seneschal
Sec. Skill	+0	+¼£	+½£	+¾£	+1£	Musician, Castellan, Seneshale

Officer	Type	Key Skills	Secondary Only
Baliff	P	Steward	
Crier	P	Orate	
Doorman	P	Recognize	
Reeve	P	Industry	
Wetnurse	P	None*	
Chirurgion	S	Chirurgion	
Clerk	S	Read	
Herald	S	Heraldry	Recognize
Musician	S	Sing, Play, Orate	
Chaplain	C	Religion	
Marshal	K	Battle	
Steward	K	Stewardship	
Castellan	K	Siege	
Seneschal	K	StewardBattle, Siege	
Mistress	?	Lustful	Flirting

Of these, A household knight may be left as castellan during an absence without pay. A household or vassal knight may serve as seneschal, but the pay is in addition to their normal. Knights will not hold specialist offices, but those skilled in music may perform for the glory of it. Seneschal is the Lord's direct assistant in all things relating to the fief.

Construction

Type	Cost to Build 1P	Produces	Residential Acres	Fields Hydes	Inhabitants per Pop
City Pop	15	F, G*, CF	1-3	1	120
Town Pop	10	F, G*, CF	2-3	1	120
Farming Village	5	F	2-4	2	100
Fishing Village	5	F	2-4	1	100
Herding Village	5	F	2-4	6	100
Mining Village	10	C	2-4	1	100
Abbey, remote	5	none	1-2	2	0-120
Abbey, urban	5	none	2-4	0	0-120
Extra Goods	2	G	0	0	0
Extra Rights	3	C	0	0	0

A monastery or abbey is a special case. It counts, generally, as a village. Most are farming or herding. They must have a chapel, and can attain up to pop 7. They may have subordinate villages, as if a town, and generate court fees in such a case, but those fees go to the Bishop, not the local lord. Monasteries (and their villages) produce no income for a local landlord - they are free from local taxes. Each time one spends to improve a monastery, however, one gains a check in Love God.

Some powerful monasteries have manors with vassal knights. The landlord for those vassal knights is the abbot. They answer to the abbot, then the bishop, then the king.

Almost all cities have an abbey within them. Those urban abbeys are usually 1 acre, plus 1-3 acres of small gardens, and is supported by donations. Such an abbey is free when a town converts to a city; the cost is in case of rebuilding if destroyed in a raid, or when added to an extant town. Urban abbeys generally have 1d6 monks per 2 town or 2 city pop. (use 1d3 for the remainder.)

Upgrading a...

Village to a Large Village

Simply build another village pop. No savings, because while certain buildings (the village chapel, the common hall) are not duplicated, the extra fences, lost space, and likelihood of a tavern make up for it. A village of pop 4 will acquire a check in hate lord for each year they are not promoted to a town.

Village to a Town

The cost is about 5£ per pop. This includes adding an inn, market square, court hall, and improving the roads. Towns can range up to about pop 15. A number of villages nearby must be present or built to support the town, per the minimum of Town Pop +1.

Note that there is no requirement for a town to be subordinated to a city.

Town to a City

The population must be at least 8, there must be a Royal Charter, and the cost is about 5£ per point of town pop. Axiomatically, the town also should be walled prior to acquiring a city status. There must be another town within 40 miles.

City to Great City

Population over 20. Must have other towns with total town pop amongst them equal to the city pop.

Working it Out

Type	Formula	Harvest?	Notes
Food Income	sum of: Farming, Fishing, Herding, Lord's Portion	Yes	Subject to rats.
Goods Income	Town Pop	Yes	Subject to rot
Coin Income	Square Root of Town Pop	No	taxes
Court Fees	Total Pop of town/city -3 1/3 vassals' CF	no	1/3 must be passed to liege
City Goods Bonus	half sum of subordinate towns' Pops, to max of own pop.	No	
City Rights Bonus	sum of subordinate towns' Pops, to max of own pop.	No	Taxes on goods

Merging of multiple extant facilities

Absorbing Villages

A village surrounded by a town may be absorbed for about 1d6£ per village pop. A successful steward roll by an overseeing steward can reduce this to 1d3£ per village pop. A fumbled steward roll results in half the pop being lost, and the costs being 1d3+3£ per village pop.

A hunting or farming village surrounded by a city is automatically eliminated. The population is lost. A steward can move the village for 1d3£ per village pop. A Fishing or mining village likewise would be absorbed, but mechanically, turns into city fishing or mining rights... The pop is lost, but the income is not.

Absorbing Towns

A large city may eventually absorb a nearby town. The cost is 5£ per town pop.

Absorbing Monasteries

Monasteries do not get absorbed. A surrounded monastery can't grow, but is otherwise unaffected.

Default Manor

Type	Number	Food	Goods	Coin	Notes
Town	1	0	1	1	Includes Rights
Farming Villages	2	2	0	0	
Herding Villages	2	1	0	0	
Lord's Portion	1	1	0	0	
Manor hall	1	0	0	0	DV=2
Total		5	1	1	
Upkeep		0	1	0	

Recommended Drawing

Measurement Standards

Acre	10 Square Chains
Chain	22 yd, or 66'. Square is 484 sq yd or 4356sf
Day's Ride	For our purposes, 40 miles give or take a couple. It is important in defining the demense.
Foot	The modern foot. The Roman foot is a touch smaller.
Hyde	roughly 100 acres.
Traditional English Mile	5000feet. A square mile is 574 acres... but... this is not the only mile in use.
Statute Mile	5280 Feet. A square mile is 640 acres.
Old English Mile	About 6500 feet. A square mile is about 970 acres.
Roman Mile	About 4850 modern feet (5000 Roman Feet). Squared, about 540 acres
Scots Mile	Roughly 5928 modern feet. Squared, about 807 Acres.
Kilometer	3280.84', square is 247.11 acre, or 2.5 hydes

Detail Scale

Use 1/8 statute mile squares. Each square is 0.04 square miles, and so 4 squares per hyde works nicely.

Up to half of the land may be left fallow in bad terrain...

Close Scale

Use 1 mile squares, Statute or English. A village is a dot, except for Herding villages, which are a square; a town or city is 1 square per 6 hydes (staute) or 5.5 hydes (English).

Handy Tables

Math

Pop	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20-21	22	23	24-26	27	28	29	30
Root, ½£	1	1½	1½	2	2	2½	2½	3	3	3	3½	3½	3½	3½	4	4	4	4	4½	4½	4½	5	5	5	5½	5½	5½
Root, ¼£	1	1½	1¾	2	2¼	2½	2¾	2¾	3	3¼	3¼	3½	3½	3¾	3¾	4	4	4¼	4¼	4½	4¾	4¾	5	5¼	5¼	5½	5½
10%, ½£	0	0	0½	0½	0½	0½	0½	1	1	1	1	1	1½	1½	1½	1½	1½	2	2	2	2	2½	2½	2½	3	3	3
10%, ¼£	0	0¼	0¼	0½	0½	0½	0¾	0¾	1	1	1	1¼	1¼	1½	1½	1½	1¾	1¾	2	2	2¼	2¼	2½	2¾	2¾	3	3

Nominal Towns: Villages = 2x TP
LP = TP

Nominal Cities: Villages = 3x TP
LP = 2xCP
Subordinate Towns = Pop

Nominal Towns							Range	
TP	Vil	LP	Gd	Rt	CF	Total	Min	Max
1	2	1	1	1	0	5	4	15
2	4	2	2	1½	0	9½	6½	29½
3	6	3	3	1½	0	13½	8½	43½
4	8	4	4	2	1	19	12	59
5	10	5	5	2	2	24	15	74
6	12	6	6	2½	3	29½	18½	89½
7	14	7	7	2½	4	34½	21½	104½
8	16	8	8	3	5	40	25	120
9	18	9	9	3	6	45	28	135
10	20	10	10	3	7	50	31	150
11	22	11	11	3½	8	55½	34½	165½
12	24	12	12	3½	9	60½	37½	180½
13	26	13	13	3½	10	65½	40½	195½
14	28	14	14	3½	11	70½	43½	210½
15	30	15	15	4	12	76	47	226
16	32	16	16	4	13	81	50	241

Nominal Cities							Range	
TP	Vil	LP	Gd	Rt	CF	Total	Min	Max
8	24	16	12	11	5	68	37	136
9	27	18	13½	12	6	76½	28	153
10	30	20	15	13	7	85	31	170
11	33	22	16½	14½	8	94	34½	187½
12	36	24	18	15½	9	102½	37½	204½
13	39	26	19½	16½	10	111	40½	221½
14	42	28	21	17½	11	119½	43½	238½
15	45	30	22½	19	12	128½	47	256
16	48	32	24	20	13	137	50	273
17	51	34	25½	21	14	145½	53	290
18	54	36	27	22	15	154	56	307
19	57	38	28½	23½	16	163	59½	324½
20	60	40	30	24½	17	171½	62½	341½
21	63	42	31½	25½	18	180	65½	358½
22	66	44	33	26½	19	188½	68½	375½
23	69	46	34½	28	20	197½	72	393

The table of Miles

Type of Mile	Linear Feet	Per Sq. Mile		Grids per Hyde in Sq. of X mile						
		Acres	Hydes	1/10	1/8	1/6	1/5	1/4	1/3	1/2
Roman	4850'	540	5 ½	37	11.9	6.7	4.6	3	1.7	0.7
Trad. English	5000'	574	5 ¾	34.8	11.1	6.3	4.4	2.8	1.6	0.7
Statute	5280'	640	6 ½	31.3	10	5.6	3.9	2.5	1.4	0.6
Scots	5928'	807	8	24.8	7.9	4.5	3.1	2	1.1	0.5
Old English	6500'	970	9 ¾	20.6	6.6	3.7	2.6	1.6	0.9	0.35
kilometer	3281'	247	2 ½	81	25.9	14.6	10.1	6.5	3.6	4.2

Knight Maintenance

Knight Maintenance	Normal	Minimum	KV	Modifiers
Impoverished	1£F/1£G	0.5£F/0.5£G	0.2	-15 CB/CS/AS
Poor	2£F/2£G	1£F/1£G	0.5	-3 CB/CS/AS
Average	3£F/3£G	2£F/2£G	1	Default
Wealthy	4£F/4£G	3£F/3£G	1	+1 CB, +0 CS, +0 HS
Rich	5£F/5£G	4£F/4£G	2	+3 CB, +1 CS, +0 HS
Superlative	6£F/6£G	5£F/5£G	3	+5 CB, +3 CS, +2 HS

Normal: Lord, Vassal, or Castellan | Minimum: Household or Gentlewoman

Costs to Build

Type	Cost to Build 1P	Produces	Residential Acres	Fields Hydes	Inhabitants per Pop
City Pop	15	F, G*, CF	1-3	1	120
Town Pop	10	F, G*, CF	2-3	1	120
Farming Village	5	F	2-4	2	100
Fishing Village	5	F	2-4	1	100
Herding Village	5	F	2-4	6	100
Mining Village	10	C	2-4	1	100
Abbey, remote	5	none	1-2	2	0-120
Abbey, urban	5	none	2-4	0	0-120
Extra Goods	2	G	0	0	0
Extra Rights	3	C	0	0	0

ALTERNATE ECON SYSTEM — MANOR			PLAYER					CHARACTER				
<i>Holding Data</i>			<i>Vassals</i>		<i>Lord</i>			<i>Type</i>				
Holder _____	Loyalty Lord <input type="checkbox"/>		Loyalty Lord _____ <input type="checkbox"/>			Grant <input type="checkbox"/> (Heritable)						
Liege _____	Love Lord <input type="checkbox"/>		Loyalty Vas. _____ <input type="checkbox"/>			Gift <input type="checkbox"/> (Lifetime)						
Title (IF ANY) _____	Hate Lord <input type="checkbox"/>					Regency <input type="checkbox"/> (Until Heir assumes)						
						Stewardship <input type="checkbox"/> (Until relieved)						
Town's Name _____	Town Pop _____	Villages _____		Lord's Portion _____	Town Rights _____	Court Fees _____	<i>Manor</i>					
		Farm _____	Fish _____	Herd _____	Mine _____		<input type="checkbox"/> in Town					
							<input type="checkbox"/> near Town					
							<input type="checkbox"/> _____					
	Income	#=£G	#=£F	#=£F	#=£F	#=£C	#=£F	£C	£C			
<i>Description</i>			<i>Stored</i>		<i>Restrictions & Formulae</i>					<i>State of the Land</i>		
			Goods _____		TownPop ≤ TotVil		TotVil ≤ 5x TownPop			<i>Year Assigned</i>		
			Food _____		CtFees = (TwPop - 3)		LdPort ≤ 5x TownPop					
			Coin _____		TownRts ≥ √TownPop		TownRts ≤ TownPop					
<i>Figured Income</i>			<i>Rents</i>		<i>Service</i>		<i>Additional Duties</i>					
£G	£F	£C	<input type="checkbox"/> 10% income		<input type="checkbox"/> Self		<input type="checkbox"/> Host a Local Tournament Annually					
Famine _____			<input type="checkbox"/> _____ £ (any)		<input type="checkbox"/> _____ Knights		<input type="checkbox"/> Maintain _____ household knights					
Poor/Terrible _____			<input type="checkbox"/> _____ £F		<input type="checkbox"/> _____ Squires		<input type="checkbox"/> Maintain _____ men at arms					
Good _____			<input type="checkbox"/> _____ £G		<input type="checkbox"/> _____ Sergeants		<input type="checkbox"/> Host a Local Hunt Annually					
Excellent _____			<input type="checkbox"/> _____ £C		<input type="checkbox"/> _____ Men At Arms		<input type="checkbox"/> Defend against _____					
Superlative _____			<input checked="" type="checkbox"/> _____ £ Roads =TP		<input type="checkbox"/> _____		<input type="checkbox"/> Host _____					
<i>Town Works</i>			Ring	Area	DV	<i>Manor Works</i>			Ring	Area	DV	

ALTERNATE ECON SYSTEM — MANOR			PLAYER					CHARACTER				
<i>Holding Data</i>			<i>Vassals</i>		<i>Lord</i>			<i>Type</i>				
Holder _____	Loyalty Lord <input type="checkbox"/>		Loyalty Lord _____ <input type="checkbox"/>			Grant <input type="checkbox"/> (Heritable)						
Liege _____	Love Lord <input type="checkbox"/>		Loyalty Vas. _____ <input type="checkbox"/>			Gift <input type="checkbox"/> (Lifetime)						
Title (IF ANY) _____	Hate Lord <input type="checkbox"/>					Regency <input type="checkbox"/> (Until Heir assumes)						
						Stewardship <input type="checkbox"/> (Until relieved)						
Town's Name _____	Town Pop _____	Villages _____		Lord's Portion _____	Town Rights _____	Court Fees _____	<i>Manor</i>					
		Farm _____	Fish _____	Herd _____	Mine _____		<input type="checkbox"/> in Town					
							<input type="checkbox"/> near Town					
							<input type="checkbox"/> _____					
	Income	#=£G	#=£F	#=£F	#=£F	#=£C	#=£F	£C	£C			
<i>Description</i>			<i>Stored</i>		<i>Restrictions & Formulae</i>					<i>State of the Land</i>		
			Goods _____		TownPop ≤ TotVil		TotVil ≤ 5x TownPop			<i>Year Assigned</i>		
			Food _____		CtFees = (TwPop - 3)		LdPort ≤ 5x TownPop					
			Coin _____		TownRts ≥ √TownPop		TownRts ≤ TownPop					
<i>Figured Income</i>			<i>Rents</i>		<i>Service</i>		<i>Additional Duties</i>					
£G	£F	£C	<input type="checkbox"/> 10% income		<input type="checkbox"/> Self		<input type="checkbox"/> Host a Local Tournament Annually					
Famine _____			<input type="checkbox"/> _____ £ (any)		<input type="checkbox"/> _____ Knights		<input type="checkbox"/> Maintain _____ household knights					
Poor/Terrible _____			<input type="checkbox"/> _____ £F		<input type="checkbox"/> _____ Squires		<input type="checkbox"/> Maintain _____ men at arms					
Good _____			<input type="checkbox"/> _____ £G		<input type="checkbox"/> _____ Sergeants		<input type="checkbox"/> Host a Local Hunt Annually					
Excellent _____			<input type="checkbox"/> _____ £C		<input type="checkbox"/> _____ Men At Arms		<input type="checkbox"/> Defend against _____					
Superlative _____			<input checked="" type="checkbox"/> _____ £ Roads =TP		<input type="checkbox"/> _____		<input type="checkbox"/> Host _____					
<i>Town Works</i>			Ring	Area	DV	<i>Manor Works</i>			Ring	Area	DV	

ALTERNATE ECON SYSTEM — ESTATE				PLAYER				CHARACTER					
<i>Holding Data</i>				<i>Vassals</i>		<i>Lord</i>		<i>Type</i>					
Holder _____				Loyalty Lord <input type="checkbox"/>		Loyalty Lord <input type="checkbox"/>		Grant <input type="checkbox"/> (Heritable)					
Liege _____				Love Lord <input type="checkbox"/>		Loyalty Vas. <input type="checkbox"/>		Gift <input type="checkbox"/> (Lifetime)					
Title (IF ANY) _____				Hate Lord <input type="checkbox"/>				Regency <input type="checkbox"/> (Until Heir assumes)					
								Stewardship <input type="checkbox"/> (Until relieved)					
Town's Name		Vassal Holding Town		Town		Villages		Lord's		Town Court		To Liege	
		Self		Pop		Farm Fish Herd Mine		Port'n Rts Fees		£F £G £C			
D _____		_____		_____		_____		_____		_____		_____	
1 _____		_____		_____		_____		_____		_____		_____	
2 _____		_____		_____		_____		_____		_____		_____	
3 _____		_____		_____		_____		_____		_____		_____	
4 _____		_____		_____		_____		_____		_____		_____	
5 _____		_____		_____		_____		_____		_____		_____	
6 _____		_____		_____		_____		_____		_____		_____	
7 _____		_____		_____		_____		_____		_____		_____	
8 _____		_____		_____		_____		_____		_____		_____	
9 _____		_____		_____		_____		_____		_____		_____	
Income				#-£G #-£F		#-£F #-£F #-£C #-£F		£C £C £C					
<i>Description</i>				<i>Stored</i>		<i>Restrictions & Formulae</i>				<i>State of the Land</i>			
				Goods		TownPop ≤ TotVil		TotVil ≤ 5x TownPop		<i>Year Assigned</i>			
				Food		CtFees = (TwPop - 3)		LdPort ≤ 5x TownPop					
				Coin		TownRts ≥ √TownPop		TownRts ≤ TownPop					
<i>Figured Income</i>				<i>Rents</i>		<i>Service</i>		<i>Additional Duties</i>					
£G £F £C				<input type="checkbox"/> 10% income		<input type="checkbox"/> Self		<input type="checkbox"/> Host a Local Tournament Annually					
Famine _____				<input type="checkbox"/> £ (any)		<input type="checkbox"/> Knights		<input type="checkbox"/> Maintain _____ household knights					
Poor/Terrible _____				<input type="checkbox"/> £F		<input type="checkbox"/> Squires		<input type="checkbox"/> Maintain _____ men at arms					
Good _____				<input type="checkbox"/> £G		<input type="checkbox"/> Sergeants		<input type="checkbox"/> Host a Local Hunt Annually					
Excellent _____				<input type="checkbox"/> £C		<input type="checkbox"/> Men At Arms		<input type="checkbox"/> Defend against _____					
Superlative _____				<input checked="" type="checkbox"/> £ Roads =TP		<input type="checkbox"/>		<input type="checkbox"/> Host _____					
Demense _____ Works Ring Area DV				Town 5 _____ Works Ring Area DV									
Town 1 _____ Works Ring Area DV				Town 6 _____ Works Ring Area DV									
Town 2 _____ Works Ring Area DV				Town 7 _____ Works Ring Area DV									
Town 3 _____ Works Ring Area DV				Town 8 _____ Works Ring Area DV									
Town 4 _____ Works Ring Area DV				Town 9 _____ Works Ring Area DV									

