Taxes

Taxes are the idea that <u>Citizens</u> must pay a sum of Diamonds to the <u>Government</u> where they are put into the <u>Treasure</u>. The Diamonds in the <u>Treasure</u> are then used to fund <u>Public</u> <u>Assignments</u> which work to better all or a majority of <u>Citizens</u>.

Tax Period

Every 10 Minecraft days, if a <u>Citizen</u> has played for a sum of more than 10 real minutes--not including time AFKing--they are <u>required to pay their taxes</u> within a 1 Minecraft day period of when they are next on the <u>World</u> or not AFK.

AFKing is defined as not speaking, moving or involving with the World.

The taxpayer, Citizen, must following the proper Taxpaying Process.

Taxpaying Process

A <u>Citizen</u> will receive a signed book which explains how much they owe in taxes in their <u>mailbox</u>. They must deliver the signed tax book and the required amount of Diamonds to a <u>Public Tax Mailbox</u> within the <u>tax period deadline</u>. Tax books should be discarded via destruction (cactus, lava, fire) when they are completed or stored in a vault.

Taking Diamonds or signed tax books from a *Public Tax Mailbox* for personal use (not moving the tax money to the <u>Treasure</u>) is considered a <u>Crime</u>.

A *Public Tax Mailbox* is a <u>mailbox</u> which follows all <u>Mailbox Construction and Placement</u> rules but is located in <u>Public Property</u> and owned by the <u>Government</u> for use in collecting **Taxes**.

Taxes aren't due on time (within the <u>tax period deadline</u>) if the <u>Citizen</u> who pays the <u>Taxes</u> is Imprisoned. Instead, the <u>Taxes</u> are due 15 days after they leave prison.

Tax Calculation Process

To calculate **Taxes** a Citizen should:

- 1. Compute the Property Metric for all Properties they own.
- 2. Apply Implicit Tax Incentives to the Property Metrics.
- 3. Calculate the **Default Tax Amount**.
- 4. Apply the <u>Circumstantial Tax Value</u> to their <u>Default Tax Amount</u>.
- 5. If there are any <u>Tax Increases</u> they should be applied after everything else.

What this means is that:

- Taxes mainly get larger as the size of a <u>Citizen</u>'s <u>Private Property</u>, <u>Shared Private</u>
 <u>Property</u> or <u>Owned Property</u> gets larger <u>without considering height</u>.
- <u>Elected Officials</u> can *partially* control how much money you pay in <u>Taxes</u>.
- Destroying your (<u>Property Owner's</u>) <u>Property</u> can result in increases in taxes and pricing. <u>Even though you own the property</u>; you are buying a sub-lease from the Government.
- Buying <u>Property</u> in certain areas is less expensive or more expensive.
- <u>Citizens</u> with no <u>Property</u> owe less taxes than those with <u>Large Property</u> but owe more than those with <u>Small Property</u>.

Default Tax Amount

The **Default Tax Amount** is the amount of **Taxes** that is paid by default.

If a **Default Tax Amount** comes out with more than 2 decimals, it should be rounded to 2 decimal places.

For Citizens who are *not* Property Owners

<u>Citizens</u> who are not <u>Property Owners</u> owe the <u>Government</u> a tax of 3 Diamonds for every 27 stacks of items they own in storage containers (not including chests, shulker boxes and ender chests).

Math

Let m be the amount of item stacks a player stores in containers at their Primary Residence.

Let $d = \lfloor \frac{m}{27} \rfloor * 3$ be the final, default tax amount a Citizen owes.

If a <u>Citizen</u> is not a <u>Property Owner</u> and also doesn't own at least 27 stacks of items in storage containers (not including chests, shulker boxes and ender chests) they owe a flat

value of 5 Diamonds to the Government. This counts as a Default Tax Amount.

a stack is defined as a Minecraft item slot which contains something.

For Citizens who are Property Owners

The equation below describes how to tax <u>Citizens</u> with different types of <u>Properties</u>. Generally speaking:

- Private Property Owners owe the default tax value
- <u>Shared Private Property Owners</u> owe extra tax based on the number of members who have resided (slept, stored, or used as their <u>primary residence</u>) in their <u>Shared Private</u> <u>Property.</u>
- Owned Property Owners owe 130% the taxes of a Private Property Owner.

Math

Let $P = [p_1, p_2, ..., p_n]$ be a list which represents each property metric a Citizen owns where incentives have already been applied.

Let $R = [r_1, r_2, \dots, r_n]$ be a list which represents the number of residents which have residence Private Property a Citizen owns.

If a Property isn't a Shared Private Property, the value of r should be a default value, 0.

$$\text{Let } f(p,r) = \begin{cases} \frac{p}{200}\,, & \text{if Property is a Private Property} \\ \frac{p}{200} * (1 + \frac{r}{10}), & \text{if Property is a Shared Private Property} \\ \frac{p}{100}, & \text{if Property is an Owned Property} \end{cases}$$

describe the operation to be performed on a Citizen's Property based on what kind of Property the particular property the Citizen owns is.

Let
$$d = \sum_{i} f(P_i, R_i)$$
 be the default tax amount a Citizen owes.

Circumstantial Tax Value

The Circumstantial Tax Value is a value which modifies the <u>Default Tax Amount</u> after all calculations. The Circumstantial Tax Value starts at 0.00 and can be <u>adjusted by elected officials</u> in increments of 0.05 per <u>Elected Official</u>. The Circumstantial Tax Value is calculated via the equation below. The Circumstantial Tax Value cannot go below 0.25 and cannot exceed 3. Attempts to do so will result in no change.



Let c be the Circumstantial Tax Value Let d be the Default Tax Amount

Let $t = \lceil (c+1) * d \rceil$ be the total tax amount

Implicit Tax Incentives

Implicit Tax Incentives are motives to build or not build in certain <u>Landarea</u> by increasing or decreasing taxes in said <u>Landarea</u>.

Implicit Tax Incentives may also be referred to as Incentives or Incentives Programs.

If a <u>Property Metric</u> with all applicable incentives applied comes out with more than 2 decimals, it should be rounded to 2 decimal places.

All increases and decreases are added together before being applied to the <u>Property</u>. <u>Metric</u> of the <u>Property</u>. The formula below describes how to compute incentives.

Math

Let x be the Property Metric of any given Property. Let U be a multiset containing 1 and all applicable incentive values.

Let $p = x * (1 + (\sum_{i} U_i))$ be the Property Metric with all applicable incentives applied.

Below the Ice Incentive

The **Below the Ice Incentive** aims to incentivize <u>Citizens</u> to build under the ice and disincentivize them from building above the ice.

<u>Property</u> which does not have ice above, below or inside of it is not considered in this incentive.

For Property Owners Under the Ice

Property Owners who own Property under the ice get a 30% reduction in Taxes.

Under the ice is defined as <u>Property</u> which is underneath the ice in a glacier biome, not underground and leaves an at least 1 block gap between the ice and the property (<u>Y</u>61 inclusive).

<u>Properties</u> with larger (95% or more <u>volumetric</u>) portions <u>above the ice</u> are not considered <u>under the ice</u>.

$$u \cup \{-0.3\}$$

For Property Owners On or Above the Ice

Property Owners who own Property above the ice get a 30% increase in Taxes.

Above the ice is defined as <u>Property</u> which is above the ice (<u>Y</u>64 inclusive) which at least 1 block of sits anywhere above the ice in a glacier biome.

<u>Properties</u> with larger (95% or more <u>volumetric</u>) portions <u>under the ice</u> are not considered <u>above the ice</u>.

$$u \cup \{0.3\}$$

For Property Owners who Puncture the Ice

<u>Property Owners</u> who own <u>Property puncturing the ice</u> get a 15% increase in **Taxes**. <u>Puncturing the ice</u> is defined as <u>Property</u> which is at least partially in the ice (<u>Y</u>62 - 63 inclusive) inside of a glacier biome.

$$u \cup \{0.15\}$$

Private Property over Owned Property Incentive

The **Private Property over Owned Property Incentive** aims to incentivize <u>Citizens</u> to build within <u>Hard Land</u>.

Owned Property gets a 30% increase in Taxes.

$$u \cup \{0.30\}$$