

State Of Decay 2: Beyond Lethal Overhaul Mod: Detailed Description

Overview:

Beyond Lethal Overhaul is a product of enormous amount of passion and thought put into one simple question:

How can I make the game I love so much better?

It started from changing things I didn't like, but quickly became about expanding and reworking game systems to make them be better and work better together.

Through time, a small list of changes slowly grew into a literal game design document spanning more than 400 pages that encompassed almost every system the game has.

I worked on the concept for more than a year as a leisure hobby and then 4 months as a serious passion project. Sure, many things have been left at the cutting floor, but I still believe that what made it through is genuinely awesome and very eager to finally present to everybody - so that we all can enjoy the enhanced experience.

This mod is meant to be an only overhaul and won't work with other overhauls, but there is a list of other smaller (and medium-sized) mods that are recommended to be installed in order to unlock the maximum potential that Beyond Lethal can offer.

Detailed list will be left at the end of this description, so let's start listing the changes:

Base Building

First and foremost i need to explain the base building overhaul - because it contains the biggest amount of changes:

Here's the cursory tour of base building changes:

1. First of all, I have reworked the core concept of facility slots - the **distinction between small and large slots** have been removed - all facilities are of the same slot size and all of them can be built in any slot (except for indoor/outdoor specifics).

2. And why is that?

Because I have also **reworked the ENTIRE facility structure** - the larger bulk of facilities have been removed, while every remaining facility has been altered and expanded, repurposing functionality of removed counterparts.

All of these changes will be listed in detailed description further, but the main point is:

While the amount of facilities have been reduced - each of them now almost completely equal to each other in benefits they provide.

Each of them presents its own plethora of desirable bonuses and active functionality - now base management is not about worrying about having to fill slots with basic necessities, but about exploring exciting opportunities to affect the process of fighting the Plague War.

3. **Community Leader requirements were removed** - now facilities will only require skills and resources to build.
4. Due to complete rework of facilities and slots - **every base has been also largely reworked:**

Every built-in facility now represents various stages of progression of new facilities - what that means is that each base presents already pre-build facilities with complete access to the same functionality of their new "regular" counterparts and even upgrade paths.

5. At last - facilities no longer suffer from an extremely limited amount of facility mod slots. **Now facilities gain one or two slots for each upgrade.**

In addition to that, facility mods now install in 10 seconds, no longer taking minutes of time and valuable in the early game labor.

This really brings out the mod system - now you don't need to sacrifice one barely meaningful bonus for another - now you get to stack your mods in related facilities and enjoy increasing efficiency.

Aside from that - **mods have been completely reworked** to fit new facilities and generally provide more interesting and important bonuses rather than some underwhelming "+facility speed increase".

6. **Outposts were significantly expanded and reworked** to keep up with the updated facility system - all of the changes are listed further in the Outposts section.

Difficulty

Difficulty is a cornerstone of State of Decay 2 gameplay - all of the base building and community management won't have any purpose without matching challenges to overcome.

Original game's difficulty implementation has a lot of questionable choices:

- First, it's **difficulty scaling** - developers tied the difficulty increase to a Total Community Standing - special attribute that is supposed to represent how much player has achieved.

On paper, it makes sense - the more player progressed, the harder challenges should be thrown at him - but on practice it is far from ideal - the problem hides in the fact, that Total Community Standing is not really about progression (clearing map of Plague Hearts, building base), but simply about doing something - all actions give player community standing and as result increase difficulty.

This creates a situation where player has more incentive to target Plague Hearts first without engaging with other systems - because that way it is going to be the easiest (less enemy spawn).

- Another problem is how **undynamic** the main challenges are - **Plague Hearts** - sure, the difficulty of engaging with them increases the more Total Community Standing player has, but it is an indirect increase - plague hearts themselves do not change in any meaningful way:

They don't increase health pools, they don't change their guardian spawns, etc.

And while at the beginning and the middle game it still results in engaging gameplay, the endgame feels more like a choir of cleaning up the rest of the hearts, rather than the epic culmination of the challenge.

I believe that I have found a solution to both of these problems:

- First, I have altered the Standing Gain mechanic - now it doesn't give standing for ANYTHING except plague heart kills.

That means that the player can explore and interact with the world at his own pace (having his progression be limited by plague heart's control over the map), choosing himself when he'd be comfortable to start engaging with the main challenge.

You can complete missions, loot facilities and kill zombies - and none of these actions will increase the difficulty.

- Second, I have tied Base progression with map clearing progression - since I have reworked **all facilities** I have made them **require special items for every upgrade** - these are called **Facility Upgrade Kits**.

The point of their existence is that you cannot obtain them anywhere except from bodies of destroyed plague hearts!

This creates an amazing balancing mechanism - player can start slowly progressing by collecting resources and building his base - but he will be naturally limited to T1 facilities unless he decides to start destroying plague hearts - which will start increasing the difficulty in return!

- Third, and final - I have found as close to perfect as modding means to allow solution to the last problem - a mod that makes Plague Hearts increase their health pools in relation with player's Total Community Standing stat! The numbers will go from vanilla 120 health to 300, 500, 700 - up to 2000 health and more!

Yes - this means that progressing through the game will not only increase the indirect challenge of increased spawns, but also will directly make Plague Hearts stronger, thus providing justification for gaining as much power as you can and all the exciting new changes I have implemented through my mod.

This mod is made by modmaker Neru and is called Growing Threat - you can find it on Nexus

(<https://www.nexusmods.com/stateofdecay2/mods/839>) - I recommend downloading "Health Scale TCS" version, because it will directly tie heart's health to the community standing, while "Health Scale Hard" only ties it to community standing thresholds.

I believe that in tandem these two mods will form a much better experience rather than on their own.

Missions

Mission System has received a number of quality of life changes:

- First, **ALL missions have been assigned unique names** - these names vaguely or directly convey what these missions are about (for example, "Network requests help scavenging" or "The [enclave name] need help with feral/missing member", etc.) and now they can all be identified right at the moment of spawning on the map (incredibly convenient for decision making).
- Then, **some annoying "missions" were removed from the game** - mainly the "COME TO TRUMBULL VALLEY" radio events (they are technically missions).
- Now **enclaves will NEVER ask for resources!** No "Give us X resource" missions will spawn - instead enclaves will ask for actual help like "help find missing member", "help rescue member", etc - this makes general gameplay much more engaging, because it replaces large amounts of annoying factors with actual action.
- Some missions of "protect character for X amount of time" had this time reduced - less waiting and more action.
- **Manual Mission Spawn System** has been added!

This is a large system and it is heavily tied to facility changes, which is why all information will be in the Facilities - Command Center section.

Small Changes

Before I'll continue to larger changes I think it will be appropriate to list all of the small tweaks that I consider to be good quality of life changes.

NOTE: All of these small changes are uploaded in forms of small mods and can be applied at the player's leisure - if you find them appropriate you can install them, if you don't - leave them out.

List of small changes:

- **Looting** - removed crashing from searching.
- **Salvaging** - now many secondary items such as backpacks, close combat weapons (knives, etc.), facility mods, fireworks and other items that can be considered or can become useless provide more parts from salvaging - this makes obtaining them not that much of an annoyance, since now they have at least salvaging value.
- **Lockpicking** - made stealth specialization lockpicking ability a default ability of all survivors - that means that right from the start of the game player can silently open any closed doors (crouch + open).
- **Fire** - now fire damages enemies that were previously immune to it - that includes armored zeds, ferals and juggernauts.

The damage to the freaks is still reduced, but now they can be killed by it.

- **Bloater gas** - removed the damage and infection effects from continuously inhaling bloater gas - that means getting "hit" by bloater explosion will apply some damage and infection to the player (and trauma - but "burning lungs" trauma has also been significantly nerfed to not punish player for simply touching the gas), but being in the gas will only stagger player.

Good news is that it ALSO APPLIES TO VEHICLES - meaning that if you hit a bloater gas you won't need to leave the car for an entire minute - you'll just need to ride the disorientation effect out (followers will get hurt and jump out, though - that i don't know how to change, but it also doesn't really matter).

- **Zombie car grabbing** - now zombies don't grab the engine side of the car.

Personally, I have always found them grabbing the front of the car to be extremely annoying - mostly because of the cases where the car was stuck and I had to wait until the "unstuck" command did its job.

Now, zombies won't grab and damage vehicle's engine - they still can grab onto doors and throw you outside, or damage car on collision, but the annoying part has been removed.

Now, let's start with the big changes.

Community Skills

Before I can even begin to describe the facility changes I need to explain several other big updates - first of them should be changes to the Community Skills system.

Original game has quite a few problems with community skills - mainly that some of them and especially some of the specializations are barely competitive with other skills:

- For example, craftsmanship skill provides such insignificant benefits that it is barely worth getting - especially specializations - Construction is simply useless at the stage of the game when it is available, while Metalwork is a giant joke.
- Other good example is Utilities skill - it IS valuable for its main role - building the Hydroponics, but its specializations are laughably unbalanced - on one hand is Electrical that unlocks Solar Array facility (permanent base-wide power) - and on the other is Plumbing that unlocks... Latrine upgrade! What is the point of such choice?
- Mechanics skill has Auto Mechanics that unlocks Auto Shop, and Engineering that unlocks... advanced muzzle attachments crafting (and ONLY at Armory).
Wow - another tough choice.
- Chemistry, on the other hand, has another problem - it is stuffed with *too much* functionality - the field is so broad that it includes both crafting of painkillers and energy drinks, and explosives and ammunition.

Yeah, the decision making about which skills to acquire is not that complex - there are obvious powerhouses and clear underperformers.

I have reworked and expanded this system with the goal to fix these holes and make each skill evenly useful.

Here is the new, reworked and expanded Community Skill structure:

1. **Military Chemistry:**

Military Chemistry unlocks crafting of firearm rounds at Workbench and incendiaries and distractables at Still.

Specializations:

- 1) **Munitions** - improves bullet crafting, significantly increasing the output.

- 2) **Pyrotechnics** - improves incendiaries and distractables crafting, increasing the output and unlocking advanced incendiaries, such as powerful Willie Pete Grenades.

2. **Mechanics:**

Mechanics unlocks crafting of explosives and vehicle service equipment (bulk repair kits, upgrade kits) at Workbench.

Specializations:

- 1) **Demilitations** - unlocks advanced explosives, increases the output of explosives crafting.
- 2) **Automechanics** - unlocks advanced vehicle equipment (advanced repair kits, heavy upgrade kit and conversion kit).

3. **Technology:**

This is the Computers skill from vanilla - it was renamed to fit broader functionality.

It unlocks crafting of remote detonated explosives and other devices.

Specializations:

- 1) **Programming** - unlocks Drone Support radio action from Prepare Drone action at Watchtower, provides radio buffs.
- 2) **Electronics** - unlocks advanced remote detonated explosives.

4. **Craftsmanship:**

Craftsmanship is mostly tied to the new Forge facility line - it unlocks crafting of melee and ranged weapons, as well as facility mods.

Specializations:

- 1) **Metalwork** - unlocks crafting of advanced and masterwork melee weapons and facility mods.
- 2) **Gunsmithing** - unlocks crafting of advanced and masterwork ranged weapons.

5. **Civil Chemistry:**

This skill unlocks and improves crafting of painkillers, stamina recovery consumables and biochem consumables.

Specializations:

- 1) **Food Chemistry** - improves crafting of energy recovery consumables, unlocks Stimulants and Espresso Shots.
- 2) **Pharmacology** - improves crafting of painkillers, unlocks Strong Painkillers, improves crafting of experimental biochem consumables.

6. **Medicine:**

Medicine hasn't been changed that much - it now activates useful passives at Infirmary - they increase trauma and infection recovery speed, it also unlocks crafting of advanced health recovery consumables (first aid kits, field surgery kits) and experimental biochem consumables.

Specializations:

- 1) **Traumatology** - improves trauma recovery buff at Infirmary, unlocks Field Surgery Kits crafting.
- 2) **Toxicology** - improves infection recovery buff at Infirmary, unlocks and improves advanced biochem consumables crafting (Scentblock).

7. **Cooking:**

Cooking skill unlocks "construct diet" actions at expanded Kitchen facility - this action provides temporary buffs that increase Max Health and Stamina for all survivors.

Specializations:

- 1) **Nutrition & Diet** - improves "construct diet" action.
- 2) **Brewing & Cuisine** - improves alcohol luxury items crafting.

8. **Construction:**

This is a skill that combines functionality of vanilla Craftsmanship and Utilities - it provides very valuable "professional maintenance" buff - it decreases the material upkeep costs - the amount reduced depends on the level of Storage facility (10/20/40/60/80% for T1/T2/T3/T4/T5 accordingly).

Specializations:

- 1) **Utilities** - unlocks crafting of advanced facility mods, unlocks Hydroponics upgrade, provides various amenities-related improvements.

- 2) **Engineering** - greatly improves facility building and upgrading speed.

9. **Gardening:**

Hasn't been changed from the original game.

10. **Psychology:**

Completely new skill - Psychology is a skill that aims to improve Training and Morale recovery actions at Training Center facility - it unlocks advanced morale boosting action and Wits and Endurance respecialization skillbooks crafting.

Specializations:

- 1) **Learning Science** - unlocks Fighting and Shooting respecialization skillbooks crafting actions at Training Center.
- 2) **Communications** - improves "Gain Mission Token" actions at Command Center facility (details at Facilities).

What I want to note is that now there is no single all-covering community skill that governs most crafting - now player will have to decide which consumables he wants to craft first and choose community skills with care.

Aside from that, I hope that changes to supporting skills will elevate them to the same level of desirability to the player - to further increase the variability of early game decision making.

Another big gameplay change is expansion of **skill acquiring system:**

Original game offers very unreliable means of getting your hands on the community skill you need - you have to either get lucky and find specific skillbook looting sites, get lucky and recruit survivor that knows that skill, or spend inadequate amount of resources and influence on specific outpost capture and upgrade to be able to learn specific skill.

This mod introduces many other, more accessible and varied ways to acquire desired community skills:

- First, all **facilities** have special skillbook crafting actions that allow player to create contextually-related skillbooks (for example, Workbench crafts Mechanics skillbook, Infirmary - Medicine, etc.), but the process will take A LOT of time - from an entire hour to 30 minutes, making the facility inaccessible in the meantime.

This is done this way because facility is meant to be the last, emergency way of obtaining community skill, if all others for some reason are unavailable.

- **Outposts** - now outposts provide skill learning actions immediately - without the need to be upgraded. Moreover - outposts provide more skills to learn - most up to two-three. Library outpost provides ALL community skills learning options.

This means that in order to get desired community skill player only needs to clear the site and capture the outpost, spending 300-500 influence most.

While facilities provide skillbook crafting actions that take time to complete, outposts provide instans learn or improve skill actions, but these have large cooldowns as the balance mechanism.

More details in the Outposts section.

- **Traders** - another good source of the skillbooks is the expanded trader system.

The mod introduces a 4-tier structure of resource-specific traders, each offering context-related skillbooks that player can buy and utilize.

This is a very superficial explanation - so it is better to read details in Traders section.

Traits

The next big change that I really enjoy experiencing is what i done to traits:

Do you remember how annoying it is to finally find a much needed potential recruit only to find out that he has Music, Law or Farting community skill. Having to skim through dozens of similarly "gifted" survivors at the community creation is, while not that frustrating as first, still quite unpleasant.

Now, what if i tell you that you have to experience it anymore. Ever.

Yes - i have manually went through all possible recruit variations in the game files and made each and every one of those who has useless quirk skills to be "free" - to have no community skill and be open to learning whatever you want.

Now you can literally pick first random survivors to start a community and you'll never have useless people!

Want more? Sure - now no existing traits will prevent survivors from being able to gain skill levels - in vanilla game there is a group of traits like "dumb", or "asthmatic" that put caps on certain skill levels, even community skills!

All of these were "fixed" by removing these leveling restrictions, so you don't need to worry that you'll get a survivor that won't be able to specialize in Shooting.

Aside from that, some other changes to traits were made:

Mostly, buffs from heroic standing were reworked - i have removed all standing speed buffs and all rationing buffs - because i have altered these mechanics and they are no longer needed.

Most other heroic traits were changed - now they provide more useful buffs like "infection resistance", etc.

Enclaves

On the account of benefits and bonuses - most enclave alliance bonuses were also reworked.

Now, there will be significantly less underwhelming bonuses like "xp gain" or "standing gain" - not only have I doubled the amount of "resource gain/+ sleeping places/+ morale" bonuses.

I have also severely expanded the Supply Drops variety and integrated them into alliance benefits pool - now enclaves are far more often to provide very pleasant Supply Drops that exist in the form of "resource + related consumables/equipment/crafting parts".

Special enclaves like Moonshiners, Soldiers, Doctors and Mechanics now offer even better, special supply drops.

Radio, Traders

Radio system was also refurbished:

- Firstly, just by having a cursory look you'll point how cleaner it looks - I took the liberty to remove many of the radio categories and commands, affecting ALL of the dlc-related items.
- Now, player will only have access to the radio commands that he earns by building facilities and from other sources - dlc-related commands were removed not only out of aesthetic purposes, but also for the sake of balance - ALL of the dlc-related functionality was repurposed into other, expanded progression mechanics and systems and can be accessed through that.

Many other things have been added as Radio Commands:

- **"Find Resources" command category has been removed** - the reason is because I have found this mechanic severely lacking - it can spawn rucksack in a looted building near you or at the other side of the map - in my opinion it is extremely unreliable as a source of resources, and interacting with it was quite non-engaging.

As replacement i have created **Supply Runs Organisation mechanic** - it is a special category of actions, available at Storage facility (and Defensive facility as a bonus) - there player can choose which resource he needs and send one-two survivors (the amount depends on the level of Storage facility) to retrieve a rucksack with related bonus items (the amount of bonus items increases with each Storage upgrade).

They will complete the action in 15 minutes and add labor debuff for another 30 - thus copying the vanilla amount of 45 minutes cooldown between radio commands.

Player is supposed to use this mechanic as a reliable source of gaining additional resources.

- **"Find Survivors" command has been removed** - this is because it was replaced a **whole new system of manual mission spawning** - this system provides player progression of unlockable missions to spawn - including mission class that creates new enclaves on the map and improves relations with existing ones - more details in the *Facilities - Command Center*.
- **Vehicle delivery system** was added - now, player can call vehicles right from the start - he doesn't need a specific enclave and heroic trait to provide this bonus.

BUT - many balancing mechanics are at play too.

For one - initially available cars are very primitive and they cost a lot. This is because this mechanic is supposed to fulfill the role of "emergency" vehicle source - in rare cases when for some unusual reason player is not able to get his hands on many normal cars.

The quality of vehicles and variety of options can be improved by upgrading Command Center facility - each upgrade provides better cars, but at even bigger prices - to balance this mechanic and not make acquiring the car too easy.

Here is the list of possible cars:

❖ **Basic:**

Sports Coupe (2 seats, small storage), Norma (2 inside seats, 2 outside seats, normal storage) - each cost 750 influence.

These cars are very bad - they are hard to control and offer little other benefits - they are only useful as emergency cars.

❖ **Decent:**

Sedan, Classic Sedan, Offroader - each cost 1200 influence.

These cars have decent mobility and storage, they can be used as main cars during middle stages of the game.

❖ **Advanced:**

Network Survey Car, Red Talon SUV - each cost 2000 influence.

These cars have good mobility and large storage, but obviously cost a ton to own.

Aside from that there is also a special category of delivered vehicles - apocalyptic cars - it is unlocked by achieving allied status with Mechanics special enclave.

They offer cars that have good stats, as well as unique features: these are Meatwagon, Burninator and Pyrohawk.

● **Trading:**

The trading mechanic that was accessible through Trading Depot was expanded into a fully fledged system:

First of all, all traders were organized into 4 tier structure:

- 1) **Basic Traders** - these are very simple traders that offer very low-quality equipment.
- 2) **Resource Traders** - six traders that sell resource specific rucksacks (Food, Meds, Materials, Ammo, Fuel, Parts) and related crafting materials, equipment, skillbooks and consumables.
- 3) **Faction Traders** - five traders from unique factions - each tied to specific resource type - they offer more rucksacks and skillbooks, better equipment and consumables.

This list consists of:

- **Trumbull Trader** - offers food, related consumables (advanced stamina recovery consumables), skillbooks (cooking, gardening, civil chemistry) and equipment (mainly gardening facility mods).
 - **Echo Lab Trader** - offers meds and related consumables (advanced health recovery and biochem consumables), skillbooks (civil chemistry, military chemistry, medicine) and equipment (including Portable Biochem Lab).
 - **Network Trader** - offers materials and related consumables (advanced stationary explosives), skillbooks (mechanics, craftsmanship, construction) and equipment (including Network Signal Booster).
 - **Red Talon Trader** - offers ammo and related consumables (advanced throwable explosives), skillbooks (military chemistry, mechanics, technology) and equipment (large amounts of firearm rounds, advanced ranged and melee weapons).
 - **Independence Day Trader** - offers fuel and related consumables (advanced incendiaries and distractables), skillbooks (military chemistry, civil chemistry) and equipment (including special firework launchers and ammo).
- 4) **Legendary Traders** - two traders that are used to be called "mysterious" - one deals with combat equipment, offering enormous variety of offensive and supportive consumables, other - general equipment, offering enormous variety of facility mods, all skillbooks, respecialization skillboks and many more.

First tier is accessible by default, but the next are unlocked through a special buff - "radio outreach" - this buff is earned by capturing and

upgrading Radio Tower outpost and installing Signal Antenna and Signal Booster facility mods into Command Center.

In order to achieve maximum radio outreach you'd need to both have facility mods and radio tower outpost.

Equipment

Many changes were implemented to various parts of the equipment system:

1. **Weapons:**

First, all weapons have been organized in tier structures and had their damage values reworked.

Let's start from **Melee weapons:**

- Weapon classes were reworked:

First, melee weapons now deal more damage to Plague Hearts - original game assigns same values to each weapons of same classes, but the mod introduces new system:

- Bladed weapons deal less damage to hearts, but are more lethal to zombies
- Blunt weapons deal more damage to hearts, but instead of being lethal are more about knocking zombies down and having to finish them.
- Heavy weapons deal most damage out of all classes and are more lethal to zombies, but are also slower and consume more stamina.

Aside from that, class-specific attributes were improved - now bladed weapons are more lethal, blunt weapons deal more knockdown and heavy weapons combine both of these:

For some reason the original game assigns LOWEST lethality values to heavy weapons, which doesn't make much sense - i have fixed that - now heavy weapons often kill zombies with their attacks, justifying their slow speed.

Besides - **I HEAVILY recommend installing "faster blunt weapons finishers" mod** - it will replace finisher animations of blunt weapons with much faster alternatives (technically, it will remove slow versions, leaving only fast) - a change that works in favor of the gameplay role of blunt weapons - their strong side is knockback - and with quicker finishers this advantage is being properly capitalized, making combat much more enjoyable.

- ALL melee weapons now belong to one out of 4 tiers of weaponry - each has increasing damage, knockback and lethality and other values.

What does that mean?

It means that the enormous variety of weapons is now organized into a strict structure - and now there is actual progression of melee weapons and means of interacting with it.

If you turn the game on you'll find out that many weapons have detailed descriptions - with all of their stats expressed.

This is not an isolated change - it is a first half of the new weapon crafting system - now, in Forge facility (more in the Facilities section) player can craft a wide variety of melee weapons of all classes that increase in quality and effectiveness with each facility upgrade.

Highest tier weapons are noticeably more effective at destroying plague hearts and dealing with zombies, which makes created long path to obtain them well worth it.

- Weapon subclasses - now melee weapons are much more different from each other not only because they are of different qualities, but also because each weapon class now has their own subclasses:
 - 1) Bladed weapons now can be either powerful (axes, large swords - more damage to hearts, lethality and dismemberment, but slower and louder), stealthy (less effective, but also produce less sound) and balanced (don't have strong or weak sides).
 - 2) Blunt weapons can be powerful (more damage to hearts and knockback to zeds, but loud and slow), balanced (no advantages or disadvantages) and agile (faster, consume less stamina, but less destructive than other subclasses).
 - 3) Heavy weapons can be bladed (more lethality to zeds) or blunt (more damage to plague hearts).

While the differences between subclasses are not that noticeable, I still believe including this in the game will make interacting with melee weapon system more exciting and engaging.

Ranged Weapons:

Ranged weapons were also heavily reworked:

- First important change - caliber damages - now differences between calibers and ammo types are more pronounced:

- 1) **Handgun rounds:** .22, .45, 9mm - these were left at vanilla level - they deal 1-1,5-3 damage per shot to Plague Hearts.
- 2) **Revolver rounds:** .357 now deals 5-6 damage per shot and .44 deals 7 damage.

The numbers are quite high only because otherwise revolvers and magnums were significantly less effective weapons in vanilla game - this is simply because they don't have large mag capacities or rate of fire.

Now revolvers and magnums become somewhat usable weapon types with their own specific advantage.

- 3) **Shotgun shells** now deal 7 damage per shot - this significantly boosts shotguns as close range option against plague hearts, while balancing the damage with innate low mag capacity and slow rate of fire.
- 4) **Rifle rounds** have been boosted - 5.56 now deals 5 damage from regular rifle and 8 damage from sniper rifle per shot, while 7.62 does whole 8 damage from automatic rifle and 12 damage from sniper rifle.

This was done to emphasize rifles as powerful late-game weapons, since now they do tangible damage while keeping their large magazines and rate of fire.

- 5) **.50 caliber rounds** now deal 30 damage per shot - this is an impressive number, but they still lose in mag capacity and rate of fire - this buff will at least allow them to keep up with the rest of the "arms race".

40mm grenade launcher rounds deal 80 damage per explosion - BE CAREFUL TO NOT HIT HEARTS WITH ROUNDS DIRECTLY, because that would replace the explosion damage with much lower round damage - shoot the explosion nearby to properly deal damage.

- 6) At last, **crossbow bolts** damage has been increased - now light bolts deal 3 damage to hearts and heavy bolts deal 5 damage.

This change was implemented to make crossbows somewhat more viable as heart assault options - at least in the early game - they still have a very slow rate of fire, but now can be used in resource deficit situations to gain progress.

- **Ranged Weapons Crafting** - this mod introduces ranged weapon crafting system:

Player can craft ranged weapons at specific facility, but since ranged weapons now are much more effective, the access to crafting them is "guarded" by many requirements:

- First, the community needs Craftsmanship specialist for 1-2 tier weapons and Gunsmithing specialist for 3-4.
- Second, player can't just craft weapons at the new facility - he also needs to have specific crafting parts - weapon parts.
- Weapon parts are an added group of miscellaneous items that serve as crafting components for different types of weapons - small weapon parts for firearms, regular for basic rifles and shotguns, large for automatic rifles and machine guns and heavy for top-tier weaponry.
- Weapon parts are produced at Workbench facility - access to better parts is unlocked by upgrading the facility.
- Weapon parts crafted from Salvaged Weapon Remains - an item only acquirable by looting and trading, which serves the role of balancing mechanism - even if the player has many resources, he'll still be limited by the amount of weapon remains and forced to make decisions.

As you can see - in order to craft weapons player would need not one, but two dedicated facilities build and upgraded - one for crafting weapon parts and the other for assembling these parts in functional weapons.

Now, understanding differences between projectile types you'll also understand the reasoning behind new ranged weapons tier system:

- ❖ **Tier 1: Revolvers and magnums** - despite having impressive damage, I consider them to be 1 tier firearms because they still lose to other weapons in terms of flexibility and usability - revolvers can't even have suppressors attached.
- ❖ **Tier 2: Handguns and shotguns** - these are the working horses of the firearm world - they are flexible, reliable and consume rounds that cost the least. They are useful, but lose their effectiveness at latest stages of the game, when plague hearts health's starts to get over 700 points mark.

- ❖ **Tier 3: Non-automatic Rifles and machine guns** - rifles are the weapons that while still maintaining some level of flexibility, more aimed at Plague Heart hunting - they shoot powerful calibers and have good reach, precision and often decent magazine sizes, while machine guns allow quick translation of low-caliber ammo into destruction and damage.
- ❖ **Tier 4: Automatic rifles and shotguns** - these are the weapons of late game - they use powerful calibers and carry benefits of high rate of fire, which allows them to be used as effective plague heart hunting options.
- ❖ **Tier 5: Large-capacity automatic rifles, heavy weapons** - these are the best of the best - automatic rifles with 70-150 magazine round capacities dish out enormous amounts of damage and allow player to carry more firepower than anything else. Heavy weapons while being powerful, i have to admit are more of gimmick weapons - they simply cannot outperform large-capacity 7.62 rifles.

Special facility has 4 tiers and provides crafting of all 5 tiers of weapons, providing X tier at each level and X+1 tier weapon crafting at each level of facility if power or special facility mod are available.

- **Fighting Humans** - one of the most unexpected changes I have found was how this improvement of weapon damage has affected the process of fighting hostile humans.

Increased damage does make enemy shots down player with almost first connection, but it also makes player one-shot hostile humans with rifles (and high-tier heavy weapons) - and this really changes the game!

Now you don't need to worry about draining ammo on terminator-type hostiles - both you and them fall very quickly, which makes shootouts EXTREMELY tense and engaging!

You do have to be careful, but you also finish combat much faster, which makes it much less annoying (the impression I had from vanilla npc combat).

2. Consumables

Weapons were not the only equipment that received updating - both supporting and offensive consumables are not updated:

- 1) **Supporting** - many changes were made to the effects stamina and health recovery consumables provide:

- **Stamina:**

First, snacks were reworked to act like weaker versions of energy drinks - now they provide a 20-second slow stamina recovery effect - this makes snacks more valuable and usable as combat supporting consumables, while still keeping them low-tier.

Then, energy drinks had their effect time increased to 50 seconds and stimulants to 90.

In addition, coffee's fatigue postpone effect time has been shortened - it was done because original effect time is so long that it allows other fatigue to add on top of recovered one, while preventing player from using another coffee.

- **Health:**

First, painkiller effects were reworked:

- Mild painkillers now don't provide continuous health recovery effect - now they heal the amount of hp normal painkillers used to have.
- While normal painkillers now heal what strong painkillers used to have.
- And strong painkillers now not only heal hp, but also provide continuous health recovery effect on top.

New health recovery items were also added: since the original only had one type of trauma recovery consumable - first aid kit - I have added two lower tier trauma recovery items:

- Light first aid kit - heals 20 trauma damage and 3 injuries if trauma has been healed.
- First Aid Kit - heals 50 trauma damage and 6 injuries if trauma has been healed.
- Field Surgery Kit - heals 100 trauma damage and 10 injuries if trauma has been healed.

This more flexible progression of health recovery consumables have been integrated into Infirmary facility

crafting progression - now player can craft Light first aid kit at T1, thus gaining means of trauma and injury recovery at the field.

- 2) **Offensive** - offensive consumables have not been reworked - but repurposed:

Original game provided a very small variety of consumables crafting - at maximum level of Workbench player can't even craft frag grenades.

I have taked ALL existing explosives, incendiaries and distractables and inserted them into crafting progressions of different facilities - now player will be able to craft not only pipe bombs and fuel bombs, but also napalm grenades, willie pete grenades, bouncing borises, remote and sticky grenades, portable minefields and many more.

Listing and describing them all would be too long, so I suggest installing the mod and researching for yourself - hope i won't disappoint.

Vehicles

Vehicles have received two large changes:

1. **Stat changes:**

First, I have changed each vehicle's Storage Sizes - now cars provide sensible and useful storages - no more 4-6 slots - now you won't need to avoid certain cars simply because they have small storages.

Some cars have also received changes to their fuel mechanisms - most small cars now consume less fuel.

Another change was made to the collision damage mechanism - now cars damage and kill zombies from lesser velocities - that means you don't need to gain that much starting speed to kill zeds and juggernauts.

2. **Upgrade system expansion:**

The way Vehicle Upgrade Kits work have been completely reworked.

In the original game upgrade kits served only one purpose - to be applied once to specific car (to create Wichita ES, for example), and that's all.

My main problem with that was that the progression path towards obtaining the best vehicle was too short - you only needed to get your hands on a modern sedan and then one Medium Upgrade Kit - and bam, now you have the best transport in the game.

I have reworked this system to provide more unique benefits and make path towards obtaining of the desired upgraded car:

- Upgrade Kits (basic three) now **no longer convert cars** - instead **they are applied at Parking facilities** and provide long-lasting unique buffs - upgrade effects last for 3 hours.
- **Light Upgrade Kits** provide "+50% to stealth and fuel efficiency" buff to all community vehicles.
- **Medium Upgrade Kits** provide "x3 vehicle inventory stack size" to every community vehicle - that means you can put more of the same items in each inventory slot (ammo, consumables, etc).
- **Heavy Upgrade Kits** provide significant armor buff: it makes all community vehicles immune to fire, bullets and explosives and receive 50% less damage from collision with zombies.
- At last, **Vehicle Conversion Kits** provide vanilla conversion functionality - these are the items that change vehicles to their

upgraded counterparts when upgraded - in order to obtain one you need to craft all three previous upgrade kits (at Workbench T1-T3 (with power)) and then combine them into Vehicle Conversion Kit at Forge T3 (with Knowledge of Automechanics).

This implementation, I believe, will make obtaining upgrade kits of any type valuable at any part of the game - regardless if player has already converted his main transport into an upgraded version.

But that's not all:

There is a third system that I have implemented - **Vehicle Crafting System:**

- It allows player to **build vehicles from separate parts - engines** (crafted at Workbench facility line) and bodies (crafted at Forge facility line).
- Both types of components exist in 4 quality tiers and are built at corresponding upgrade levels of their facilities (basic, decent, good, masterwork - T1, T2, T3, T4).
- Then, player can assemble the vehicle at an empty parking spot.
- The mod provides complete selection of vehicles - ALL cars have been organized into 4 tiers and are available to be assembled.

The *ONLY PROBLEM* is that while *I HAVE the functionality* completed *I CANNOT PUBLISH* this functionality with the mod:

- The reason is that the original game doesn't support vehicle crafting and the technical basis was made by other modders.
- I am not a technical modder and I would not be able to create such functionality myself - so I took the mechanism that these modders made and implemented them into the Car Crafting system in my mod.
- BUT - when I asked for their permission to use that integrated functionality (all tested and working) - they *declined*.

So, if you would want to see this functionality appear in my mod you can try going to the State of Decay 2 Modding discord server and ask @theneru and @T1Maniac if they'd want to reconsider their decision to allow me (@The Backstab President) to use their functionality base.

Maybe - if enough people would request that they'll allow me to share this system with you.

Facilities. Detailed:

Now, we can finally talk about the facility changes - and they are a lot.

Let's start from the general overview:

Now there are only 10 facilities in the game - most have been removed and their functionality was repurposed into those that now form building structure.

Here's what has been cut:

- ALL Large Slot facilities:
 - Armory - was partially repurposed into Workbench T4.
 - Auto shop - was partially repurposed into Workbench T4.
 - Bunkhouse - was repurposed into Sleeping Facility.
 - Field Hospital - was repurposed into Infirmary T3.
 - Trading Depot - functionality was expanded in a full-blown trader radio system (see Radio. Traders section and Command Center description).
 - Sniper Tower - was partially repurposed into Watchtower T3.
 - Forge - was expanded into Forge facility line (4 tiers).
 - Solar Array - was repurposed into Utility Center facility line.
 - Staging Area - was repurposed into Storage facility progression.
 - Farm - was partially repurposed into Garden facility progression (3 tiers).
 - Lounge - was repurposed into Trading Center facility progression.
- Small slot facilities:
 - Training Area, Gym, Target Lineup, Shooting Range - were repurposed into Training Center facility line (3 tiers).
 - Generator, Rain Collector - were repurposed into Utility Center facility line.
 - Latrine - was repurposed into Utility Center facility line.
 - Hydroponics - was repurposed as T3 Garden facility progression.
 - ALL Red Talon prefab facilities - some functionality was repurposed into Workbench facility (Advanced explosives crafting).

Now let's look at what the facility structure represents now.

Main Crafting Facilities:

First, and most important are changes to the main crafting facilities - facilities that craft offensive consumables and equipment.

In my opinion, in the vanilla game they form very uneven structure:

- It has Workbench with 3 tiers of progression that allows crafting of limited variety of explosives, vehicle repair items and weapon and facility mods - this is a small slot facility with progression.
- On the other hand, it has multiple large slot crafting facilities: Auto Shop, Armory and Forge - from which Forge is barely useful (crafts some "good" melee weapons and that's all), Auto Shop is fairly decent because of upgrade kits, but loses its relevance after you upgrade main vehicle, and Armory is too good - it allows crafting of ALL types of ammo (while Workshop NEEDS facility mods to be able to do this), more types of explosives and advanced muzzle attachments.
- Not only that, to build Workbench 3 player needs 48 materials and Mechanics knowledge, to build Auto Shop - 25 materials and knowledge of Automechanics, and even to build Forge - 25 materials and Knowledge of Craftsmanship - while Armory only needs 25 materials and Warlord leader - which is basically a non-issue, because player can just assign one, start building and immediately demote the leader.

In my opinion, this is very unbalanced and can be greatly improved.

Not only that, there is another important crafting category that player can greatly benefit from - biochem items - which are only available to craft if player has Biochem Lab installed in the Infirmary facility.

So, the very first changes of this mod were to this facility structure:

- I have reformed it into three main facility progressions - Workbench (4 tiers), Forge (4 tiers), and Still (4 tiers) - each of them are independent facilities meant to fulfill distinctly different roles, with their own main skill requirements and progressions - no more quick and immediate access to top-tier functionality or underwhelming and barely usable facilities.
- Besides that, the item pool in each crafting category has been greatly expanded - now player will be able to craft all existing explosives, incendiaries, mines and distractables that the game has - even Daybreak-exclusive explosives (on the higher tiers of Workbench facility line).

- In addition, facility mods were reworked to *improve* existing expanded functionality instead of *being only means to access* it - for example, player won't need to buy Independence Day facility mod to craft Bouncing Borises and rest of ID consumables - same also applies to Biochem Lab. Now you only need to build and upgrade facilities to get access to good items.

Here is what each facility line is for:

- **Workbench** - this the expanded vanilla Workbench facility line:

It provides crafting of consumables and other small items:

- Bullets crafting - T1 provides access to magnum and revolver bullets, T2 - shotgun and handgun, T3 - rifle rounds, T4 - heavy rounds.
- Explosives crafting - the explosive crafting mechanic has been expanded - not just by adding almost all existing explosives in the game into crafting pool, but also by reworking the skill requirements (more details in previously explained skill system rework).
- Vehicle repair and upgrade items crafting - the variety is greatly expanded - now player can craft repair kits at T1, and craft them not just from parts, but also materials (if suddenly the need will rise).
The reworked car upgrade system was explained previously.
- General equipment crafting - backpacks, material resource, circuitry, weapon mods and weapon parts.

Workbench allows player to craft mechanics and military chemistry skillbooks.

- **Smithy** - this is the Forge class facility line:

It provides crafting of "heavier" items:

- Melee Weapons - 4 tiers of bladed, blunt and heavy weapons.
- Ranged Weapons - 4 tiers of a wide variety of weapons - from revolvers and small capacity shotguns to advanced handguns, to rifles with 150 rounds in the magazine.
- Facility Mods - you can craft almost every facility mod, but each of them require specific knowledge on top of knowledge of Craftsmanship and Metalwork.

- Car repair kits (less variety than workbench - just that player would have means of repairing cars if he'd choose Forge over Workbench path in early game).

Forge line allows player to craft craftsmanship and construction skillbooks.

- **Still** - this is the facility line that focuses on chemical items - it provides both offensive and supporting consumables:
 - Incendiaries - large variety of incendiaries (including Willie Pete grenades and Independence Day items).
Distractables - extremely useful supporting consumables like smoke grenades, flashbangs, road flares (for use with bloater grenades) and etc.
 - Experimental biochem consumables - access to these was reformatted from "Infirmary facility-mod only" to a steady balanced progression of Still facility line. Chemical Plant (Still T4) allows crafting of Pentamezin - now it gives a 60 seconds "aim snap" ability that was removed from Gunslinging specialization!
 - Luxury items - player can craft alcohol and hygiene luxury items for sale or personal use.
 - Distillation - a group of actions that transform one type of main or crafting resource into another - for example, you can craft fuel from chemicals and chemicals from fuel, make plague samples from chemicals and other.

As you can see, an interesting structure is created:

Each of the facility lines provide functionalities that both valuable separately, and a complement each other:

- Workbench and Still provide their own unique offensive and supporting consumables.
Together they compensate for each other's "weak points" - bullets and explosives are good for killing Plague Hearts and individual threats, while masses are better controlled with incendiaries and distractables.
- Forge on its own allows crafting of melee weapons and weapon mods - and in tandem with Workbench - extremely valuable ranged weapons.
- Also there are two special weapons that were repurposed from Independence Day trader - Starshank Launcher and Pyrolauncher - first is a weapon that is very effective in the hands of followers and second is extremely effective horde combat tool - they can be crafted from special weapon parts created in Workbench T2 and T3, combined at Forge T2 and T3 facility, and loaded with special ammo crafted at Still T2 and T3.

Command Center

First, the main functionality of Command Center has been reworked and expanded:

The outposts amount in the vanilla game is unnecessarily limited - upgrading Command Center to the maximum gave only 4 slots, while only ways of further increasing the amount (getting hands on Network Signal Booster and buying special Red Talon operatives) were very unreliable (first is impossible to find - only buy, and second is locked behind special currency).

I have increased the amount of unlockable outposts by strictly tying it up with facility progression: Basic Command Room gives 3 outposts, T2 gives 6 outposts and T3 - 8, while Signal Booster and Signal Antenna facility mods were reworked to provide new special buff "Increased Radio Outreach" that is a part of previously mentioned expanded Radio Trading System.

The Hack Drone action was also moved into the Watchtower facility, but that doesn't mean that Command Center has lost functionality - on the contrary.

In addition to that, Command Center has received a brand new system - Manual Mission Spawning:

- Now, player can start various missions from Command Center facility - and this is not just a barebones functionality - it is a fully fledged system with options and progression.
- Callable missions are divided in 3 categories - ambient, enclave and faction:
 - Ambient missions are regular one-off missions that provide variety of challenges and simple rewards. These can give player resource rucksacks, equipment, or even vehicles.
 - At Command Center T1 there is a limited pool of ambient missions with simple rewards, at T2 player gets access to all ambient missions (that the mod provides).
 - Command Center T3 unlocks Faction Missions - these are essentially a next-level-Ambient Missions - also one-off missions, but now connected with developed factions like Network, Red Talon, Echolab, etc - these missions provide much better reward than regular ones - which is why they are exclusive to maximum upgrade level of Command facility.
- Enclave Missions are different from previous types:

- These missions are directly connected with potential and existing enclaves on the map - similar to radio call mission "Find Survivors" - but much more flexible and varied.
- Enclave Missions allow player to spawn missions that either spawn new enclaves, or spawned by existing enclaves - thus allowing player to increase enclave relationships "on demand". Besides that - player can choose which mission to spawn - be it resource request (down to specific resource), or help request (down to specific problem).
- At T1 player can invite and improve relations with neutral enclaves, at T2 friendly, and at T3 player can invite enclaves that become instantly allied and make allied enclaves spawn missions that will reward with a second alliance bonus on completion.
- Obviously - all three mission types are quite beneficial and desirable for the player and ability to call them needs to be balanced, so here is how this mechanism is implemented:
 - Each mission spawn action requires a Mission Token - special miscellaneous item that has been added to the game with this specific role to fulfill.
 - Each mission type requires a token of its specific type and each token type is created with special action (in the same facility) - it doesn't cost anything, but puts special effect for 20 minutes that locks other "gain X token" actions.
 - This means that in a single hour a player can get 3 mission tokens in total, and he has the option to choose which ones.

This system is quite experimental and hard to test and balance - of course I have implemented what I found to be conceptually sound balancing mechanisms, but I understand that I can't truly control it.

Still, I hope it will add something overall positive to the game and looking forward to the feedback.

Storage

Storage has been structurally reworked - now instead of having 3 tiers and 3 specializations it has 5 tiers - with the ultimate storage capacity at the final one.

The price for upgrading also doesn't include facility upgrade kits and is very lenient on resources, which means you can increase base's storage capacity as soon as you get to the limits.

Don't forget the Resource Scavenging actions that replaced radio actions - upgrading the Storage improves results of scavenging actions - it adds crafting items (alcohol, seeds, parts and reagents) corresponding to chosen resource - the amount of them increases with each upgrade.

In addition, Storage has new passive - maintenance upkeep.

This passive works similar to Staging Area main passive - it reduces base's material upkeep in 10/20/40/60/80% along with facility progression (all five tiers) - but it activates only if one of survivors has Construction skill (now it is a basic community skill and not a specialization - read more later in Skills and Traits section).

As an additional bonus Storage also has a new passive - it increases vehicle inventory slot stack sizes - and the effect also grows with facility progression.

Utility Facility

Original game has quite a big amount of facilities that serve a single purpose - and many of those provide varied levels of access to base-wide power or water.

I repurposed all of them into single facility line - Utility Shed (T1), Utility Center (T2), Utility Plant (T3).

Utility facilities provide:

- Actions that give limited access to water
- Actions that give limited access to power
- Actions that consume hygiene luxury items in return for morale boost
- Crafting of Construction skillbooks.
- Latrine passive that provides permanent morale increase

At T1 actions provide very limited time windows of base-wide water or power, while taking quite a lot of time to complete - almost an hour of preparation for a 10 minutes of chosen amenity.

This is done this way to emphasize the importance of these amenities in the postapocalypse and how hard it is to actually get them - you'd need to actually plan ahead in order to utilize them.

Facility mods that provide water and power were reworked to act the same way - long preparation time and limited access - but still better than this "basic" alternative (to justify their existence).

Further upgrades decrease the action completion time and increase the amenity access time, but that's not all.

Now, to get base-wide water and power player doesn't just need to capture corresponding outposts - he needs to build Utility facility and upgrade it to T2 for

water, and T3 for power in addition with capturing outposts to finally receive constant base-wide amenities.

To make this less tedious, outpost capture costs were changed - instead of spending 1000 and 2000 influence they will demand 400 and 500 influence and 5 and 8 materials for Water and Power correspondingly.

If you remember - facility upgrades now require Facility Upgrade Kits - this means that the process of acquiring maximum progression of utilities is also heavily tied to difficulty progression.

All of this is done to make getting base-wide amenities to feel like an actual long and meaningful path with many steps and choices, instead of just two separate acts of spending large amounts of influence.

Defense facility

The original defense facility of the main game has very much to be desired - the only notable thing it provides is armed guards at the base - the place the player spends the least amount of time!

Otherwise, It gave no meaningful bonuses and no reasons to prioritize over other facilities.

Now, defense facility has 3 tier progression, each step of which provides very significant incentives to own it:

- **Safezone increase** - this, in my opinion, is the biggest thing that was added in the latest update - now the game has specific buff that increases facilities' safezone radius and I have utilized it to the maximum.

Now, Defense facility provides special "defenses" passive that greatly increases safezones and scouting ranges around the outposts and main base.

Now having a fully-upgraded Defense facility at the base actually makes a very tangible difference - the map becomes significantly safer.

I have to note that it has some minor bugs that sometimes prevent safezone sizes from changing - returning to the menu and back on the map fixes those.

- **Active defenses** - in addition to safezones, i have reworked the active defenses action of the outposts:

Defensive Landmines provide very powerful effect that i felt appropriate to balance by reducing how much it lasts initially - from an hour to 10 minutes - and then tied that time to Defense facility progression:

Each tier of Defense facility provides additional 10 minutes to the landmines effect time, resulting in 40 minutes at T3.

- **Noise and Thread** - each level of Defense facility provides increasing effects of noise and threat reductions, affecting the intensity of infestation spawns.

In the original game this effect was extremely weak, barely covering basic community sounds - now it actually can catch up even with high-membership communities and provide tangible effect.

- **Radio Commands:**

Defense facility also provides various radio commands:

- T1 unlocks Recon, allowing player to utilize precise information about surroundings.
 - T2 unlocks Sniper Support, allowing player to get his hands on a powerful tool of support and offense.
 - T3 has action that unlocks Drone Recon and Drone Strike if player has Technology and Programming specialist.
- But that's not all - it also has **synergy with Artillery Outpost** - if the outpost is captured and Defense facility is sufficiently upgraded it unlocks up to 4 different artillery radio commands:
 - T1 Outpost + T2 Defenses: Artillery Strike - 5 high precision strikes, targeted by smoke grenade.
 - T1 Outpost + T2 Defenses: Napalm Strike - 5 very imprecise napalm strikes that burn a large area.
 - T2 Outpost + T3 Defenses: Air Strike - 10 high precision strikes
 - T2 Outpost + T3 Defenses: Artillery Barrage - broad area denial attack.

I believe all of this makes this new expanded Defense facility into a truly desirable option at any level of the game.

Sleeping Facility

Vanilla game has a problem with sleeping places - it unnecessarily complicates the process of satisfying the need for sleeping places - facilities barely give any, even large ones, and safehouse outposts provide pathetic 2 beds.

As a result - you often have to fill valuable slots with sheltered beds and barracks and that doesn't feel good or enjoyable at all - it feels like wasting slots. As an insult to injury, not having sleeping places seems to be bugged and not provide any debuffs!

In this mod the facility is reworked - now you can only build single sleeping facility - bedrolls that give 3 spots - but then you can upgrade it four times, adding 2 additional sleeping places with each upgrade up to 9. Aside to that, bedrolls is one of the two facilities that doesn't demand facility upgrade kits for upgrades.

This way, you'll only need to spend one facility slot to satisfy the need for sleeping spots, and with little upgrades instead of large ones you can flexibly add sleeping places to perfectly follow the growth of the community.

Kitchen

Kitchen facility, while being a cornerstone of any base, has been assigned couple of pleasant changes:

- **It can now craft Stimulants** - at T3 upgrade player can craft stimulants that provide 90 seconds of quick stamina recovery.
For some reason, in the original game it is not the case, but now the stamina recovery consumables crafting progression is complete.
It also provides access to Espresso Shots crafting.
- **Proper Diet** - each level of Kitchen provides action "construct diet", which is unlocked if the player has a Cooking specialist.
Constructing diet provides a 30-minutes lasting buff to Max Health and Stamina. This action also serves as main option of improving Cooking skill, because it doesn't require any resources.
- **The "Prepare Feast" active actions have been removed** - now there is a special category of Luxury Consumption actions - player can spend luxury snacks and alcohol to temporarily boost morale (unfortunately, the selection of items that can be used is limited, because of how labor-consuming it was to make them).
- Finally, Kitchen has received a VERY useful passive functionality - **it now provides Rationing Effect** - while the original game has rationing as active action that also applies debuffs, new Kitchen provides less "effective", but completely positive constant reduction of overall food consumption.

At T1 rationing reduces 15% of food consumption, at T2 - 30%, at T3 - 45%.

In accordance with that change, all other existing personal traits and buffs that affect food consumption were removed from the game.

This was implemented to make Kitchen actually have a high-priority role in base management instead of being something more symbolic - now having a kitchen and upgrading it doesn't just give players ability to boost morale and craft snacks, but also significantly affects the food economy - the most important economy on Lethal difficulty.

Training Facility

The original game has 2 training facilities - each with single available upgrade - one for fighting and one for shooting. Each of them only provide a single stat buff (health or stamina) and exp gain buff.

In my opinion, it is quite a strange decision - facility slots are quite a luxury and spending them on just two buffs seems very uninspiring, especially that vanilla has problems with satisfying sleeping places.

Gladly, the sleeping problem my mod is solving already, but i'm obviously not going to stop there - the training facility has been reworked and sufficiently expanded.

First, now there is a single facility with a 3-tier progression path: Training Area, Training Center, Training Complex.

This facility focuses on all basic skills - not just Fighting and Shooting:

- Training Area focuses on survival skills - Wits and Endurance - it provides xp gain buffs and special buffs, such as increase in Consumables inventory stack size (which is EXTREMELY helpful, because it applies to every consumable in the game, not just stamina and health recovery).
- Training Center provides Fighting skill xp buff and several melee combat buffs such as reduced stamina costs for grabbing, striking, dodging and finishers.
- Training Complex provides Shooting skill xp buff, increased Bullets inventory stack size (allowing to carry much more bullets) and reduced ranged weapon durability loss from usage.

But these are not even a half of overall new functionality:

Training facility also provides:

- Max Health and Stamina increase.
- Reduced injury and trauma severity.

- Ability to learn and improve new Psychology skill.
- Access to actions that provide skill-specific xp (same as original game).
- Access to morale boosting actions - since the Lounge facility was removed, Training facility now partially fulfills that role.

This is quite a selection of useful functionality, but, in my opinion, final one takes the cake:

It gives access to Respecialization Skillbooks crafting actions.

What is Respecialization Skillbook? It's these books that rare mysterious trader sells - on consumption they allow player to choose different specialization for specific basic skill - their greater point is that they allow player to choose any specialization - even those that weren't available at first.

- T1 provides access to Wits and Endurance respecialization books crafting (requires knowledge of Psychology).
- T2 - Fighting (requires knowledge of Learning Science).
- T3 - Shooting (requires knowledge of Learning Science).

Yes, that means you can retrain your survivors to have Gunslinging instead of other skills - but that would require you to upgrade the facility to T3 and also have a Learning Science specialist - one of the two specializations of Psychology skill.

Infirmary

Infirmary has been one of the least affected by changes, here's is what it gained:

- Now it has passives that increase infection and trauma recovery if community has Medicine specialist
- The highest tier of Infirmary - Field Hospital, provides Medicine specialization-specific buffs - if community has a Traumatology specialist it greatly increases trauma recovery and if community has a Toxicology specialist it greatly increases infection recovery.
- Crafting progression has been slightly expanded: since different variations of first aid kit were added, now T1, T2 and T3 can produce their own trauma healing consumables: Improvised First Aid Kit, First Aid Kit and Field Surgery Kit crafting are accessible at corresponding tiers.
- As it has been already noted - Infirmary now does not provide biochem items crafting, because this functionality was moved to Still facility line.

- At last, Infirmary also provides hygiene luxury items “consumption” - player can spend luxury items for morale boosts.

Farming Facility

The original game has THREE facilities that fulfill the same role:

- Small slot Garden and Garden 2
- Large slot Farm and Farm 2
- Small slot Hydroponics

I don't understand why they needed to separate small slot t3 into own facility, because as result that breaks progression and kind of makes a mess.

I have simply restructured all small slot facilities into a proper 3-tier structure that goes: Garden -> Greenhouse -> Hydroponics.

Each tier provides more income and requires additional amenities - water for T2 and power for T3.

There are other changes:

- Food income has been increased - personally i have found 2 food per day (Garden 1) for a whole facility slot to be extremely underwhelming. To change that i increased food income - now it provides 3/6/9 food per day for each tier of progression.
- Now Farming facilities cannot be replanted - they provide BOTH food and meds in the 3:1 ratio.
- Active actions have been changed - instead of spending seeds to increase the output player can spend seeds to produce fixed amount of food or meds.
- If you're afraid that this will reduce overall food gain don't worry - with expanded facility mod slots amount you can put up to 4 slots to increase the production and gain health and stamina bonuses.
- At last, player can craft Gardening skillbooks to learn the skill if he can't get his hands on Farming outpost.

While these changes are quite simple, in my opinion they make the facility much better than the original scattered mess.

Outposts

At last, the final changes.

The outposts system was largely expanded:

First, the **costs of capturing and upgrading outposts were reworked**:

- Now there is no need to spend 2000 influence and 8 materials for measly +1 resource gain - outposts now produce more resources (2/3/4 for 1/2/3 levels) and leveling up now costs 400 influence and 5 materials for level 2 and 500 influence and 8 materials for level 3 upgrade.
- Most special outpost costs were also recalculated - and many new special outposts were added - now water outpost requires 400 influence and 5 materials and power outpost requires 500 influence and 8 materials to be captured.

More details are in the special outposts section further.

Then, outposts received a lot of **new functionality**:

- **Community Skill Learning**: as i already mentioned - now outposts provide community skill learning actions right from the level 1. Player doesn't need to spend exorbitant amounts of influence to simply acquire the desired skill anymore.

Aside from that - outposts provide more than one contextual community skill to learn - more in detail outpost listing.

- **Passives**: latest update has introduced new passives that provide increase in outpost safezone the more it is upgraded. I went even further - i have attached safezone and scouting range increase to the Defensive facility line progression - now not only upgrading outposts, but also building and upgrading Shooting Platform, Watchpost and Watchtower provides significant bonuses to the safezone ranges.
- **Actives**: all outposts were assigned special action categories as an additional bonus - now outposts provide partial functionality of main and supporting crafting facilities (for example, ammo outpost can provide bullets crafting actions).
- **Outpost Specializations**: but that's not all - main resource outposts don't just get specific crafting action categories - before upgrading player gets to decide which action category he wants outpost to provide.

For example - materials outpost provides 3 specializations: explosives crafting, melee weapons crafting or facility mods crafting.

And this functionality also improves with outpost upgrades - just like at the facilities this functionality was taken from.

Let's look at these changes in detail:

Old Outposts:

- **Food Outpost:**

Provides 2/4/6 food per day.

Allows learning of Cooking.

Has only one crafting specialization - stamina recovery consumables crafting (copies Kitchen progression).

- **Meds Outpost:**

Provides 2/3/4 meds per day.

Allows learning of civil chemistry and medicine.

2 Specializations:

1. Health recovery consumables crafting - copies Infirmary progression.
2. Experimental consumables crafting - copies Still experimental category progression.

- **Materials Outpost:**

Provides 2/3/4 materials per day.

Allows learning of Mechanics, Construction and Craftsmanship.

3 specializations:

1. Melee weapons crafting - copies first 3 tiers of Forge melee weapons crafting category.
2. Firearm maintenance crafting - copies first 3 tiers of Workbench muzzle attachments and weapon parts crafting categories.
3. Facility Mods crafting - copies first 3 tiers of Forge facility mods crafting category.

- **Ammo Outpost:**

Provides 2/3/4 ammo per day.

Allows learning of Military Chemistry, Mechanics and Technology.

3 specializations:

1. Bullets crafting - copies first 3 tiers of Workbench firearm rounds crafting category.
2. Thrown Explosives crafting - copies thrown part of first 3 tiers of Workbench facility explosives crafting category.
3. Placed Explosives crafting - copies placed part of first 3 tiers of Workbench facility explosives crafting category.

- **Fuel Outpost:**

Provides 2/3/4 fuel per day.

Allows learning of civil chemistry and military chemistry.

3 specializations:

1. Experimental consumables crafting - copies 3 tiers of Still facility experimental consumables crafting category.
2. Incendiaries crafting - copies first 3 tiers of Still facility incendiaries crafting category.
3. Distractables crafting - copies first 3 tiers of Still facility distractables crafting category.

- **Safehouse Outpost:**

Provides 4 beds for the community.

Allows learning of Cooking and Psychology.

2 specializations:

1. Cooking - same as food outpost.
2. Training - copies 3 tiers of training and morale increase actions progression from Training Center facility.

- **Power and Water outposts** now:

Cost 400 influence and 5 materials (Water outpost) and 500 influence and 8 materials (Power outpost) to capture.

Provide 120 parts per day income.

Allo learning of Technology and Construction.

Provide T3 functionality of Utility Plant (Water actions for Water Outpost and Power actions for Power Outpost).

- **Artillery Outposts** now:

Provides 2 and 4 ammo per day (for basic and level 2).

Allows learning of Technology.

Synergises with Defense facilities - unlocks radio actions to call artillery support:

- Basic: Air Strike and Napalm Strike if Watchpost facility is built.
- Level 2: Artillery Strike and Mortar Barrage if Watchtower facility is built.

- **Radio Tower** outpost now:

Has 2 levels.

Costs 400 influence and 5 materials to capture and 500 influence and 8 materials to upgrade.

Synergises with Command facility - provides a special buff that unlocks various trader calls if Command Post is properly upgraded.

Each level of Radio Tower provides 1 point of Increased Radio Outreach buff, Signal Antenna facility mod provides 1 point and Signal Booster facility mod provides 2 points:

- At 1 point Command Center T1 unlocks radioing Basic Traders
- At 2 points Command Center T2 unlocks radioing Faction Traders
- At 4 points Command Center T3 unlocks radioing Mysterious Traders

As you can see - here forms a very interesting synergy with building system:

- When player decides which facility to build he can plan around capturing outposts to compensate for facilities that would be missing.
- Still, facilities at the base provide better and complete functionality, so outposts won't be able to fully replace them.

This creates additional depth to the decision making process, which is always welcome.

New Outposts:

Besides upgrading and changing existing outposts new outposts are introduced, as well as various facilities have been reassigned with what kind of outposts they are:

- **Offices, Churches** and various civilian buildings **like Post Office** are now also **Safehouse outposts** and provide complete safehouse outpost benefits and functionality.
- **Fruit Stands** are no longer food outposts - to me it doesn't really make sense for them to be fully fledged outposts like restaurants and farms - so now they are just regular "empty" outposts.
- **Construction Site** sites have become "**Construction Site Outposts**" - these are "light" variations of materials outpost - they produce materials, but do not provide crafting functionality.

To compensate for the lack of benefits, construction site outposts are cheaper to upgrade.

- **Coffee Stand Outpost** is now just a **non-outpost**.

It never really made sense why this particular building should be a special outpost AND it was a very underwhelming outpost - so I simply "demoted" it.

- But don't worry - now all **bars** and **small food stores** are promoted to being fully fledged **food outposts**.
- Sites like **Greenhouse, Barn и Farm** are now no longer just food outposts - they are their own outpost type - **Farming Outpost**.

Farming outposts too provide food gain like food outposts, but instead of cooking crafting actions it allows learning of Gardening and can be replanted to produce meds instead of food (and back to food).

- Also, in vanilla **Farming Supplies** - a site that contains farming inventory and doesn't really give any access to food now has become a **materials outpost** instead of food outpost.
- Numerous **warehouses** and other large **garages and sheds**, spread out over the game maps are now no longer basic outposts - they are now fully fledged **materials outposts** - and can be captured and utilized.
- **Auto Shop site** now has been assigned its own special outpost type - **Auto Shop Outpost**:

It provides **materials** and **two specialization paths**:

1. **Vehicle maintenance and upgrade items crafting** - 3 levels of progression that copies Workbench's progression (meaning you can craft not only repair kits - but also upgrade kits).
2. **Firearms crafting** - 3 levels progression that copies Forge's first 3 tiers of ranged weapons crafting.

- **Library site** has also been assigned its own special outpost type - **Library Outpost**:

It does not provide any resource gain and can't be upgraded, but it provides ALL community skill learning actions, and also respecialization books crafting actions from Training Complex.

Capturing costs 8 materials and 500 influence.

- **Landmark Outposts** have been demoted:

In my opinion, Landmark Outposts are extremely lame - their bonuses always turned out to be extremely boring and underwhelming and they never provided the feeling that you're interacting with something special and worthwhile.

Because of that I have simply decided to reassign them regular outpost types:

- **Wind Farm** now became a regular **Power Outpost**.
- **Sanctuary Church** has become a regular **safehouse outpost**.
- **Sasser Hospital** has become a regular **meds outpost**.
- **Leeds Cement** has become a regular **materials outpost**.
- **Trumbull Valley Research Biolab** was left unchanged.
- But, don't worry again - instead new **special site types** were introduced
 - **super sites** - these were assigned a special **Fortified Station outpost**:
 - These sites are **Fire Station, Police Station** and **Factory**.
 - Instead of giving 1 type of resource they give 2 materials, 2 fuel and 2 ammo each day.
 - They do not have upgrades - they get captured and provide 3 cool specializations each for a price of 3 facility upgrade kits - and the capture cost is enormous - 2000 influence and 20 materials.
 - Specializations can be refunded and the outpost can be respecialized - the price for this action will be one facility upgrade kit.

Here is what each of these specializations provide:

- **Ammo Station** provides T4 incendiaries and T4 firearm rounds crafting actions.
- **Weapons Station** provides T4 ranged weapons crafting, advanced muzzle attachments crafting and weapon parts crafting.
- **Industrial Factory** provides T4 facility addons crafting and T4 melee weapons crafting.

As you can see - they provide very valuable functionalities and cost a lot to obtain, but still less than completely upgrading their facility counterparts.

Conclusion:

Now, I am finally finished with this description and can be free.

Lastly, I need to do two things - mention the people who helped me achieve this goal and leave the list of mods that I'd recommend installing alongside Beyond Lethal Overhaul.

My personal "thank you" goes to:

- **KaiHeilos** - for creating an amazing **Asset Editor** tool that allowed me to bring (almost) all of my fantasies into reality.
- **SoD2 Modding Discord** for help with problems and the tough process of learning the toolset:
 - User and prolific modder **Neru** himself - for creation of many mods that allowed me to learn how things work and occasional advice.
 - User and modder **T1Maniac** - for creation of many facility-related mods that allowed me to learn how things work and useful advice (ESPECIALLY about how to make custom icons).
 - User **Tenoz/TheTrueTenoz** - for help in figuring out one of the biggest problems I have encountered during the process of learning Asset Editor.
 - **Others** that I have definitely forgotten - for small, but nonetheless valuable advice on various subjects.

So, finally, the list of mods that i recommend using in tandem with Beyond Lethal Overhaul to create the best possible experience:

- **Neru's mods:**
 - ❖ **Growing Threat** - the most important out of all - this is A MANDATORY mod to be installed with Beyond Lethal Overhaul!
 - ❖ **Plague Heart Health Gauge** - this mod shows the health of the Plague Heart if you get in close distance to it - it GREATLY helps to understand how weapons affect hearts and is in my opinion a mandatory inclusion especially if you plan to use Growing Threat too.
 - ❖ **Vehicle Health Bar** - it displays vehicle health bars - very useful to understand what is good for cars and what is not.
 - ❖ **Follower Health Bar** - it displays the health, stamina and infection level of your followers - it is an incredibly useful mod, because

figuring out your followers' states without it is practically impossible.

- ❖ **Enclave Health Bar** - this mod displays health of the enemy enclaves in nearest vicinities - it is also INCREDIBLY useful mod, because knowing states of enemies is as crucial as knowing your own.
- ❖ **In-Game Clock** - simple, but convenient mod that displays current daytime.
- ❖ **Brighter Lights** - mod that improves flashlights, car lights and lights at bases. Makes night looting more convenient and less stressful.

- **Short Night:**

Simple, but in my opinion very effective quality of life mod - it makes the super dark nights much shorter, thus making gameplay much more pleasant in the long run.

- **No Slow Crush Finishers for Blunt Weapons:**

This mod does one simple thing - removes all the slow finisher animations from blunt weapon finishers and leaves one very quick (gold swing) and one decently quick.

This makes ALL the difference - it alleviates the combat with blunt weapons to previously unreachable levels of enjoyment - I STRONGLY recommend using this mod, it has NO downsides.

- **Basic Training Mod:**

Personally, i haven't tested this mod, but i have heard that it is a very good mod for improving the behavior of follower npcs.

If it is true - then I think it would fit well with all the changes I have made.

If you'll have any interesting experience (good or bad) with this mod and mine - please share it in the nexus page.