

# SushiSwap Project WhitePaper

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## Origin

Since Uniswap was launched in the past two years, Uniswap has established its leading position in the DEFI. What followed is that their protocol design itself has become an industry standard, and many projects have learned its principles. In this case, we designed SushiSwap, a more advanced protocol than the Uniswap protocol: an evolution. Using Uniswap's elegant core design, we have added community-oriented features, which we believe will help improve the design of the protocol and bring more benefits to participants.

## protocol design

### Incentives for liquidity providers

Of course, many people may ask: "Why should I provide liquidity to SushiSwap instead of Uniswap?"

With Uniswap, liquidity providers only earn transaction fees from the fund pool when they actively provide liquidity. Once they withdraw funds from the pool, they will no longer receive that passive income. In addition, as agreements become more and more popular, even though they are early liquidity providers, they still face being joined by large funds, exchanges, mining pools, and other (larger and richer) stakeholders to join the agreement, which will dilute the risk of earnings. In SushiSwap, liquidity is provided to the fund pool, and SUSHI tokens can also be rewarded. However, unlike Uniswap, even if you decide to no longer provide liquidity, the SUSHI tokens you get will also entitle you to continue to receive a portion of the fees in the SUSHI agreement. As an early miner involved in providing liquidity, you will become an important stakeholder in the agreement. Income you receive from your investment in the mining in the LP (provides flow mobility) is proportional to the total number of coins on behalf of the LP. Unless you continue to increase the provision of liquidity, your holdings and corresponding reward income will gradually be diluted as the capital pool grows.

### Token distribution

We know that many of us are existing liquidity providers in the Uniswap pool. Based on this situation, we have designed a token distribution mechanism to make it as easy as possible for existing Uniswap liquidity providers to migrate to our agreement!

In order to be able to start providing liquidity and obtain SUSHI tokens, anyone who holds Uniswap LP tokens can put these LP tokens in the corresponding initial pool list. Once this

operation is completed, they will start earning token rewards after the block height of 10750000 . The list of LP tokens can be added by way of governance voting on the chain. Therefore, this will be a decision made by each of us .

In each block, 100 SUSHI tokens will be created . These tokens will be evenly distributed to the miners in each fund pool.

However, the number of SUSHI tokens generated in the first 100,000 blocks (about 2 weeks) will be 10 times the usual amount, that is, 1000 SUSHI tokens will be rewarded in each block. This is also to motivate the early farmers and participants of the agreement, and to provide assistance for liquidity migration.

List of initially available pools:

- CeFi stable coins: USDT-ETH, USDC-ETH
- DeFi stablecoin: DAI-ETH, sUSD-ETH
- Loan agreement: COMP-ETH, LEND-ETH
- Synthetic assets: SNX-ETH, UMA-ETH
- Oracles: LINK-ETH, BAND-ETH
- Ponzi economic tokens: AMPL-ETH, YFI-ETH
- Delicious tokens (2 times reward): SUSHI-ETH

The amount of SUSHI/WETH pool is twice that of others, so you are welcome to put your SUSHI (SUSHI) tokens into the fund pool of uniswap to get more “delicious”. After SUSHI is online, the community can vote to add more mining pools or change the SUSHI weight of any pool. How to change, you decide!

## **Reward distribution**

According to the current Uniswap configuration, 0.3% of all transaction fees in any pool will be distributed proportionally to the liquidity providers in the pool. In SushiSwap, 0.25% goes directly to active liquidity providers, and the remaining 0.05% will be exchanged for SUSHI (obviously through SushiSwap) and distributed to SUSHI token holders.

## **Ensure the sustainability of the project**

Let us ensure the long-term viability and sustainability of the project. According to @LawMaster’s suggestion, 10% of each SUSHI version will be used for development and future iterations, including security audits. I hope the community will not mind giving us a sip of soup.

Liquidity migration

After 100,000 blocks from the beginning of the agreement (approximately 2 weeks), we will migrate all liquid tokens mined on the SushiSwap contract. This migration will involve all Uniswap LP tokens mined on SushiSwap, and we will redeem them at Uniswap and initialize these tokens to the new liquidity pool. These new pools are almost the same as the standard

Uniswap pool, with the additional function of allocating the costs incurred to SUSHI token holders through the above logic.

After the migration is completed, the converted liquidity will be provided to the first batch of SushiSwap pools, and the agreement will be put into production immediately. Miners can continue to receive SUSHI token rewards without doing anything.

## Protocol usage

At the protocol and smart contract level, SushiSwap and Uniswap share the same interface. This means that if your protocol is currently compatible with Uniswap, integration with SushiSwap should be relatively simple. We will start integrating SushiSwap with various DeFi and other ecosystem tools.

## Security audit

Safety is very important to us. We have done unit testing as much as possible and tested everything that can be done on the testnet.

We invite Trails of Bits, PeckShield, OpenZeppelin, Consensys, Certik and Quantstamp to review the contract. The first of SushiSwap in its official Twitter account does recognize completion of the audit of the company will win this audit. We promise to pay 5 ETH for this review after your confirmation .

The contract you are about to review will contain all the content in the SushiSwap smart contract repository, which is available from <https://github.com/sushiswap/sushiswap> and is currently available for review.

At the same time, MasterChef's "agricultural" contract is unaudited, but for most Solidity developers, it is simple. Before you use LP tokens, please read the contract carefully! Everything is in the beta, please do so at your own risk.

## Smart contract

The contract with WTFPL license can be obtained from <https://github.com/sushiswap/sushiswap>. Some codes are borrowed from other projects, including Uniswap / Yam / Compound / OpenZeppelin, and are licensed by them. The following is a list of contracts with a brief description:

SushiToken : The token contract, with COMP/YAM voting functionality.

MasterChef : Deposit LPs tokens to farm SUSHI.

SushiMaker : Collect revenues, convert to SUSHI, and send to SushiBar.

SushiBar : Stake SUSHI to earn more SUSHI .

Migrator : Migrate MasterChef LP tokens from Uniswap to SushiSwap.

GovernorAlpha + Timelock : Governance stuff from Compound .

UniswapV2 : UniswapV2 contracts with small modification for Migration.

All contracts we sign should have a reasonable scope of testing. We will continue to do more tests. If you think there is any problem, please let us know through Discord (preferably privately, if it is a serious problem).

## **How do you participate**

You can use the interface on <https://app.sushiswap.org> to start depositing LP tokens into the MasterChef contract

Reputation: We borrowed most of the UI code from Yam

You will get SUSHI accurately from block 10750000. Make sure to stake LP tokens before grading to get the maximum profit.