



arcade.city

Blueprint for a New Economy

Whitepaper and Token Plan

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Introduction: Toward the Decentralized Economy

Around the world, emerging technologies are accelerating the transfer of power from top-down, centralized institutions to distributed networks driven by voluntary peer-to-peer collaboration.

Services that people once relied upon centralized institutions to provide, they are increasingly able to get directly from their peers.

Tech companies like Uber and AirBnB have seized on this 'sharing economy' trend to build billion-dollar corporations facilitating pseudo peer-to-peer transactions at global scale. As central intermediaries and gatekeepers, they restrict access to their marketplaces and dictate the terms of each transaction. They represent a temporary, transitional step in the evolution of the sharing economy.

The next evolution of the sharing economy will make the 'middleman' intermediaries obsolete. Service providers and consumers will be able to reliably connect peer-to-peer at scale, using decentralized marketplaces that are owned and operated by the participants themselves.

That decentralized economy is what we are here to build – and sooner than later.

What is Arcade City?

Arcade City is a decentralized global community of peer-to-peer service providers and consumers. The core technical offering is an Ethereum-based app for web, Android and iOS. Arcade City features an open ecosystem with forthcoming APIs to enable developers and entrepreneurs to easily create their own apps and service offerings as part of the Arcade City network. Initial service offerings focus on the ridesharing industry, with plans in motion for peer-to-peer deliveries and short-term home rentals.

Arcade City aims to reinvent the sharing economy by combining the power of blockchain technology, open-source development, platform cooperativism, and a decentralized 'swarm' organizational model open to all.

Project history

Arcade City began in late December 2015 in defiance of transportation regulations in Portsmouth, New Hampshire which had made Uber illegal. Local taxis threatened to boycott Portsmouth's 10,000+ person New Year's Eve celebration, protesting the city council for not cracking down hard enough on 'illegal' Uber drivers. To compensate for the imminent transportation shortage, a small group of current and former Uber drivers organized under the name Arcade City to provide peer-to-peer rides to party-goers free of charge.

After positive feedback from 100+ successful rides on New Year's Eve, Arcade City decided to launch a basic app in mid-February to facilitate peer-to-peer rides in other cities. The website with driver signups quickly went viral in early January, crashing the website under heavy volume.

When Uber withdrew from Midland, Texas in late January, a group of local drivers created a Facebook group called 'Arcade City Midland / Request a Ride' that grew overnight to hundreds of members, attracting local media coverage for providing peer-to-peer transportation in the aftermath of Uber's departure. Because of this early organization and media attention, Midland remained our largest regional network until the Austin situation in May.

The basic 'v0' Arcade City mobile app was launched in mid-February and was live for two months, with rides given in 28 states and Australia. Drivers could set their own rates, advertising their personal policies and payment methods on a customizable driver profile. Riders could select their preferred driver and pay the driver directly through the app. Realizing that our model at the time of centrally vetting drivers was not scalable globally, we phased out our 'v0' app, planning to launch 'v1' in the summer on a better platform with a more decentralized model.

When Uber and Lyft withdrew from Austin, Texas in early May, we recognized an opportunity to replicate our Midland success in a much larger market. Using the same strategy, we built an Arcade City network for peer-to-peer rides organized primarily through Facebook, with 10,000 members in its first month, and currently at 41,000 and rising. Tens of thousands of peer-to-peer rides have been given under the Arcade City banner with no reported accidents or safety incidents. Top drivers have reported earning two or three times what they made with Uber. Our Austin push was featured in TechCrunch, The Guardian, National Review, VICE, Austin Inno, CoinTelegraph and more, with mentions in Newsweek, Bloomberg, The Economist, The Atlantic, Reason, Business Insider, and countless local media outlets. Our Austin push was featured in TechCrunch, The Guardian, National Review, VICE, Austin Inno, CoinTelegraph and more, with mentions in Newsweek, Bloomberg, The Economist, The Atlantic, Reason, Business Insider, and countless local media outlets.

In turning over the governance of the Austin network to the drivers themselves, we realized we had discovered a powerful model for self-governing ridesharing networks, where groups of local drivers are incentivized to form a community that solves issues of marketing, standards, driver vetting, and communication at the local level. Whereas we'd previously had small pockets of individual drivers giving rides and beginning to get organized in cities around the world, the sheer volume of participants in the Austin network created a vibrant marketplace where drivers were free to innovate and create new organizational structures to fill the gap typically handled by a far-distant corporate headquarters. Teams of drivers called 'pods' formed to offer specialized service; for example a female-only driver pod focused on safe late-night rides for women, or a pod specializing in peer-to-peer deliveries.

Realizing the importance of this kind of 'group-forming network', we restructured our 'v1' app launch plans to incentivize the rapid creation of these Austin-style networks in cities around the world. In September we declared a 'global game' to incentivize the creation of these networks by attaching success metrics in the game to specific functionality in the 'v1' app that would become available first to the most-organized networks.

Initial plans announced in April envisioned that the 'v1' app would power our main-stream growth phase. Successes in establishing functioning rideshare networks in tens of cities around the world would be leveraged into the necessary resources to hire a team of experienced Ethereum developers to rebuild all or most of our platform on the Ethereum blockchain. This is in line with our commitments made since January to decentralize entirely over time.

Thanks to recent developments -- including an experienced Ethereum development team joining Arcade City and producing a functional ridesharing prototype in record time -- we have been able to accelerate the 'v2' Ethereum plans, with a token sale planned for November 1 and our fully decentralized Ethereum ridesharing app live in just a few weeks afterward.

The Arcade Token (ARC)

To facilitate peer-to-peer transactions in the Arcade City network, Arcade City is issuing an Arcade token (ARC) on the Ethereum blockchain. The ARC token will be the only means of paying for services in the Arcade City ecosystem. ARC token payments will be incentivized by built-in referral commission, reputation points, and other incentives customizable by developers and guild leaders.

To make sure anyone can use ARC tokens to pay for services within the Arcade City ecosystem, a in app exchange with credit card will be provided.

Users can buy, sell, and trade ARC tokens on cryptocurrency exchanges and peer-to-peer just like any other cryptocurrency.

Issuing the Token

The distribution of the ARC tokens will be presented in the form of a token sale. An amount of 100 million tokens will be created to start this new economy. 84 million (84% of the total supply) will be offered to the public during a 28 day token sale.

Users can purchase tokens by sending Ether¹ (ETH) to a smart contract. The total supply of ARC tokens will be allocated as follows:



Public Token Sale: 84,000,000 ARC (84%)

Tokens offered for sale to the public.

AC Legacy: 8,000,000 ARC (8%)

Token allocation to reward and further incentivize existing corporate, swarm, founders, and investor stakeholders.

2% (2M) of these tokens will compensate a large group of swarm participants and founders who contributed significantly to the progress of Arcade City over the past year. These tokens are immediately available and will be allocated proportional to each person's contributions, determined through community consensus after a series of group discussions led by the Vice Mayor.

1% (1M) of these tokens will compensate the Janitor, Vice Mayor, and City Manager. These

1 Ether is the cryptocurrency fueling the distributed application platform Ethereum. It is a form of payment made by the clients of the platform to the machines executing the requested operations. In our application, Ether allows people to purchase ARC tokens. More info: <https://www.ethereum.org/ether>

tokens are subject to a period of illiquidity lasting 2 months. Following the holding period, they will vest for 10 months at 100,000 (10%) a month. These rules are programmed into a Smart Contract (TokenVesting.sol) and cannot be changed.

5% (5M) of these tokens will be released immediately after the token sale to current investor stakeholders who decide to 'tokenize' their current equity investment in Arcade City, Inc. Any excess tokens not allocated to investors will be redirected to the swarm/founders pool as described above.

Development Team: 6,000,000 ARC (6%)

These tokens will be distributed to the development team.

Development team tokens will be subject to a period of illiquidity lasting 2 months. Following the holding period, they will vest for 10 months at 600,000 (10%) a month. These rules are programmed into a Smart Contract (TokenVesting.sol) and cannot be changed.

ARC Rewards: 2,000,000 (2%)

These tokens will be used to compensate people in the swarm for bringing in significant value after the token sale, who want to be rewarded in ARC tokens. These tokens will be managed by the Arcade City Council.

Note!

The token creation is capped at 672,000 ETH. The amount of tokens mentioned above assumes a sold-out token sale sold at 125 ARC per ETH. In the other case the total amount of created tokens will be less and the above breakdown will be allocated pro rata.

Token Sale Details

The ARC token sale will start on November 1, 2016 at 3pm UTC and will run for a period of 28 days or when cap is reached.

During this period, people can purchase tokens by sending ETH to a smart contract. The contract address will be announced on the Arcade City website a few days before the start of the token sale.

The first hour of the token sale will be a 'power hour', in which users can purchase ARC tokens at approximately 0.10 USD per token (125 ARC per 1 ETH sent to the contract.)

After the first hour, the price increases to 100 ARC per ETH. The price increases over the next weeks to 75 ARC per ETH (approximately 0.15 USD per token).

The token sale is capped at 84,000,000 ARC tokens and ends after 28 days or when ARC is sold-out.

No more ARC tokens can be created after the token sale ends. These limits are fixed in the smart contract before the token sale and cannot be changed during or after the token sale.

After the token sale ends, ARC tokens will be introduced on exchanges for trading. All token holders can transfer ARC tokens from their wallet to another, from the moment they are purchased.

Once the 'v2' Arcade City app is launched, ETA first week of December, token holders will be able to transfer their ARC tokens from their private wallet, to the wallet integrated into the 'v2' app, to start using ARC tokens in the new Arcade City Ecosystem.

The source code of the Arcade Token Smart Contract that will be used for this token sale is available at this URL: <https://github.com/arcadecity/ac-token>

Use of Proceeds for Token Sale Ether

The Ether proceeds collected from the token sale will be sent to a 5-of-7 multisignature wallet. Four keys will be held by members of the council, of which two by swarm delegates and two by development team, 3 keys will be distributed to external keyholders. In the first year, the funds will be allocated as follows:



If all 84M tokens are sold in the token sale, Arcade City will have sufficient resources to generate revenue within 12 months to sustain funding of the project for the foreseeable future.

The goal is for the project to be self-sustaining after one year, and within three years to be managed by the broader Arcade City community with no central Council.

Revenue generation & projections

The v2 Arcade City app generates revenue from Arcade token transactions.

A 5% fee from each transaction will accumulate in a 5-of-7 multisignature 'Treasury' wallet managed for the first three years by the Arcade City Keyholders, disbursing funds according to budgets determined by 5-of-7 votes by the City Council (Compare to a 20-25% fee for Uber and Lyft).

When the Treasury is 'full' with the budget needed for years two and three (an amount of ARC tokens equivalent to 20M USD), no more funds will be added to the Treasury. The fee will be decreased and/or allocated to increased referral commissions or other community payments, to be determined at the time through community consensus and a 5-of-7 vote of the Arcade City Council.

Revenue Projections

Arcade City projects a minimum annual revenue run rate of \$12M by Q4 2017, generating by December 2017 a minimum of \$1M/month of fees on ARC transactions.

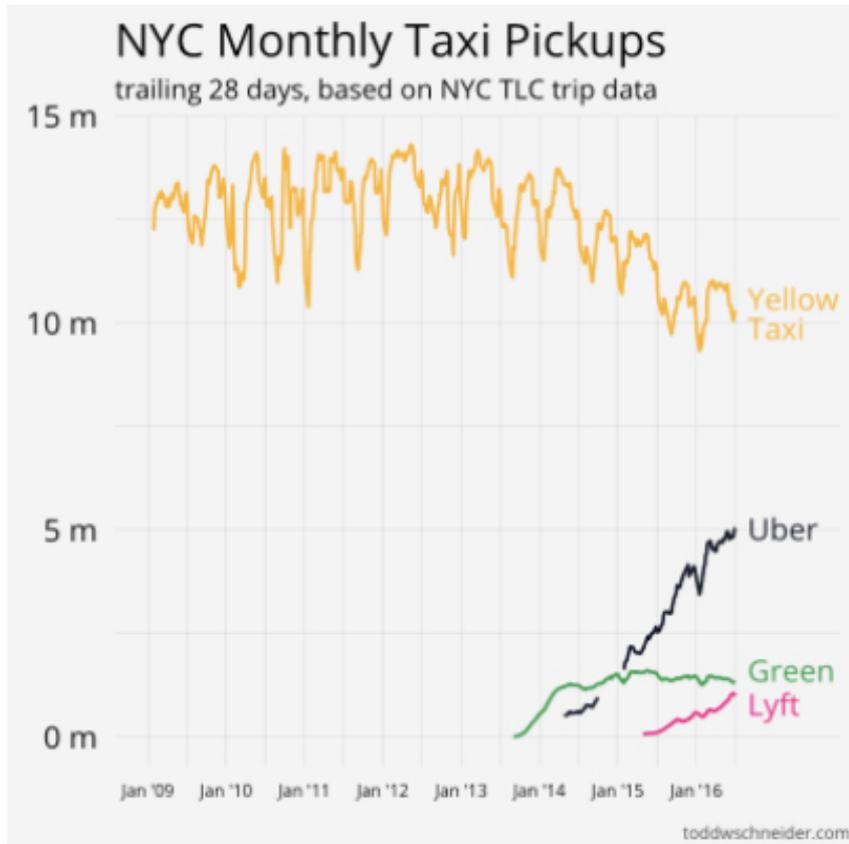
In our live market tests we've identified an average Arcade City transaction size of \$25 USD, yielding an average fee per transaction of \$1.25.

Our target rideshare driver gives an average of about 8 trips per day, 17 days out of the month, generating about \$170 per month per driver. (136 monthly trips x \$1.25 average fee)

Therefore to generate \$1M/month in fees, we would need only 5,882 rideshare drivers active anywhere in the world. (1,000,000 / 170) Based on our tremendous traction and driver interest so far, we project that to be easily achievable by December 2017.

Aggregate statistics about taxi, Uber, and Lyft usage show that there are about 15 million ride-for-hire pickups every month in New York City alone.

If Arcade City captures just 6% of the NYC ride-for-hire market – 900,000 rides per month – that would generate a monthly revenue of \$1.12M in one city alone. Therefore we view the \$1M in monthly revenue from ridesharing and other services – anywhere in the world – being a very conservative estimate.



(NYC analytics data source: <http://toddschneider.com/posts/analyzing-1-1-billion-nyc-taxi-and-uber-trips-with-a-vengeance>)

Arcade City Council

Arcade City starts with a 7-member City Council. Strategic and budgetary decisions will be made by this council, by voting 5 out of 7. Budgets are spent by means of a multisig wallet, where 5-of-7 keyholders are needed to sign transactions. Members of the City Council can be replaced with a 6-of-7 vote.

The initial city council members:

Christopher David - Janitor

Christopher David founded Arcade City in December 2015. A former Uber driver, Chris initially envisioned Arcade City as a decentralized, driver-run competitor to Uber. As a blockchain enthusiast and proponent of radical decentralization, Chris was the first to recognize the larger potential of Arcade City as an unstoppable engine of mass peer-to-peer transactions across countless industries and countries all over the world. Using skills acquired during years of grassroots political organizing, he led the growth of Arcade City from an idea into a global movement on a shoestring budget. After much trial and error, he somehow managed to attract an amazing team of talented visionaries passionate to fulfill on the greater vision of Arcade City to 'decentralize all

the things'. Chris has a bachelors degree in international relations, a black belt in tang soo do, and a really loud mouth. And he thinks you should read Swarmwise and Freedom(tm).

Jennifer Williams - Vice Mayor

Jennifer Williams is a founding member of the Arcade City Swarm and has served as the Director of Support since February 2016. She contributes on a full-time basis to expanding operations globally with the other founding members. Together they give new members the necessary tools and resources needed to efficiently and effectively navigate the Arcade City ecosystem. Her primary motivation is to guide, educate and liberate individuals by making information accessible through email, social media, and the Arcade City Help Desk that she designed. After her studies in graphic design and holding several corporate managerial positions she decided to exit the proverbial 'hamster wheel' and pursue her entrepreneurial goals which led her to ridesharing. Jennifer has 2.5 years of rideshare experience, has mentored 400+ new drivers, and served as a marketing coordinator, brand ambassador and recruiter, which has given her extensive knowledge of the industry. Through her work with Arcade City she has gained interests and insights into cryptocurrency and blockchain technologies, and she believes that implementing the latest technologies will help Arcade City supercede the ridesharing competitors by eliminating the middlemen and allowing drivers to earn fair wages and build stronger communities while saving riders from price gouging.

Lauren Slade - City Manager

Lauren Slade is an accomplished operations and support professional with over four years of direct experience providing tactical strategies ranging from small startups to large scale teams operating globally. As a forward thinking tech leader she believes in pairing laser-focused user observation with a great amount of drive to constantly improve ways of operating as the most definitive route to unstoppable success. Lauren is steadfast and committed to collaboratively solving meaningful problems with a team who values getting things done. She joined Arcade City full-time in June of 2016 to direct the V2 integration of decentralized management systems and develop operational growth processes. Lauren looks forward most to ensuring Arcade City becomes a self-sustaining business model, free of a central governing council from the top down. Her passion for process-minded management and developing teams inspires her to successfully scale and balance hyper growth within talent and project recruitment. As a natural planner she enjoys getting down to the detail on performance and tracking metrics.

Kristien De Wachter - City Planner

De Wachter has over 10 years of experience in project management and operations. In the beginning of 2015 she reinforced A-Labs, the City's digital innovation lab. As lead of A-Labs, making the bridge between experiments and the "outside world", tackling all problems that obstruct the way towards a good end-product, making sure all team members can work and think freely towards the common goals. Working on decen-

tralization for more than a year. She joined forces with Arcade City on the 23th of September, as a liaison between the dev team in Antwerp and the swarm and swarm leaders, making sure all the cats run in the same direction, always with respect for everyone's individuality and strengths. Believes Arcade City will bring freedom to every individual.

Stefaan Ponnet - Engineer

Stefaan has 15 years of experience in software development, design and architecture. He managed a software company for 6 years and worked for large companies as well as emerging start-ups. Interested in the possibilities of decentralized systems, he was an early Ethereum follower. Since september 2015 Stefaan has been full-time involved in developing Ethereum prototypes for government in the city of Antwerp. Stefaan has a passion for open source methodology and loves to solve technological problems. Stefaan and the Antwerp team joined Arcade City in September 2016 by publicly pledging our support to the community. Stefaan will add his expertise by developing all necessary building blocks - like Smart Contracts , Dapps, APIs, and anything else needed to make this new economy a reality.

Michael Thuy - System Architect

Thuy has been studying and working on decentralized technology for the past 2 years, mostly from within the City of Antwerp's digital innovation lab 'A-Labs'. In the past year he has been working on concepts like Blocktube and Locals World. From a strong ideological and technical background he manages to mash up cutting edge technology to come up with all-round concepts. Meeting Arcade City, he felt he had no other purpose in life than to contribute to Arcade City's swarm. Michael is co-authoring the Arcade City whitepaper/concept and building on the Polymer/Ethereum prototype. With Arcade City, Michael wants to make sure his kids grow up in a different economic model than he did.

He also would like Arcade City to be the de facto economic model on Mars.

Ben Adriaenssen - Brand Architect

Ben Adriaenssen after finishing his studies in 'Visual Arts - Graphic Design' found that working in advertising agencies or graphic studios was not fulfilling his strong urge to do something good for the world and the people in it. Applying his skill-set to communicate about random services or products wasn't enough; he wanted to make a difference. Working for the City of Antwerp was a big step in this direction. While starting and working in the City of Antwerp's digital innovation lab 'A-Labs', his lifelong passion for creating digital interactive things has been reignited. Focusing on block-chain-technology was another big step to combining the love for design with the passion for people. Ben is thrilled to be able to contribute his value to a project like Arcade City. Working in this innovative decentral way, with like-minded people in a swarm structure, is for Ben a dream come true. He hopes Arcade City can put the power, literally and figuratively, back into the hands of the common man.

Arcade City Advisory Board

The Arcade City Advisory Board will provide feedback and guidance to the Arcade City Council in exchange for nominal amounts of ARC tokens from the Arcade City rewards pool.

Invitations to the Arcade City Advisory Board will be extended after 7-of-7 votes by the Arcade City Council. Removals also require a 7-of-7 vote.

Arcade City Infrastructure

Offers

Any user can publish a request for services or goods as an offer.

To use a rideshare example:

User wants to go from location A to B. He publishes an offer like this:

**#NeedARide from [general home location] to [general drop off location]
#3riders #goodtipppers 20 ARC**

The user is offering 20 ARC to get from A to B, needs place for 3 people. The drivers subscribe to the hashtag #needaride and claim the offer by putting the same ARC amount on the offer, confirming the deal.

When the ride is successful, the user releases the ARC to the driver. In the case of a dispute, the rider can maintain a hold on the funds until a third-party mediator reviews the situation.

A driver can advertise an offer as well:

@ARCJakeVan Level 8 driver in @awesomemguild offering rides near [geo], can support #wheelchair #carseat

The user can reply, presenting an offer to this driver by replying to the @driver. The offer will look like this:

@ARCJakeVan #NeedARide from [general home location] to [general drop off location] #3riders #goodtipppers 20 ARC

Disputes

Funds are deposited into an escrow until the user releases the funds to the receiver.

For every offer made, a smart contract is automatically created. Both users deposit tokens to the escrow as a guarantee for successful transaction.

If there's a dispute, the user will not release the funds, and can start the process of resolving the dispute.

The guild can state the process of resolving disputes in the Charter of the Guild.

One way to resolve disputes would be to ask the founders of the guild to interfere. It would also be possible that a dispute resolving guild will be formed. (@disputemediation)

Guilds

A guild is any group of Arcade City users who band together under a common name. Users can choose to start a closed or open Guild.

Closed Guilds

- To create a closed guild the founder must submit 5 ARC tokens to be paid to the Arcade City Treasury.
- Users may become members of a closed guild by invitation only. Invitations are extended by the founders of the guild at their own discretion.

Open Guilds

- Creating an open guild is free.
- Anyone can freely become a member of the guild.

Starting a new guild

- Any user with an account can start a new guild.
- Choose open (free) or closed (paying) guild.
- Set the rules: fees (0% to 100%) and division of fees.
- Name the guild (pick the @name and display name.. Like @awesomeguild and The Awesome Guild)
- Add the charter, explaining what this guild stands for.

Referrals

All new Arcadians can enter the referral code of an existing Arcadian.

Once a new Arcadian enters the referral code of an existing user, a unique referral code will be generated for him.

Arcadians earn 1% of every ARC token payment from active referrals.

Reputation

Arcade City collects and shows many metrics in order to facilitate the community to come up with a reputation system. Showing these metrics in the front-end, Arcadians can form their own subjective opinion.

No personal data is or ever will be collected or stored. Arcade City works with the data that is publicly available, coming from blockchain transactions with public keys.

Available data:

- Number of successful transactions
- Thumbs up - thumbs down - neutral
- Number of disputes
- Total transaction volume

With every successful transaction, reputation tokens will be minted and distributed to the transacting parties.

As an added metric, users can give feedback on the quality of the transaction. To

signify the transaction is done the user can give a thumbs up, a thumbs down or no feedback.

A thumbs up will result in the minting of 20 rep tokens, equally distributed over the two parties. A thumbs down will not generate any rep tokens, a neutral transaction will generate 10 rep tokens (5 for each).

More advanced reputation systems can be developed with the transparent data provided from blockchain. Arcade City will provide a web API, making deeper analysis of reputation and quality possible.

Assurance

Closed guild founders are allotted a predetermined percentage of ARC tokens from all transactions made within the associated guild. All guild fees are automatically deducted and sent to a smart contract. Guild fees are used for compensation to the founders of the guild and will be paid when specific conditions are met, as stated in the guild's constitution.

Conclusion: into the future we create

The core motivating principle of Arcade City has always been the freedom to connect with one's peers without permission. So far we've applied that concept to decentralized ridesharing. But taken to its logical conclusion, that principle also carries significant ramifications in the realm of governance.

It is not just a ridesharing app that we're building. It is a community of free individuals connecting, transacting, and living exclusively through voluntary, peaceful interactions.

We have no final answers about what Arcade City is or can grow to become. This is a process of discovery that we invite you to join.

What is possible when we coordinate our best efforts to build a new economy — a new society — that works for everyone?

Let's find out..

Disclaimer

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Risk disclosures will be made available at <http://legal.arcade.city> prior to the beginning of the token sale.