

# Metaverse Virtual Real Estate

Q2 2022 Quarterly Report



# Key Insights

- Virtual real estate tripled in market cap this quarter thanks to the primary sales of new virtual worlds such as Otherside, Illuvium, and Arcade Land.
- On a USD basis, land prices decreased around 80% this quarter.
- On an ETH basis, virtual real estate has maintained a positive YTD return.
- Virtual land has been one of the best performing NFT categories this year.
- The primary land sale for Otherside was the largest NFT mint in history by several multiples.
- A parcel of virtual land in Otherside sold for a record-breaking 333 ETH.
- Rare land retains more value than basic land in market downturns.



#### Introduction

It has been a tumultuous quarter for crypto markets, to say the least. There have been significant sell offs across asset classes, and several large players such as Terra, 3AC, and Celsius have undergone liquidation or insolvency. On a macro level, the prices of Bitcoin and Ethereum have been highly correlated to the S&P 500, especially towards the downside.

As we have seen over the last several quarters, metaverse land prices behave as a leveraged asset class (crypto X metaverse adoption) that sees extreme performance to both the upside and the downside. Most existing worlds have experienced a sharp decline in land prices this quarter, largely due to the fact that most land is denominated in ETH. This relationship will be explored in more depth in the section <a href="Price Performance">Price Performance</a> and <a href="Land Prices">Land Prices</a>.

Despite the decline in land prices, the virtual real estate category has continued to grow in terms of sales volume, posting yet another record quarter. Similar to last quarter, sales growth has primarily resulted from the creation of new virtual worlds that have recently created and sold land. This notably includes Bored Ape Yacht Club's metaverse, Otherside, which registered the largest-ever primary NFT sale. This topic will be explored comparatively and in more depth in the sections, <u>Sales Volume</u> and <u>Emerging Worlds</u>.

Note: This report contains data provided by <u>Dune Analytics</u>, <u>MetaMetriks</u>, <u>Nansen</u>, and Parcel's internal data science team.

This report is not intended to serve as a recommendation for financial advice.



## Market Cap

Given the growing number of virtual worlds, it seems appropriate to categorize them into four tiers based on their land market cap<sup>1</sup>:

Tier 1 worlds have a land market cap greater than \$100M

Tier 2 worlds have a land market cap between \$25M - \$100M

Tier 3 worlds have a land market cap between \$10M - \$25M

Tier 4 worlds have a land market cap less than \$10M

	World	Available Supply	Avg Price (\$)	Market Cap (\$)
Tier 1	Otherside	100,000	\$6,058	\$605,811,765
	Decentraland	67,663	\$5,330	\$360,637,550
	The Sandbox	111,951	\$2,493	\$279,125,422
Tier 2	NFT Worlds	10,000	\$5,978	\$59,780,562
	Axie Infinity	17,241	\$2,881	\$49,671,321
Tier 3	Voxels	7,850	\$2,243	\$17,612,260
	Worldwide Webb	5,025	\$2,568	\$12,905,258
Tier 4	Axie Infinity	9,508	\$1,034	\$9,828,478

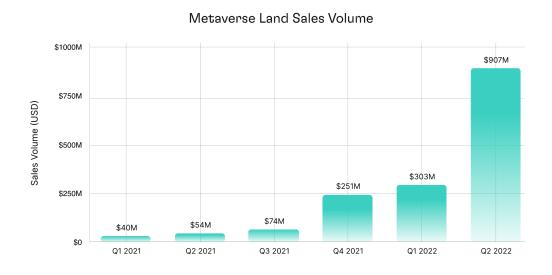
This report covers the top seven ETH-based worlds, which represent 93% of the total market cap of virtual real estate. Note that Axie Infinity is technically within the top seven virtual worlds by land market cap (\$49M), but not covered in this report because it operates on Ronin (an Ethereum sidechain). To see land sale metrics for other worlds that are not included in this report, the following public Dune dashboard is recommended: <a href="Metaverse Land Community">Metaverse Land Community</a>.

<sup>&</sup>lt;sup>1</sup> Market Cap is calculated by multiplying the average transaction price per land parcel by the available supply of land parcels.

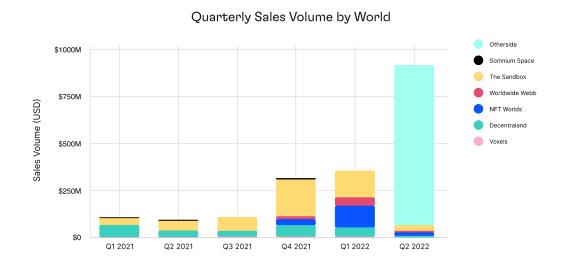


## Sales Volume

The total sales volume of virtual real estate this quarter was \$907M, up 200% QoQ and 1,600% YoY.



Growth this quarter was primarily driven by the creation of Otherside, developed by Yuga Labs (of Bored Ape Yacht Club fame). The demand for Otherside land generated an astonishing \$317M in primary land sales on May 1, and continued to generate over \$500M in secondary sales over the next two months. This was the largest recorded NFT mint in history and essentially tripled the sales volume of the virtual real estate market.



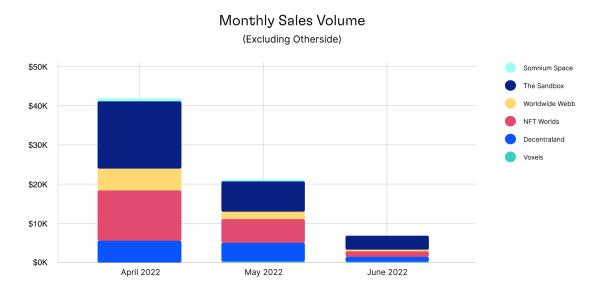


However, excluding Otherside, most worlds saw significantly reduced sales volume this quarter. Overall NFT trading volume is down -93% on OpenSea this quarter compared to Q1.

The following table shows the relative percent change in sales volume over the quarter for each world.

World	Q1 2022	Q2 2022	% Change
Somnium Space	\$3,266,000	\$1,013,000	-69%
Decentraland	\$52,957,000	\$11,488,000	-78%
The Sandbox	\$141,241,000	\$28,484,000	-80%
NFT Worlds	\$112,887,000	\$20,416,000	-82%
Worldwide Webb	\$45,940,000	\$7,607,000	-83%
Voxels	\$5,670,000	\$803,000	-86%

Monthly sales volume decreased by -50% from April to May and another -66% from May to June.

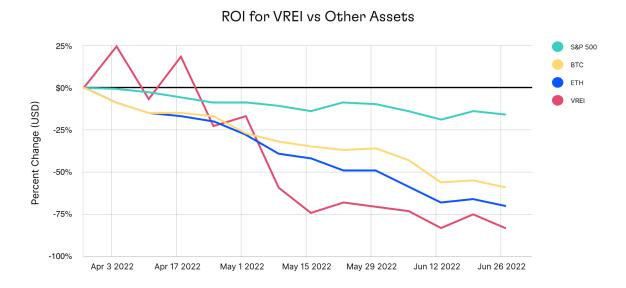


For a more detailed analysis about the Otherside land sale, see Otherside Analysis.



### Price Performance

Prices of major cryptocurrencies and digital assets declined significantly this quarter, alongside the broader selloff in U.S. equities — as represented by the S&P 500 (-20%). As we have seen over the last several quarters, at a macro level, metaverse land behaves as a leveraged asset class (crypto  $\times$  metaverse adoption) that sees extreme performance to both the upside and the downside. This relationship is exhibited in the following chart using Parcel's virtual real estate index (VREI²).

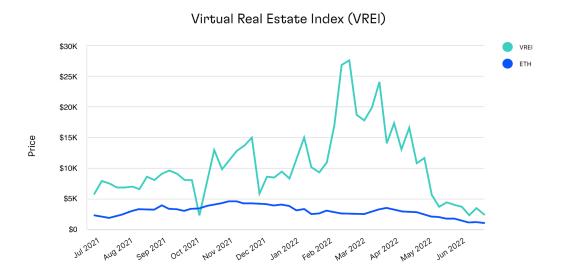


With the S&P down roughly -20% this quarter, BTC is down -56%, ETH is down -63%, and the VREI is down -80%. As most land is priced in ETH, the price change in USD-terms—particularly during downturns such as this—gets especially negative. There is a compounding effect of declining ETH prices, as well as investor capitulation in what is a relatively illiquid market.

Zooming out, ETH and the VREI are down -54% and -59% year-over-year (YoY), respectively. As equity markets continue to decline, expect ETH and virtual real estate prices to decline in tandem.

<sup>&</sup>lt;sup>2</sup> VREI currently includes six virtual worlds: Decentraland, The Sandbox, NFT Worlds, Voxels, Somnium Space, and Worldwide Webb. The weighting of each virtual world in the index is based on the previous three months of sales (USD) of virtual land.





The following chart compares the year-to-date (YTD) performance of the VREI to other NFT indices. These indices are created by <a href="Nansen">Nansen</a> and represent four different NFT categories: Art, Social, Game, and Metaverse.

Index	YTD Change (ETH)	YTD Change (USD)	Top 3 Assets
Metaverse-20	23%	-64%	Otherdeed by Otherside Sandbox Land Meebits
Social-100	16%	-66%	BAYC CryptoPunks MAYC
Art-20	14%	-67%	Chromie Squiggle Murakami.Flowers TheCurrency
VREI	4%	-71%	Decentraland Land The Sandbox Land NFT Worlds
Game-50	-59%	-88%	ForgottenRunesWizardsCult CyberKongz Impostors Genesis Aliens

While nearly all NFTs have declined significantly in terms of USD, it is useful to compare relative performance on an ETH basis. NFTs associated with the metaverse have performed the best relative to the other categories. Note that the top two heaviest weighted assets within the NSN-Metaverse-10 index are both virtual land collections. The reason that the NSN-Metaverse-20 includes Otherdeed by Otherside and the VREI does not is because Nansen rebalances their NSN-Metaverse-20 index every 30 days, whereas Parcel rebalances the VREI every six months. For more information about Nansen NFT indices, visit nansen.ai.



#### Land Prices

Land prices in the following section are displayed in terms of ETH as opposed to USD.

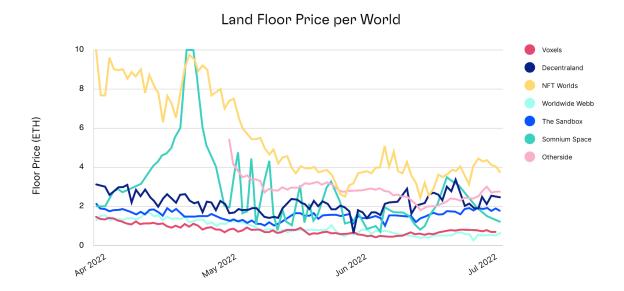
The following chart compares the average floor price per land parcel by world since the beginning of this year.



The Sandbox and Decentraland have followed similar downtrends after beginning the year as the most expensive land on average. NFT Worlds saw a significant increase in price in February and March, but has since regressed. Smaller worlds in terms of sales volume, such as Somnium Space, have remained fairly stable throughout this period.

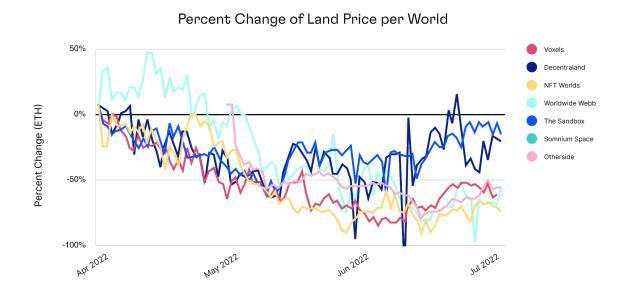
Zooming in further, the next chart shows the average floor price per land parcel by world over the quarter.





For most worlds, floor prices (ETH) have moved sideways throughout June. The back-half of the year may be a good time to watch for any bounces in land prices.

The next chart shows the present change in land floor price since the beginning of the quarter.





The percent change in land floor prices (ETH) for each world relative to the start of the year (YTD) and the start of Q2 (QoQ) is summarized in the table below.

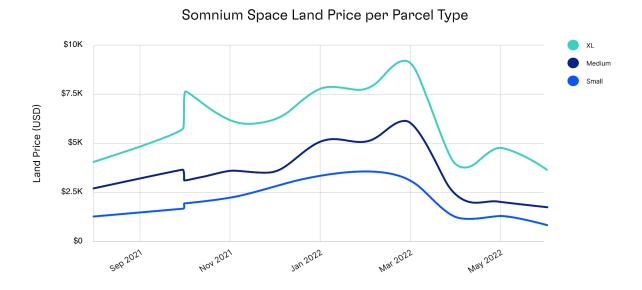
	YTD	QoQ
Voxels	-43%	-66%
Decentraland	-39%	-21%
NFT Worlds	22%	-63%
Worldwide Webb	25%	-48%
The Sandbox	-68%	-17%
Somnium Space	-85%	-40%
Otherside	N/A	-49%

NFT Worlds and Worldwide Webb are the only two worlds that have had a positive return on ETH since the beginning of the year.



# Impact of Property Traits on Price

The following analysis breaks out different average floor prices by land property within a single world: Somnium Space. Typically, the higher valued traits are also rarer and retain their value better in market downturns. An example of this is the different floor prices of each parcel size:



A few other examples of different property traits having an impact on average floor price include a) estates versus individual land in Decentraland; and b) different sized apartments with Worldwide Webb. The following chart compares each of these property types and the corresponding average floor price at the beginning and end of the quarter (April – June).



	Trait	April '22	June '22	Variance
Decentraland	Estate	\$23,565	\$21,429	-9.10%
2 000 mon anama	Land	\$10,117	\$3,855	-61.90%
Somnium	XL	\$3,925	\$3,625	-7.60%
Space	Medium	\$2,355	\$1,745	-25.90%
	Small (base)	\$1,236	\$831	-32.80%
Worldwide	Penthouse	\$24,796	\$20,643	-16.70%
Webb	Large	\$2,721	\$1,474	-45.80%
	Medium	\$1,191	\$782	-34.30%
	Small (base)	\$947	\$533	-43.70%

In each of these examples, the higher valued properties retain more value during market downturns.

The impact of land properties on price is further explored for Otherside in the next section.

# Otherside Analysis

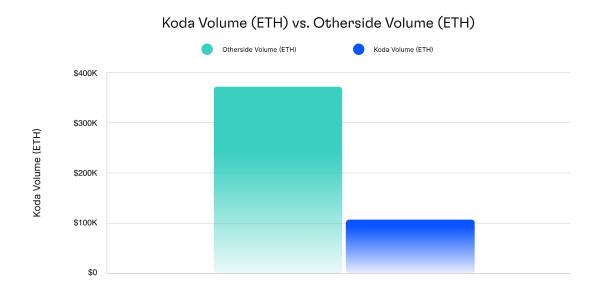
The following analysis is of Otherside and the impact of land property traits on parcel prices, as well as the sales volume that Otherside generated relative to other major NFT collections.

10% of the lands in Otherside have the Koda trait, a collection of alien creatures that inhabit the land. Parcels containing a Koda have been responsible for the highest single land transactions of the quarter. Historically the most expensive land sales have come from Decentraland estates; however, this is now being rivaled by Otherside land containing Kodas.



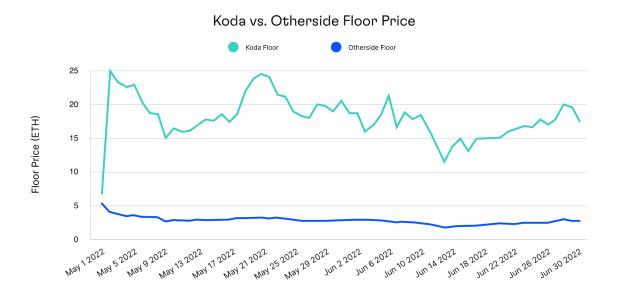
Transaction Date	Price (ETH)	Price (USD)
May 5, 2022	333	\$915,658
May 3, 2022	333	\$926,406
May 2, 2022	300	\$856,500
May 5, 2022	290	\$796,630
May 2, 2022	280	\$799,400

Lands with Koda alone have generated 105,717 ETH in secondary sales, 28% of total Otherside volume.

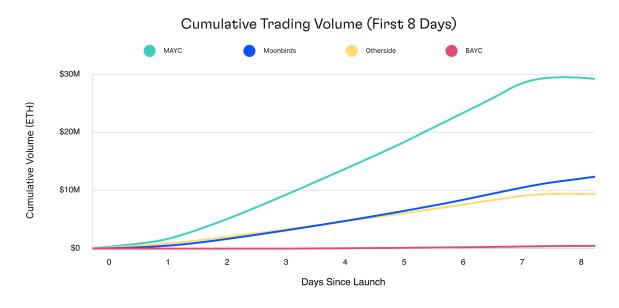


Although investors are willing to pay a significant premium for lands with Koda, the median floor price for Koda's was 17.8 ETH.





Otherside's land mint was the largest NFT mint in history by several multiples. The following chart shows trading volume in the first 90 days after mint for several of the top virtual worlds.



In addition, Otherside has produced the most expensive land sale of the quarter with a parcel being bought for 333 ETH (equivalent to \$915,658 at the time of sale).





Otherdeed #33 for Otherside

The Otherside parcel displayed above has a Koda; however, it has one of the more common ones (ranked 9,056/10,000).



# **Emerging Worlds**

In addition to Otherside, there were a number of other notable primary land sales to highlight this quarter. Both Illuvium and Arcade Land are game-type virtual worlds that have been highly anticipated.

<u>Illuvium</u> is an open-world RPG, monster collector, and autobattler game operating on Immutable X, which is a layer-2 scaling solution for the Ethereum blockchain. Illuvium's primary land sale distributed 19,969 land plots via dutch auction<sup>3</sup> from June 2 – June 5. Altogether, Illuvium generated \$72 million (USD) from primary land sales.

Land Tier	Starting Bid (ETH)	Avg. Sale Price (ETH)	Supply	Total Value Sold (USD)	% of Value Generated
Tier 1	2	0.6	12,003	\$11,909,000	16%
Tier 2	6	1.5	5,011	\$13,436,000	19%
Tier 3	20	5	2,087	\$18,150,000	25%
Tier 4	80	18.8	868	\$28,694,000	40%

<sup>\*</sup>The transaction rate used to calculate total value sold was \$1,754/ETH

Similar to NFT Worlds and Metroverse, owning more rare land enables higher yield in the form of in-game Fuel, which can be sold for ETH. To learn more about how virtual worlds are incentivizing land ownership through NFT-staking, you can check out this article, <u>How to Earn Yield With Virtual Real Estate</u>.

<sup>&</sup>lt;sup>3</sup> Dutch Auction - an auction in which the auctioneer begins with a high asking price in the case of selling, and lowers it until some participant accepts the price. This helps to address FOMO and botting; additionally, the auction duration helps to reduce the likelihood of a gas war.



<u>Arcade Land</u> aims to be an interoperable virtual world for NFT communities, where you can socialize, create, own, play, and live your life as your NFT avatar. The primary sale for Arcade Land took place on April 1 and sold out within two minutes. There were 10,000 land parcels sold, generating over \$15 million (USD).

Land Tier	Mint price (ETH)	Supply	Total Value Sold (USD)	% of Value Generated
Regular	0.25	5,000	\$4,312,000	28%
Large	0.5	3,000	\$5,175,000	34%
XL	0.75	1,900	\$4,916,250	32%
Mega	3	100	\$1,035,000	7%

<sup>\*</sup>The transaction rate used to calculate total value sold was \$3,450/ETH

Arcade Land promises land owners exclusive access to future events, merchandise, discord servers, NFT, and token airdrops. Land comes in one of four types: regular, large, XL, and mega. The size of your land plays a factor in what things you can build on your land.



#### Conclusion

There has been a dramatic decline in both sales volume and average price among existing virtual land this quarter. This decline is correlated to the broader crypto and NFT market. Despite this decline, overall sales volume of virtual real estate tripled this quarter with the launch of Yuga Labs' Otherside and other emerging worlds such as Illuvium and Arcade Land.

During this downturn, metaverse-related NFTs, such as virtual land, have held up particularly well compared to other NFT categories (on a relative ETH basis). Furthermore, highly valued land parcels tend to retain more value relative to basic land within the same world. Should the price of ETH continue to fall, expect virtual land prices to also continue to decline in terms of USD. Given the likelihood of an ongoing bear market, it will be more effective to compare relative performance on an ETH basis.

This report contains data provided by <u>Dune Analytics</u>, <u>MetaMetriks</u>, <u>Nansen</u>, and the internal Parcel team of data scientists.