

Cherre

Better Data, Better Decisions

Valuation Models Are Only as Good
as Their Underlying Data





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Born in Providence RI, and have extensive experience advising and investing in leading private technology companies.

Prior to founding Cherre, I served as Executive Director of Oppenheimer's Private Shares Group, after Oppenheimer acquired GreenCrest Capital, a firm I co-founded.

Prior to that I served as Principal at Knight Capital's Private Equity Group.

Earned my MBA from the University of Pennsylvania Wharton School and am a Joseph Wharton Merit Scholar. Also holds a B.A., LL.B., and LL.M. in finance and International Law from IDC Herzliya.



Better Data, Better Decisions



Better Data, Better Decisions

If we could seamlessly
collect and connect all
real estate data



Better Data, **Better Decisions**

We could be empowered to
make more impactful
investment decisions



Property asset pricing models fail as a result of poor quality and missing data inputs.

The pricing discrepancies in residential markets are abnormally large, and typically exceed 20%, more than any other asset class



Inaccurate Valuation

Real estate professionals are notoriously inaccurate at predicting residential sale prices.

Existing public and private pricing platforms rely on limited, inaccurate, and outdated asset information.

Broker Fee

Buyers and sellers have an emotional connection to the asset and/or process.

Limited market pressure to materially reduce agent fees over time in any major urban market.

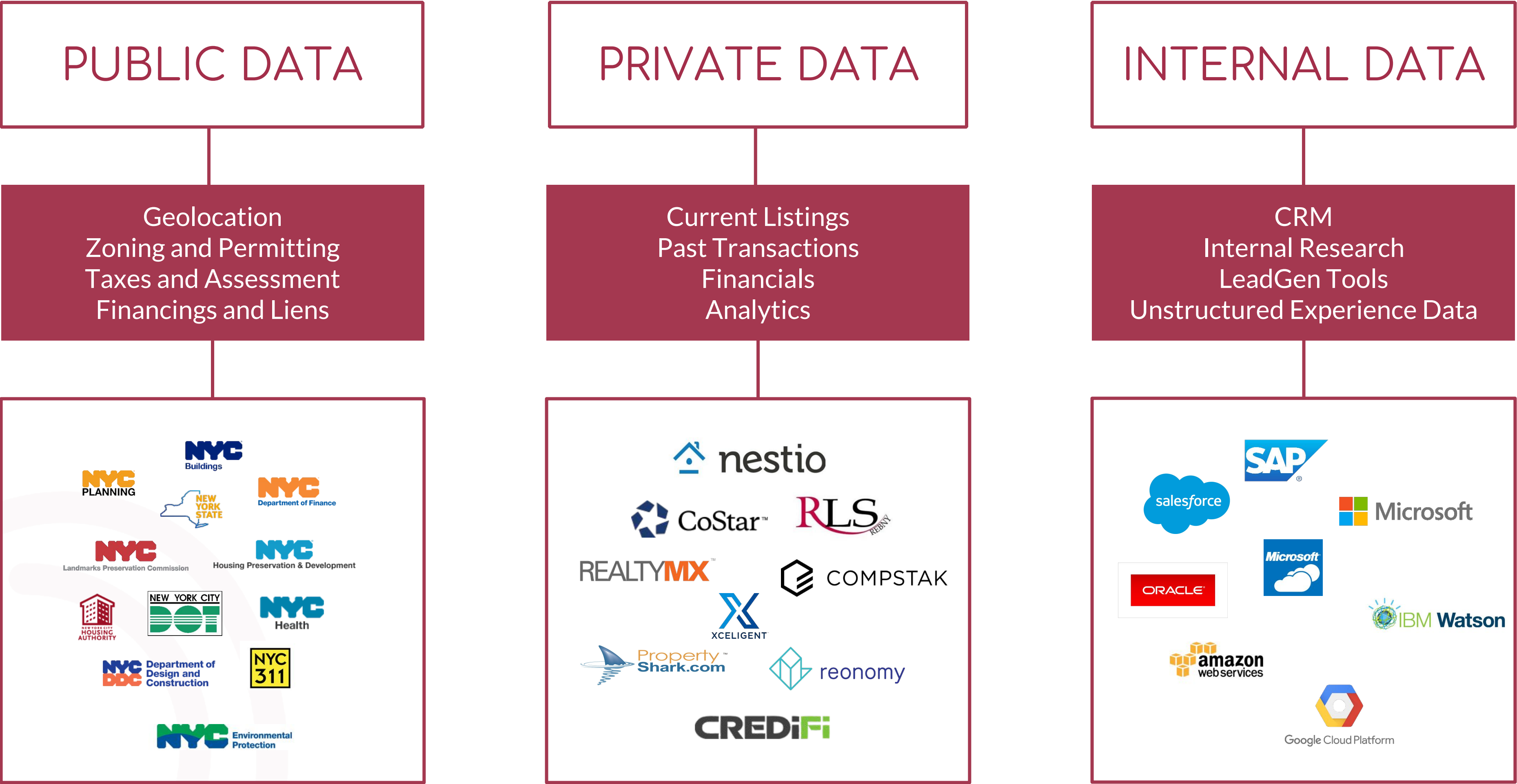
Transaction Costs

Transaction costs are higher than any other asset class.

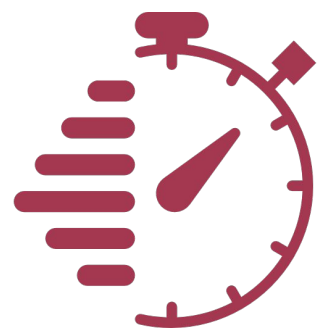
Real estate professionals have limited control over such costs.



Segregation of data assets leads to multiple sources of “truth”



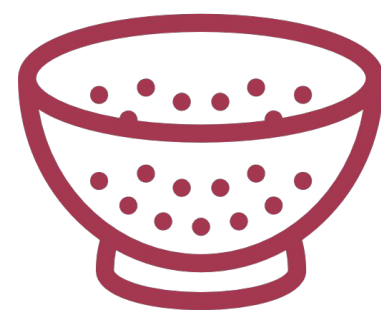
Rapid market transitions, and limited collection points exasperate the problem



Contradictory and Outdated information

Data obtained from official government sources is months old at best, and often contradictory.

Inconsistent data points across official and private sources, leads to inaccurate model inputs and assumptions.



Lack of systematic collection and analysis

The vast majority of key property attributes is not collected or analyzed at all.

Condition, finances, maintenance, and countless other key attributes are not systematically collected or analyzed.



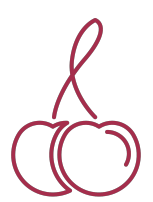
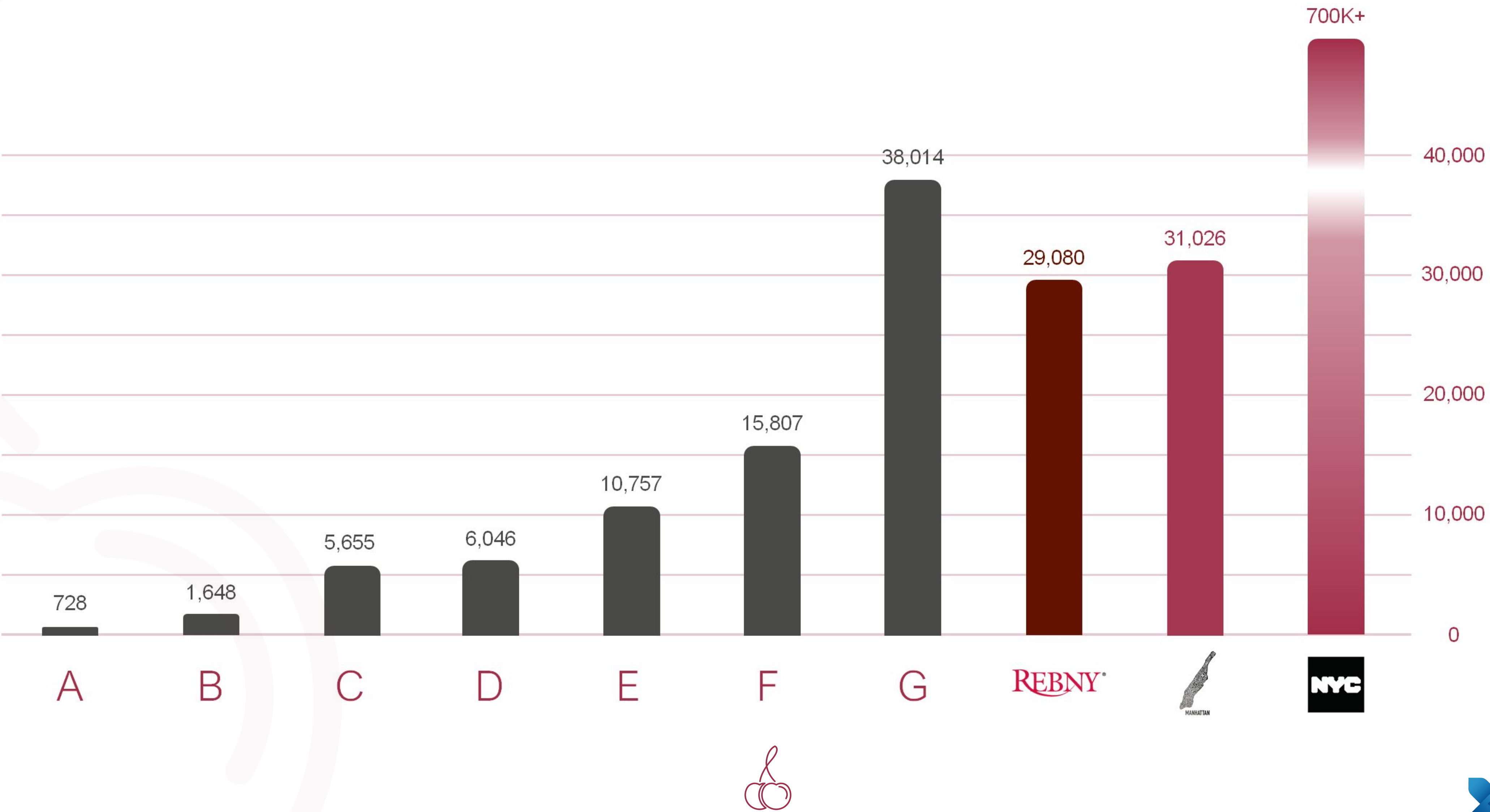
Constant flux in large urban markets

30K-50K permits per year, 10%-30% occupant turnover, 2%-6% vacancy rate.

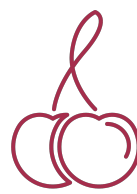
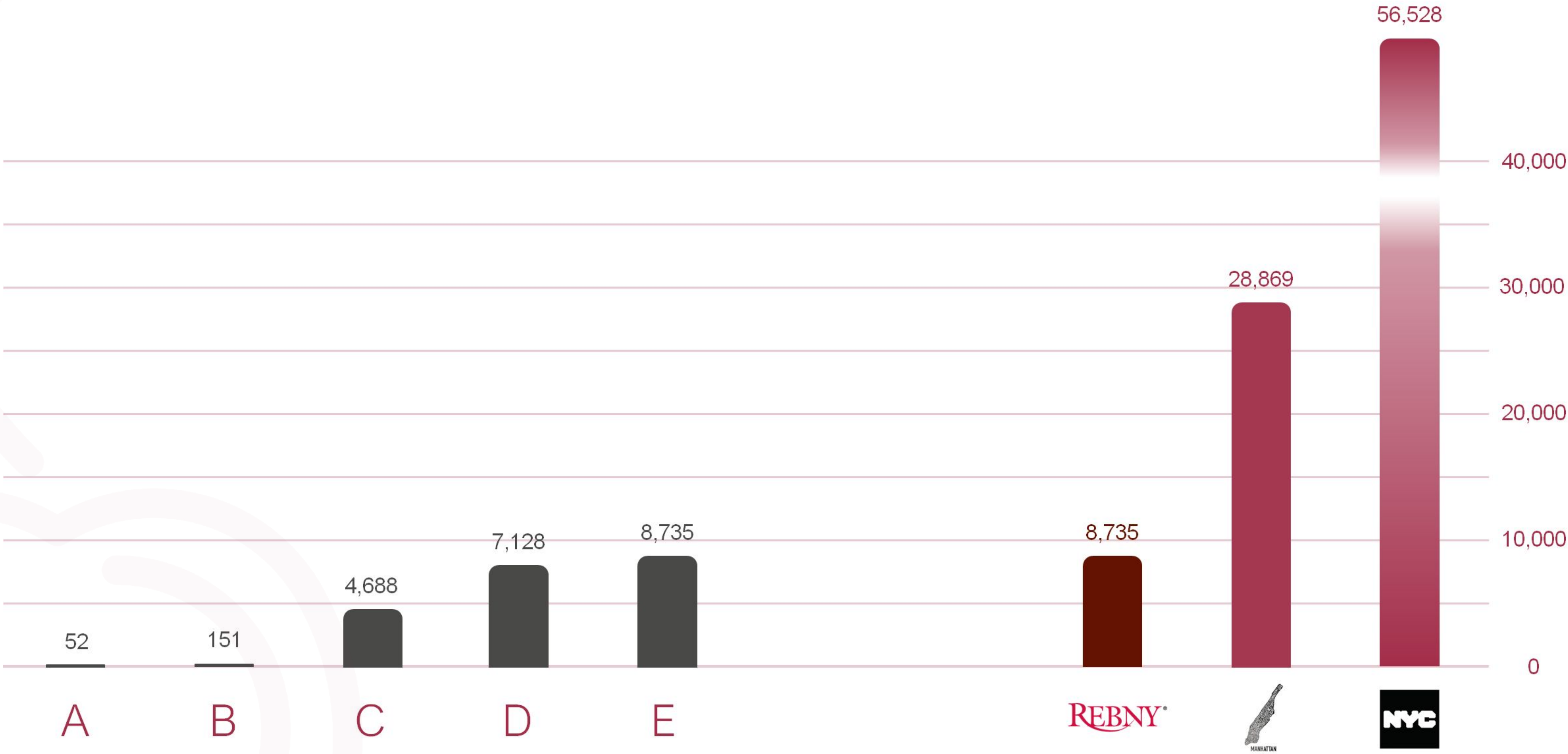
Large cities experience rapid development and turnover, creating a constant state of property and occupant data deficiency.



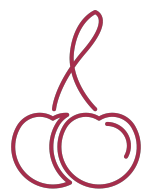
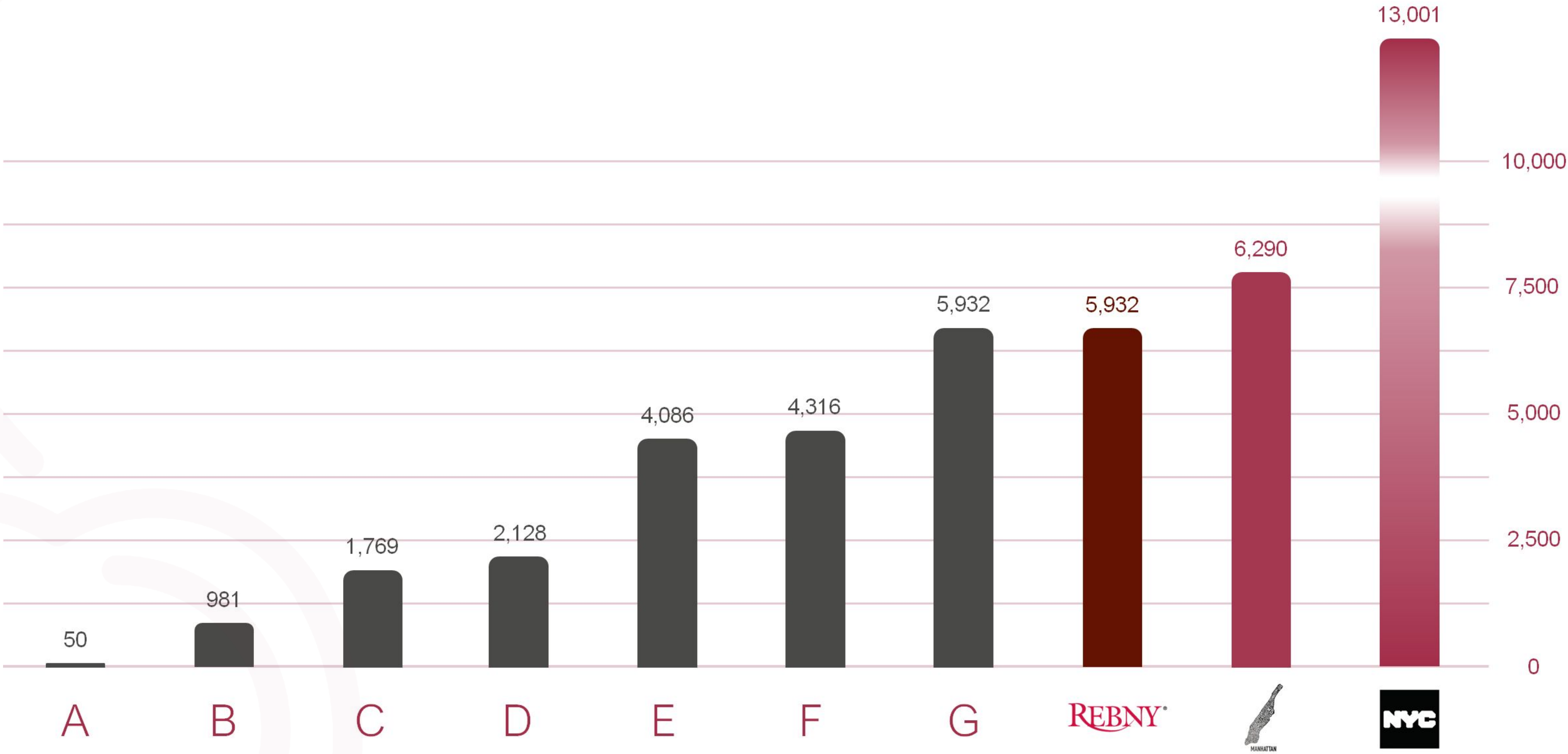
Residential Condo/Co-op Buildings



Residential Rental Buildings

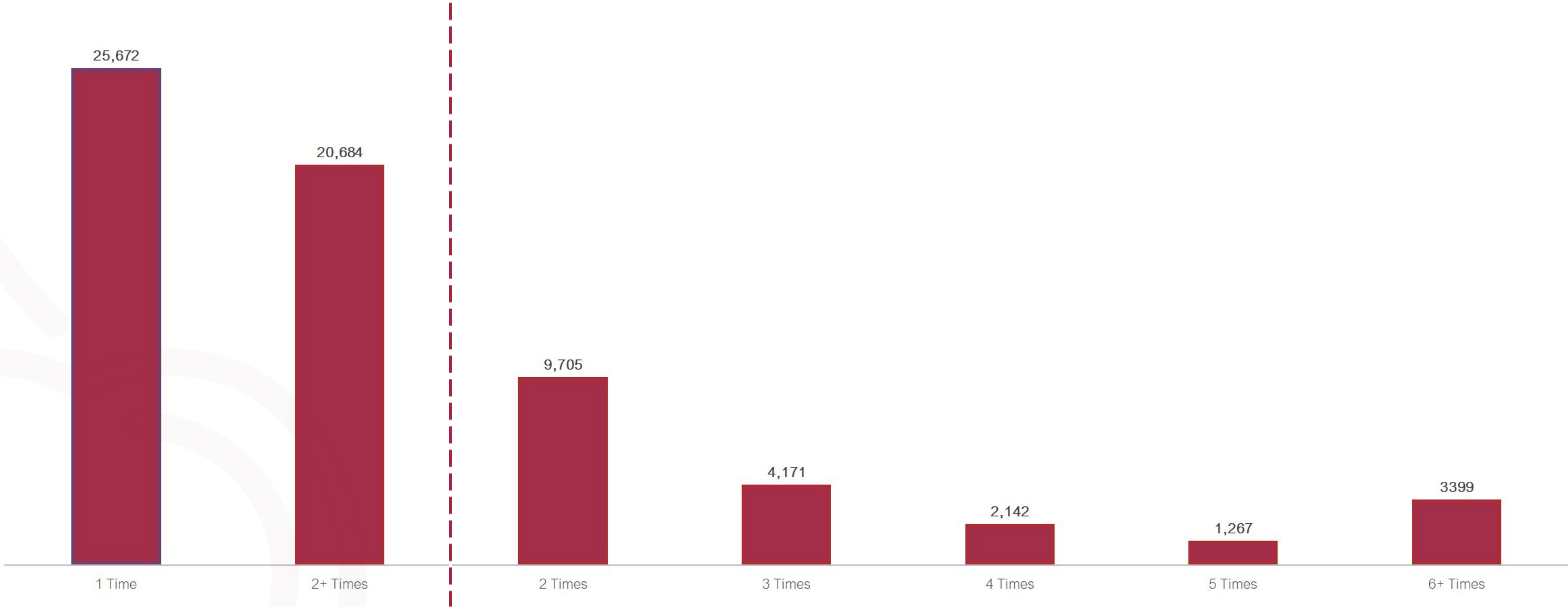


Residential Townhouse Buildings



Building Uniqueness

Building Frequency



Crucial data isn't collected, or is only collected if property is listed

Building Data

Private elevator
Garage
New development
Outdoor space
Package room
Pool
Recent development
Service level
Storage unit
Year altered

Unit Data

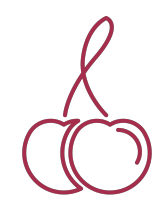
Air conditioning type
Balcony/terrace
Closet space
Counter tops
Finishes
Fireplace
Floor paneling
Lighting
Live/work space
Loft
Multiple levels (duplex/triplex)
Sleep loft/alcove
Outdoor space size
Square feet
Tax abatement
Unit line
Views/obstructions
Washer/dryer in-unit
Window size

Listing Data

Assessment
Board approval
Broker fee
Co-broke agreement
Commission
Condition
Exclusions
Flip tax
Furnished
Inclusions
Kitchen appliances
Lease restrictions
Maintenance
Financing restriction
Pet policy
Showing instructions
Taxes
Utilities

	Building Sale	Building Rent	Unit Sale	Unit Rent
General (timeless) :: building Category: Building.Timeless				
General (timeless) :: unit Category: Unit.Timeless				
Idiosyncratic :: building sale Category: Building.Sale.Idiosyncratic				
Idiosyncratic :: building lease Category: Building.Rent.Idiosyncratic				
Idiosyncratic :: unit sale Category: Unit.Sale.Idiosyncratic				
Idiosyncratic :: unit lease Category: Unit.Rent.Idiosyncratic				
Other :: agent, broker, renter, or seller Category: Other				

- Complimentary data (potentially contradictory)
- New or materially augmented data



Before

{ \$2,100 - \$2,500 } p/SQFT

2 Bedroom
Appears underpriced

Agent Input

Address: 10 West St., Unit #14F
Price: \$2,500,000
Bedrooms: 2
Square Feet: 1,000-1,200
Floor Number: Unknown
Days on Market: 1
Condition: "Like new"
Maximum Financing: Unknown
Owner: Michael Stewart
Previous Listings and Sales:
Unidentified Address (Median price p/SQFT for 2BR sales \$2,600)

{ \$2,275 } p/SQFT

1 Bedroom
Overpriced

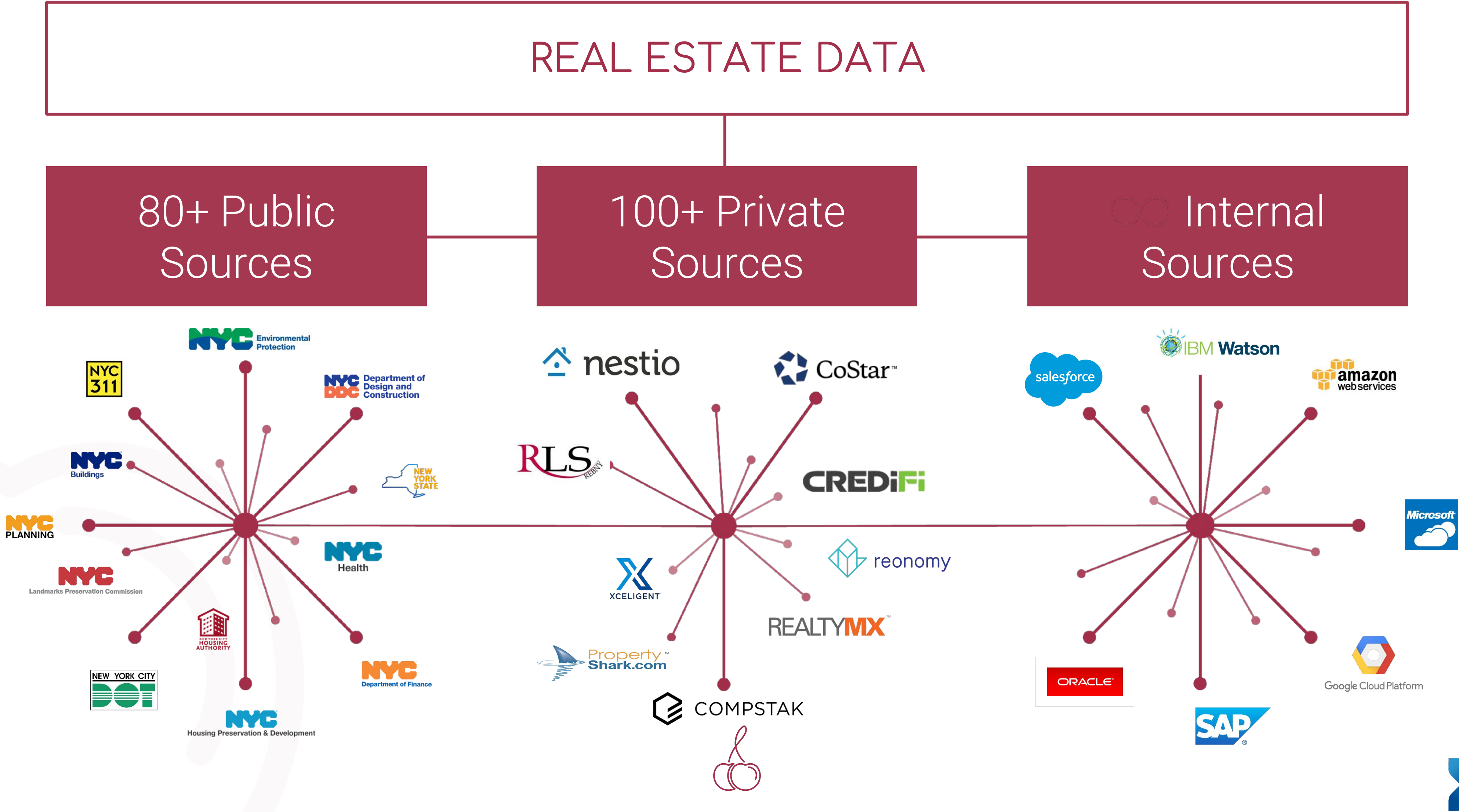
Analyst/Compliance Input

Address: 10 Little West St., Unit #14F
Price: \$2,500,000
Bedrooms: 1 [Room smaller than legal bedroom size]
Square Feet: ~~1,000-1,200~~ 1,100 [Field rejects ranges]
Floor Number: 14 [Resolved from 10 Little West St.]
Days on Market: 1
Condition: Good (Triple Mint)
Maximum Financing: Unknown
Owner: Michael Stewart
Previous Listings and Sales: [Resolved from 10 Little West St.] 9 Previous 1BR Sales (Median Price P/SQFT \$2,200)

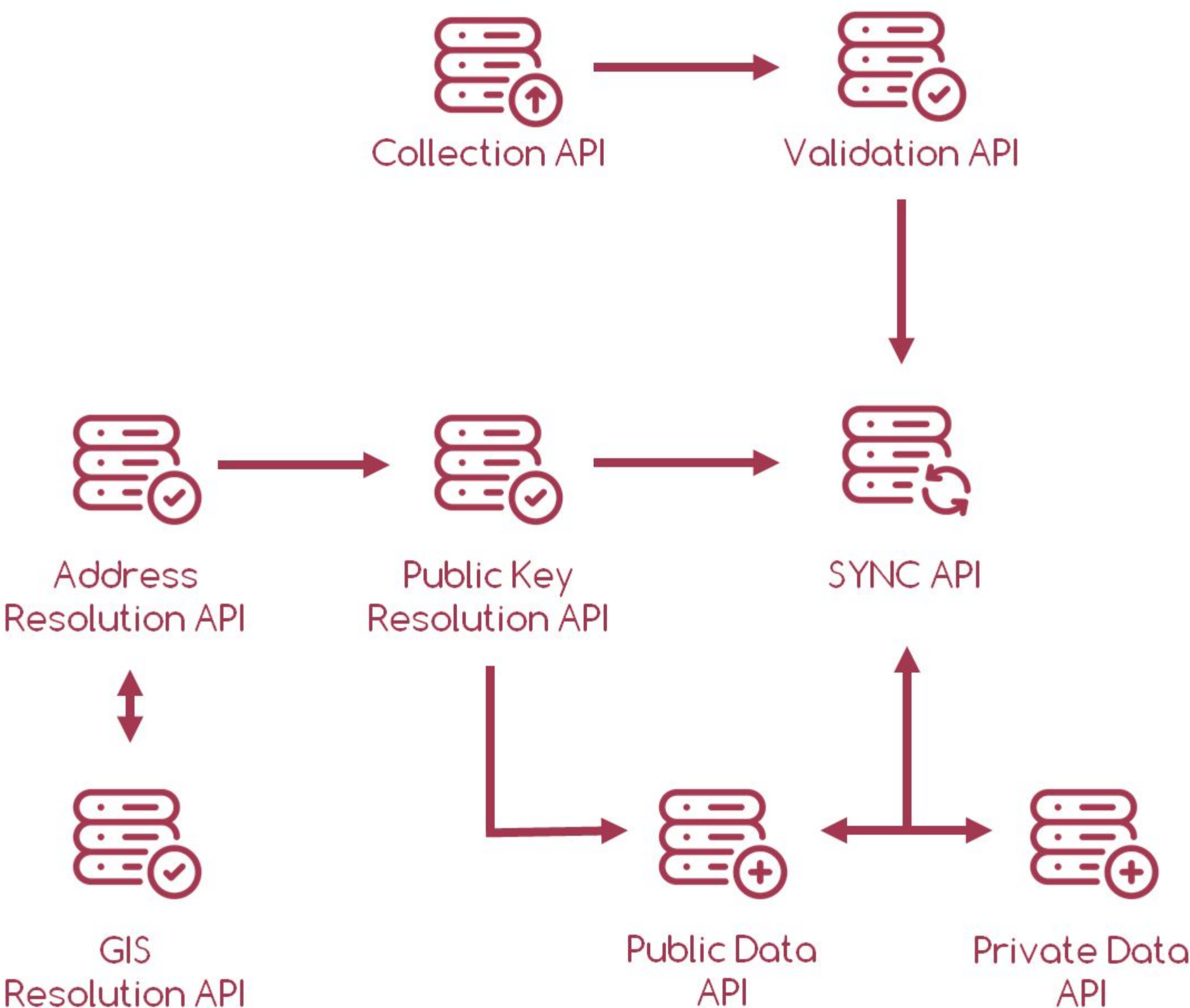


Reconciling and analyzing multiple, orphaned data sources is an expensive and time consuming manual endeavor.

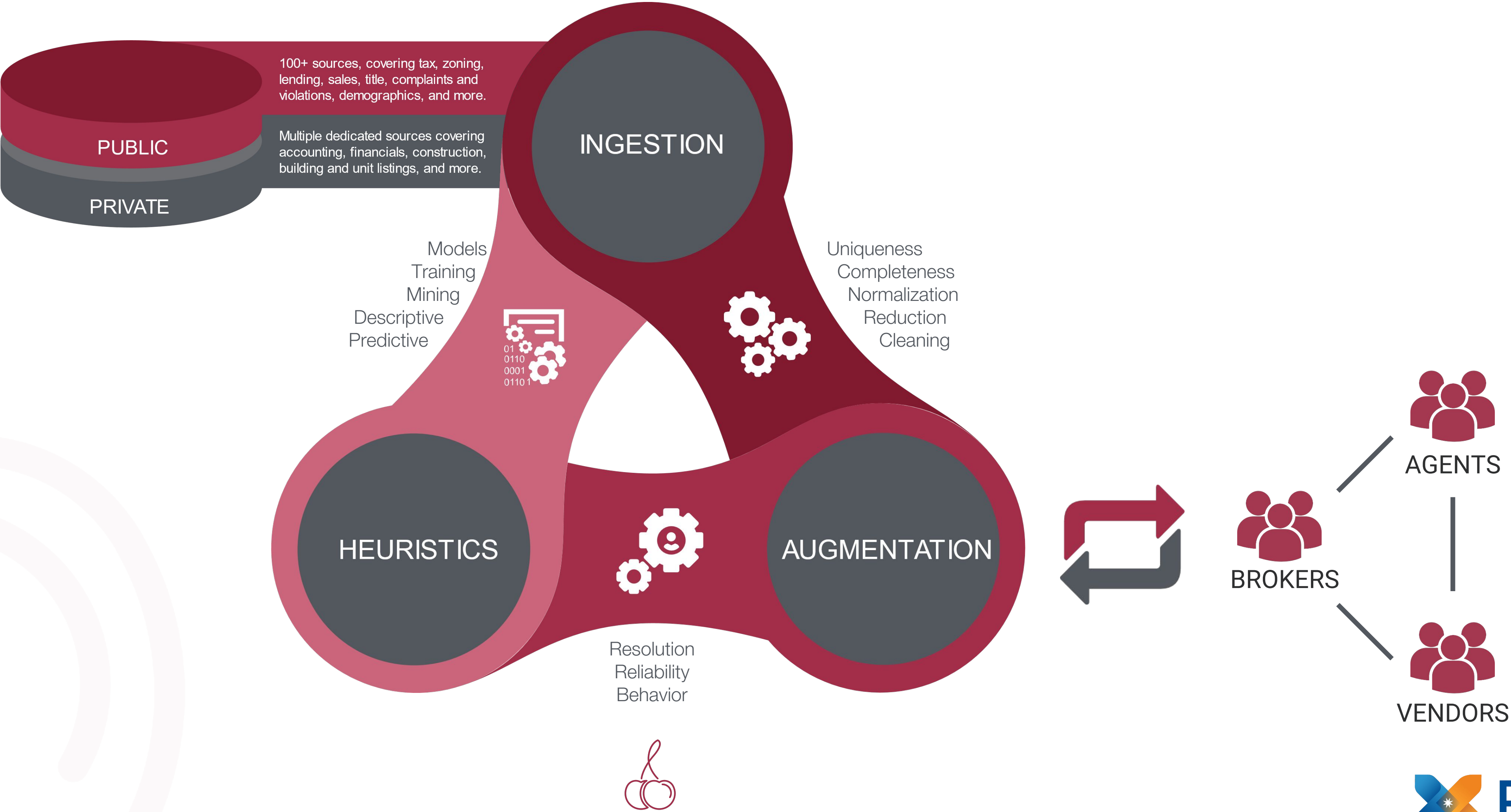
We automated the process and connected all the dots



Multiple data resolution APIs required



Ensuring the most robust and accurate property information(.), constantly machine learning and self-improving



Data decisions in a complete data environment

{ \$2,100 - \$2,500 } p/SQFT

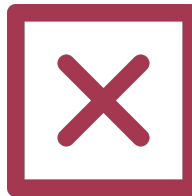


2 Bedroom
Appears underpriced

Agent Input

Address: 10 West St., Unit #14F
Price: \$2,500,000
Bedrooms: 2
Square Feet: 1,000-1,200
Floor Number: Unknown
Days on Market: 1
Condition: "Like new"
Maximum Financing: Unknown
Owner: Michael Stewart
Previous Listings and Sales:
Unidentified Address (Median price p/SQFT for 2BR sales \$2,600)

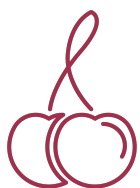
{ \$2,275 } p/SQFT



1 Bedroom
Overpriced

Analyst/Compliance Input

Address: 10 Little West St., Unit #14F
Price: \$2,500,000
Bedrooms: 1 [Room smaller than legal bedroom size]
Square Feet: ~~1,000-1,200~~ 1,100 [Field rejects ranges]
Floor Number: 14 [Resolved from 10 Little West St.]
Days on Market: 1
Condition: Good (Triple Mint)
Maximum Financing: Unknown
Owner: Michael Stewart
Previous Listings and Sales: [Resolved from 10 Little West St.] 9 Previous 1BR Sales (Median Price P/SQFT \$2,200)



{ \$2,380 } p/SQFT



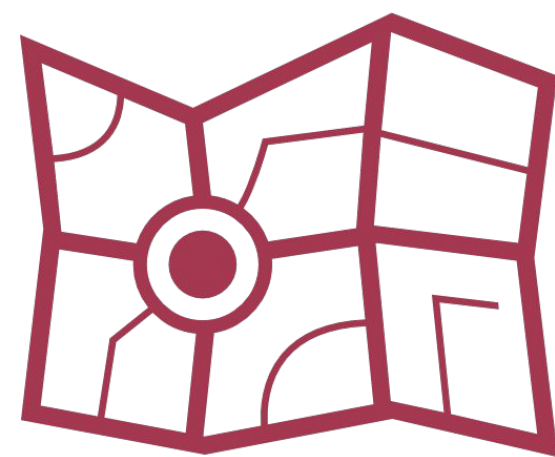
1 Bedroom
Underpriced

Cherre (truth)

Address: 10 West St., Unit #14F [Vanity Address]
Price: \$2,500,000
Bedrooms: 1 (King Size) [Multiple user inputs]
Square Feet: 1,050 [Multiple user inputs]
Floor Number: 14
Days on Market: 163 [relisted within 7 days of last listing]
Condition: Renovated 2014; New Kitchen [User input]
Maximum Financing: 75% [Resolved from previous building listings]
Owner: Michael and Lisa Stewart [Multiple user inputs]
Previous Listings and Sales: [Resolved with 25 Battery Pl. and 10 Little West St.] 18 Previous 1BR Sales (Median Price P/SQFT \$2,400)
Alt. Address:

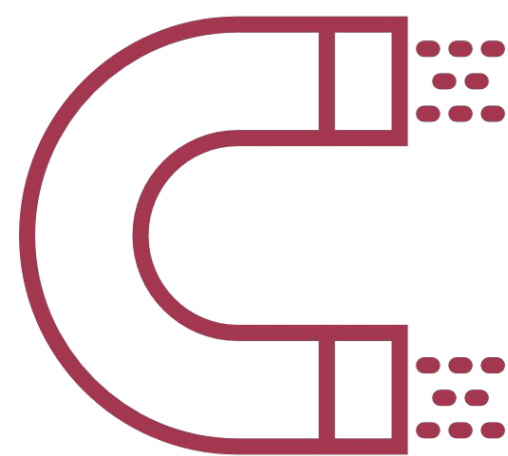
- 10 Little West St., Unit #14F [Resolved]
- 25 Battery Pl. [Resolved]

NYC Market Case Study: from launch to actionable data



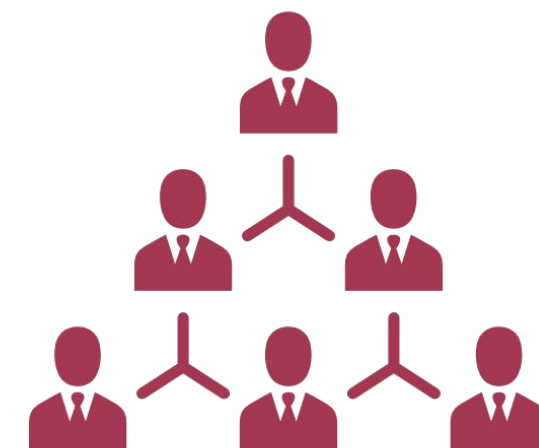
BASE MAP

NYC lacked a reliable or reputable public data vendor that could provide all required data end points to power Cherre's data platform. We therefore **had to build the base map from the bottom up**, connecting all city resources to private data repositories.



COLLECTION

We launched our collection tools to residential brokers and agents in rapid succession. Our **Content Management System** is used to prepare client facing marketing materials, and our **Comparative Market Analysis** tool is used to identify accurate asset pricing.



CRITICAL MASS

Relying solely on inbound content and word of mouth marketing, we were able to reach **over 400 users within the first 120 days**, and continued to grow at a rapid rate thereafter. Users are extremely engaged, and augment data at an ever increasing pace.



ACTIONABLE DATA

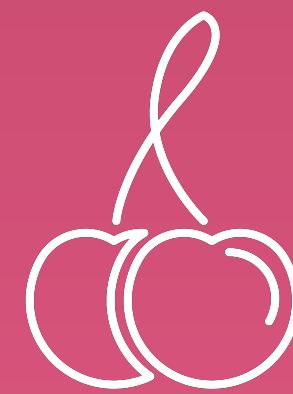
With data being augmented by top agents across multiple top-tier firms, we are able to provide the market with the most complete and accurate public and listing data. We **sell that data back to investors and top-tier brokerage firms for a monthly subscription**.



Questions?

“The most interesting information comes from children, for they tell all they know and then stop.” – Mark Twain

Thank You



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