

Structured Data and the FDTA: What Does it Mean for Municipal Advisors and Their Clients



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Speakers

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Topics

- **What is FDTA**
- **The Basics of Structured Data**
- **Overview of XBRL**
- **Going Forward**
- **What MAs Can Do**
- **Questions**

What is the FDTA?

Financial Data Transparency Act

- Signed into law December 2022
- Requires use of data standards by member agencies of the Financial Stability Oversight Council (FSOC)
- Requires data transparency relating to municipal securities
 - SEC responsible for developing rules specific to municipal market
 - Many corporate filings to EDGAR already have this mandate
- Defines Data Standards
- Establishes rulemaking responsibilities and timeline

Financial Data Transparency Act (FDTA)

Data standards are defined as:

- Including common identifiers
- Open and nonproprietary
- Able to render data searchable and machine-readable
- Financial reporting requirements documented in machine-readable taxonomies
- Incorporate standards developed and maintained by voluntary consensus standards bodies
- Consistent with applicable accounting and reporting principles



Timing:

- 18 months after enactment, heads of covered agencies shall jointly issue proposed rules for public comment to establish data standards; joint rulemaking process to be led by Treasury department
- 2 years after enactment, jointly promulgate final rules for data standards;
- Data standards established shall take effect not later than 2 years after which final rules are promulgated

Basics of Structured Data

- What is Structured Data?
- Why is Structured Data Important?
- Where is Structured Data Currently Used?
- What is a Data Standard? How are Data Standards Used to Generate Structured Data?
- Common data standards in securities markets: Legal Entity Identifiers (LEI), eXtensible Business Reporting Language (XBRL), CUSIP
- What is a Taxonomy?

What is Structured Data?

“Structured data is data that is divided into standardized pieces that are identifiable and accessible by both humans and computers”
Securities and Exchange Commission



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Office of Structured Disclosure

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What is Structured Data?

History and Rulemaking

Inline XBRL

IFRS Taxonomy

▶ Data

▶ Preparers

What Is Structured Data?



Structured data is data that is divided into standardized pieces that are identifiable and accessible by both humans and computers. The granularity of these pieces can range from an individual data point, such as a number (e.g., revenues), date (e.g., the date of a transaction), or text (e.g., a name), to data that includes multiple individual data points (e.g., an entire section of narrative disclosure). Structured data can be created and communicated using data standards like XBRL, XML, and JSON, or generated with web and pdf forms.

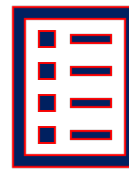
Structured data offers numerous benefits. Widely available software can be used to easily analyze vast amounts of structured data without extensive and burdensome manual processing. This allows investors, analysts, and regulators to access and manipulate data in one disclosure, to compare disclosures across registrants, and to make comparisons against previous disclosures from the same registrant. For example, individual data points can be analyzed to observe trends, or can be combined to create ratios or other derived outcomes. Data structured at a high level of granularity can be useful for text analytics or manual comparisons of narrative disclosures, for instance comparisons to determine how different registrants are describing a particular issue. Software can also be used to enhance the readability of structured data by, for example, providing a standardized interface that links various sections of the disclosure. For these reasons, countries around the world are increasingly using structured data for business reporting, including, for example, the [XBRL standard](#).

What is Unstructured Data?

Disclosure in the municipal securities market today is largely unstructured data. Unstructured data is easy to create and collect, but can't be easily organized, classified, queried, or analyzed, and may require a lot of manual intervention to interpret.

Unstructured data:

- Text files
- Photos
- Videos
- Audio files
- Emails
- Social media posts
- PDFs



What's the Problem With Unstructured Data?

Efficient markets rely on high quality, inexpensive, rapidly & widely accessible data

- Ratio analysis, peer comparison and aggregation difficult & time-consuming
 - Which local governments have the highest unfunded OPEB as a % of revenue?
 - Which cities have the greatest reliance on sales tax revenue?
 - Which school districts have the lowest cash balances?
 - Which hospitals have the highest percentage of patient revenue?
 - Which mass transit systems rely most on farebox revenue?
- Expensive manual data acquisition and entry; duplicated across many firms
- Data quality control – issuers and users prone to errors

Why Do Regulators Want Structured Data?

“XBRL has made it easier and less costly to extract, filter, compare, and analyze the information in SEC filings. XBRL facilitates the comparison of a company’s information across time periods, against other companies, and between data in SEC filings and other agency filings. It allows for faster and more sophisticated analysis by regulators, investors, and academics. This increased usability has benefits for investors of all types.”

Caroline Crenshaw, SEC Commissioner, [*The Lessons of Structured Data*](#)”

Data Standards in Use Today

SEC: 6,000+ public companies and investment management companies report in XBRL

FDIC: 5,000 banks

FERC: 600+ public utilities

200+ XBRL regulatory and oversight programs worldwide

80 global oversight agencies

Why Do Investors Want Structured Data?

“Extracting data from an HTML document takes at least 20 minutes, from a good quality PDF, takes around 30 minutes, from an image around 50 minutes. Data pulled from an XBRL file though, can be extracted in 1 to 2 seconds... let’s us focus on better analytics rather than scraping data from documents.”

Adrien Cloutier, Global Director of Equity Data, Morningstar

“We can make data available to investors much faster if it’s in XBRL format, because we can eliminate manual data entry and a lot of the checking and manual review needed with non-structured data.”

“... [with XBRL] there’s no difference in the availability of data between large and small companies.”

Pranav Ghai, CEO, Calcbench:

“...the use of XBRL... has benefited both Refinitiv clients and the investment communities we serve by enabling us to make significant strides in how quickly we can deliver our fundamental data to the markets. In many instances that time has reduced from days to minutes.”

Diana Serbu, Head of Company Data Strategy and Management, Refinitiv, part of LSEG (formerly Thomson Reuters)

What are data standards?

- **Standards** improve the efficiency of an existing process
- **Data standards** improve the creation, reporting and use of data through automation
- A **taxonomy** is a digital dictionary of clearly defined terms used to report information
 - Common language with clear, consistent definitions for all stakeholders (preparers, consumers)
 - Leverages accounting/reporting standards already used such as FASB, GASB, IFRS
 - Includes relationships between reported facts (calculations, financial table structure, presentation)
 - Mechanism to make data machine-readable (automation)



What are data standards?

Goals: reduced cost of reporting, data collection and analysis, increased data accuracy and quality, increased timeliness



What are Data Standards?

- Data standards *are not* accounting standards (e.g., GASB, FASB, IFRS)
- Data standards are *not* products or formats (like CSV, JSON, XML, HTML)
- Data standards can be created to adapt to all different types of governments, e.g., general purpose or special district, allowing them to report *as they do today*
- Open, nonproprietary data standards allow *many* options for report preparation because any accounting system or reporting software can be adapted to open (free) data standards

How do data standards work?

**EL PASO COUNTY SCHOOL DISTRICT #38 - LEWIS-PALMER
STATEMENT OF NET POSITION
JUNE 30, 2020**

	<u>Primary Government</u> <u>Governmental Activities</u>	<u>Component Unit</u> <u>Charter School</u>
ASSETS		
Cash and Investments	\$ 30,905,748	\$ 3,817,420
Restricted Cash and Investments	-	10,733,853
Receivable:		
Accounts Receivable	310,830	2,933
Taxes Receivable	2,320,956	-
Intergovernmental	251,551	-
Due from Primary Government		79,241
Prepaid Items	35,987	-
Inventories	185,306	-
Capital Assets, Not Being Depreciated	10,931,851	21,003,691
Capital Assets, Net of Accumulated Depreciation	73,497,388	8,548,637
Total Assets	<u>118,439,617</u>	<u>44,185,775</u>

Embedding Critical Information Into Reported Facts (“Metadata”)

Primary Governmental Activities

Cash and Cash Equivalents and Investments

Monetary

Instant

Cash and cash equivalents and investments includes not only currency on hand, but also demand deposits with banks or other financial institutions. Cash also includes deposits in other kinds of accounts or cash management pools that have the general characteristics of demand deposit accounts in that the governmental enterprise may deposit additional cash at any time and also effectively may withdraw cash at any time without prior notice or penalty. Investments amounts pertaining to a security or other asset that (a) a government holds primarily for the purpose of income or profit and (b) has a present service capacity based solely on its ability to generate cash or to be sold to generate cash.

EL PASO COUNTY SCHOOL DISTRICT #38 - LEWIS-PALMER
STATEMENT OF NET POSITION
JUNE 30, 2020

	<u>Primary Government Governmental Activities</u>	<u>Component Unit Charter School</u>
ASSETS		
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US dollars

Scale = actuals

El Paso County School District

Period ending June 30, 2020

Embedding Metadata Doesn't Change the Reported Fact, or the Accounting Standard Used to Determine the Fact

Primary Governmental Activities

Cash and Cash Equivalents and Investments

Monetary

instant

Cash and cash equivalents and investments includes not only currency on hand, but also demand deposits with banks or other financial institutions. Cash also includes deposits in other kinds of accounts or cash management pools that have the general characteristics of demand deposit accounts in that the governmental enterprise may deposit additional cash at any time and also effectively may withdraw cash at any time without prior notice or penalty. Investments amounts pertaining to a security or other asset that (a) a government holds primarily for the purpose of income or profit and (b) has a present service capacity based solely on its ability to generate cash or to be sold to generate cash.

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El Paso County School District

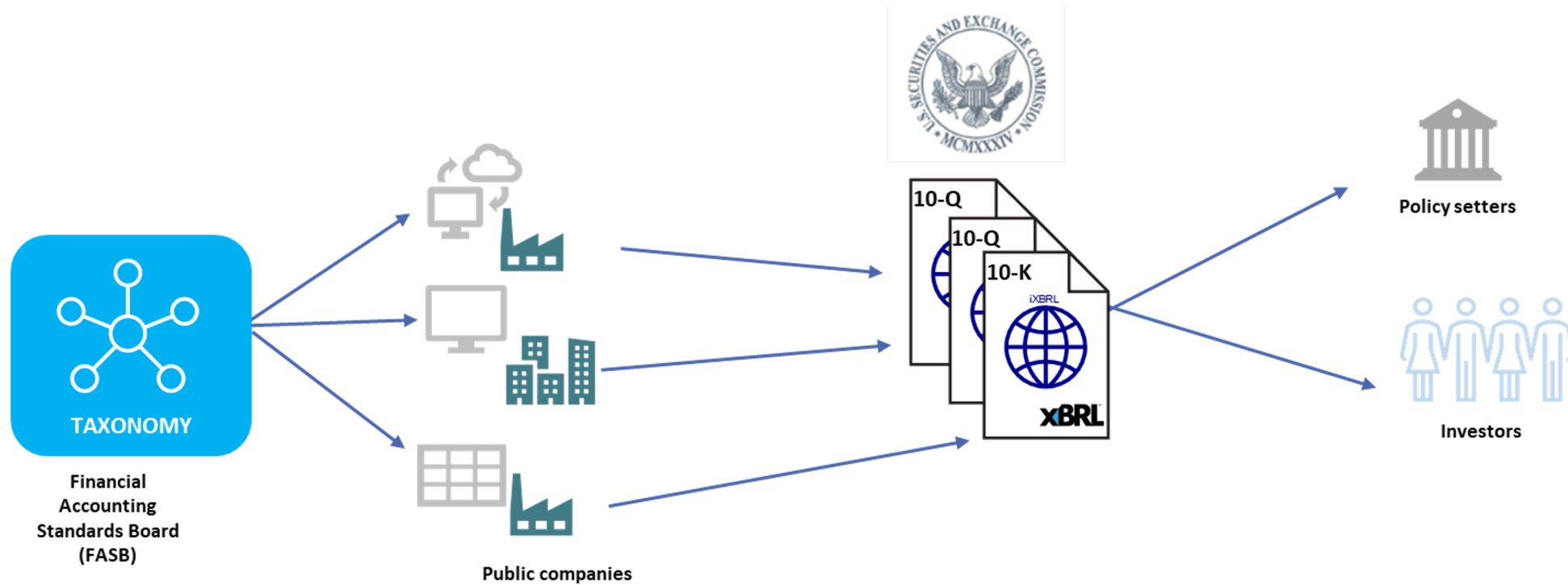
Period ending June 30, 2020

XBRL (eXtensible Business Reporting Language)

- Open, nonproprietary
- XBRL International – global nonprofit standards body, responsible for maintaining and expanding upon the specification
 - Multiple country jurisdictions
- XBRL US – national nonprofit standards setter, responsible for development work and adoption efforts in the United States
- XBRL is not:
 - A technical format like XML or JSON
 - A product
 - An accounting standard

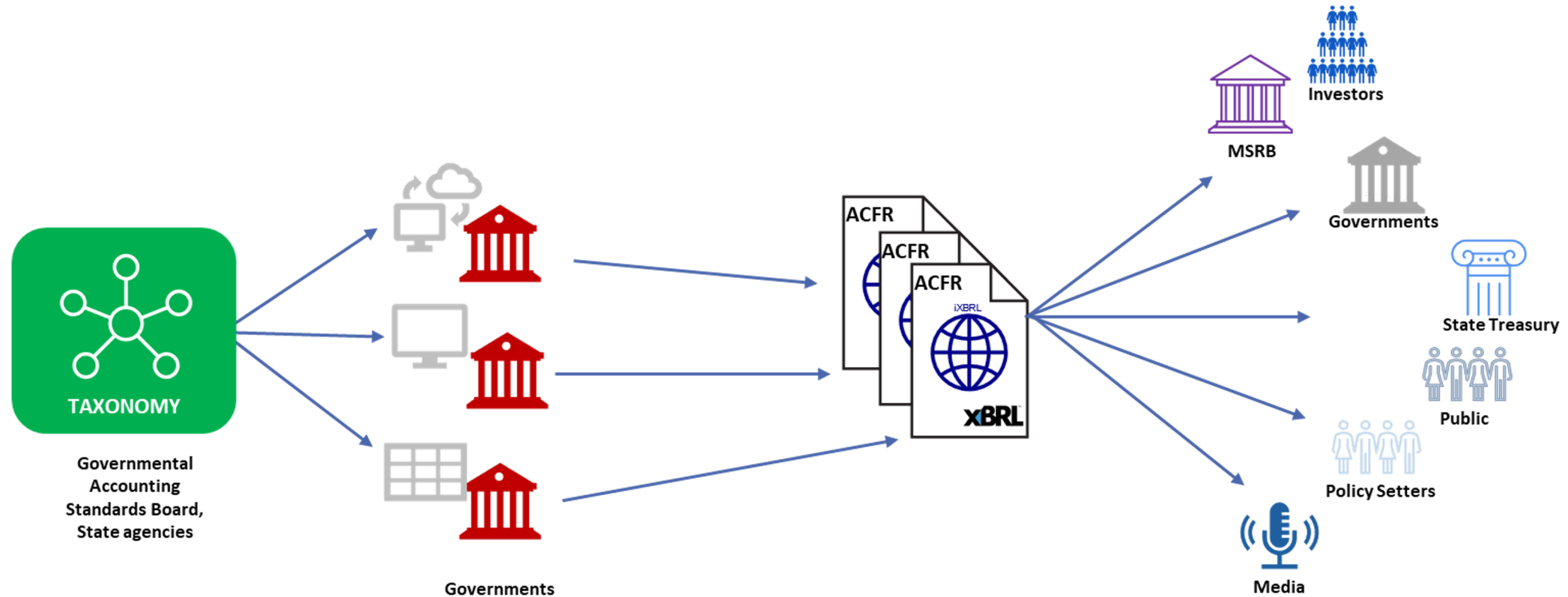


How public companies report to the SEC today



10/20/2016

How governments could report under FDTA



FDTA Does Not Specify Specific Data Standards

- Defines features of a data standard; specifies a legal entity identifier
- XBRL meets the specifications of the law (non-proprietary, able to render data machine-readable, uses taxonomies developed by consensus bodies, etc.)
- XBRL's wide use globally (including by SEC) is why FDTA is sometimes conflated with XBRL, but they are not the same
- XBRL US Standard Government Reporting working group has built a taxonomy for GASB ACFRs to demonstrate how data standards could be applied to government financial reporting

How Can Data Standards Be Applied to ACFRs

Live demo



Show Task Pane / Login XBRL API Credentials | Get a Free Account / Login XBRL API Credentials | Query Worksheet | Query Workbook | Browse Online Documentation | Download Free Templates / Online Support | Web Resources

A2 =XBRL.showData(CONCATENATE("https://api.xbrl.us/api/v1/fact/search?report.source-name=sec&report.document-type=10-K,10-Q&report.sic-code=8060&period.fiscal-year=2020,2021,2022&concept.local-

	A	B	C	D	E	F	G	H	I
1									
2	concept.local-name	entity.name	fact.value	period.fisc	period.fiscal-year				
3	Liabilities	Mednax, Inc.	2600231000	Y	2020				
4	Assets	Mednax, Inc.	3347948000	Y	2020				
5	Liabilities	Mednax, Inc.	1746006000	2Q	2021				
6	Assets	Mednax, Inc.	2555130000	2Q	2021				
7	Assets	MAGELLAN HEALTH, INC.	3224911000	1Q	2020				
8	Liabilities	MAGELLAN HEALTH, INC.	1793308000	1Q	2020				
9	Liabilities	MAGELLAN HEALTH, INC.	1801868000	3Q	2020				
10	Assets	MAGELLAN HEALTH, INC.	3381020000	3Q	2020				
11	Liabilities	MAGELLAN HEALTH, INC.	1456821000	Y	2020				
12	Assets	MAGELLAN HEALTH, INC.	3359855000	Y	2020				
13	Assets	MAGELLAN HEALTH, INC.	3236507000	1Q	2021				
14	Liabilities	MAGELLAN HEALTH, INC.	1293636000	1Q	2021				
15	Liabilities	MAGELLAN HEALTH, INC.	1456821000	Y	2020				
16	Assets	MAGELLAN HEALTH, INC.	3359855000	Y	2020				
17	Assets	Encompass Health Corporation	6445900000	Y	2020				
18	Assets	Encompass Health Corporation	6445900000	Y	2020				
19	Assets	Encompass Health Corporation	6445900000	Y	2020				
20	Liabilities	Encompass Health Corporation	4444300000	Y	2020				
21	Liabilities	MAGELLAN HEALTH, INC.	1808234000	2Q	2020				
22	Assets	MAGELLAN HEALTH, INC.	3351203000	2Q	2020				
23	Liabilities	MAGELLAN HEALTH, INC.	1380287000	3Q	2021				
24	Liabilities	MAGELLAN HEALTH, INC.	1456821000	Y	2020				
25	Assets	MAGELLAN HEALTH, INC.	3359855000	Y	2020				
26	Assets	MAGELLAN HEALTH, INC.	3353450000	3Q	2021				
27	Assets	MAGELLAN HEALTH, INC.	3217929000	2Q	2021				
28	Liabilities	MAGELLAN HEALTH, INC.	1260434000	2Q	2021				
29	Assets	MAGELLAN HEALTH, INC.	3359855000	Y	2020				
30	Liabilities	MAGELLAN HEALTH, INC.	1456821000	Y	2020				
31	Assets	SELECT MEDICAL HOLDINGS CORP	7115567000	1Q	2020				
32	Assets	SELECT MEDICAL HOLDINGS CORP	7115567000	1Q	2020				

XBRL Filed Data

Query Validate

To get as-filed data, choose: a function from the drop-down menu below; *at least one search parameter* from the list of options that appear, and; as many 'Fields to Return' as needed - then click Get.

Function: fact

Filter by Source (eg. FERC, SEC, ESEF): ALL

Filter by Document Type (eg. 10-K, 6-Q): 10-K x 10-Q x 1 x Annual x +

Select Report by Entity Name: 557833

or Select DTS by Entity Name: 691843

or Get Facts by Entity Name:



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(Filer) Filing was made by and describes the company named.

(Subject) Filing describes the company named but was made by another entity.

(Filed by) Filing was made by the company named but describes a subject company.

(Reporting) Filing was made by an individual reporting holdings in a company.

[Paper] [Paper filings](#) are available by film number.

[Cover] Filing contains an SEC-released cover letter or correspondence.

(Each "Reporting" and "Filed by" filing has a matching "Subject" listing.)

Items 1 - 40 [RSS Feed](#)

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Company

CIK

Form Type

Ownership? Include Exclude Only

40 Entries

Form	Formats	Description	Accepted	Filing Date	File/Film No
10-K	[html] [text]	CRAWFORD UNITED Corp. (0000047307) (Filer) Annual report [Section 13 and 15(d), not S-K Item 405] Accession Number: 0001437749-23-007323 Act: 34 Size: 9 MB	2023-03-21 09:05:31	2023-03-21	000-00147 23747966
10-K	[html] [text]	METAWORKS PLATFORMS, INC. (0001515139) (Filer) Annual report [Section 13 and 15(d), not S-K Item 405] Accession Number: 0001493152-23-008326 Act: 34 Size: 7 MB	2023-03-21 09:00:36	2023-03-21	000-55049 23747946
10-K	[html] [text]	Vigil Neuroscience, Inc. (0001827087) (Filer) Annual report [Section 13 and 15(d), not S-K Item 405] Accession Number: 0000950170-23-008835 Act: 34 Size: 15 MB	2023-03-21 07:17:33	2023-03-21	001-41200 23747836
10-K	[html] [text]	iSpecimen Inc. (0001558569) (Filer) Annual report [Section 13 and 15(d), not S-K Item 405] Accession Number: 0001558370-23-004231 Act: 34 Size: 9 MB	2023-03-21 07:00:52	2023-03-21	001-40501 23747810
10-K	[html] [text]	Black Bird Biotech, Inc. (0001409999) (Filer) Annual report [Section 13 and 15(d), not S-K Item 405] Accession Number: 0001477932-23-001598 Act: 34 Size: 6 MB	2023-03-21 06:30:19	2023-03-21	000-52828 23747796

V3 560808

	R	S	T	U	V	W	X
1	<p>To use this template with ESEF or SEC filings, enter the report.id for a report in cell V3. Look up report.id values from the <i>Select Report by Entity Name</i> field on the fact function dropdown of the XBRL Filed Data add-in - copy the value from that field into cell V3. Dimensional data often found in the disclosure sections of a report is in a pivot table on the corresponding worksheet tab. The queries for data in the report - facts by period and their presentation - are in grouped columns A-Q (click the + above column R to ungroup). The 'calculating' message below the worksheet shows Excel's processing progress (facts load once, then XLOOKUP matches facts to the report or selected section). Facts start loading when cell R2 background is gray, and the report is fully loaded when cell S4 shows the text "Report Label". <i>Anyone can use the 'show all data' checkbox for 8-K reports.</i></p> <p>All XBRL US Members can use the check box to see all facts for most financial reports in our Public Filings Database.</p>					<p>Choose a Report Section from cell Z2 OR check the box below to show all data. <input checked="" type="checkbox"/></p>	<p>Updated 11/15/22</p>
2	<p>METAWORKS</p>				<p>Report ID: 100030 - Statement -</p>		
3	<p>PLATFORMS, INC. 10-K FY 2022 filed 2023-03-21 with 787 unique tagged facts</p>				<p>Report URL</p>	<p>2023</p>	<p>2022</p>
4	<p>Section</p>	<p>Report Label</p>	<p>View HTML</p>	<p>US GAAP 2022</p>	<p>71 Extension Concepts</p>	<p>2023-03-18</p>	<p>Y</p>
68		Current Assets			AssetsCurrentAbstract		
69		Cash and cash equivalents			CashAndCashEquivalentsAtC		34941
70		Accounts receivable, net			AccountsReceivableNetCurre		167213
71		Prepaid expenses			PrepaidExpenseAndOtherAss		24896
72		Interest receivable, related par		extension	InterestReceivableRelatedPar		142493
73		Notes receivable, related party			NotesReceivableRelatedParti		655689
74		Total Current Assets			AssetsCurrent		1025232
75		Long-Term Assets			LongTermInvestmentsAndRe		
76		Intangible asset, net			FiniteLivedIntangibleAssetsN		
77		Notes receivable, related party			NotesReceivableRelatedParti		594311
78		Investments, related party		extension	InvestmentsRelatedPartyNon		627
79		Total Long-Term Assets		extension	LongTermAssets		594938
80		Total Assets			Assets		1620170

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Company Name: *METAWORKS PLATFORMS, INC.*
Period: Y, 2022
Filing Date: 2023-03-21

Filing Link:

<https://www.sec.gov/Archives/edgar/data/1515139/000149315223008326/0001493152-23-008326-index.htm>

Section	Report Label	View HTML	US GAAP 2022	71 Extension
209	Number of share issued for services			StockIssue
210	EnderbyWorks shares issued to minority shareholders		extension	StockIssue
211	Derivative liability write-off for expired warrants		extension	StockIssue
212	Ending balance, value			Shareholder
213	Ending balance, shares			ShareOuts
214	00000007 - Disclosure - NATURI NATURE AND CONTINUANCE OF OPERATIONS	View HTML		Organization
215	00000008 - Disclosure - SUMMA SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES	View HTML		Significant/
216	00000009 - Disclosure - CONCEI CONCENTRATION AND CREDIT RISK	View HTML		ConcentrationAndCreditRiskI
217	00000010 - Disclosure - ACCQUI ACCOUNTS RECEIVABLE	View HTML		LoansNotesTradeAndOtherR
218	00000011 - Disclosure - PREPAI PREPAID EXPENSES	View HTML	extension	DisclosureOfPrepaidExpense
219	00000012 - Disclosure - NOTES NOTES RECEIVABLE - RELATED PARTY	View HTML	extension	NotesReceivableRelatedParty
220	00000013 - Disclosure - INTANG INTANGIBLE ASSET	View HTML		IntangibleAssetsDisclosureT
221	00000014 - Disclosure - INVEST INVESTMENTS, RELATED PARTY	View HTML		InvestmentsInAndAdvancesT

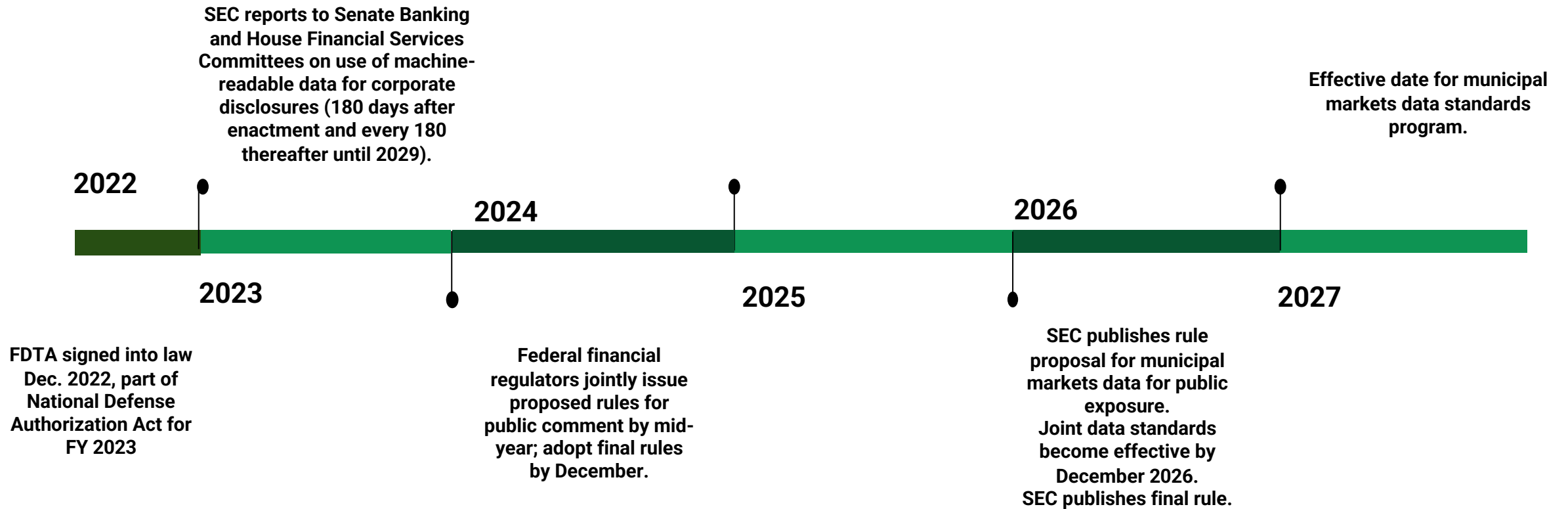
5. PREPAID EXPENSES

For the years ended December 31, 2022 and 2021, prepaid expenses was comprised of:

	December 31, 2022	December 31, 2021
Prepaid expenses	\$ 24,896	\$ 27,500
Prepaid insurance	-	60,791
	\$ 24,896	\$ 88,291

During 2021, the Company entered into a relationship with an unrelated entity to acquire common stock under a subscription agreement. The Company would advise it on blockchain technology, permitting it to expand its marketing business, and in return the entity would provide marketing services. On December 31, 2022, a total of \$57,500 payments were made on deposit for the purchase of these shares, the relationship was evaluated as unbeneficial to the Company, it decided to expense these payments and terminate the arrangement. There was no obligation or penalty should either party choose to terminate the relationship. During the year ended December 31, 2022, the entity provided marketing services. As a result, the deposit of \$57,500 was expensed on December 31, 2022, as a marketing expense.

What happens next?



Discussion: Going Forward

Current Unknowns

- Focus of Treasury/multi-department/Agency work
- Focus of SEC work
- GASB's role
- What information will be required to be machine-readable?
- Number of taxonomies needed for munis and who will develop them
- Costs
- Timing of implementation/phase in
- How will financials/other required disclosures be converted into XBRL (or other data standard)?
- How will EMMA submissions be made?

Discussion: Going Forward

What Can MAs Do?

- Be aware of and learn more about structured data, XBRL and standards development
- Be aware of pending regulations coming from Federal Agencies
- Be aware of issuer group efforts
- Be aware of NAMA webinars and information as process moves forward
- Participate in the standards development process and offer input to SEC, MSRB