MOBILE BUSINESS KEYWORD SEARCH TOOL USER DOCUMENTATION

Background

The Mobile Business Keyword Spreadsheet Tool searches State of Washington Department of Revenue (DOR) business licensing data to identify potential mobile businesses that may present risk of stormwater pollution. The procedure is based on key business license information including North American Industry Classification System (NAICS) codes, keywords in the description of the business, and city endorsement codes (ETP IDs).

The Tool consists of a single executable file (cli.exe)¹ and a folder of comma-delimited files (.csv) that the program uses to reference, weight, and score target keywords (keywords.csv), target NAICS codes (naics.csv), and ETP IDs that relate to a business's home jurisdiction (endorsements.csv).

The Tool was developed as part of a Stormwater Action Monitoring (SAM) Study on Mobile Business Stormwater Source Control and Coordination. This document provides instructions for using the Tool. The full description of how the Tool was developed is provided in the technical memorandum prepared for this task of the Study (Aspect Consulting, 2022). The memorandum and other deliverables from the Study can be found in the <u>SAM Website</u>.

Setup

No installation is required.

To begin, simply unzip (extract) the Mobile Business Tool zip file/folder (.zip) into a desired location on your computer:



¹ "CLI" is short for "command line interface"

The unzipped folder contains two key elements:

- 1. The executable application file itself (cli.exe)
- A "data" folder containing three files of reference tables the application requires to run (keywords.csv, naics.csv, and endorsements.csv), plus two files of example input tables (example_input_data.csv and example_two_cities.xlsx).



Running the Application

To run the application, double click "cli.exe".

When the application first opens and starts to load, you will see a blank Windows Terminal (command prompt) window appear:



Shortly after, instructional text is printed in the terminal window and a Windows dialogue box appears prompting the user to "Select Folder":

© C:\M	🔄 C:\MobileBusinessTool\cli.exe X 📐 + 🗸								
Welcome This to cit was	to the Mobile	e Business Spre	adsheet tool! DOR business dat	ta to ellucio	ate mobil	e businesses that may	/ notentia	llv generate illi	×
To modi folder.	$\leftarrow \rightarrow \checkmark \uparrow$	🚞 > This PC > O	S (C:) > MobileBusinessToo	bl			~ C	Search MobileBusinessTool	Q
Ensure	Organize 👻 New	w folder						≣ ▪	?
OC NOIN	Name	^	Date modified	Туре	Size				
	📒 data		6/25/2024 9:43 AM	File folder					
Please Note: J to the									
		Folder: MobileBusines	sTool						
								Select Folder Cano	el

This is asking the user to point to the folder than contains the reference tables: keywords.csv, naics.csv, and endorsements.csv (the "data" folder in the original application distribution). If any of

these files cannot be found or there is an error in processing them, the software will default to the initial pilot program values that have been hardcoded into the application.

Select Folder									
· -> · · •	📩 > This PC > OS (0	C:) → MobileBusinessTool	>			~	C Sea	rch MobileBusines	ssTool
	less folder								= -
rganize 🔹 IN	^		-						= •
Name		Date modified	Туре	Size					
data		6/25/2024 9:43 AM	File folder						
								1	
								1	
								1	
								1	
								l	
	Folder data							ļ	
]	Folder: data							ļ	

Navigate to the appropriate folder and then click "Select Folder".

Note: The reference tables in this folder can be modified by the user to customize the list of keywords searched, the NAICS codes, and the endorsements. However, **care should be taken to preserve the names of the files as well as the structure of the data (columns, column names)**. If file names or column names are changed, the application will fail to load the tables and default to values hardcoded into the software. See the "**Reference Tables**" section in this document for more information. After the data folder is identified, the application reads the values of the reference tables into the system:



In the next window that appears, the user is prompted to point to the "business data file". This is the file provided by the user that contains the business license information, including business name, NAICS Codes, business description, UBI number, ETP IDs, etc. The Data folder includes an example data set that can used for this step.

Open							
$\leftrightarrow \rightarrow \sim \uparrow$	📒 > This PC > OS	(C:) > MobileBusinessToo	l > data		~ C	Search data	
Organize 🔻 New	folder						
Name	^	Date modified	Туре	Size			
🔹 endorsements.csv		4/22/2024 1:23 PM	Microsoft Excel C	4 KB			
😰 example_input_da	ta.csv	6/25/2024 9:34 AM	Microsoft Excel C	257 KB			
keywords.csv		4/22/2024 1:23 PM	Microsoft Excel C	1 KB			
🔊 naics.csv		4/22/2024 1:23 PM	Microsoft Excel C	2 KB			
F	ïle name: example_inpu	ıt_data.csv			 	Open	

This file can be stored anywhere on your computer in either csv or xlsx format.

Assuming the input business data file contains all the required fields with the expected names (see following section), the application will run and generate an output file called "**output_dataset.xlsx**" *in the same directory as where the cli.exe is located*. This file can be used to review potential mobile businesses identified by the Tool.

MobileBusinessTool X	+			- 0	×
⊕ New ~ 🔏 🗘 🗋	a) 🖻 🛈	\mathbb{N} Sort $\stackrel{_{\scriptstyle\smile}}{_{\scriptstyle\smile}}$ \equiv View $\stackrel{_{\scriptstyle\smile}}{_{\scriptstyle\smile}}$			
\leftarrow \rightarrow \checkmark \uparrow $\stackrel{\bullet}{\frown}$ \rightarrow This PC \rightarrow C	DS (C:) > MobileBusinessTool		~ C	Search MobileBusinessTool	Q
Name ^	Date modified	Type Size			
📒 data	6/25/2024 9:43 AM	File folder			
🗹 🎴 cli.exe	4/24/2024 11:45 AM	Application 35,600 KB			
🚺 output_dataset.xlsx	6/25/2024 9:51 AM	Microsoft Excel W 179 KB			
3 items 1 item selected 34.7 MB					

Note: The application will always write out the results to output_dataset.xlsx in the same directory as the cli.exe **and will overwrite any existing copy of output_dataset.xlsx.** Previous versions of output_dataset.xlsx should be renamed or moved to another directory if you do not want them to be overwritten.

Business Data File Requirements

The application prompts the user to select a table of business information extracted from the Department of Revenue Business Licensing Service Portal (BLS Portal). These can either be provided as .csv or .xlsx.

Multiple cities (separated by sheets in an .xlsx file) or a single city's data (.csv or .xlsx) can be provided.

The final section of this document describes the process of downloading data from the BLS Portal.

FILE AND SHEET NAMES

To successfully look up and reference the endorsement (ETP) codes for mobile businesses in endorsements.csv, the input file name and/or sheet name(s) should be identical to the city name(s) (in all caps) as it appears in endorements.csv.

For CSVs, the file name should be the city name in all caps, just as it appears in endoresments.csv (e.g., "SEATAC.csv" or "REDMOND.csv")

For XLSX files, the sheet name(s) should correspond to the (all caps) city names as they appear in endorements.csv. Excel files can contain multiple sheets with data for different cities.

Note: in any case, the name of the file/sheet(s) MUST be less than 30 characters or the application will fail.

REQUIRED FIELDS

It is recommended that the user's input file matches the format in example_input_data.csv.

However, the application will run if the following five fields are provided (along with any other columns/fields):

Column/Field	Expected Field Name
Business Description	"ProdDescription":
Business Unified Business Identifier Number (UBI)	"bus-ubi"
(Legal) Name of the Business	"LE-name"
Primary business NAICS codes	"DOR-NAICS-Primary"
Secondary business NAICS codes	"DOR-NAICS-Secondary"

If the input data file contains the five fields above and all are named using the **Expected Field Names** above, then the application should run without additional user input. However, if the five required fields exist but have different names, the application will prompt the user to identify them, one-by-one:



Reference Tables

The reference values stored in **keywords.csv**, **naics.csv**, and **endorsements.csv** impact how potential mobile business are sorted, weighted, scored, filtered, or otherwise flagged by the software.

Users of this software can adjust the lists of reference values stored in keywords.csv, naics.csv, and endorsements.csv. However, only the contents of the each should be adjusted. Any changes to the number of columns, the columns names, or the file names/types would break the functionality to the tool.

KEYWORDS

The file **keywords.csv** has two columns: "**Keyword**" and "**Weight**". The values in the keyword column are strings of characters that the Tool searches for in the business description that are *potentially* indicative of mobile business—or explicitly indicative of a business that isn't of interest. The "Weight" is a numerical value between 0 and 1 that represents a degree of relevance, with "1" being highly relevant/indicative and 0 being the least relevant/indicative. It is suggested to use values of 0.25, 0.5, 0.75, and 1 to have four tiers of relevance for various keywords.

Entries with a value of "-1" are there to explicitly identify and exclude keywords/descriptions that are not of interest for stormwater. For example, a business might have the word "mobile" in its description, which, by default, has a weight of 0.75. However, if the description also has the word "wireless" or is part of the term "mobile home" then the weight of "-1" for "wireless" or "mobile home" tells the Tool that that instance of the word "mobile" isn't of interest in that case.

The keywords.csv file can also contain common misspellings or typos (e.g. "serivce" in addition to "service").

Keyword	Weight		Keyword	Weight	Keyword	Weight
arborist	0.5		mobile auto	1	pressure wash	1
carpet clean	0.75		mobile clean	1	repair	0.25
food truck	1		mobile service	1	service	0.25
food vendor	0.25		oil	0.5	serivce	0.25
grease	0.5		on site	0.5	vactor	1
hvac	0.25		paint	0.25	vent hood	1
installation	0.25		pesticide	0.5	window wash	1
landscape	0.75		pet groom	0.25	mobile + modular	-1
maintenance	ntenance 0.5		pipe clean	0.5	mobile home	-1
mobile	0.75		pool	0.25	wireless	-1

Some examples from **keywords.csv** are below:

NAICS CODES

The file naics.csv contains three columns: "HIGHER_PRIORITY_NAICS",

"MEDIUM_PRIORITY_NAICS", and "LOWER_PRIORITY_NAICS". Each of these columns contains lists of NAICS codes that are ranked high, medium, or low priority for the purpose of identifying mobile businesses. The NAICS ranking was done by the Study team based on perceived risk of stormwater pollution (see technical memorandum for full explanation, Aspect 2022). NAICS codes can be moved from one column to another to adjust their priority, additional NAICS codes can be added to any of the columns, and NAICS codes can also be removed from the table. However, blank cells should be avoided between entries in each column.

ENDORSEMENTS/ETP CODES

An Endorsement Type Identifier (ETP-ID) specific to "non-resident" businesses indicates that a business is applying for a license in a city in which their business does not reside—which is an indicator that a business is located outside the licensed jurisdiction to do work. While a non-resident endorsement alone does not indicate a mobile business, it would be a likely attribute of a mobile business.

The file **endorsements.csv** has two columns: "City", and "ETP_ID". The values in the "City" column need to match the file/sheet name (as described in the previous section) and the value in "ETP_ID" is the non-resident ETP ID code used by that city.

If the system finds a match in endorsements.csv for the given city name (as provided in the file/sheet name of the input data), the output of the tool will be filtered for only those businesses that have that endorsement code.

If the system does not find a match in endorsements.csv for the names of the file/sheet, the system will simply warn the user and not perform any filtering or sorting based on the ETP-ID.

```
Processing example_input_data...
Could not find city example_input_data in endorsements! Not filtering by ETP-ID.
```

If filtering the output dataset for this non-resident ETP-ID is not desired, simply change the name of the input file/sheet to be something other than the city name(s) or remove the entry from endorsements.csv.

Output

After successfully running, the Mobile Business Spreadsheet tool creates an output file called "output_dataset.xlsx" in the same directory as the cli.exe. The application will overwrite any existing copy of output_dataset.xlsx. Any previous version of output_dataset.xlsx should be renamed or moved to another directory if you do not want it to be overwritten.



The output excel file contains the following sheets/tabs:

- A sheet (or multiple sheets) containing the input data, sorted, with added formatting and additional fields (see below)
- Higher Priority NAICS Summary
- Medium Priority NAICS Summary
- Lower Priority NAICS Summary
- City Summary
- NAICS Summary
- Keyword Summary

🚨 AutoSave 🖲 Cit) 🛃 🧐 - 🖓 - 🤉 eutput_dataset.alsx + Saved to this PC 🛩	₽ Search	Parker Wittman 🌒 – 🗆 🗙
File Home Insert Draw PageLayout Formulas Data Review View Automate Developer Help Acrobat		🖓 Comments 🛛 🖻 Share 👻
$ \begin{array}{ c c c c c } \hline & & & & & & & & & & & & & & & & & & $	Normal Bad Good Neutral Check Cell Diplonotory Input Unked Cell	Catalation Σ Audio
Ciposito iui pont iui Auginent iu Nutreir iui	22/141	Letit coning similarity Abo-int Aboot Actour
A1		
A B C D E F G H I J K L M N O P	Q R S T U V	W X Y Z AA AB AC AD AE AF AG AH AI AJ AK AL
1 Run-Date LE-name firm-name bus-ubi NAICS-PILAICS-Sece ETP-ID usFlammaMail-addr/Mail-addr/Mail-addr/Mail-addr/Mail-Unit/Mail-Citry Mail-State Mail-	Eip Mail-Zip+Operated-Phys-addrPhys-addrPhys-addrays-Unit	tryPhys-Unit Phys-City Phys-State Phys-Zip Phys-Zip+4Agency-Idfrs-Stat-Cqfrs-Exp-Optrs-Stat-Dq-Ists-Issuefis-Acct-NCity LimitsdDescript Latitude Longitudejarch F
2 2022-07-112 Fuent & Priminant Reducted D1412 0226 False Reducted 049.00 mail city 6 WA 36034	1117 N Reducted	Physicity: WA 50054 5356 Reducted A 2022-11-0-2021-04-0 Reducted His RTIPORT Reducted Reducted Duricity: WA 5005 5316 Reducted A 2023 09 2010 8 2 3010 8 3010 8 3010 8 3010 8 3010 8 3010 8 3010 8 3010 8 3010 8
4 2022-07-11E name 9 Firm name Reducted 811412 0828 Faile Reducted Avii city 1 WA 98057	5337 N Redacted	Physicity VMA 98057 5317 Reducted A 2022-08-3 2022-09-0 2014-09-2 Reducted Yes APPLIANC Reducted Reducted
3 2022-02-11E name 8 Firm name Redacted 811310 238220 0828 False Redacted Mail city 1 WA 98118	4030 N Redacted	Physicity 1WA 98118 4030 Reducted A 2022-10-3 2021-09-0 2020-08-2 Reducted Yes SVCINSTA Reducted Reducted
6 2022-07-1: LE name 8 Firm name Redacted 811310 0528 False Redacted APT A Mail city 7 WA 98499	2613 N Redacted APT	V203 Physicity WA 98031 3192 Redacted A 2022-10-3 2021-11-0 2020-11-2 Redacted Yes MAINTEN. Redacted Redacted
7 2022-07-1: LE name 6 Firm name Redacted 811412 238220 0828 False Redacted STE 201 Mail city 8 TN 38120	9401 N Redacted STE	1W Physidty WA 98043 2188 Redacted A 2022-12-3 2022-01-0 2018-12-1) Redacted Yes HVAC & El Redacted Redacted
8 2022-07-1: LE name 6 Firm nam: Redacted 236115 441110 0828 False Redacted Mail city 1 WA 98291	0295 N Redacted	Physicity IWA 98290 5211 Redacted A 2022-11-9/2021-12-0/2016-12-1: Redacted Yes UNDERGR Redacted Redacted
9 2022-07-1:LE name 7 Firm nam:Redacted 484110 0828 False Redacted Mail city 8 WA 98038	5843 N Redacted	Physicity (WA 98038 5843 Redacted A 2023-03-3 2022-04-0 2018-01-2 Redacted Yes DUMP TRL Redacted Redacted
10 2022-07-1: LE name 8 Firm nami Redacted 458991 238390 0828 False Redacted Mail city 6 WA 98032	1059 N Redacted	Physicity WA 98032 1039 Redacted H 2022-12-3 2022-01-0 2010-04-2 Redacted Yes WHLSL, R Redacted Redacted
11 2022-07-1 LE name 7 Firm name Redacted 449110 811490 0828 False Redacted Mail city 1 WA 98072	2313 N Redacted	Physicity IWA 98115 7718 Redacted A 2023-04-9/2022-03-0/2010-03-9/Redacted Yes SELLING FIRedacted Redacted
12 2022-07-1 LE name 1 Firm name Redacted 811310 332323 0828 False Redacted Mail city 1 WA 98073	2883 N Redacted	Physicity SWA 98053 9177 Redacted A 2022-12-3 2022-01-0.2019-02-1: Redacted No Structural Redacted Redacted
13 2022-07-1 LE name 2 Firm nami Redacted 484210 0828 False Redacted Mail city 1 WA 98074	6019 N Redacted	Physicity WA 98074 6019 Redacted H 2022-11-9 2021-11-1 Redacted Yes ONSITE LA Redacted Redacted
14 2022-07-1 LE name 2 Firm nami Redacted \$11430 US2S False Redacted Mail city 1 WA 95380	9757 N Redacted STE	124 Physicity EWA 58056 7051 Redacted A 2023-04-3 2022-05-0 2010-04-0 Redacted No The RepAthedacted Redacted
15 2022-07-118 name 5 Firm nami Redacted 434210 532120 0328 False Redacted Mail city 1 WA 59188	1330 N Redacted	Physicity JWA 93168 1310 Reducted A 2022-02-2 2022-03-0 2020-02-2 Reducted No Moving C Reducted Reducted
10 2022-07-11E name 6 Film name Reparted 221114 238210 US28 Fible Reparted Site 8 Mail City I WA Sel4	0021 N Redacted SIE	B Physicity WA 39144 0021 Reported A 2022-09-0.2018-012-012-012-012-012-012-012-012-012-012
12 2022/07/12 Ename 0 Film nam Reducted 221122 22120 0526 Fibe Reduced IIINIT 9227 Mail City o WA 5005	4722 N Podected UNIT	Physicity WA 5004 562 Reducted A 2022/09/5/2021/09/20104/16/20104/16/20104/16/20104/16/20104/16/20104/2010
12 2022/07/21 E name 8 Firm name Refared 6 2022 6 2028 Falce Refared Available A	2257 N Redarted	Diversity VWA 94168 2757 Bedicted A 2022/12/3 2022/0.6.1 Related Yes Steron/a Related Related
22 2022-07-21 E name 4 Firm name Related 01110 01228 Falce Related Mail (b) 1987	2322 N Redacted	Physicial UKA 9375 2322 Backated A 2022-073-2022-0721 Backated No. Environer Backated Backated
2 2022-07-11E name 1 Firm name Reducted 238910 484121 0828 Failee Reducted Avii (1) 1 WA 98166	1343 N Redacted	Physicity 1WA 94072 9188 Reducted A 2022-03-3 2022-04-9 2013-10-2 Reducted No. TRUCKING Reducted Reducted
22 2022-07-1 LE name 1 Firm name Redacted 238910 484110 0828 False Redacted Mail city 1 WA 98292	1567 N Redacted	Physicity IWA 98290 9239 Redacted A 2023-03-3 2022-03-1 2022-04-0 Redacted No Demolitio Redacted Redacted
23 2022-07-1 LE name 1 Firm nami Redacted 238910 484220 0828 False Redacted Mail city 1 WA 98059	0000 N Redacted	Physicity 5 WA 98059 0000 Redacted A 2023-01-3.2022-02-0.2017-03-0 Redacted No. Redacted Redacted
24 2022-07-1: LE name 1 Firm name Redacted 811490 0828 False Redacted UNIT 1 Mail city 3 WA 98026	7518 N Redacted UNIT	1 Physidty EWA 98026 7518 Redacted A 2022-07-3 2021-08-0 2019-11-1: Redacted No PIANO TU Redacted Redacted
25 2022-07-1:LE name 1 Firm nam:Redacted 811122 0828 False Redacted APT E Mail city 1 WA 98444	6949 N Redacted APT	E Physicity IWA 98444 6949 Redacted A 2022-08-3 2021-08-3 Redacted No Window T Redacted Redacted
26 2022-07-1: LE name 4 Firm nami Redacted 238910 484220 0828 False Redacted Mail city 3 WA 98019	1045 N Redacted	Physicity IWA 98922 8764 Redacted A 2022-03-3:2021-04-0:2018-12-1/Redacted No TRUCKING Redacted Redacted
27 2022-07-1: LE name 5 Firm nami Redacted 238910 484110 0828 False Redacted Mail city 1 WA 98296	7159 N Redacted	Physicity JWA 98296 7159 Redacted A 2023-03-3: 2022-03-0: 2022-04-0 Redacted No TRUCKING Redacted Redacted
23 2022-07-1 LE name 5 Firm name Redacted 811412 238220 0828 False Redacted STE 201 Mail city 8 TN 38120	9401 N Redacted	Physicity (WA 88047 2150 Redacted A 2022-12-3 2022-01-0 2010-04-2) Redacted Yes PLUMBIN (Redacted Redacted
29 2022-07-1 LE name 8 Firm name Redacted 449129 811412 0828 False Redacted Mail city 1 WA 98402	1409 N Redacted	Physicity IWA 98402 1409 Redacted A 2022-07-3 2021-08-0.2020-07-1 Redacted Yes I WILL BESRedacted Redacted
30 2022-07-11E name 7 Firm nami Redacted 811198 0828 False Redacted APT 16H Mail city 1 WA 90038	9071 N Redacted APT	16H Physicity WA 98058 9071 Redacted A 2022-04-3 2021-04-0 2022-04-1: Redacted No Roadside Redacted Redacted
31 2022-07-11te name 4 Pirm nam Redacted 230115 238160 0828 Palse Redacted UNIT A Mail City 7WA 9007	4509 N Reducted UNIT	A Physicity WA 30087 4509 Redacted A 2022-10-3 2021-12-0 2020-11-2 Redacted No Contracto Redacted Redacted
32 2022-07-1 LE name 1-Him nami kedacted 238990 0628 Palse kedacted Madi city a wa Sedul	0000 N Redacted	Physicity wa 30011 8918 Redacted A 2023-01-3.2022-02-0.2010-0-1 Redacted No Swimmin Redacted Redacted
33 2022-07-11E name 3 Firm Ram Reported 57/210 235/20 05/26 Fisher Reported Mail City I WA Select	2200 N Redacted	Physicity 1WA 36168 206 Reported A 2022-09-970222-10-0.2010-04-1 Reported Tes HEATING (Reported Reported Development (MA) 2021-2017 Exception (Comparison (Compar
34 2022/07/11/E name 5 min ann Readsted 250/20 0026 Pales Reduced Mail City 1 WA 30027	2040 N Reducted	Physicity: WA 50052 2346 Reducted A 2022/09/5/2021/09/2/02102/Reducted Tes SALE OF Reducted Reducted
S 2022-07-11 Ename 4 Ermini mi Berlantori (S1731) 239991 (1823 Ealso Berlantori Mallicity 3 WA S991)	1237 N Redarted	Physicity WA S0119 2605 Redacted A 2023-02-2020 (2023-02-2012) Redicted No LANDSALEGISTICAL Redacted
22 2022-07-116 name 5 Firm n mediated 218910 0828 Faise Redacted Mail city 1 W 900	S001 N Redacted	Physicity 1WA 98052 5001 Redacted A 2022-11-9/2010-04-2 Redacted Yes CONSTRUIREd Redacted Redacted
33 2022-07-1 LE name 8 Firm n. In Redacted 561730 238950 0828 False Redacted Mail city 0 WA 58028	0000 N Redacted	Physicity WA 98028 0000 Redacted A 2022-12-3 2022-01-0 2010-04-2 Redacted Yes LANDSCAI Redacted Redacted
39 2022-07-1 LE name 8 Firm n Redacted 237110 361730 0828 False Redacted Mail city 5 WA 98252	9216 N Redacted	Phys.city / WA 98252 9216 Redacted A 2022-12-3.2022-01-0.2017-03-2 Redacted No LANDSCAI Redacted Redacted
40 2022-07-11LE name 8 Firm na Redacted 444240 0828 False Redacted Mail city 1 WA 98055	7355 N Redacted	Physicity SWA 98055 7355 Redacted A 2023-05-3.2022-06-0.2010-04-1: Redacted Yes PROVIDE I Redacted Redacted
A1 2012-012-11 nome & Firm nome Barlantadi SE1720 128960 1922 Folca Radantad Mail nite 2006 48324	2075 N Padartad	Dhuc rity I.WA 98933 7567 Radiantad A 3093.11.3.9303.11.3.9304.13.0.906.04.04.04.04.04.04.04.04.04.04.04.04.04.
CITY NAME 1 CITY NAME 2 Higher Priority NAICS Summary Medium Priority NAICS Summary Lower Priority NAICS Summary	City Summary NAICS Summary Keyword Summary	• + 1 (
Ready 20 2 Accessibility investigate		🕞 Display Settings 🌐 🎹 🖳 — — 🕂 100%

The first sheet of the output file (or sheets, if inputting data for multiple cities) will have all the contents/columns of the input data file. The business records in the output file are presorted to put the most likely mobile businesses with the highest risk of stormwater pollution at the top of the list based on NAICS codes. Businesses with "High" priority NAICS codes are at the top and highlighted in orange. Businesses with "Medium" priority NAICS codes are next and highlighted in yellow. Businesses with "Low" priority NAICS codes are next and highlighted in green. Businesses with NAICS codes that are not among those with a listed priority are last in the list and are not highlighted.

Within each grouping of NAICS priority, the business records are sorted by their **Weighted** keyword score, with high scores at the top and lower scores at the bottom.

In addition to all the input fields, each business record contains four added columns:

- **Search_Rating:** a score counting the number of total matched keywords (e.g., three matching keywords give a "Search_Rating" of 3)
- Weighted_Search_Rating: a score representing the sum of the weighted values of the matched keywords (e.g., two matched keywords with weights of 0.5 and another with a weight of 0.75 would give a "Weighted_Search_Rating" of 1.75)
- Keywords_in_Description: a list of all the matched keywords in the business description
- **NAICS_Priority**: The NAICS priority category for the given business.

The contents of the additional tabs are as follows:

- **Higher Priority NAICS Summary:** a list of all the businesses in the high priority NAICS category
- Medium Priority NAICS Summary: a list of all the businesses in the medium priority NAICS category
- Lower Priority NAICS Summary: a list of all the businesses in the lower priority NAICS category

• **City Summary**: A breakdown of the minimum, maximum, average, and median weighted keyword search scores for each input city

City	Minimum Weighted Search Score	Average Weighted Search Score	Median Weighted Search Score	Maximum Weighted Search Score
CITY NAME 1	0	0.214285714	0.25	1.25
CITY NAME 2	0	0.277552204	0.25	3

• **NAICS Summary**: A summary of the number of businesses and weighted score statistics by NAICS priority.

NAICS Priority	NAICS CODES	Business Count	Minimum Weighted Search Score	Average Weighted Search Score	Median Weighted Search Score	Max Weighted Search Score
HIGHER_PRIORITY_NAICS	['482', '485', '484', '493', '4881', '4882', '4884', '4889', '2211', '441', '447', '811192', '8112', '8113', '8114', '8111']	21	-1	0.30952381	0.25	1.25
MEDIUM_PRIORITY_NAICS	['1152', '236', '237', '238', '311', '312', '321', '3221', '3222', '325', '3241', '326', '316', '331', '332', '333', '334', '335', '336', '423140', '423930', '423110', '4233', '4237', '424930', '4244', '4246', '4247', '4244', '4246', '4247', '4248', '444', '445', '5321', '5324', '621910', '6112', '6113', '6115', '327', '4238', '6111']	541	-1	0.170979667	0.25	1.75
LOWER_PRIORITY_NAICS	['323', '722', '712']	7	0	0.142857143	0.25	0.25

• **Keyword Summary:** A count of the number of matches for all the keywords listed in keywords.csv.

Downloading Business Licensing Data from the Department of Revenue Business License Service

1. Log onto the BLS Portal and navigate to the Reporting tab and select City Reporting:

≡	New Manager		
K	(EN WALDO Partner Portal	₽ጰ	Filter
:	New Manager Get Next Task City Reports	×	Search
	Partner Licensee	×	To Do
	Reports available for Pa	artner Cities	Reporting
			Need Help?

2. Select the Partner Licensee option:



3. Enter the jurisdiction name and click Generate

□ ⊘	П×
	GeArate

4. All current business licenses in the jurisdiction will appear in a preview window:

=	Partner Licensee Report								□ 0	D	×
K	KEN WALDO Partner Portal	₽₰	Parameters								
:	New Manager Get Next Task		Parameters	۹							
÷	City Reports Partner Licensee	×	City of Redmond								
	Partner Licensee	×	Partner Licensee								1
			< Page 1 of 64	6.315 Rows	Standard SC Share Filte						
			Run-Date	LE-name	firm-name	bus-ubi	DOR-NAICS-Primary	DOR-NAICS-Secondary	ETP-ID		
			Jun-22-2022	ANDERSEN CONSTRUCTION COMPANY	ANDERSEN CONSTRUCTION COMPANY	604169674	236220		1279		
			Jun-22-2022	MASCOTT EQUIPMENT COMPANY, INC.	MASCOTT EQUIPMENT COMPANY, INC.	601376971	423850		1279		
			Jun-22-2022	MY ALARM CENTER, LLC	MY ALARM CENTER, LLC	602511540	561621		1279		
			Jun+22+2022	CHECKPOINT SYSTEMS, INC.	CHECKPOINT SYSTEMS, INC.	601134574	561621	l≩	1279		
			Jun-22-2022	INTERIOR TECHNOLOGY, INC.	INTERIOR TECHNOLOGY, INC.	600060203	444190	238990	1279		
			Jun-22-2022	FIVE9, INC.	FIVE9, INC	603204792	541519		1279		
			Jun-22-2022	RURAL CELLULAR CORPORATION	RURAL CELLULAR CORPORATION	603081726	517312		1279	1.0	_
			Jun-22-2022	JDH MEDIA INC.	ROCKET FARM	604833153	512110	512191	1279		2
			Jun-22-2022	EC COMPANY DBA ALL POWER COMPA	N ELECTRICAL CONSTRUCTION COMPANY	601107330	238210		1279		
			Jun-22-2022	AMERICAN NATIONAL INSULATION, INC	C INSULPRO PROJECTS	604169657	238310		1279		
			Jun-22-2022	ETS-LINDGREN INC.	ETS-LINDGREN. INC.	601312504	811213		1279		
			Jun-22-2022	MASTER ELECTRIC CO., INC.	MASTER ELECTRIC CO., INC.	604031949	238210		1279		
			Jun-22-2022	H2OME CERTIFIED INC	HOME CERTIFIED, INC.	602547840	541350	236118	1279		
			Jun-22-2022	FIRE CHIEF EQUIPMENT CO., INC.	FIRE CHIEF EQUIPMENT CO., INC.	602683436	423990		1279		
			Jun-22-2022	ANMAC WATER TREATMENT SERVICE, IN	ANMAC WATER TREATMENT SERVICE IN	60597711	238220		1279		

5. Open the Table Views window to adjust the data output:

ustomize Table			Views	Pul	blish Current View	Public Views New View	1
Table P	Partner Licensee		View	Default			
		_	Standard	0			
Current View S	C Share		SC Share	۲	Overwrite	Remove	
Show History							
vailable Columns	:	Colu					-
	•	Colu	mns				_
ous-id	+	=	Run-Date				>
us-id usloc-id	++++++	=	Run-Date LE-name				
us-id usloc-id intct1-Addr1	+++++++++++++++++++++++++++++++++++++++	=	Run-Date LE-name firm-name				
us-id usloc-id intet1-Addr1 intet1-Addr2	+ + + +	=	Run-Date LE-name firm-name bus-ubi				2
us-id usloc-id intet1-Addr1 intet1-Addr2 intet1-Addr2	+++++++++++++++++++++++++++++++++++++++	=	Run-Date LE-name firm-name bus-ubi DOR-NAICS-Primary))))
us-id usloc-id intet1-Addr1 intet1-Addr2 intet1-Addr3 intet1-City	+ + + + + + +		Run-Date LE-name firm-name bus-ubi DOR-NAICS-Primary DOR-NAICS-Secondary				
us-id usloc-id intet1-Addr1 intet1-Addr2 intet1-Addr3 intet1-City intet1-Last-Name	· + + + + + + + + + + + + + + + + + + +		Run-Date LE-name firm-name bus-ubi DOR-NAICS-Primary DOR-NAICS-Secondary ETP-ID				
us-id usloc-id intet1-Addr1 intet1-Addr2 intet1-Addr3 intet1-City intet1-Last-Name intet1-Mid-Othr-Name	· + + + + + + + + + + +		Run-Date LE-name firm-name bus-ubi DOR-NAICS-Primary DOR-NAICS-Secondary ETP-ID HazardousFlammableMtrl				
ius-id iusloc-id intet1-Addr1 intet1-Addr2 intet1-Addr3 intet1-City intet1-Last-Name intet1-Unid-Othr-Name intet1-Phone	· + + + + + + + + + + + + +		Run-Date LE-name firm-name bus-ubi DOR-NAICS-Primary DOR-NAICS-Secondary ETP-ID HazardousFlammableMtrl Mail-addr1				
ous-id ousloc-id Intet1-Addr1 Intet1-Addr2 Intet1-Addr3 Intet1-City Intet1-Last-Name Intet1-Mid-Othr-Name Intet1-Phone Intet1-State	· · · · · · · · · · · · · · · · · · ·		Run-Date LE-name firm-name bus-ubi DOR-NAICS-Primary DOR-NAICS-Primary ETP-ID HazardousFlammableMtrl Mail-addr1 Mail-addr2				

6. Open a New View to customize the table and name it "BLS license download_[6-digit date]":

Lustomize Table		Views Publish Current View Public Views New View
Table Dataselissas		View Default
		Standard O
Current View Standard		SC Share Overwrite Recove
Horizontal Scrolling 🖌		2 Rows
Show History		
User Inverted		
Show Filter	6	-
vailable Columns	Columns	
w View		
New View		×
		>>>
New View K		×
		<u>Cancel</u>
	= firm-name	×
	= Mail-addr1	×
	= Mail-addr2	>
	= Mail-addr3	>

- 7. Add (+ symbol) or remove (x symbol) columns to include only the following data fields. If necessary, rearrange the data fields to be in this order (using the parallel lines symbol on the left of the column name):
 - bus-ubi, the business license number
 - LE-name, legal business name
 - firm-name, the "doing business as" name
 - Mail-addr1, the mailing address of the business
 - Mail-addr2, the mailing address of the business
 - Mail-addr3, the mailing address of the business
 - Mail-UnitType, the mailing address of the business
 - Mail-Unit, the mailing address of the business
 - Mail-City, the mailing address of the business
 - Mail-State, the mailing address of the business
 - Mail-Zip, the mailing address of the business
 - Mail-Zip+4, the mailing address of the business
 - Phys-addr1, the physical address of the business
 - Phys-addr2, the physical address of the business
 - Phys-addr3, the physical address of the business
 - Phys-UnitType, the physical address of the business
 - Phys-Unit, the physical address of the business
 - Phys-City, the physical address of the business
 - Phys-State, the physical address of the business
 - Phys-Zip, the physical address of the business
 - Phys-Zip+4, the physical address of the business
 - ETP-ID, the endorsement identifiers for the business (includes "non-resident")
 - HazardousFlammableMtrl, indicates if the business uses hazardous or flammable materials
 - ProdDescription, provides the business description as written by the applicant
 - DOR-NAICS-Primary, indicates the primary NAICS code for the business
 - DOR-NAICS-Secondary, indicates the secondary NAICS code for the business

Customize Table		Views Publish Current View Public Views New View					
Table Partner Licensee				View	Default		
				Standard	0		
Current View SC Share				SC Share	۲	Overwrite	Remove
Horizontal Scrolling ✔ Show History 📃 User Inverted 📃 Show Filter 📃					₽ 21	Rows	
wailable Columns	:	Colu	mns				
bus-id	+	=	Run-Date				>
busloc-id	+	=	LE-name				>
			firm pama				
Cntct1-Addr1	+	=	IIIII-name				/
Cntct1-Addr1 Cntct1-Addr2	++	=	bus-ubi				>
Cntct1-Addr1 Cntct1-Addr2 Cntct1-Addr3	+ + + +	=	bus-ubi DOR-NAICS-Primary				>
Cntct1-Addr1 Cntct1-Addr2 Cntct1-Addr3 Cntct1-City	+ + + + + +	=	bus-ubi DOR-NAICS-Primary DOR-NAICS-Secondary				>
Cntct1-Addr1 Cntct1-Addr2 Cntct1-Addr3 Cntct1-City Cntct1-Last-Name	+ + + + + + +	=	bus-ubi DOR-NAICS-Primary DOR-NAICS-Secondary ETP-ID				> > > > >
Cntct1-Addr1 Cntct1-Addr2 Cntct1-Addr3 Cntct1-City Cntct1-Last-Name Cntct1-Mid-Othr-Name	+ + + + + + + + + + +		bus-ubi DOR-NAICS-Primary DOR-NAICS-Secondary ETP-ID HazardousFlammableMtrl				> > > > > > > > >
Cntct1-Addr1 Cntct1-Addr2 Cntct1-Addr3 Cntct1-City Cntct1-Last-Name Cntct1-Mid-Othr-Name Cntct1-Phone	+ + + + + + + + + + + + + + + + + + + +		bus-ubi DOR-NAICS-Primary DOR-NAICS-Secondary ETP-ID HazardousFlammableMtrl Mail-addr1				> > > > > > > > > > > > > > > > > > >
Cntct1-Addr1 Cntct1-Addr2 Cntct1-Addr3 Cntct1-City Cntct1-Last-Name Cntct1-Mid-Othr-Name Cntct1-Phone Cntct1-State	+ + + + + + + + + + + + + + + + + + + +		bus-ubi DOR-NAICS-Primary DOR-NAICS-Secondary ETP-ID HazardousFlammableMtrl Mail-addr1 Mail-addr2				> > > > > > > > > > > > > > > > > > >

8. Save the custom table that you created with the columns listed above