

Options ▾ Zoom to ☑ Clear Selection ☑ Refresh															
Establishments With Issued Licenses				Assigned Inspector Areas		Violations		Rule 9 - Consumption During Prohibited Hours			Rule 76 - Data Collection Form (Liquor Delivery)		Rule 58 - Data Collection - For Restaurants		Recycle
License No.	License Type	License Code	T/A Name	CR	department id	legislative district number	councilmanic district number	corporate name	address	geocoded address	city	zip code	lease type		
315	B	BL+	Geer's	10684900	W06832570	47A	District 5	G & E Enterprises, LLC	3415 52nd Avenue	3415 52ND AVE, 20781	Cheverly	20781	Deed		
806	B	BLX	The Walrus Oyster & Ale House	15682954	W15700388	26	District 8	Oyster Bar Management, LLC	152 Waterfront Street	152 WATERFRONT ST, 20745	National Harbor	20745			

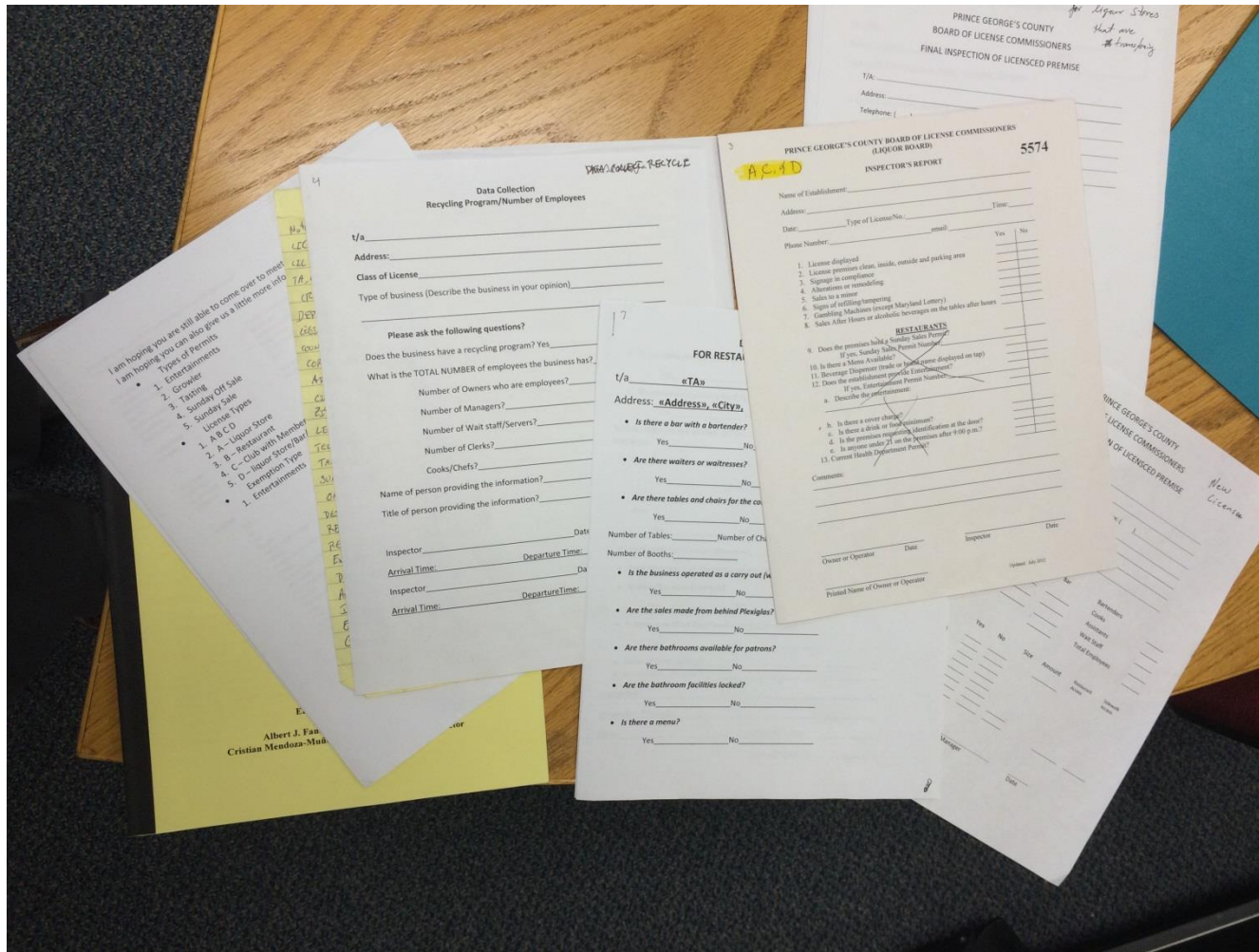
LIQUOR LICENSE INSPECTION APP

Data Collection Made Easy: Using GIS to Inspect Liquor

Teddy Hailegeberel, Charlie Wrenn, Andrew Dané

HOW THINGS WERE DONE BEFORE

Forms were completed via paper and turned in at the end of the inspector shift.



HOW THINGS WERE DONE BEFORE

Database was based on Access with no particular organization

Lease	Beer Tasting	Beer and Wine Tasting	Description	Renewal Fee	Renewal Date	entertainment 2	drive in window	Alcohol Awareness	Inspection	Email Address	Field1	Growlers
2021			O Liquor Store	\$910.00	✓	N/A	NO	1/16/2016		surjit0816@		
2023			O Liquor Store	\$910.00	✓	N/A	DRIVE-IN WINDOW	10/19/2017		n/a		
2016		✓	O Liquor Store	\$910.00	✓	N/A	NO	1/29/2017		n/a		
2025			O Liquor Store	\$910.00	✓	N/A	DRIVE-IN WINDOW	2/5/12		n/a		
2015			O Liquor Store	\$910.00	✓	N/A	NO	5/21/2018		n/a		
2037			O Liquor Store	\$910.00	✓	N/A	NO	1/29/2017		Sal&Sons@		
2015			O Carry Out	\$245.00	✓	N/A	NO			n/a		
Deed			O Restaurant w/Off	\$2,420.00	✓	PREMISES HOLDS AN ENTER	DRIVE-IN WINDOW	11/29/2017		michellekir		
Deed			O Restaurant	\$5,000.00	✓	ONLY FAMILY ORIENTATED	NO	3/3/2019		jpeterson@		
2022			O Restaurant	\$1,455.00	✓	ONLY FAMILY ORIENTATED	NO	5/24/2016		n/a		
2020			O Restaurant	\$1,455.00	✓	NO ENTERTAINMENT PERM	NO	3/26/2017		WWTony@		
2024			O Liquor Store	\$910.00	✓	N/A	NO	3/3/2017		n/a		
2027			O Liquor Store	\$910.00	✓	N/A	NO	7/21/2018		n/a		
2018			O Carry Out	\$365.00	✓	NO ENTERTAINMENT PERM	NO	11/5/2015		ymp717@y		
Deed			O Veterans	\$910.00	✓	CLASS C LICENSE	NO	10/19/2017		n/a		
deed			O Veterans	\$910.00	✓	CLASS C LICENSE	NO			n/a		
2024			O Restaurant	\$1,455.00	✓	ONLY FAMILY ORIENTATED	NO	2024		n/a		
2012			O Restaurant	\$1,455.00	✓	ONLY FAMILY ORIENTATED	NO					
2024			O Bowling Alley	\$365.00	✓	ONLY FAMILY ORIENTATED	NO			normanhav		
Month to Month			O Bowling Alley	\$365.00	✓	ONLY FAMILY ORIENTATED	NO			normanhav		
2019			O Restaurant	\$3,025.00	✓	ONLY FAMILY ORIENTATED	NO	4/12/2015		blutton@p		
2025			O Restaurant	\$3,025.00	✓	ONLY FAMILY ORIENTATED	NO	4/12/15		blutton@p		
2017			O Restaurant	\$3,025.00	✓	ONLY FAMILY ORIENTATED	NO	4/12/15		blutton@p		
2020			O Restaurant	\$1,455.00	✓	ONLY FAMILY ORIENTATED	NO	4/12/15		blutton@p		
2020			O Restaurant	\$3,025.00	✓	ONLY FAMILY ORIENTATED	NO			blutton@p		
2015			O Liquor Store	\$910.00	✓	N/A	NO	9/13/2015		lmhav@cor		
Deed			O Hotel	\$5,000.00	✓	PREMISES HOLDS AN ENTER	NO	3/2/2019		n/a		
Deed			O Restaurant w/Off	\$2,420.00	✓	NO ENTERTAINMENT PERM	NO	1/22/2019		n/a		
2017			O Liquor Store	\$910.00	✓	N/A	NO	2/8/2016		astorhomet		
2019			O Liquor Store	\$910.00	✓	N/A	NO	1/26/2018		n/a		
2019			O Restaurant	\$3,025.00	✓	ONLY FAMILY ORIENTATED	NO			alfaomegal		
Deed			O Restaurant	\$1,455.00	✓	PREMISES HOLDS AN ENTER	NO	4/7/2016		clickett@a		
2012			O Liquor Store	\$910.00	✓	N/A	DRIVE-IN WINDOW	5/21/2018		Bloss401@r		
2015			O Restaurant	\$1,455.00	✓	NO ENTERTAINMENT PERM	NO			pjwilson19		
2024			O Restaurant	\$1,455.00	✓	PREMISES HOLDS AN ENTER	NO	11/6/2018		ddmlee@y		
2022			O Liquor Store	\$910.00	✓	N/A	NO			ThiTh61@		

HOW TO FIX THE PROBLEM (STRATEGY)

Identify

- Identify how they stored their data.
- Identify all forms used for inspection.
- Identify areas that can be broken up into section based on cluster of establishments.

Conversion

- Converted all data into feature class or tables.
- Converted all paper forms into tables and stored them in geodatabase and SDE.

Design

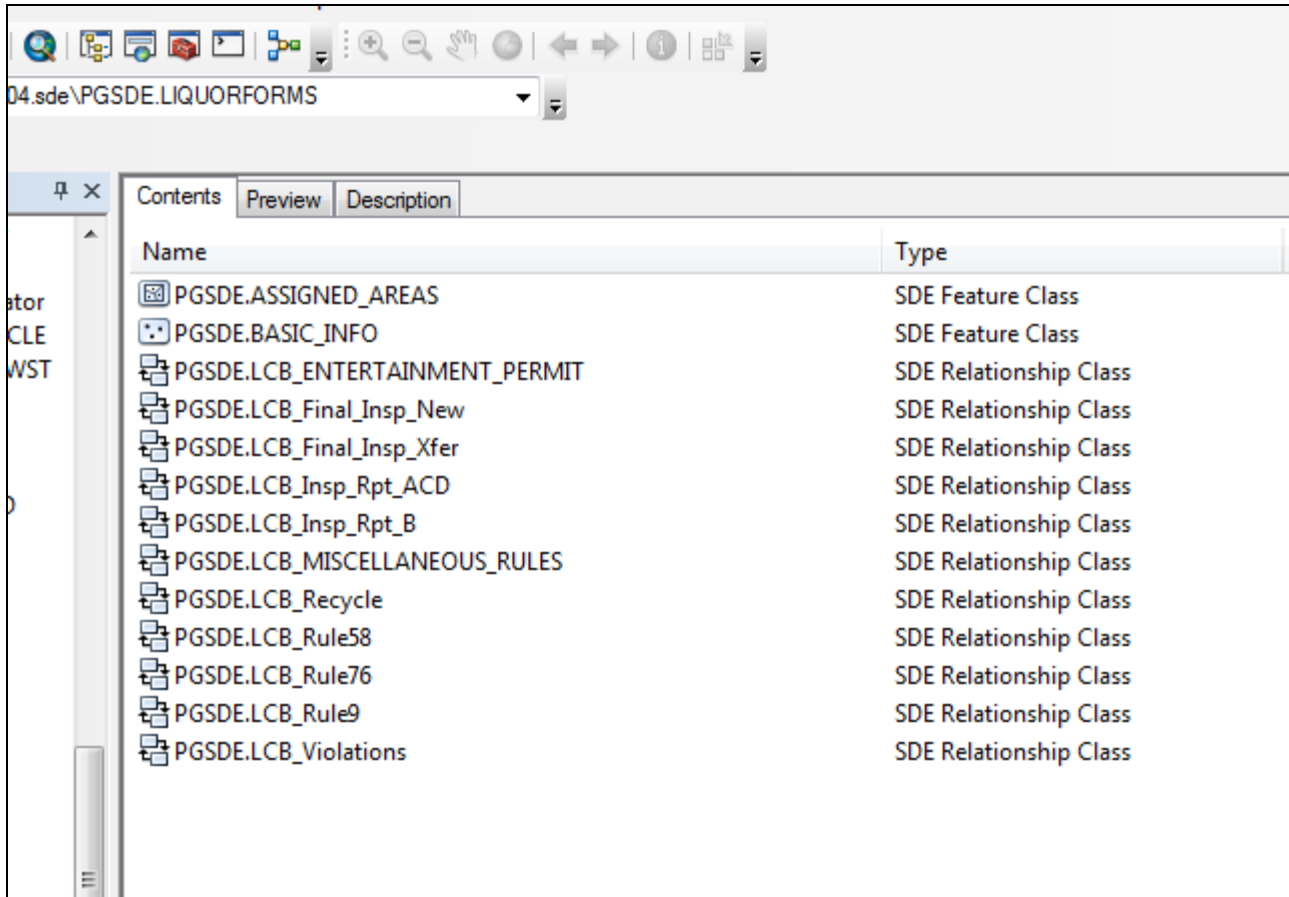
- Design a database using File Geodatabase and SDE.
- Create multiple tables as forms to store inspection data, using GUID to link. Establishments and forms.
- Design a web app that will hold all the data for viewing (Dashboard) and reporting purpose.

Create

- Created 21 Areas that each inspectors will be allocated by admins. These areas will also be used as a way to
- Created a web application that will let ESRI Collector will use
- Create a web app using ArcGIS online that serves as dashboard. This app will also update data by admins.
- Created relationship links between Establishments and form tables and published the form tables along with Establishments.



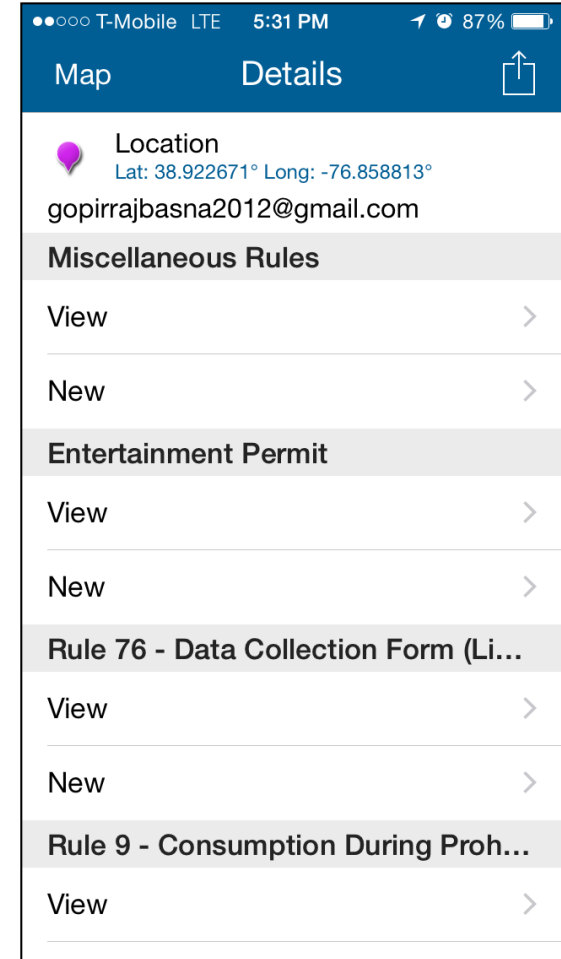
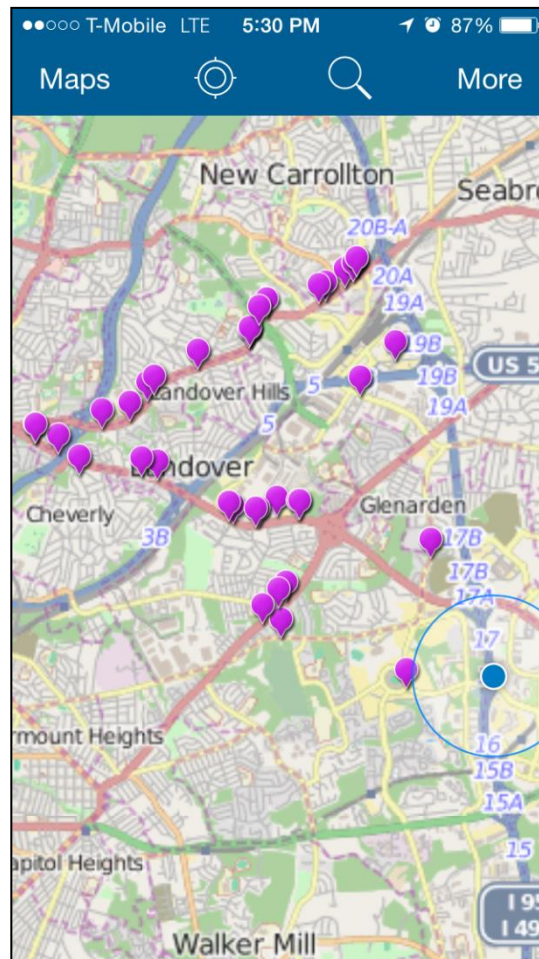
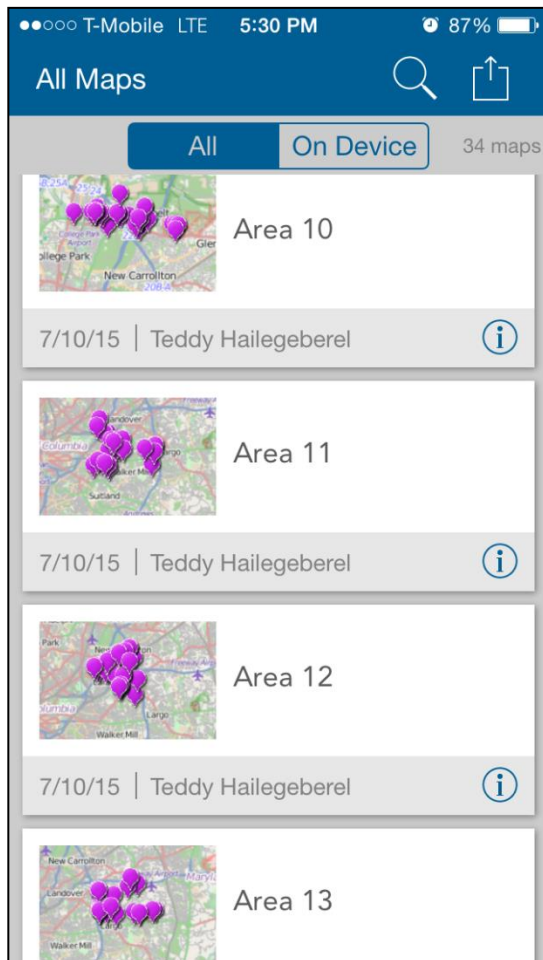
CREATED DATABASE – WITH RELATIONSHIP



04.sde\PGSDE.LIQUORFORMS

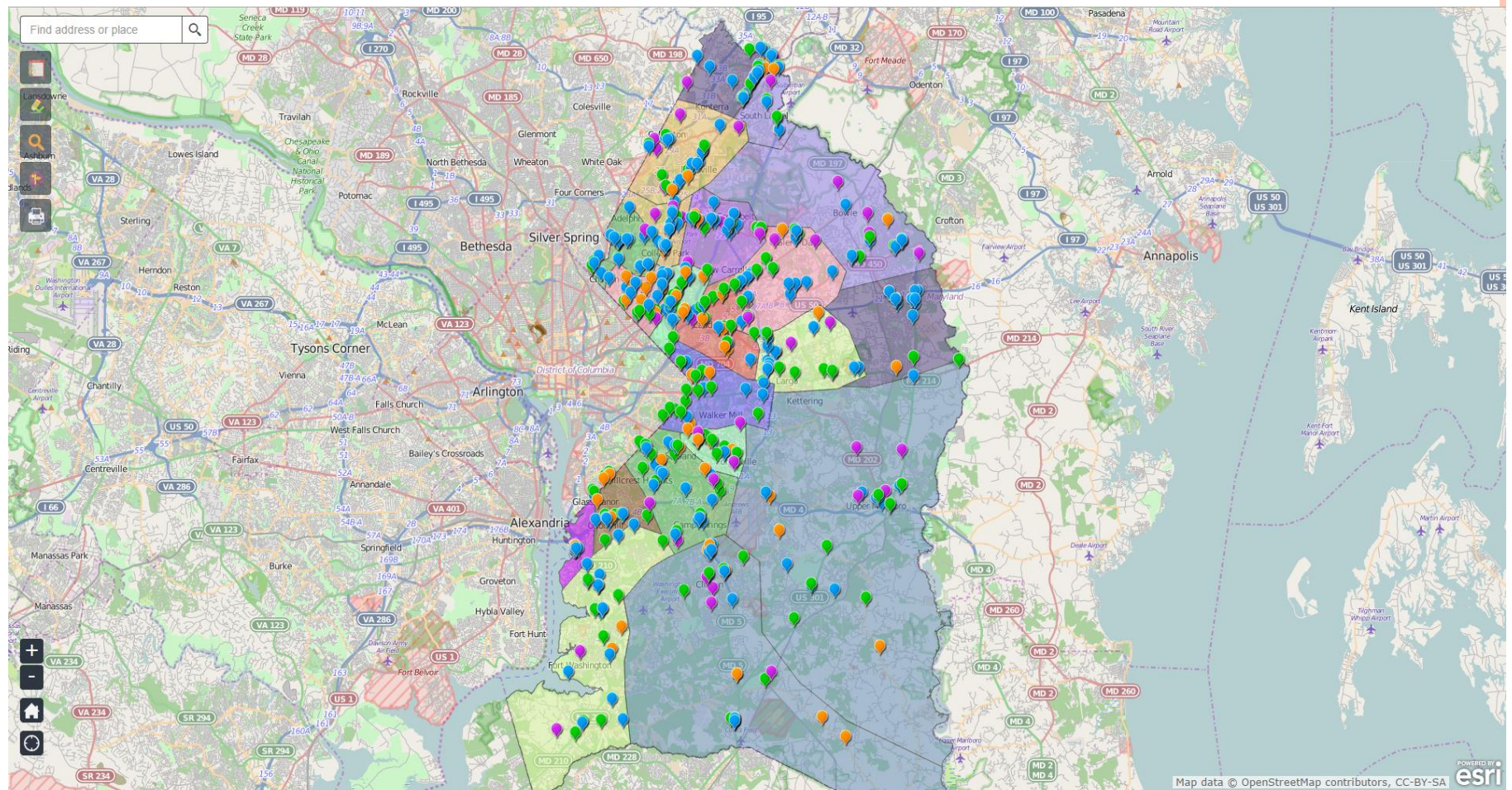
Name	Type
PGSDE.ASSIGNED_AREAS	SDE Feature Class
PGSDE.BASIC_INFO	SDE Feature Class
PGSDE.LCB_ENTERTAINMENT_PERMIT	SDE Relationship Class
PGSDE.LCB_Final_Insp_New	SDE Relationship Class
PGSDE.LCB_Final_Insp_Xfer	SDE Relationship Class
PGSDE.LCB_Insp_Rpt_ACD	SDE Relationship Class
PGSDE.LCB_Insp_Rpt_B	SDE Relationship Class
PGSDE.LCB_MISCELLANEOUS_RULES	SDE Relationship Class
PGSDE.LCB_Recycle	SDE Relationship Class
PGSDE.LCB_Rule58	SDE Relationship Class
PGSDE.LCB_Rule76	SDE Relationship Class
PGSDE.LCB_Rule9	SDE Relationship Class
PGSDE.LCB_Violations	SDE Relationship Class

INSPECTION AREAS ON ESRI COLLECTOR APP



- ESRI Collector App allows inspector to select area that is assigned to them and they can submit forms directly over the app. This will reduce paper work and travel time for inspector.

DASHBOARD APP WITH TOOLS



- Dashboard app will show admin where all establishments are located and has features where admin can assign areas to inspectors.



DASHBOARD APP TOOLS

Options

Zoom to

Clear Selection

Refresh

Establishments With Issued Licenses

Assigned Inspector Areas

Violations

Rule 9 - Consumption During Prohibited Hours

Rule 76 - Data Collection Form (Liquor Delivery)

Rule 58 - Data Collection - For Restaurants

Recycling Program/Number of Employees

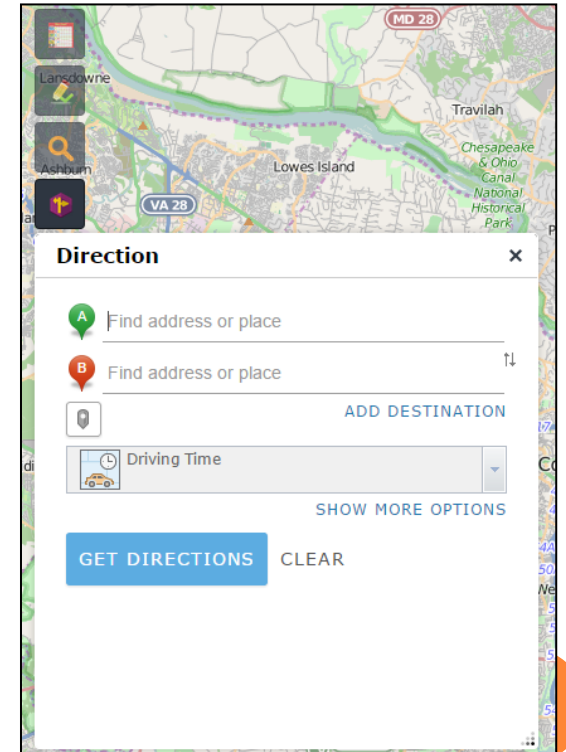
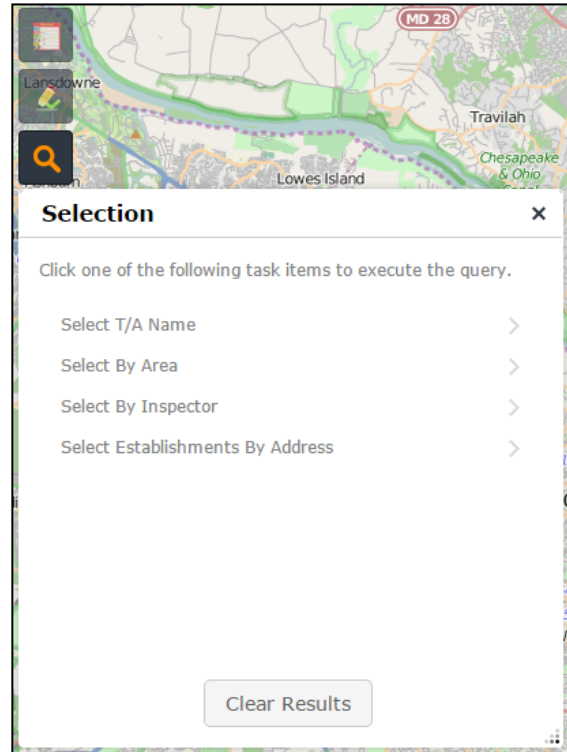
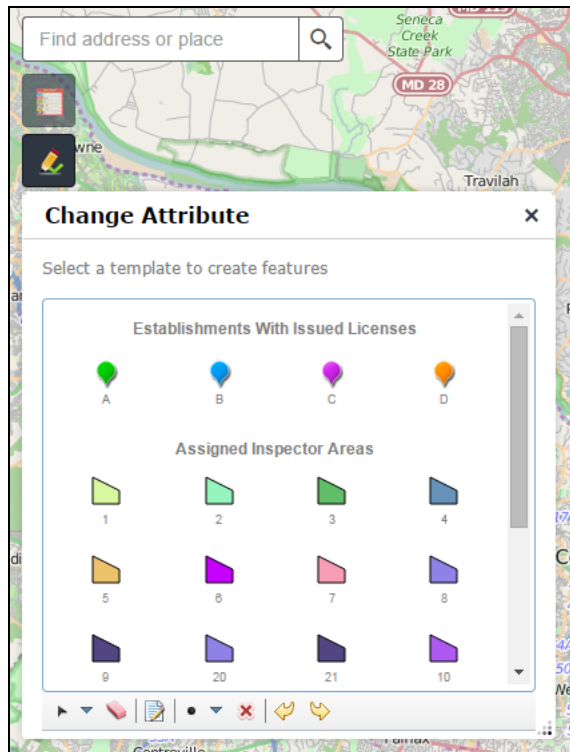
Inspector's Report - (A, C, & D)

Inspector

License No.	License Type	License Code	T/A Name	CR	department id	legislative district number	councilmanic district number	corporate name	address	geocoded address	city	zip code	lease type	telephone	tasting	sunday sales permit?	on-off sales	description
315	B	BL+	Gee's	10684900	W06832570	47A	District 5	G & E Enterprises, LLC	3415 52nd Avenue	3415 52ND AVE, 20781	Cheverly	20781	Deed	301-927-2582	None	Yes	Both	Restaurant w/Off Sale
806	B	BLX	The Walrus Oyster & Ale House	15682954	W15700388	26	District 8	Oyster Bar Management, LLC	152 Waterfront Street	152 WATERFRONT ST, 20745	National Harbor	20745			None	Yes	On	Restaurant

4

645 features 0 selected



CHALLENGES

- Setting up standards when deciding on how or what forms are. We went through a few iterations of database design deciding to put all the data into one table vs breaking out all the forms into different tables.
- We had to make sure it was user friendly. We could not make assumption “inspectors will figure out how to use it”.
- E-mail violations
- Data use by inspectors

LESSON LEARNED

- In the future we need to make sure all fields are set to text. We found out it was best to have all fields in text format because it was easy to manage for backend perspective.
- All fields should be drop down options. It will reduce errors from users.
- We are still learning and are open to suggestions.



WHAT'S NEXT

- For admins we are currently coming up with easy ways to manage their data. Currently they have no GIS personnel who can manage it fulltime. Thus we have come up with a web form so they can view their data directly from our SDE server.
- Also we are in the process of adding a feature where they can change or manipulate their data directly from a web site.
- We are also creating a .py script for report of all inspected establishments and create excel/csv file for admins.
- Also we need to find a way to e-mail violation to establishments.



CONNECTING TO A DATABASE: PHP

Prince George's County Liquor Board Inspection Forms

[Select Inspection Form to Complete](#)

Select a Form ▼ Enter

OR

[View Previous Inspection Records](#)

Select a Table ▼ Enter
Select a Table
Final Inspection of Licensced Premise (New License)
Final Inspection of Licensced Premise (Transfer)
Inspection of Licensced Premise (Renewal)



CONNECTING TO A DATABASE: PHP

Prince George's County Liquor Board Inspection Forms

FINAL INSPECTION OF LICENSED PREMISE (NEW LICENSE)

Location Information

T/A:

Unit: Street Name:

City: State: Zipcode:

Contact Information

Telephone: () -

Fax: - -

Email:

Ammenity Type	Yes	No	Size	Amount	Restaurant Access	Sidewalk Access
Pool Tables	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="text"/>		
Complete Kitchen Facilities	<input type="checkbox"/>	<input checked="" type="checkbox"/>				
Menu	<input type="checkbox"/>	<input checked="" type="checkbox"/>				
Dance Permit	<input checked="" type="checkbox"/>	<input type="checkbox"/>				
Drive In Windows	<input checked="" type="checkbox"/>	<input type="checkbox"/>				
Juke Box	<input checked="" type="checkbox"/>	<input type="checkbox"/>				
Stage	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="text"/>			
Outdoor Patio	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>		<input type="text" value="Select"/>	<input type="text" value="Select"/>

Inspector Name

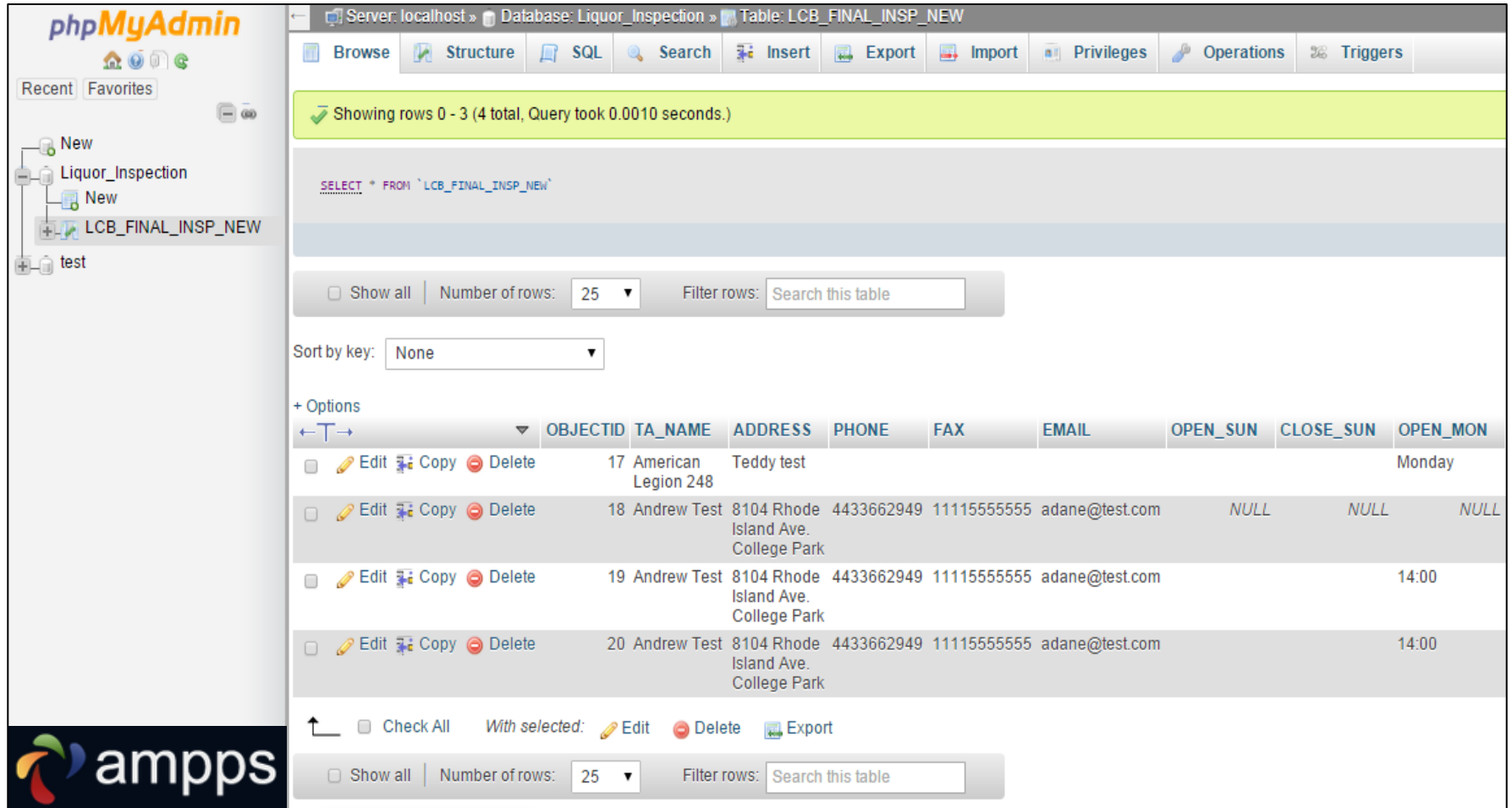
Owner/Manager Name

Date

Submit

Reset

CONNECTING TO A DATABASE: PHP



The screenshot displays the phpMyAdmin web interface. The left sidebar shows the database structure: 'Liquor_Inspection' with a sub-entry 'LCB_FINAL_INSP_NEW'. The main panel shows the table 'LCB_FINAL_INSP_NEW' with a query result of 4 rows. The table has columns: OBJECTID, TA_NAME, ADDRESS, PHONE, FAX, EMAIL, OPEN_SUN, CLOSE_SUN, and OPEN_MON. The data rows are as follows:

OBJECTID	TA_NAME	ADDRESS	PHONE	FAX	EMAIL	OPEN_SUN	CLOSE_SUN	OPEN_MON
17	American Legion 248	Teddy test						Monday
18	Andrew Test	8104 Rhode Island Ave. College Park	4433662949	11115555555	adane@test.com	NULL	NULL	NULL
19	Andrew Test	8104 Rhode Island Ave. College Park	4433662949	11115555555	adane@test.com			14:00
20	Andrew Test	8104 Rhode Island Ave. College Park	4433662949	11115555555	adane@test.com			14:00

The interface includes standard database management tools like Browse, Structure, SQL, Search, Insert, Export, Import, Privileges, Operations, and Triggers. The bottom of the interface shows the 'ampps' logo.



CONNECTING TO A DATABASE: PHP

Liquor Inspection Information: Final Inspection (New)

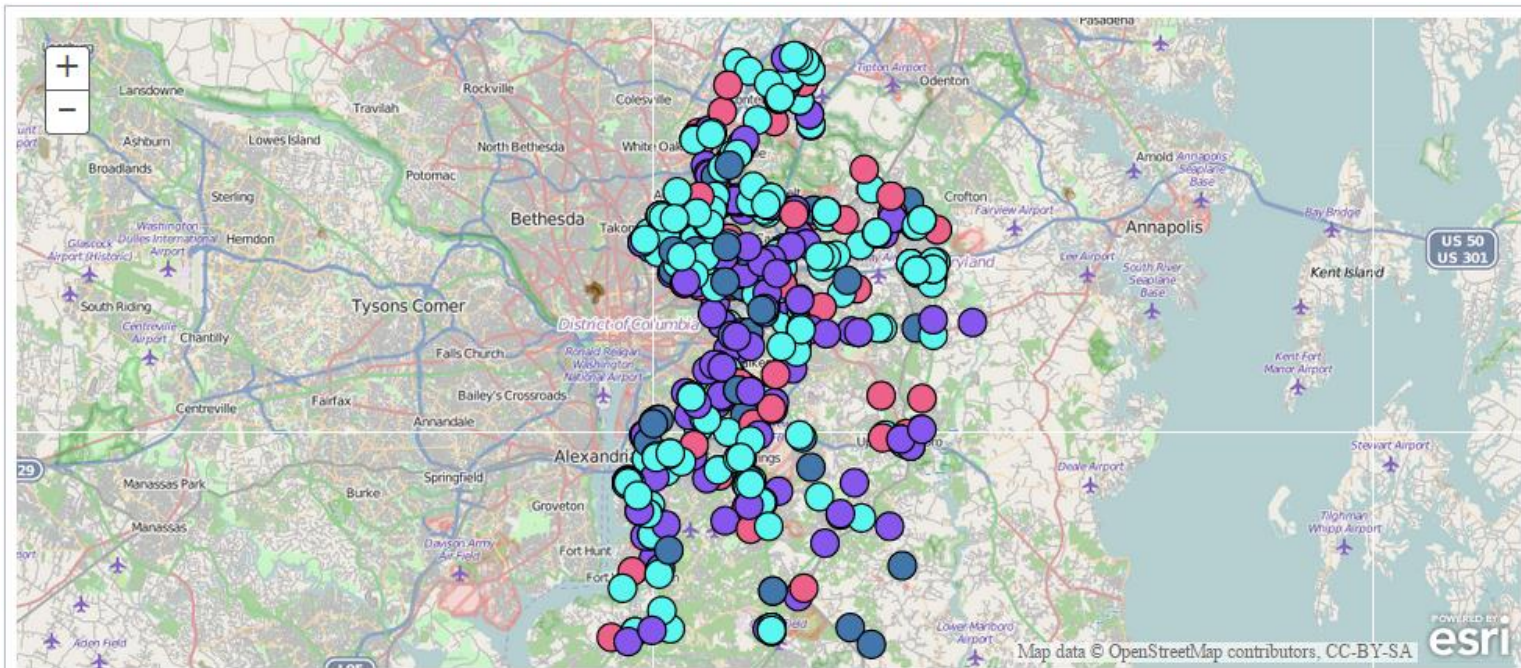
Object ID	TA Name	Address	Phone	Fax	Email	Sunday Open	Sunday Close	Monday Open	Monday Close	Tuesday Open	Tuesday Close	Dining Rooms	Dining Size	Dining Tables	Lounge Tables	Bar Tables	Dining Booths
17	American Legion 248	Teddy test						Monday	8:30			0		0	0	0	0
18	Andrew Test	8104 Rhode Island Ave. College Park	4433662949	11115555555	adane@test.com												
19	Andrew Test	8104 Rhode Island Ave. College Park	4433662949	11115555555	adane@test.com			14:00	23:00	15:00	23:00	1	20 sq. ft.	3	4	4	4
20	Andrew Test	8104 Rhode Island Ave. College Park	4433662949	11115555555	adane@test.com			14:00	23:00	15:00	23:00	1	20 sq. ft.	3	4	4	4



CONNECTING TO A DATABASE: REPRESENTATIONAL STATE TRANSFER















Establishments With Issued Licenses (645 features, 4 selected)										Options ▼
License No.	License Type	CR	Department ID	Legislative District Number	Councilmanic District Number	Corporate Name	Address	Geocoded Address	City	Default Sort Order
315		10684900	W06832570	47A	District 5	G & E Enterprises, LLC	3415 52nd Avenue	3415 52ND AVE, 20781	Ch	Show Selected Records
806		15682954	W15700388	26	District 8	Oyster Bar Management, LLC	152 Waterfront Street	152 WATERFRONT ST, 20745	National Harbor	20745
619		14698376	W13927306		Unknown	Soulent LLC	5124 Baltimore Avenue	5124 BALTIMORE AVE, 20781	Hyattsville	20783
104		11839222	W10384758	27B	District 9	MANAS, LLC	10104 Croom Road	10104 CROOM RD, 20772	Upper Marlboro	20772
585		7354456	D03917168	23B	District 9	Pineapple Alley Catering, Inc.	8714 Rosaryville Road	8714 ROSARYVILLE RD, 20772	Upper Marlboro	20772
554		13722368	D10144814	24	District 7	NS Choice Mart, Inc	2130 Brooks Drive	2130 BROOKS DR, 20747	Forestville	20747
804		15465838	D15610090	26	District 9	Daisy's Grill Restaurant	8503-5 Oxon Hill Road	8503 OXON HILL RD, 20744	Ft. Washington	20744
187		11231804	W07466204	22	District 3	Alamo Mexican Restaurant LLC	5508-14 Kenilworth Avenue	5508 KENILWORTH AVE, 20737	Riverdale Park	20737

CONNECTING TO A DATABASE: REPRESENTATIONAL STATE TRANSFER



Establishments With Issued Licenses (645 features, 3 selected)										
License No.	License Type	T/A Name	CR	Department ID	Legislative District Number	Councilmanic District Number	Corporate Name	Address	Geocoded Address	Default Sort Order
315		Gee's	10684900	W06832570	47A	District 5	G & E Enterprises, LLC	3415 52nd Avenue	3415 52N AVE, 2078	Show Selected Records
806		The Walrus Oyster & Ale House	15682954	W15700388	26	District 8	Oyster Bar Management, LLC	152 Waterfront Street	152 WATERFRONT ST, 20745	Clear Selection
619		Under the Coconut Tree	14698376	W13927306		Unknown	Soulent LLC	5124 Baltimore Avenue	5124 BALTIMORE AVE, 20781	Show/Hide Columns
104		Moore's Country Store	11839222	W10384758	27B	District 9	MANAS, LLC	10104 Croom Road	10104 CROOM RD, 20772	

CONNECTING TO A DATABASE: REPRESENTATIONAL STATE TRANSFER

	OBJECTID	TA_NAME	ADDRESS	TELEPHONE	ON_OFF	GROWLERS
	1061	Franklin's	5121-23 Baltimore Avenue	301-927-2740	On	N
	857	Grizzly's	9544 Crain Highway, Unit #1	301-599-0505	On	N
	1037	Schreiber's Country Store	4421 Wheeler Road	240-838-5487	Both	N
	898	Mama Stella's Pasta House	7918 Old Branch Avenue	301-868-3057	Both	N
	984	Applebee's (Forestville)	3447 Donnel Drive	301-516-7800	On	N
	867	Mile High Restaurant	6420 Aaron Lane	301-856-5800	Both	N
	795	Penn Mar Liquors	3022 Donnell Drive	301-735-4030	Off	N
	673	Blue Sky Liquor	6430 Central Avenue	301-336-7372	Off	N
	689	Liquor City	9115 Annapolis Road	301-577-9190	Off	N
	947	Clinton American Legion Post 259	9122 Piscataway Road	301-868-2550	On	N
	832	Tucker's Liquors	8100 Old Alexander Ferry Road	301-868-4278	Off	N
	780	Freddie's Liquor Store	7700 Marlboro Pike	301-735-9480	Off	N
	927	Szechwan Hunan	4115 Branch Avenue	301-423-8988	Both	N
	679	Central Avenue Liquors	6115 Central Avenue	301-333-1990	Off	N



QUESTIONS?

