California VGI Working Group – Workshop 7

Data analysis of Policy Recommendations Survey

June 4, 2020

Recap of Policy Recommendations survey

Policy Recommendations in the VGI Working Group

- **109 policy recommendations, with detailed input**
  - Description
  - How success looks like
  - Leading agency
  - Submitting party
  - Etc.

- **Policy survey to answer three questions (assign 1-5 score)**
  - **Q1 – Agree / disagree:** "Do you agree or disagree that this recommendation will advance VGI in California?"
  - **Q2 – Clarity:** "How clear, understandable, and policy ready is this recommendation?"
  - **Q3 – Relevance:** "Q3. How critical and relevant is this policy to meeting your organization's own VGI objectives?

> 3000+ scoring entries on policy recommendations.
> How do we make sense of that?!

ENGIE
Impact

**Two methods for
survey data analysis**

Three principles to analyze the responses from the survey

Overview

1. Use average scoring (arithmetic mean) > Accounts for all opinions

2. Use standard deviation > Reflects divergence in opinions

3. Define 5 classes of policy recommendations > Distinguish between "*convergence*" and "*agreement*"

| Strong Convergence, Agree	Strong convergence, Disagree	
Broad convergence, Agree	Broad convergence, Disagree	Divergence / Unclear

ENGIE
Impact

Two methods to classify the responses from the survey

Method 1: Focus on Q1 only

For every policy recommendation
1. Use average (arithmetic mean) of scoring for Q1
2. Use standard deviation of scoring for Q1
3. Define 5 classes

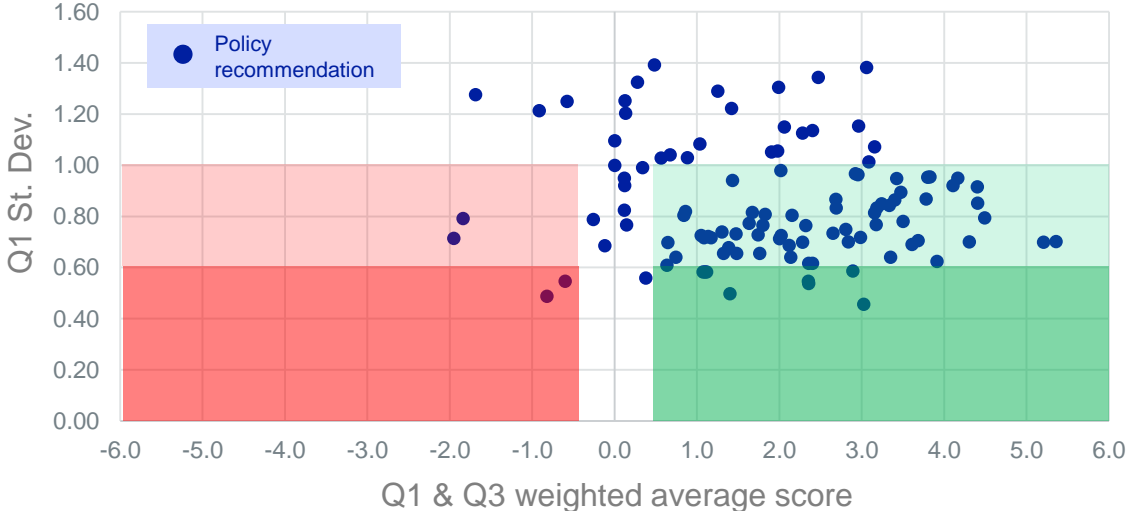| Class	Q1 Average	Q1 St. Dev.
Strong convergence, Agree	> 3.2	< 0.6
Broad convergence, Agree	> 3.2	0.6 < X < 1
Strong convergence, Disagree	< 2.8	< 0.6
Strong convergence, Disagree	< 2.8	0.6 < X < 1
Divergence / Unclear	all other	all other
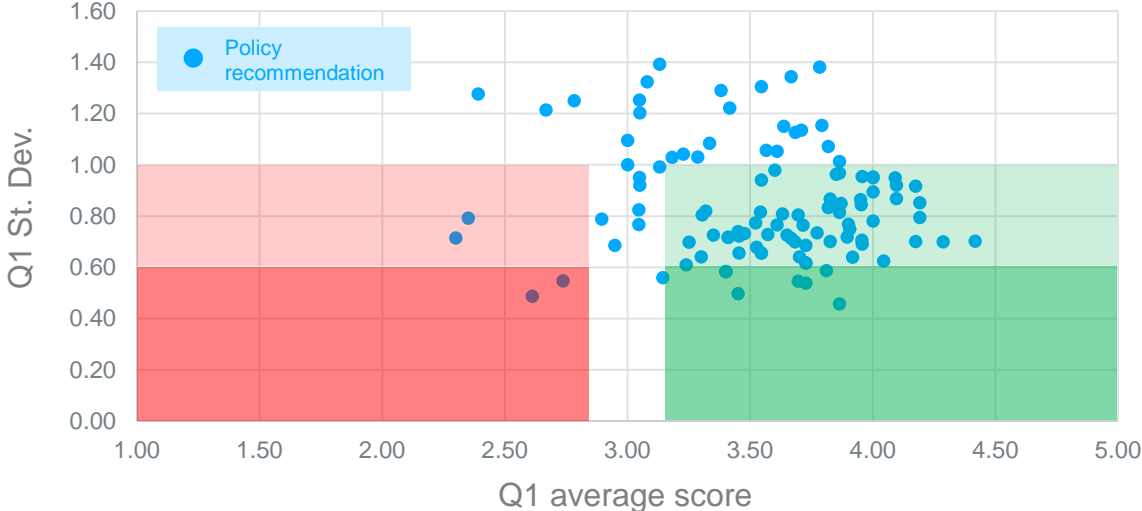
Method 2: Focus on Q1 & Q3

For every policy recommendation
1. Translate average (arithmetic mean) of scoring for Q1 [1, 5] to weights [-2,2]
2. Use average (arithmetic mean) of scoring for Q3
3. Multiple Q1 weight & Q3 scoring: Q1 weight [-2,2] x Q3 score [1,5] = [-10,10]
4. Use standard deviation of scoring for Q1
5. Define 5 classes

Class	Q1 & Q3 Weighted Average	Q1 St. Dev.
Strong convergence, Agree	> 0.5	< 0.6
Broad convergence, Agree	> 0.5	0.6 < X < 1
Strong convergence, Disagree	< -0.5	< 0.6
Strong convergence, Disagree	< -0.5	0.6 < X < 1
Divergence / Unclear	all other	all other

Classification of Policy Recommendations

Strong Convergence, Agree		Strong convergence, Disagree		Broad convergence, Agree		Broad convergence, Disagree		Divergence / Unclear	
Q1 Method	Q1 & Q3 Method	Q1 Method	Q1 & Q3 Method	Q1 Method	Q1 & Q3 Method	Q1 Method	Q1 & Q3 Method	Q1 Method	Q1 & Q3 Method

Strong Convergence, Agree

Q1 Method	Q1 & Q3 Method
2.08	2.08
3.02	3.02
6.06	6.06
7.05	7.05
9.02	9.02
10.12	10.12
10.13	10.13
10.14	10.14

Strong convergence, Disagree

Q1 Method	Q1 & Q3 Method
8.03	8.03
10.06	10.06

Broad convergence, Agree

Q1 Method			Q1 & Q3 Method		
1.01	3.03	8.01	1.01	3.03	8.01
1.03	3.04	9.01	1.03	3.04	9.01
1.07	3.05	9.03	1.07	3.05	9.03
1.08	3.06	10.01	1.08	3.06	10.01
1.09	3.07	10.02	1.09	3.07	10.02
1.1	4.03	10.03	1.1	4.03	10.03
1.11	4.05	10.04	1.11	4.05	10.04
1.13	5.02	10.07	1.13	5.02	10.07
1.14	5.03	10.08	1.14	5.03	10.08
1.15	6.04	10.09	1.15	6.04	10.09
1.18	6.07	10.15	1.18	6.07	10.15
1.19	6.08	11.03	1.19	6.08	11.03
1.2	6.09	11.04	1.2	6.09	11.04
2.01	6.1	11.05	2.01	6.1	11.05
2.02	6.11		2.02	6.11	
2.04	7.03		2.04	7.03	
2.07	7.04		2.07	7.04	
2.09	7.06		2.09	7.06	
2.1	7.07		2.1	7.07	
2.11	7.08		2.11	7.08	
2.15	7.09		2.15	7.09	
2.17	7.1		2.17	7.1	
2.2	7.12		2.2	7.12	
2.21	7.13		2.21	7.13	
2.24			2.24		

Broad convergence, Disagree

Q1 Method	Q1 & Q3 Method
10.1	10.1
10.11	10.11

Divergence / Unclear

Q1 Method		Q1 & Q3 Method	
1.02	3.01	1.02	3.01
1.04	4.01	1.04	4.01
1.05	4.02	1.05	4.02
1.06	4.04	1.06	4.04
1.12	5.01	1.12	5.01
1.16	6.01	1.16	6.01
1.17	6.02	1.17	6.02
2.03	6.03	2.03	6.03
2.05	6.05	2.05	6.05
2.06	7.01	2.06	7.01
2.12	7.02	2.12	7.02
2.13	7.11	2.13	7.11
2.14	8.02	2.14	8.02
2.16	10.05	2.16	10.05
2.18	11.01	2.18	11.01
2.19	11.02	2.19	11.02
2.22		2.22	
2.23		2.23	

Participates **converged on agreeing** with **71** recommendations

Participants **converged on disagreeing** with **4** recommendations

Participants expressed **divergent opinions** on **34** recommendations

Thank you