Information Item

DATE: August 21, 2015

TO: Technical Advisory Committee

PREPARED BY: Steve Peterson, Planning Analyst (651-602-1819)

SUBJECT: Regional Solicitation Update

With the recent programming of FY 2017-2019 funds, Metropolitan Council Staff is now turning its attention to the 2016 Regional Solicitation, which will program funds for fiscal years 2020-2021.

At this time, two handouts are provided:

1) The draft 2016 Regional Solicitation Schedule. TAB will be awarding funds in January of 2017.
2) 2014 Regional Solicitation Criteria Sensitivity Analysis. As requested by TAB, the impact of each criterion within eight application categories has been determined.

* There is no analysis of Transit Reconstruction/Modernization, as there was only one application completed for that category.

As the timeline, shows, TAC will see agenda items related to the 2016 Regional Solicitation for the next several months.

Draft 2016 Regional Solicitation Schedule

DATE	PROCESS
July	Survey applicants, scorers, F&PC and TAC members, TAB on previous solicitation.
August	Staff evaluate previous solicitation scoring. Staff review survey and summarize results.
August 20/Sept. 16	F&PC/TAB - Present Scoring Criteria Sensitivity Analysis.
Sept 17/Oct 21	F&PC/TAB review survey results. Introduce changes to Introduction and Qualifying Criteria sections.
Oct 15/Nov 18	F&PC/TAB discusses changes to measures for roadway applications.
Nov 19/Dec 16	F&PC/TAB discusses changes to measures for bike/ped applications and transit applications.
Dec 17/Jan 20	F&PC/TAB wrap-up discussion on equity measures and multi-modal measures.
January 20, 2016	TAB – Public presentation on draft 2016 regional solicitation package
January 21, 2016	TAC F&PC reviews the draft 2016 regional solicitation package. The draft is forwarded to TAC.
February 3, 2016	TAC reviews the draft 2016 regional solicitation package. Public comment closes February 10.
February 17, 2016	TAB reviews the draft 2016 solicitation package.
February 18, 2016	TAC F&PC reviews the list of comments and staff responses, and may recommend modifying the draft solicitation package before recommending adoption of the final 2016 regional solicitation package to the TAC.
March 2, 2016	TAC reviews the public comments, staff responses and any revisions from the TAC F&PC. The TAC may also modify the solicitation package before forwarding it to the TAB for adoption as the final 2016 regional solicitation package. Recommend functional classification map.
March 14, 2016	TAB presents the draft 2016 regional solicitation to the Met Council as an information item.
March 16, 2016	TAB reviews the revised 2016 solicitation package recommended by the TAC. The TAB forwards the adopted 2016 regional solicitation package to the Met Council for concurrence. TAB adopts the regional roadway functional classification map identifying eligible “A” minor arterials.
March 28, 2016	The Metropolitan Council’s Transportation Committee reviews the 2016 solicitation package and recommends it to the Metropolitan Council for concurrence.
April 13, 2016	The Metropolitan Council concurs with TAB adoption of the 2016 regional solicitation package.
March – May 2016	Online application set-up and testing
May 18, 2016	**TAB solicits for Regional Solicitation projects.** Staff sends announcements to local governments and other organizations and directs interested applicants to the Met Council website where all the solicitation materials are accessible.
May 19, 2016	TAC F&PC names project scoring group chairs and begins staffing the scoring groups.
May 2016	Met Council and TAB host workshops on the Regional Solicitation applications. Staff describes each program, eligibility requirements and scoring criteria and answers questions.
June 30, 2016	Deadline for staffing the project scoring groups.
July 15, 2016	**Regional Solicitation applications are due by 4:00 PM.**
July 18 through August 10, 2016	Staff logs in all the applications and reviews the qualifying criteria responses of all applications. Staff meets with the chair of each scoring group to discuss the qualifying criteria review, and may consult with the FHWA field office. Staff prepares a report for the TAC F&PC. Staff notifies the applicants if their project appears not to meet the qualifying criteria and invites them to the TAC F&PC meeting to defend their application.
August 18, 2016	Staff presents the list of projects that may not meet the qualifying criteria and applicants may defend their applications. The TAC Funding and Programming Committee votes on each qualifying issue and reports their decisions to the TAC at their August meeting.
Aug 22 - Oct 7, 2016	Scoring groups meet and evaluate the applications. They develop ranked lists of projects.
October 20, 2016	**The TAC F&PC approve the ranked lists of projects and make them available on the Met Council website.** Notify applicants that the scores are available and requests for scoring reevaluations of specific criteria can be submitted.
October 31, 2016	Scoring re-evaluation requests are due.
October 31 through November 4, 2016	Staff reviews all the scoring reevaluation requests, consults with the individual scorer and chair and prepares a report for TAC F&PC.
November 17, 2016	The TAC F&PC discusses the scoring reevaluation report prepared by staff. The TAC F&PC votes on all scoring reevaluations and adjusts the project scores and rankings if necessary. Final scores are forwarded to the TAC and TAB for information.
November 21 through December 9, 2017	Staff develops funding options for the modal categories based on anticipated available funding in the programs, adopted procedures and guidance from the TAB.
December 15, 2017	TAC F&PC considers the funding options presented by staff and votes to eliminate, modify or create additional options and forwards them to the TAC. Additional TAC F&PC meeting(s) may be necessary to develop funding options.
January 4, 2017	TAC reviews the funding options forwarded by TAC F&PC and may make adjustments. TAC forwards the options to the TAB Programming Committee.
January 18, 2017	**TAB vote to award funds and direct staff to include them into the draft 2018-2021 TIP.**

Transportation Advisory Board

of the Metropolitan Council of the Twin Cities

Information Item

DATE: August 20, 2015

TO: TAC Funding and Programming Committee

PREPARED BY: Steve Peterson, Planning Analyst (651-602-1819)
Jessica Schoner, Planning Intern (651-602-1961)

SUBJECT: Sensitivity Analysis of Regional Solicitation Criteria

This information item presents a sensitivity analysis of the scoring criteria used in the 2014 Regional Solicitation. Criteria were evaluated on how they impacted project rankings, which ultimately contribute to the final funding decisions. These criteria should be reviewed to see if they are performing as intended.

Evaluation Method

While each criterion measures an important concept, some are more significant than others. Criteria were assigned point values relative to their policy importance. This point value reflects how the criterion is *intended* to perform.

Tables 1 through 8 present the criteria used to evaluate each project subcategory. The criteria are sorted based on their point allocations. Each criterion is presented with three measures:

1. Number of projects changing their ranked order if the criterion is removed
2. Number of projects that are pushed above or below the TAB-approved funding line if the criterion is removed
3. Standard deviation, or a measure of how clustered or spread out project scores are, for that criterion

Number of projects changing their ranked order if a criterion is removed, and ranked position relative to TAB-approved funding decisions

The primary measure for evaluating a criterion's actual impact in the 2014 Regional Solicitation was how many projects changed their rank position within a project subcategory if that criterion is removed. Criteria that have a large impact on how the projects score relative to each other have more potential to affect a funding decision. Changes in ranked order sometimes caused a project to move above or below the TAB-approved funding line, also indicated in the tables. However, criteria that have a mismatch between their point value and their effect on project rankings (e.g., high point value but minimal impact on rankings, or vice versa) may not be performing as intended. Future meetings will discuss possible solutions to address any issues identified.

Standard Deviation

To further explore the potential for a criterion to contribute to a project's funding decision, we calculated the standard deviation of each criterion's project scores. Higher standard deviations usually suggest scores that are widely spaced, though it is possible for outliers to skew standard deviations. Lower standard deviations indicate score clustering. Standard deviation also depends on the number of points allocated to a criterion; with higher-value criteria expected to have generally higher standard deviations.

Table 1. Summary of Roadway Expansion criteria performance (23 projects submitted).

Criteria	#	Measures	Max Points	# of projects: Rank order changed	# of projects: Crossed funding line	St. Dev.	Comments
Safety	6	Cost effectiveness (project cost/crashes reduced)	150	18	1	37	
Usage	2A	Current daily person throughput	110	20	3	34	
Congestion / Air Quality	5A	Cost effectiveness (project cost/vehicle delay reduced)	100	16	1	34	
Regional Role	1A	Role in Regional Economy	90	17	1	30	
Infrastructure Age	4	Date of construction and remaining useful life	75	17	1	29	
Risk	8	Risk Assessment Form	75	10	0	11	
Equity and Housing	3B	Housing Performance Score	70	10	0	12	
Regional Role	1B	Current daily heavy commercial traffic	65	13	0	16	
Usage	2B	Forecast 2030 average daily traffic volume	65	13	0	17	
Congestion / Air Quality	5B	Cost effectiveness (project cost/kg per day reduced)	50	14	0	16	
Multimodal	7A/B	Ridership of transit routes directly and indirectly connected to the project; Bicycle and pedestrian connections	50	9	0	12	
Multimodal	7C.	Transit, bicycle, or pedestrian elements of the project	50	11	0	11	
Equity and Housing	3A	Connection to disadvantaged populations and project's benefits, impacts, and mitigation	30	6	0	5	
Regional Role	1C	Connection to Job Concentrations, Manufacturing/Distribution Locations, Educational Institutions, and local activity centers	20	4	0	5	The only possible values were 0, 12, or 20.
	TOTAL		**1,000**				

Key:	**Number changed rank order:** How many projects changed their ranked order by including that criterion	**Number crossed funding line:** How many projects would have flipped across the TAB-approved funding line by including that criterion	**St. Dev.** Standard deviation, a measure of how clustered or spread out project scores are

Table 2. Summary of Roadway Reconstruction / Modernization criteria performance (21 projects submitted).

Criteria	#	Measures	Max Points	# of projects: Rank order changed	# of projects: Crossed funding line	St. Dev.	Comments
Safety	6.	Cost effectiveness (project cost / crashes reduced)	150	12	2	44	
Usage	2A.	Current daily person throughput	110	14	0	31	
Infrastructure Age / Condition	4B.	Geometric, structural, or infrastructure deficiencies	100	8	0	5	*All projects scored ≥ 80*
Regional Role	1A.	Role in Regional Economy	90	15	1	26	
Risk	8.	Risk Assessment Form	75	12	0	19	
Equity / Housing	3B.	Housing Performance Score	70	10	1	17	
Regional Role	1B.	Current daily heavy commercial traffic	65	13	0	18	
Usage	2B.	Forecast 2030 average daily traffic volume	65	9	0	16	
Infrastructure Age / Condition	4A.	Date of construction and remaining useful life	50	11	0	13	
Congestion / Air Quality	5A.	Cost effectiveness (project cost/vehicle delay reduced)	50	5	1	13	
Multimodal	7A/B.	Ridership of transit routes directly and indirectly connected to project; Bicycle and pedestrian connections	50	12	1	12	
Multimodal	7C.	Transit, bicycle, or pedestrian elements of the project	50	12	0	13	
Equity / Housing	3A.	Connection to disadvantage populations and project's benefits, impacts, and mitigation	30	6	0	8	
Congestion / Air Quality	5B.	Cost effectiveness (project cost/kg per day reduced)	25	7	0	8	
Regional Role	1C.	Connection to Job Concentrations, Manufacturing / Distribution Locations, Educational Institutions, and local activity centers	20	4	0	6	*Scores are tightly clustered at 0, 12, and 20.*
	TOTAL		**1,000**				

Key:	**Number changed rank order:** How many projects changed their ranked order by including that criterion	**Number crossed funding line:** How many projects would have flipped across the TAB-approved funding line by including that criterion	**St. Dev.** Standard deviation, a measure of how clustered or spread out project scores are

Table 3. Summary of Roadway System Management criteria performance (10 projects submitted).

Criteria	#	Measures	Max Points	# of projects: Rank order changed	# of projects: Crossed funding line	St. Dev.	Comments
Safety	6	Cost effectiveness (project cost / crashes reduced)	200	8	0	73	
Congestion / Air Quality	5A	Cost effectiveness (project cost/vehicle delay reduced)	150	8	0	57	Most scores are either over 100 or below 30.
Usage	2A	Current daily person throughput	85	2	0	16	
Infrastructure Age / Condition	4	Date of construction and remaining useful life	75	2	0	10	
Risk	8	Risk Assessment Form	75	3	0	22	
Equity / Housing	3B	Housing Performance Score	70	0	0	9	Scores are clustered in the top half of the score range
Regional Role	1A	Role in Regional Economy	65	4	0	24	
Congestion / Air Quality	5B	Cost effectiveness (project cost/kg per day reduced)	50	4	0	16	
Multimodal	7A/B	Ridership of transit routes directly and indirectly connected to the project; Bicycle and pedestrian connections	50	2	0	11	
Multimodal	7C	Transit, bicycle, or pedestrian elements of the project	50	4	0	18	
Regional Role	1B	Current daily heavy commercial traffic	40	0	0	10	
Usage	2B	Forecast 2030 average daily traffic volume	40	0	0	7	
Equity / Housing	3A	Connection to disadvantaged populations and project's benefits, impacts, and mitigation	30	0	0	9	
Regional Role	1C	Connection to Job Concentrations, Manufacturing / Distribution Locations, Educational Institutions, and local activity centers	20	2	0	3	The only possible values were 0, 12, or 20.
	TOTAL		**1,000**				

Key:	**Number changed rank order:** How many projects changed their ranked order by including that criterion	**Number crossed funding line:** How many projects would have flipped across the TAB-approved funding line by including that criterion	**St. Dev.** Standard deviation, a measure of how clustered or spread out project scores are

Table 4. Summary of Bridges criteria performance (6 projects submitted).

Criteria	#	Measures	Max Points	# of projects: Rank order changed	# of projects: Crossed funding line	St. Dev.	Comments
Infrastructure Age / Condition / Safety	4A	Date of construction and remaining useful life	300	4	1	24	
Infrastructure Age / Condition / Safety	4B	Geometric, structural, or infrastructure deficiencies	100	0		4	The lowest score is 90.
Usage	2A	Current daily person throughput	95	2	1	27	
Risk	6	Risk Assessment Form	75	0	0	27	One outlier score (5); others scored 68 to 75.
Cost Effectiveness	7	Cost effectiveness (total project cost / total points awarded)	75	2		30	Two low scores and the rest 43 to 75
Equity / Housing	3B	Housing Performance Score	70	0	0	12	
Regional Role	1A	Role in Regional Economy	65	2	1	20	
Multimodal	5A/B	Ridership of transit routes directly and indirectly connected to the project; Bicycle and pedestrian connections	50	0	0	17	
Multimodal	5C	Transit, bicycle, or pedestrian elements of the project	50	0	0	18	
Regional Role	1B	Current daily heavy commercial traffic	40	2	1	13	
Usage	2B	Forecast 2030 average daily traffic volume	30	0	0	6	
Equity / Housing	3A	Connection to disadvantage populations and project's benefits, impacts, and mitigation	30	0	0	8	
Regional Role	1C	Connection to Job Concentrations, Manufacturing / Distribution Locations, Educational Institutions, and local activity centers	20	0	0	4	The only possible values were 0, 12, or 20.
	TOTAL		**1,000**				

Key:	**Number changed rank order:** How many projects changed their ranked order by including that criterion	**Number crossed funding line:** How many projects would have flipped across the TAB-approved funding line by including that criterion	**St. Dev.** Standard deviation, a measure of how clustered or spread out project scores are

Table 5. Summary of Multiuse Trails and Bicycle Facilities criteria performance (31 projects submitted).

Criteria	#	Measures	Max Points	# of projects: Rank order changed	# of projects: Crossed funding line	St. Dev.	Comments
Regional Role	1	Identify location of project relative to Regional Bicycle Transportation Network	200	26	2	61	
Usage	2	Cost effectiveness per population and employment	200	25	3	53	
Safety	4B	How project will correct deficiencies or address safety problem	150	17	1	8	All projects scored between 120 and 150.
Risk / Public Engagement	6	Risk Assessment Form	130	19	3	15	
Safety	4A	Gaps closed, barriers removed, and / or connectivity between jurisdictions improved by the project	100	24	2	12	
Equity / Housing	3B	Housing Performance Score	70	13	1	13	
Equity / Housing	3A	Connection to disadvantage populations and project's benefits, impacts, and mitigation	50	17	1	13	
Multimodal	5A/B	Ridership of transit routes directly and indirectly connected to the project; Pedestrian connections	50	10	0	10	
Multimodal	5C	Transit or pedestrian elements of the project	50	19	1	8	
	TOTAL		**1,000**				

Key:	Number changed rank order:	Number crossed funding line:	St. Dev.
	How many projects changed their ranked order by including that criterion	How many projects would have flipped across the TAB-approved funding line by including that criterion	Standard deviation, a measure of how clustered or spread out project scores are

Table 6. Summary of Pedestrian Facilities criteria performance (9 projects submitted).

Criteria	#	Measures	Max Points	# of projects: Rank order changed	# of projects: Crossed funding line	St. Dev.	Comments
Usage	2	Cost effectiveness per population and employment	200	6	1	47	
Safety	4B	Deficiencies corrected or safety problem addressed	180	0	0	44	
Risk	6	Risk Assessment Form	130	4	1	25	
Safety	4A	Barriers overcome, gaps filled, or system connections	120	2	0	27	
Regional Role	1	Connection to Job Concentrations, Manufacturing / Distribution Locations, Educational Institutions, and local activity centers	100	6	1	43	
Multimodal s	5A/B	Ridership of transit routes directly and indirectly connected to project; Bikeway connections	75	4	1	13	All projects scored at least 45
Multimodal	5C	Transit or bicycle elements of the project	75	0	0	14	
Equity / Housing	3B	Housing Performance Score	70	4	1	18	
Equity / Housing	3A	Connection to disadvantaged populations and project's benefits, impacts, and mitigation	50	2	0	12	7 (of 9) submissions scored 30 or 40
	TOTAL		**1,000**				

Key:	**Number changed rank order:** How many projects changed their ranked order by including that criterion	**Number crossed funding line:** How many projects would have flipped across the TAB-approved funding line by including that criterion	**St. Dev.** Standard deviation, a measure of how clustered or spread out project scores are

Table 7. Summary of Safe Routes to School criteria performance (3 projects submitted).

Criteria	#	Measures	Max Points	# of projects: Rank order changed	# of projects: Crossed funding line	St. Dev.	Comments
SRST Elements	1	Describe how the project addresses 5 E's* of SRST Program	250	0	0	15	
Safety	4B	Deficiencies corrected or safety or security addressed	150	0	0	25	
Usage	2A	Average share of student population that bikes or walks	120	0	0	46	
Safety	4A	Barriers overcome, gaps filled, or system connections	100	0	0	2	All submissions scored at least 96.
Public Engagement / Risk	6B	Risk Assessment Form	85	0	0	26	
Usage	2B	Student population within school's walkshed	80	0	0	34	
Equity / Housing	3B	Housing Performance Score	70	0	0	10	
Equity / Housing	3A	Connection to disadvantage populations and project's benefits, impacts, and mitigation	50	0	0	6	
Multimodal	5	Ridership of transit routes directly connected to the project	50	0	0	26	
Public Engagement / Risk	6A	Public engagement process	45	0	0	4	All submissions scored between 38 and 45.
	TOTAL		**1,000**				

**The 5 Es of Safe Routes to School include Evaluation, Engineering, Education, Encouragement, and Enforcement.*

Key:	**Number changed rank order:** How many projects changed their ranked order by including that criterion	**Number crossed funding line:** How many projects would have flipped across the TAB-approved funding line by including that criterion	**St. Dev.** Standard deviation, a measure of how clustered or spread out project scores are

Table 8. Summary of Transit Expansion criteria performance (12 projects submitted).

Criteria	#	Measures	Max Points	# of projects: Rank order changed	# of projects: Crossed funding line	St. Dev.	Comments
Usage	2C	Service (operating) cost effectiveness of project (per new rider)	175	2	0	45	
Emissions	4A	Total emissions reduced	133	2	0	41	
Equity / Housing	3A	Connection to disadvantage populations and project's benefits, impacts, and mitigation	130	4	1	47	
Usage	2A	Cost effectiveness of project (per rider)	105	5	0	29	
Usage	2B	Cost effectiveness of project (per new rider)	70	2	0	16	
Equity / Housing	3B	Housing Performance Score	70	0	0	9	All submissions scored above 42
Emissions	4B	Cost effectiveness (project cost / kg of emissions reduced)	67	4	0	17	
Multimodal	5A	Bicycle and pedestrian connections	50	2	0	8	
Multimodal	5B	Multimodal elements of the project	50	0	0	10	
Risk	6	Risk Assessment Form	50	0	0	11	
Regional Role	1C	Ridership of transit routes directly connected to the project	34	0	0	11	
Regional Role	1A	Connection to Job Concentrations, Manufacturing / Distribution Locations, Educational Institutions, and local activity centers	33	0	0	0	All submissions scored 33 (100%)
Regional Role	1B	Existing population within ¼ mile (bus stop) or ½ mile (transitway)	33	0	0	10	
TOTAL			**1,000**				

Key:	**Number changed rank order:** How many projects changed their ranked order by including that criterion	**Number crossed funding line:** How many projects would have flipped across the TAB-approved funding line by including that criterion	**St. Dev.** Standard deviation, a measure of how clustered or spread out project scores are