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MEMORANDUM

To: **Direct Emissions Reduction Focus Group**

From: Ross Patronsky, Senior Planner

Date: June 23, 2011

Re: Recommended Package of Proposals for Consideration by the CMAQ Project Selection Committee

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Background and Proposal Scoring

Eighteen proposals that addressed direct emissions reductions were submitted for FY 2012 – 2016 CMAQ funding. Based on the Goals and Strategies memorandum adopted at the last Group meeting, Group members scored the proposals. The detail of these scores is given in a separate table, posted to the Focus Group web page.

From this detail, the average scores of each proposal are summarized in an attached table. The table is organized in descending order of overall average total score, where "total score" means the sum of the scores for the four individual evaluation criteria. As can be seen, the average total scores range from a high of 10.6 to a low of 4.4.

In addition, a graph comparing the average total score to the average individual scores is attached. This graph indicates that two of the criteria, "Proximity to Sensitive Populations" and "Asthma Rates Near Project," are generally consistent with the average total score. The criterion, "Does Project Help Improve the Region's Public Fleets?" declines somewhat more rapidly than the average total score. The fourth criterion, "Innovative or State of the Art Technology," is not well-correlated with the average total score. This is because many of the lower-ranking projects involve emerging technologies such as electric vehicle charging stations, while the higher-ranking projects involve more proven technologies that have clearer emissions benefits.

In addition to the criteria derived from the Goals and Strategies, the Group also agreed that proposals to replace vehicles at or near the end of their useful lives should be avoided. Approving these types of proposals could encourage governments and agencies to view the CMAQ program as a fleet management program, rather than focusing on the core purposes of congestion mitigation and air quality improvement.

While the Group was interested in electric vehicle technologies, the proposals submitted were small, scattered, and not part of a larger plan to disseminate electric vehicle technology through the region. The Group agreed that funding such proposals should wait for the development of criteria to evaluate individual charging station sites, and a region-wide plan for their implementation.

Finally, the Group's discussions generated an idea for an additional project to begin retrofitting or repowering "non-traditional" diesel engines, such as marine fleets, non-road construction equipment, or intermodal equipment such as cranes. The owners of these sources have expressed some interest in CMAQ funding, but are not generally knowledgeable about federal funding regulations, CMAQ application procedures, and the like. The Illinois Environmental Protection Agency agreed to develop such a proposal, modeled along the lines of their existing school bus program. This proposal has been submitted; it is posted on the Focus Group web page. It was submitted too late to be included in the scoring, however.

Proposed Package of Projects

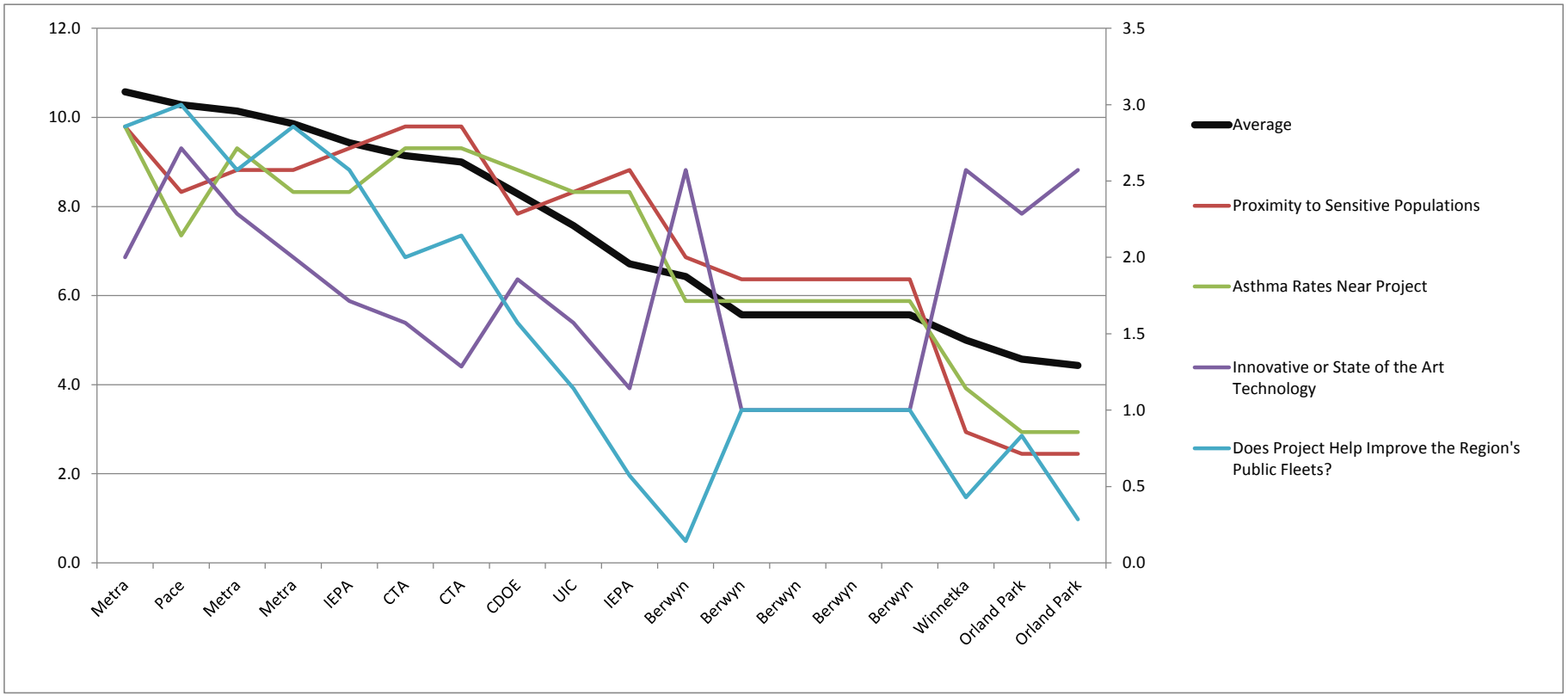
Based on the scoring and the additional considerations above, staff recommends the following proposals be adopted as a package to advance the recommendations of GO TO 2040:

CMAQ ID	Sponsor	Brief Description
DR13123744	Metra	Metra UP Automatic Engine Start-Stop System
DR13123720	Pace	Transit Diesel Engine Retrofits - 2012
DR13123745	Metra	Metra MD Locomotive Repowers
DR13123743	Metra	Metra BNSF Replace Main Engine Drive Generator
DR13123746	IEPA	Chicago Area Clean School Bus Initiative
DR01123614	CTA	Purchase a ZF TopoDyn Program
DR01123606	CTA	Retrofit of Electronic Engine Cooling Fan/System
OT01123607	CDOE	Chicago Area Alternative Fuel Deployment Project, Phase 2
	IEPA	Clean Off-Road and Marine Vessel Initiative

Implementing these proposals will improve the livability for sensitive populations, modernize the fleets of the major transit service providers in the region, and implement green technology projects. The total federal funding required to implement these proposals is $60,804,800.

As noted previously, the lower-scoring proposals not included in the package tended to be simple vehicle replacements, or were for technologies that need further research before implementing.

Direct Emission Reduction CMAQ Proposals
Qualitative Evaluation Ordered Summary

CMAQ ID	Sponsor	Brief Description	Average	Proximity to Sensitive Populations	Asthma Rates Near Project	Innovative or State of the Art Technology	Does Project Help Improve the Region's Public Fleets?	Proposal Total	Proposal Federal	cumulative federal
DR13123744	Metra	Metra UP Automatic Engine Start-Stop System	10.6	2.9	2.9	2.0	2.9	$ 460,000	$ 368,000	$ 368,000
DR13123720	Pace	Transit Diesel Engine Retrofits - 2012	10.3	2.4	2.1	2.7	3.0	$ 16,725,000	$ 13,380,000	$ 13,748,000
DR13123745	Metra	Metra MD Locomotive Repowers	10.1	2.6	2.7	2.3	2.6	$ 5,000,000	$ 4,000,000	$ 17,748,000
DR13123743	Metra	Metra BNSF Replace Main Engine Drive Generator	9.9	2.6	2.4	2.0	2.9	$ 1,150,000	$ 920,000	$ 18,668,000
DR13123746	IEPA	Chicago Area Clean School Bus Initiative	9.4	2.7	2.4	1.7	2.6	$ 5,000,000	$ 5,000,000	$ 23,668,000
DR01123614	CTA	Purchase a ZF TopoDyn Program	9.1	2.9	2.7	1.6	2.0	$ 1,116,000	$ 892,800	$ 24,560,800
DR01123606	CTA	Retrofit of Electronic Engine Cooling Fan/System	9.0	2.9	2.7	1.3	2.1	$ 7,805,000	$ 6,244,000	$ 30,804,800
OT01123607	CDOE	Chicago Area Alternative Fuel Deployment Project, Phase 2	8.3	2.3	2.6	1.9	1.6	$ 38,359,000	$ 25,000,000	$ 55,804,800
DR01123603	UIC	Emissions Reduction Program for UIC Fleet	7.6	2.4	2.4	1.6	1.1	$ 782,000	$ 625,600	$ 56,430,400
OT13123629	IEPA	Partners for Clean Air Marketing	6.7	2.6	2.4	1.1	0.6	$ 3,750,000	$ 3,000,000	$ 59,430,400
OT05123620	Berwyn	Charging Stations for Electric Vehicles	6.4	2.0	1.7	2.6	0.1	$ 47,000	$ 38,000	$ 59,468,400
DR05123739	Berwyn	Fire Dept ESDA Vehicle Replacement	5.6	1.9	1.7	1.0	1.0	$ 260,000	$ 208,000	$ 59,676,400
DR05123740	Berwyn	Fire Dept Pumper Vehicle Replacement	5.6	1.9	1.7	1.0	1.0	$ 502,000	$ 402,000	$ 60,078,400
DR05123741	Berwyn	Public Works Fleet Vehicle Replacement 1989	5.6	1.9	1.7	1.0	1.0	$ 130,000	$ 104,000	$ 60,182,400
DR05123742	Berwyn	Public Works Fleet Vehicle Replacement 1991	5.6	1.9	1.7	1.0	1.0	$ 65,000	$ 52,000	$ 60,234,400
OT02123590	Winnetka	Electric Vehicle Charging Stations - Village of Winnetka	5.0	0.9	1.1	2.6	0.4	$ 51,600	$ 37,800	$ 60,272,200
OT06123599	Orland Park	Purchase of 2 Electric Vehicles	4.6	0.7	0.9	2.3	0.8	$ 80,600	$ 64,500	$ 60,336,700
OT06123596	Orland Park	Electric Charging Station Installations at six Orland Park Locations	4.4	0.7	0.9	2.6	0.3	$ 382,200	$ 305,800	$ 60,642,500

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