

Public Body Procurement Workgroup

Report of the Public Body Procurement Workgroup on Potential Incentives for the Cement and Concrete Industries to Reduce Overall CO2 Emissions from the Manufacturing of Cement and Production of Concrete Used in Commonwealth-funded Projects

August 2023

Table of Contents

I.	Introduction	3
II.	Background	3
	Overview of Public Body Procurement Workgroup Authority and Duties	3
	Overview of SB 272	4
	Study Participants/Stakeholders	4
III.	Workgroup Meetings on SB 272	5
IV.	Summary of Information Presented to the Workgroup	6
V.	Workgroup Findings and Recommendations	9
VI.	Conclusion	10
	Appendix A. Letter to Workgroup and Text of SB 272.....	11
	Appendix B. September 19, 2022 Meeting Materials	23
	1. Agenda	
	2. Approved Meeting Minutes	
	Appendix C. November 28, 2022 Meeting Materials	32
	1. Agenda	
	2. PowerPoint Presentation from DEQ	
	3. Approved Meeting Minutes	

Appendix D. May 2, 2023 Meeting Materials	49
1. Agenda	
2. Meeting Materials	
a. Public Body Procurement Workgroup 2023 Proposed Work Plan	
b. Outline of Information Presented at the November 28, 2022 Workgroup meeting on SB 272	
c. PWG SB 272 Survey – Local Government Usage of Concrete	
3. Draft Recommendation for SB 272	
4. Approved Meeting Minutes	
Appendix E. May 16, 2023 Meeting Materials	66
1. Agenda	
2. Meeting Materials	
a. Final Recommendation for SB 272	
3. Approved Meeting Minutes	

I. Introduction

The Chair of the House General Laws Committee, Delegate James A. "Jay" Leftwich, Jr., directed the Department of General Services' (DGS') Public Body Procurement Workgroup (Workgroup) to study SB 272, patroned by Senator Ghazala Hashmi during the 2022 General Assembly session. The Workgroup was asked to review the climate impact of cement manufacturing and investigate potential incentives that could be offered to the cement and concrete industries to reduce overall CO₂ emissions from the manufacturing of cement and production of concrete used in Commonwealth-funded projects. The Chair set a deadline of December 1, 2023, for the Workgroup to submit a report with its findings and recommendations to the General Assembly.

In response to this directive, stakeholders were identified, and four Workgroup meetings were held at which SB 272 was discussed. This report summarizes the information presented to the Workgroup by stakeholders and subject matter experts and the Workgroup's findings and recommendations.

II. Background

Overview of Public Body Procurement Workgroup Authority and Duties

Item 85 of the 2022 Appropriations Act directs DGS to lead, provide administrative support to, and convene an annual public body procurement workgroup to review and study proposed changes to the Code of Virginia in the areas of non-technology goods and services, technology goods and services, construction, transportation, and professional services procurements. The Appropriations Act language specifies that that Workgroup's membership shall be composed of the following individuals or their designees:

- Director of the Department of Small Business and Supplier Diversity
- Director of the Department of General Services
- Chief Information Officer of the Virginia Information Technologies Agency
- Commissioner of the Virginia Department of Transportation
- Director of the Department of Planning and Budget
- President of the Virginia Association of State Colleges and University Purchasing Professionals
- President of the Virginia Association of Governmental Procurement

Additionally, the Appropriations Act language requires that a representative from each of the following provide technical assistance to the Workgroup:

- Office of the Attorney General's Government Operations and Transactions Division
- Staff of the House Appropriations Committee
- Staff of the Senate Committee on Finance and Appropriations
- Divisions of Legislative Services

The Appropriations Act language outlines two avenues by which bills may be referred to the Workgroup for study. First, the Chairs of the House Committees on Rules, General Laws, and Appropriations, as well as the Senate Committees on Rules, General Laws and Technology, and Finance and Appropriations, can refer legislation by letter to the Workgroup for study. Second, the Chairs of the House Committees on Rules and Appropriations, as well as the Senate Committees on Rules and Finance and Appropriations, can request that the Workgroup review procurement-related proposals in advance of an upcoming legislative session to assist in obtaining a better understanding of the legislation's potential impacts. Additionally, bills may also be referred to the Workgroup for study by the General Assembly, which can pass a bill that includes an enactment clause directing the Workgroup to study a particular topic.

Overview of SB 272

As introduced, SB 272 sought to create a performance bonus for contractors to utilize lower carbon concrete products on projects with the Department of General Services (DGS) and the Virginia Department of Transportation (VDOT). The bill also directed the Department of Environmental Quality (DEQ) to work with DGS and VDOT to develop a baseline for determining lower carbon concrete products.

The substitute bill, as passed by the Senate¹ directed DGS to convene a stakeholder work group to review the climate impact of cement production and recommend policies and practices to incentivize the reduction of CO₂ emissions in such production. The substitute bill was left in the House Agriculture, Chesapeake and Natural Resources Committee.

Study Participants/Stakeholders

The Workgroup's Appropriations Act language directs it to hear from stakeholders identified by the patron of referred legislation and other interested individuals. As such, the Workgroup's staff (Staff) contacted Senator Hashmi, the patron of SB 272, and the Chair of the House General Laws Committee, Delegate Leftwich, to solicit their input regarding stakeholders they would like included in the Workgroup's review of SB 272. The Staff compiled the names of the stakeholders identified into a stakeholder email distribution list, which it used to communicate information about the Workgroup's study of SB 272 and opportunities for public comment to the identified stakeholders. The Staff also added any interested individual to the stakeholder email distribution list upon request by such individual.

The stakeholder email distribution list was composed of the following individuals:

- The Honorable Ghazala F. Hashmi – Senate of Virginia
- The Honorable James A. “Jay” Leftwich – House of Delegates
- Chris Neidl – Co-Founder of the OpenAir Collective
- Walton Shepherd – Natural Resources Defense Council
- Nikhil Neelakantan – Engineer and Low Carbon Concrete Advocate

¹ SB 272, as substituted, passed the Senate in the 2022 General Assembly Session by a vote of 22Y, 18N

- Thomas Ballou – Department of Environmental Quality
- Jonathan Williams – Easter Associates, Inc.
- Doug Easter – Easter Associates, Inc.
- Sean M. Hutson – Office of the Attorney General
- Don Ingrassano – Titan America

III. Workgroup Meetings on SB 272

The Workgroup held four meetings during which it discussed SB 272. At its September 19, 2022 meeting, Workgroup staff introduced SB 272 and shared that the bill was before the Workgroup for study at the direction of Delegate Leftwich, Chair of the House General Laws Committee. No further action was taken.

The Workgroup began its efforts on SB 272 at its second meeting held on November 28, 2022, first hearing from Senator Hashmi. She thanked the Workgroup for the opportunity to present her bill. She explained that the bill has two main purposes, the first purpose is environmental, specifically to address the CO₂ emissions that result from cement production. The second purpose is to put Virginia in alignment with the efforts that the cement and concrete industries already are taking to reduce CO₂ emissions that result from cement production. Senator Hashmi explained that the production of cement requires extreme heat and that such heat is obtained by burning powdered coal or natural gas, and that the chemical reaction from this process releases CO₂. She shared that her goal for SB 272 and for the Workgroup's study of SB 272, is for the Workgroup to review the climate impact of cement production and investigate potential incentives that may be offered to the cement and concrete industries to reduce overall CO₂ emissions from the production of cement and concrete that is used in Commonwealth-funded projects.

Following Senator Hashmi's presentation, three stakeholders spoke to the Workgroup regarding SB 272. Eric Koehler, Director of Quality at Titan America, which operates in Virginia as Titan Virginia Ready-Mix and Roanoke Cement Company, highlighted that the organization's decarbonization team is working to find ways to decarbonize cement and concrete in all stages of production and shared that they have committed to net zero concrete by 2050. Chris Clow with Holcim Ready Mix Concrete in Virginia shared that carbon reduction is a significant challenge and goal for the entire industry and stressed the importance of allowing stakeholders to participate in the Workgroup's study. Nikhil Neelakantan with OpenAir, a volunteer-led network that aims to capitalize on opportunities to advance and accelerate CO₂ removal through collaborative advocacy and research on carbon emissions, stated the importance of the public sector leading the transition to lower carbon concrete use, citing examples of efforts made by other states. Neelakantan emphasized that existing and emerging decarbonization methods and practices are competitive economically and deliver superior quality and durability compared to conventional methods and practices.

Next, the Workgroup heard presentations from DEQ, VDOT, and DGS. Thomas Ballou, the DEQ's Air Data Analysis and Planning Manager, discussed DEQ's role in regulating cement and concrete manufacturers in Virginia explaining that the emissions that result from the cement and concrete industries come from (i) the actual process of manufacturing cement, and (ii) from the

combustion of fossil fuels, which are required to generate the extreme heat needed to produce clinker, a primary ingredient in cement. Ballou informed the Workgroup of the industries that DEQ regulates for CO₂ emissions in only two sectors: power and motor vehicles. Ballou presented a chart illustrating the latest greenhouse gases (GHG) inventory showing that in 2018 there was approximately 140 million metric tons of CO₂ emitted in Virginia, with transportation being the largest sector, followed by the power sector.

Andy Babish, VDOT's State Materials Engineer, spoke about VDOT's use of concrete and its current practices related to carbon footprint reduction. Babish explained that a recent study Balmoral Group completed for VDOT estimated that for calendar year 2022, VDOT's consumption of concrete was approximately 6% of the total estimated concrete produced in Virginia. Babish shared that VDOT allows Type IL cement, which is a newer cement that uses more limestone content than other commonly used types of cements. Type IL cement uses less energy to manufacture, thus reducing its carbon footprint by about 10%. Babish concluded by stating that VDOT works with the Virginia Transportation Research Council and the concrete industry in efforts to continue to reduce VDOT's carbon footprint.

Mike Coppa, the DGS Director of the Division of Engineering and Buildings (DEB), spoke about executive branch usage of concrete on vertical construction projects in the Commonwealth. Coppa estimated that annually executive branch agencies use approximately one-half of 1 percent of the concrete produced in Virginia on such projects.

At its third meeting, held on May 2, 2023, Sandra Gill, the DGS Deputy Director, presented an overview of the information previously shared by stakeholders and subject matter experts, noting that VDOT and DGS use very little concrete (6.5%) compared to the total production of concrete in Virginia. Gill shared that staff, in conjunction with the Virginia Association of Governmental Procurement (VAGP), conducted a survey of local governments to determine the amount of concrete used on local construction projects; however, only six responses were received. Gill concluded the overview, and the Workgroup discussed the information before it and proposed draft recommendation language.

At its fourth and final meeting, held on May 16, 2023, the Workgroup voted to approve the language of the final recommendation that it had developed at its previous meeting.

See Appendices B, C, D, and E for the meeting materials, including meeting minutes for each of the four meetings.

IV. Summary of Information Presented to the Workgroup

The Workgroup was directed to review the climate impact of cement manufacturing and investigate potential incentives that could be offered to the cement and concrete industries to reduce overall CO₂ emissions from the cement and concrete used in Commonwealth-funded projects and report its findings to the General Assembly by December 1, 2023. Below is a summary of the testimony and presentations that the Workgroup received pertaining to this task.

Understanding CO₂ emissions in the manufacturing of cement

Senator Hashmi shared with the Workgroup that the manufacturing of cement, which is used to make concrete, requires extreme heat that is achieved by burning powdered coal or natural gas. Senator Hashmi stated that the chemical reaction, as a result of burning coal or natural gas, releases CO₂ into the environment and emphasized the profound environmental impact of the process for manufacturing cement by citing statistics showing that if cement were a country, it would rank third in line for global CO₂ emissions, behind the United States and China.

Thomas Ballou, DEQ's Air Data Analysis & Planning Manager, explained that the emissions that result from the manufacturing of cement and production of concrete are twofold – the CO₂ emissions come from the actual process of manufacturing cement and from the combustion of fossil fuels, which is required to generate the extreme heat that is needed to produce clinker, a primary ingredient in cement. Ballou shared that in addition to emitting greenhouse gases (GHGs), cement and concrete manufacturers are a source of criteria pollutants, including sulfur dioxide (SO₂) and nitrogen oxides (NO_x), both of which are products of fossil fuels combustion and are regulated by the Clean Air Act.

Ballou shared that in 2021 Roanoke Cement Company, a large Virginia cement manufacturer, emitted just under 1 million tons of CO₂. He shared that in addition to the CO₂ emissions, Roanoke Cement Company also emitted approximately 2,600 tons of both criteria pollutants, SO₂ and NO_x. He stated that such criteria pollutant emissions are fairly significant, qualifying Roanoke Cement Company as a substantially regulated source of criteria pollutants and explained that the 223 remaining cement and/or concrete facilities in Virginia mostly are batching and/or handling facilities that are smaller in operations and do not produce much CO₂.

Ballou provided the Workgroup a pie chart² illustrating that in 2018 there were approximately 140 million metric tons of CO₂ emitted in Virginia, with the largest sector being transportation, followed by the power sector. He pointed out that the cement and concrete industries produced just under 1 million metric tons of CO₂, which he categorized as a fairly small component of Virginia's GHG inventory. Ballou shared that, nationally, approximately 100 cement manufacturers produce about 66 million metric tons of CO₂, which is about 10% of the total industrial emission of greenhouse gases (GHGs) in the U.S.

Current Industry Efforts to reduce CO₂ emissions

Eric Koehler of Titan America shared that Titan America's decarbonization team is increasingly working to find ways to decarbonize cement and concrete in all stages of its production, from raw material extraction through the manufacturing process and to delivery to the customer. Koehler shared that Titan American is working to reduce its carbon emissions and has committed to net zero concrete by 2050, which is validated by the Science Based Targets initiative. He further explained that in order to achieve this goal, Titan American is required to meet interim objectives including achieving a 35% reduction target for scope one emissions and a 45% reduction target for scope two emissions by 2030. With these goals and commitments in place, he stated that Titan America is well on its way to reducing its carbon emissions.

² See Appendix C

Additionally, Koehler stated that Titan America has fully converted its cement production to Type IL cement, also known as Portland Limestone Cement, which is about 10% lower in CO₂ than traditional Type I and Type II cement.

Chris Clow of Holcim Ready Mix Concrete, stressed that carbon reduction is a significant challenge and goal for the entire industry and stated that Holcim Ready Mix appreciates the importance that states across the country are placing on the initiative to reduce CO₂ in cement production.

Current regulations of CO₂ emissions in Virginia

Thomas Ballou, with DEQ, shared with the Workgroup that he has been involved in regulatory efforts at DEQ to reduce CO₂ and that his group also works on emissions inventories that estimate the level of emissions coming from facilities and manufacturers, like cement and concrete producers.

Ballou explained that in Virginia, DEQ regulates approximately 224 cement and/or concrete facilities and stressed that DEQ only regulates those facilities criteria pollutants, such as SO₂ and NO_x addressed above, and not for CO₂ emissions. Currently, DEQ only regulates the power and motor vehicle sectors for CO₂ emissions, as they are the main sources of CO₂ emissions, both in Virginia and in the U.S.

State and local use of cement and concrete

The Workgroup invited VDOT and DGS' Division of Engineering and Buildings to present on the use of concrete in state projects. Additionally, local governments were surveyed to determine the amount of concrete used on local projects; however only six responses were received.

Andy Babish, VDOT State Materials Engineer, spoke about VDOT's use of concrete on horizontal construction projects and its current practices related to carbon footprint reduction. He shared that a recent study done by the Balmoral Group for VDOT estimated that VDOT's consumption of concrete in Virginia for the 2022 calendar year was approximately 525,000 cubic yards, which is around 6% of the total estimated concrete produced in Virginia.

Babish shared with the Workgroup current efforts VDOT is taking to reduce its carbon footprint, such as allowing the use of waste-stream byproducts, commonly referred to as supplementary cementitious materials (SCMs), in concrete mixes. He cited examples of SCMs, including fly ash, which is a byproduct of coal-fire and coal generated production facilities; slag cement, which is a byproduct of steel production; and silica fume, which is a byproduct of metal production. Additionally, he shared that VDOT allows Type IL cement to be used, which is a newer cement in the marketplace that has become more common in concrete production, adding that Type IL cement has more limestone content and takes less energy to manufacturer, thus reducing its carbon footprint by about 10%.

VDOT, Babish states, specifies maximum cementitious material contents for most of its structural concrete to prevent and mitigate shrinkage cracking, and doing this promotes longevity and durability in structural concrete and reduces the carbon footprint. He also noted that VDOT continues to work with the Virginia Transportation Research Council to look into carbon sequestration technologies and methods to further reduce VDOT's carbon footprint.

Mike Coppa, the Director of the DGS Division of Engineering and Buildings (DEB), spoke to the Workgroup regarding state agencies' use of concrete on vertical construction projects. Coppa shared that approximately 40,000 cubic yards of concrete is used on state agency projects each year, which is about .5% of the total concrete used in Virginia annually. He shared that through the policies established in the Construction and Professional Services Manual (CPSM), which DEB authors for agencies to follow for construction, concrete mixes used for building construction must include at least 50% Portland cement. Coppa concluded by stating that structural engineers are tasked with designing specific concrete mixes within the parameters of the CPSM and to be best suited for the project.

V. Workgroup Findings and Recommendations

At its third meeting the Workgroup was given an overview of information shared by stakeholders and presenters and was presented with several considerations for the Workgroup to discuss as possible recommendations on SB 272. Those considerations were: (1) codify procurement preferences and initiatives in the bill for low carbon concrete, (2) address the issue with policy through preferences or incentives, (3) not make changes to the law or implement policy because the industry already is moving toward low carbon concrete, (4) create tax incentives for the industry to move toward low carbon concrete, or (5) consider whether DEQ should regulate CO₂ emissions for cement and concrete.

Before further discussion of the proposed considerations, DGS Director Joe Damico sought clarification on two items: (i) which agencies would be impacted by SB 272 as the bill was introduced, and (ii) if VDOT would be impacted by the bill as introduced for construction of roads and bridges. Gill stated that SB 272 as introduced would amend the DGS code section, and while the language does not specifically exclude roads and bridges, it could be interpreted to exclude those as they are not under DGS' authority. Additionally, through testimony provided to the Workgroup, it was determined that VDOT uses approximately 6% of the total concrete produced in Virginia each year and projects under DGS' review use approximately .5% of the total concrete produced in Virginia each year.

Lisa Pride shared that VDOT has been working diligently for several years to allow the use of lower carbon concrete in its specifications and continues to work with the industry to continue to lower the amount of carbon association with the concrete used on VDOT projects. She stated that she would like the Workgroup to move forward with the third consideration presented by Gill, to not impose additional requirements on the industry because the industry already is making progress on this issue, also noting the small amount of concrete used by state agencies. Willis Morris, Director of the Department of Small Business and Supplier Diversity (DSBSD), inquired as to whether VDOT and/or the industries report on progress toward lower carbon

concrete initiatives, to which Pride stated that VDOT keeps track of its specifications changes and can produce reports with that information. In addition, the Workgroup agreed to engage DEQ regarding its capacity to monitor the industry progress toward producing emissions-free cement.

At its May 16, 2023, meeting, staff presented the Workgroup with DEQ's response regarding its capacity to monitor the industry progress toward producing emissions-free cement, sharing that while DEQ does not directly collect this information, the sources of interest are required to submit annual reports of their GHG emissions to the EPA and this data is publicly available, adding that DEQ will add a link to the EPA data on DEQ's GHG inventory website. The Workgroup voted to approve the following final recommendation on SB 272 by a vote of 8-0-2³:

The Workgroup finds that it is not appropriate at this time for the state to enact procurement incentives for the cement and concrete industries to reduce overall CO₂ emissions resulting from the manufacturing cement and production of concrete that is used in state-funded projects because (i) the cement and concrete industries are already making significant strides to reduce overall CO₂ emissions resulting from the manufacturing of cement and production of concrete and has committed to making additional progress in the future, (ii) the Virginia Department of Transportation permits and advocates for lower carbon concrete to be used in its specifications and has been working with the cement and concrete industries for several years to reduce the amount of CO₂ associated with the concrete used in transportation projects, and (iii) the state agencies that use concrete on vertical construction projects use a very small amount of the total cement produced in Virginia each year (one-half of 1 percent).

VI. Conclusion

The Workgroup would like to thank the stakeholders and interested parties for their participation, as well as the subject matter experts from various state agencies who provided presentations and technical expertise to assist the Workgroup in its deliberations.

³ Yes: Morris, McHugh, Dooley, Pride, Saunders, Heslinga, Haley, Damico. Abstain: Frye, Tweedy

Appendix A: Letter to Workgroup and Text of SB 272

This appendix contains the letter from the Chair of the House General Laws Committee, Delegate James A. “Jay” Leftwich, Jr., directing the Workgroup to study SB 272 and the text of SB 272.

July 12, 2022

Mr. Joe Damico
Director, Dept. of General Services
1100 Bank Street
Richmond, VA 23219

Dear Mr. Damico,

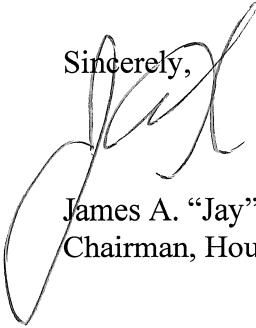
During the 2022 General Assembly Session, Senator Ghazala Hashmi carried Senate Bill 272; *Concrete; DGS shall convene a work group to review climate impact.* On March 3rd, 2022, this was left in Agriculture, Chesapeake and Natural Resources Committee.

In advance of the 2023 General Assembly Session, I request that you convene a group of interested parties to study SB 272 and review ways to continue to reduce carbon emissions in concrete and cement, without sacrificing the integrity of the product and cost competitiveness.

I ask that you include as part of this group representatives from the VRMCA to work through concerns and find a possible solution which is necessary to accomplish this work by December 1, 2023.

Thank you for your advocacy work on behalf of the Department of General Services and your willingness to work collaboratively with other stakeholders to find a solution. I have enclosed a copy of this legislation, and I stand by to assist in any way.

Sincerely,


James A. "Jay" Leftwich, Jr.
Chairman, House General Laws Committee

2022 SESSION**SB 272 Concrete; DGS shall convene a work group to review climate impact.**

Introduced by: Ghazala F. Hashmi | all patrons ... notes | add to my profiles

SUMMARY AS PASSED SENATE: (all summaries)

Climate impact of concrete; work group; report. Directs the Department of General Services to convene a stakeholder work group to review the climate impact of concrete and recommend policies and practices to incentivize the reduction of the air emission impact of the production of concrete procured by agencies of the Commonwealth for Commonwealth-funded projects. The work group shall report its findings, including any public comments received, and recommendations no later than November 1, 2023.

FULL TEXT[01/11/22 Senate: Prefiled and ordered printed; offered 01/12/22 22101529D](#) pdf[01/25/22 Senate: Committee substitute printed 22105171D-S1](#) pdf | impact statement**AMENDMENTS**[Senate committee, floor amendments and substitutes offered](#)**HISTORY**[01/11/22 Senate: Prefiled and ordered printed; offered 01/12/22 22101529D](#)[01/11/22 Senate: Referred to Committee on Agriculture, Conservation and Natural Resources](#)[01/25/22 Senate: Reported from Agriculture, Conservation and Natural Resources with substitite \(9-Y 6-N\)](#)[01/25/22 Senate: Committee substitute printed 22105171D-S1](#)[01/27/22 Senate: Constitutional reading dispensed \(39-Y 0-N\)](#)[01/28/22 Senate: Read second time](#)[01/28/22 Senate: Reading of substitute waived](#)[01/28/22 Senate: Committee substitute agreed to 22105171D-S1](#)[01/28/22 Senate: Engrossed by Senate - committee substitute SB272S1](#)[01/31/22 Senate: Read third time and passed Senate \(22-Y 18-N\)](#)[02/22/22 House: Placed on Calendar](#)[02/22/22 House: Read first time](#)[02/22/22 House: Referred to Committee on Agriculture, Chesapeake and Natural Resources](#)[02/25/22 House: Assigned ACNR sub: Chesapeake](#)[02/28/22 House: Subcommittee recommends laying on the table \(6-Y 4-N\)](#)[03/08/22 House: Left in Agriculture, Chesapeake and Natural Resources](#)

2022 SESSION
22101529D

SENATE BILL NO. 272

Offered January 12, 2022

Prefiled January 11, 2022

A BILL to amend and reenact § 10.1-1186 of the Code of Virginia and to amend the Code of Virginia by adding sections numbered 2.2-1135.1 and 33.2-276.1 and by adding in Article 13 of Chapter 3 of Title 58.1 a section numbered 58.1-439.12:13, relating to lower carbon concrete; report.

Patron-- Hashmi

Referred to Committee on Agriculture, Conservation and Natural Resources

Be it enacted by the General Assembly of Virginia:

1. That § 10.1-1186 of the Code of Virginia is amended and reenacted and that the Code of Virginia is amended by adding sections numbered 2.2-1135.1 and 33.2-276.1 and by adding in Article 13 of Chapter 3 of Title 58.1 a section numbered 58.1-439.12:13 as follows:

§ 2.2-1135.1. Use of lower carbon concrete.

A. As used in this section:

"Concrete" means structural and nonstructural masonry, precast, and ready-mix concrete building products.

"Concrete global warming potential baseline" or "baseline" means the average global warming potential values for concrete specifications approved for use by the Department and the Department of Transportation in buildings, infrastructure, and roadways owned by the Commonwealth. The baseline shall be determined by the Department of Environmental Quality, in consultation with the Department and the Department of Transportation, pursuant to § 10.1-1186.

"Environmental product declaration" means product specific Type III environmental product declarations that conform to ISO Standard 14025 and enable the numeric GWP and environmental impact comparisons between concrete mixes fulfilling the same functions.

"Global warming potential" or "GWP" means a numeric value included in an environmental product declaration that measures the total contribution to global warming from the emission of greenhouse gases, or the elimination of greenhouse gas sinks, that results from the production or utilization of a specific product or service.

"Lower carbon concrete" means concrete mixes and products that have been verified to result in a global warming potential value that is at least 20 percent lower than the concrete global warming potential baseline.

B. By January 1, 2023, the Department, the Department of Transportation, and the Department of Environmental Quality shall develop and implement performance-based specifications for concrete use in buildings, infrastructure, and roadways owned by the Commonwealth.

C. 1. For any building project initiated by the Department after January 1, 2023, that involves the placement of 50 cubic yards or more of concrete, a concrete material provider shall be eligible for a performance bonus if such provider utilizes a lower carbon concrete.

2. The provisions of this subsection shall not apply to a project if the Director, in his sole discretion, determines that (i) it would not be in the public interest, (ii) it would result in unreasonable costs, (iii) such lower carbon concrete cannot be produced or made in sufficient and reasonably available quantities of satisfactory quality, or (iv) it would conflict with compliance with state or federal law. Such determination shall be included in the request for proposal, invitation to bid, or other solicitation for any project for which such determination is made.

D. The Department shall report annually to the Governor and the General Assembly, beginning December 1, 2023, of the lower carbon concrete performance bonus, including a cost-benefit analysis of the use of lower carbon concrete.

§ 10.1-1186. General powers of the Department.

The Department shall have the following general powers, any of which the Director may delegate as appropriate:

1. Employ such personnel as may be required to carry out the duties of the Department;
2. Make and enter into all contracts and agreements necessary or incidental to the performance of its duties and the execution of its powers under this chapter, including, but not limited to, contracts with the United States, other states, other state agencies and governmental subdivisions of the Commonwealth;
3. Accept grants from the United States government and agencies and instrumentalities thereof and any other source. To these ends, the Department shall have the power to comply with such conditions and execute such agreements as may be necessary, convenient, or desirable;
4. Accept and administer services, property, gifts and other funds donated to the Department;
5. Implement all regulations as may be adopted by the State Air Pollution Control Board, the State Water Control Board, and the Virginia Waste Management Board;
6. Administer, under the direction of the Boards, funds appropriated to it for environmental programs and make contracts related thereto;
7. Advise and coordinate the responses of state agencies to notices of proceedings by the State Water Control Board to consider certifications of hydropower projects under 33 U.S.C. § 1341;
8. Advise interested agencies of the Commonwealth of pending proceedings when the Department of Environmental Quality intervenes directly on behalf of the Commonwealth in a Federal Energy Regulatory Commission proceeding or when the Department of Wildlife Resources intervenes in a Federal Energy Regulatory Commission proceeding to coordinate the provision of information and testimony for use in the proceedings;
9. Establish, in cooperation with the Department of General Services and the Department of Transportation, the concrete global warming potential baseline, as that term is defined in § 33.2-276.1. Such baseline shall be established by January 1, 2023, and reestablished every five years thereafter.
10. Notwithstanding any other provision of law and to the extent consistent with federal requirements, following a proceeding as provided in § 2.2-4019, issue special orders to any person to comply with: (i) the provisions of any law administered by the Boards, the Director or the Department, (ii) any condition of a permit or a certification, (iii) any regulations of the Boards, or (iv) any case decision, as defined in § 2.2-4001, of the Boards or Director. The issuance of a special order shall be considered a case decision as defined in § 2.2-4001. The Director shall not delegate his authority to impose civil penalties in conjunction with issuance of special orders. For purposes of this subdivision, "Boards" means the State Air Pollution Control Board, the State Water Control Board, and the Virginia Waste Management Board; and
- 10-11. Perform all acts necessary or convenient to carry out the purposes of this chapter.

§ 33.2-276.1. Use of lower carbon concrete.

A. As used in this section:

"Concrete" means structural and nonstructural masonry, precast, and ready-mix concrete building products.

"Concrete global warming potential baseline" or "baseline" means the average global warming potential values for concrete specifications approved for use by the Department of General Services and the Department in buildings, infrastructure, and roadways owned by the Commonwealth. The baseline shall be determined by the Department of Environmental Quality, in consultation with the Department and the Department of General Services, pursuant to § 10.1-1186.

"Environmental product declaration" means product specific Type III environmental product declarations that conform to ISO Standard 14025 and enable the numeric GWP and environmental impact comparisons between concrete mixes fulfilling the same functions.

"Global warming potential" or "GWP" means a numeric value included in an environmental product declaration that measures the total contribution to global warming from the emission of greenhouse gases, or the elimination of greenhouse gas sinks, that results from the production or utilization of a specific product or service.

"Lower carbon concrete" means concrete mixes and products that have been verified to result in a global warming potential value that is at least 20 percent lower than the concrete global warming potential baseline.

B. By January 1, 2023, the Department, the Department of General Services, and the Department of Environmental Quality shall develop and implement performance-based specifications for concrete use in buildings, infrastructure, and roadways owned by the Commonwealth.

C. 1. For any highway, bridge, or infrastructure project initiated by the Department after January 1, 2023, that involves the placement of 50 cubic yards or more of concrete, a concrete material provider shall be eligible for a performance bonus if such provider utilizes a lower carbon concrete that is included on the Department's approved materials list.

2. The provisions of this subsection shall not apply to a project if the Commissioner, in his sole discretion, determines that (i) it would not be in the public interest, (ii) it would result in unreasonable costs, (iii) such lower carbon concrete cannot be produced or made in sufficient and reasonably available quantities of satisfactory quality, (iv) it would result in the loss or reduction of federal funding, (v) it would limit or jeopardize the ability to obtain federal funding, or (vi) it would conflict with compliance with state or federal law. Such determination shall be included in the request for proposal, invitation to bid, or other solicitation for any project for which such determination is made.

D. The Department shall implement an expedited evaluation process for lower carbon concrete, materials, and methods submitted by application from a private entity for inclusion on the Department's approved materials list. Applicants shall be notified of evaluation results no later than six months after the submission of an application, unless technical constraints make completing of the evaluation in such time frame impractical.

E. The Department shall report annually to the Governor and the General Assembly, beginning December 1, 2023, of the lower carbon concrete performance bonus, including a cost-benefit analysis of the use of lower carbon concrete.

§ 58.1-439.12:13. Environmental product declaration tax credit.

A. For purposes of this section, "environmental product declaration (EPD) technology implementation cost" means the total initial cost incurred by concrete and concrete component producers to analyze, adopt, and implement technologies that enable the subsequent completion of Type III EPDs that conform to ISO Standard 14025 at concrete production facilities and enable the numeric global warming potential and environmental impact comparisons between concrete mixes fulfilling the same functions.

B. 1. For taxable years beginning on or after January 1, 2022, but before January 1, 2025, a taxpayer that is a producer of concrete, including producers of major concrete components, cement, and aggregate, shall be allowed a nonrefundable credit against the tax imposed pursuant to § 58.1-320 or 58.1-400 for amounts paid in the taxable year for EPD technology implementation costs incurred for an EPD analysis at up to eight concrete, cement, supplementary cementitious materials, or aggregate production facilities owned and operated by the taxpayer in Virginia.

2. For taxable years beginning on or after January 1, 2025, but before January 1, 2026, a taxpayer that is a producer of concrete, including producers of major concrete components, cement, and aggregate, shall be allowed a nonrefundable credit against the tax imposed pursuant to § 58.1-320 or 58.1-400 for amounts paid in the taxable year for EPD technology implementation costs incurred for an EPD analysis at a single concrete, cement, supplementary cementitious materials, or aggregate production facility owned and operated by the taxpayer in Virginia.

C. The credit shall equal the lesser of the amount actually paid in the taxable year for such EPD technology implementation costs or \$5,000.

D. The amount of the credit that may be claimed in any single taxable year shall not exceed the total amount of tax imposed by this chapter for that taxable year. If the amount of the credit allowed under this section exceeds the taxpayer's tax liability for the taxable year during which the EPD technology implementation costs were incurred, the amount that exceeds the tax liability may be carried over for credit against the income taxes of the taxpayer in the next five taxable years or until the total amount of the tax credit has been taken, whichever is sooner.

E. The Tax Commissioner shall develop guidelines implementing the provisions of this section. Such guidelines shall be exempt from the provisions of the Administrative Process Act (§ 2.2-4000 et seq.).

2. That the Materials Division of the Department of Transportation shall, by January 1, 2023, complete an evaluation of the durability, strength, and structural performance of portland limestone cement, and such cement shall be included on the list of approved materials if the evaluation finds that inclusion is consistent with the goals of public safety and cost efficiency. For purposes of this enactment, "portland limestone cement" means Type IL or Type IT blended hydraulic cement (ASTM C595) that includes up to 15 percent pulverized limestone as a substitute for clinkers.

2022 SESSION

SB 272 Concrete; DGS shall convene a work group to review climate impact.

Introduced by: Ghazala F. Hashmi | all patrons ... notes | add to my profiles

SUMMARY AS PASSED SENATE: (all summaries)

Climate impact of concrete; work group; report. Directs the Department of General Services to convene a stakeholder work group to review the climate impact of concrete and recommend policies and practices to incentivize the reduction of the air emission impact of the production of concrete procured by agencies of the Commonwealth for Commonwealth-funded projects. The work group shall report its findings, including any public comments received, and recommendations no later than November 1, 2023.

FULL TEXT

01/11/22 Senate: Prefiled and ordered printed; offered 01/12/22 22101529D [pdf](#)

01/25/22 Senate: Committee substitute printed 22105171D-S1 [pdf](#) | impact statement

AMENDMENTS

Senate committee, floor amendments and substitutes offered

HISTORY

01/11/22 Senate: Prefiled and ordered printed; offered 01/12/22 22101529D

01/11/22 Senate: Referred to Committee on Agriculture, Conservation and Natural Resources

01/25/22 Senate: Reported from Agriculture, Conservation and Natural Resources with substitite (9-Y 6-N)

01/25/22 Senate: Committee substitute printed 22105171D-S1

01/27/22 Senate: Constitutional reading dispensed (39-Y 0-N)

01/28/22 Senate: Read second time

01/28/22 Senate: Reading of substitute waived

01/28/22 Senate: Committee substitute agreed to 22105171D-S1

01/28/22 Senate: Engrossed by Senate - committee substitute SB272S1

01/31/22 Senate: Read third time and passed Senate (22-Y 18-N)

02/22/22 House: Placed on Calendar

02/22/22 House: Read first time

02/22/22 House: Referred to Committee on Agriculture, Chesapeake and Natural Resources

02/25/22 House: Assigned ACNR sub: Chesapeake

02/28/22 House: Subcommittee recommends laying on the table (6-Y 4-N)

03/08/22 House: Left in Agriculture, Chesapeake and Natural Resources

22101529D

SENATE BILL NO. 272

Offered January 12, 2022

Prefiled January 11, 2022

1 A BILL to amend and reenact § 10.1-1186 of the Code of Virginia and to amend the Code of Virginia
 2 by adding sections numbered 2.2-1135.1 and 33.2-276.1 and by adding in Article 13 of Chapter 3 of
 3 Title 58.1 a section numbered 58.1-439.12:13, relating to lower carbon concrete; report.
 4

7 Patron—Hashmi

8 Referred to Committee on Agriculture, Conservation and Natural Resources

9
10 Be it enacted by the General Assembly of Virginia:

11 1. That § 10.1-1186 of the Code of Virginia is amended and reenacted and that the Code of
 12 Virginia is amended by adding sections numbered 2.2-1135.1 and 33.2-276.1 and by adding in
 13 Article 13 of Chapter 3 of Title 58.1 a section numbered 58.1-439.12:13 as follows:

14 § 2.2-1135.1. Use of lower carbon concrete.

15 A. As used in this section:

16 "Concrete" means structural and nonstructural masonry, precast, and ready-mix concrete building
 17 products.

18 "Concrete global warming potential baseline" or "baseline" means the average global warming
 19 potential values for concrete specifications approved for use by the Department and the Department of
 20 Transportation in buildings, infrastructure, and roadways owned by the Commonwealth. The baseline
 21 shall be determined by the Department of Environmental Quality, in consultation with the Department
 22 and the Department of Transportation, pursuant to § 10.1-1186.

23 "Environmental product declaration" means product specific Type III environmental product
 24 declarations that conform to ISO Standard 14025 and enable the numeric GWP and environmental
 25 impact comparisons between concrete mixes fulfilling the same functions.

26 "Global warming potential" or "GWP" means a numeric value included in an environmental product
 27 declaration that measures the total contribution to global warming from the emission of greenhouse
 28 gases, or the elimination of greenhouse gas sinks, that results from the production or utilization of a
 29 specific product or service.

30 "Lower carbon concrete" means concrete mixes and products that have been verified to result in a
 31 global warming potential value that is at least 20 percent lower than the concrete global warming
 32 potential baseline.

33 B. By January 1, 2023, the Department, the Department of Transportation, and the Department of
 34 Environmental Quality shall develop and implement performance-based specifications for concrete use in
 35 buildings, infrastructure, and roadways owned by the Commonwealth.

36 C. I. For any building project initiated by the Department after January 1, 2023, that involves the
 37 placement of 50 cubic yards or more of concrete, a concrete material provider shall be eligible for a
 38 performance bonus if such provider utilizes a lower carbon concrete.

39 2. The provisions of this subsection shall not apply to a project if the Director, in his sole discretion,
 40 determines that (i) it would not be in the public interest, (ii) it would result in unreasonable costs, (iii)
 41 such lower carbon concrete cannot be produced or made in sufficient and reasonably available
 42 quantities of satisfactory quality, or (iv) it would conflict with compliance with state or federal law.
 43 Such determination shall be included in the request for proposal, invitation to bid, or other solicitation
 44 for any project for which such determination is made.

45 D. The Department shall report annually to the Governor and the General Assembly, beginning
 46 December 1, 2023, of the lower carbon concrete performance bonus, including a cost-benefit analysis of
 47 the use of lower carbon concrete.

48 § 10.1-1186. General powers of the Department.

49 The Department shall have the following general powers, any of which the Director may delegate as
 50 appropriate:

51 1. Employ such personnel as may be required to carry out the duties of the Department;

52 2. Make and enter into all contracts and agreements necessary or incidental to the performance of its
 53 duties and the execution of its powers under this chapter, including, but not limited to, contracts with
 54 the United States, other states, other state agencies and governmental subdivisions of the
 55 Commonwealth;

56 3. Accept grants from the United States government and agencies and instrumentalities thereof and
 57 any other source. To these ends, the Department shall have the power to comply with such conditions

INTRODUCED

SB272

59 and execute such agreements as may be necessary, convenient, or desirable;
60 4. Accept and administer services, property, gifts and other funds donated to the Department;
61 5. Implement all regulations as may be adopted by the State Air Pollution Control Board, the State
62 Water Control Board, and the Virginia Waste Management Board;
63 6. Administer, under the direction of the Boards, funds appropriated to it for environmental programs
64 and make contracts related thereto;

65 7. Advise and coordinate the responses of state agencies to notices of proceedings by the State Water
66 Control Board to consider certifications of hydropower projects under 33 U.S.C. § 1341;

67 8. Advise interested agencies of the Commonwealth of pending proceedings when the Department of
68 Environmental Quality intervenes directly on behalf of the Commonwealth in a Federal Energy
69 Regulatory Commission proceeding or when the Department of Wildlife Resources intervenes in a
70 Federal Energy Regulatory Commission proceeding to coordinate the provision of information and
71 testimony for use in the proceedings;

72 9. Establish, in cooperation with the Department of General Services and the Department of
73 Transportation, the concrete global warming potential baseline, as that term is defined in § 33.2-276.1.
74 Such baseline shall be established by January 1, 2023, and reestablished every five years thereafter.

75 10. Notwithstanding any other provision of law and to the extent consistent with federal
76 requirements, following a proceeding as provided in § 2.2-4019, issue special orders to any person to
77 comply with: (i) the provisions of any law administered by the Boards, the Director or the Department,
78 (ii) any condition of a permit or a certification, (iii) any regulations of the Boards, or (iv) any case
79 decision, as defined in § 2.2-4001, of the Boards or Director. The issuance of a special order shall be
80 considered a case decision as defined in § 2.2-4001. The Director shall not delegate his authority to
81 impose civil penalties in conjunction with issuance of special orders. For purposes of this subdivision,
82 "Boards" means the State Air Pollution Control Board, the State Water Control Board, and the Virginia
83 Waste Management Board; and

84 11. Perform all acts necessary or convenient to carry out the purposes of this chapter.

85 **§ 33.2-276.1. Use of lower carbon concrete.**

86 *A. As used in this section:*

87 "Concrete" means structural and nonstructural masonry, precast, and ready-mix concrete building
88 products.

89 "Concrete global warming potential baseline" or "baseline" means the average global warming
90 potential values for concrete specifications approved for use by the Department of General Services and
91 the Department in buildings, infrastructure, and roadways owned by the Commonwealth. The baseline
92 shall be determined by the Department of Environmental Quality, in consultation with the Department
93 and the Department of General Services, pursuant to § 10.1-1186.

94 "Environmental product declaration" means product specific Type III environmental product
95 declarations that conform to ISO Standard 14025 and enable the numeric GWP and environmental
96 impact comparisons between concrete mixes fulfilling the same functions.

97 "Global warming potential" or "GWP" means a numeric value included in an environmental product
98 declaration that measures the total contribution to global warming from the emission of greenhouse
99 gases, or the elimination of greenhouse gas sinks, that results from the production or utilization of a
100 specific product or service.

101 "Lower carbon concrete" means concrete mixes and products that have been verified to result in a
102 global warming potential value that is at least 20 percent lower than the concrete global warming
103 potential baseline.

104 *B. By January 1, 2023, the Department, the Department of General Services, and the Department of
105 Environmental Quality shall develop and implement performance-based specifications for concrete use in
106 buildings, infrastructure, and roadways owned by the Commonwealth.*

107 *C. 1. For any highway, bridge, or infrastructure project initiated by the Department after January 1,
108 2023, that involves the placement of 50 cubic yards or more of concrete, a concrete material provider
109 shall be eligible for a performance bonus if such provider utilizes a lower carbon concrete that is
110 included on the Department's approved materials list.*

111 *2. The provisions of this subsection shall not apply to a project if the Commissioner, in his sole
112 discretion, determines that (i) it would not be in the public interest, (ii) it would result in unreasonable
113 costs, (iii) such lower carbon concrete cannot be produced or made in sufficient and reasonably
114 available quantities of satisfactory quality, (iv) it would result in the loss or reduction of federal
115 funding, (v) it would limit or jeopardize the ability to obtain federal funding, or (vi) it would conflict
116 with compliance with state or federal law. Such determination shall be included in the request for
117 proposal, invitation to bid, or other solicitation for any project for which such determination is made.*

118 *D. The Department shall implement an expedited evaluation process for lower carbon concrete,
119 materials, and methods submitted by application from a private entity for inclusion on the Department's
120 approved materials list. Applicants shall be notified of evaluation results no later than six months after*

121 the submission of an application, unless technical constraints make completing of the evaluation in such
 122 time frame impractical.

123 E. The Department shall report annually to the Governor and the General Assembly, beginning
 124 December 1, 2023, of the lower carbon concrete performance bonus, including a cost-benefit analysis of
 125 the use of lower carbon concrete.

126 **§ 58.1-439.12:13. Environmental product declaration tax credit.**

127 A. For purposes of this section, "environmental product declaration (EPD) technology
 128 implementation cost" means the total initial cost incurred by concrete and concrete component
 129 producers to analyze, adopt, and implement technologies that enable the subsequent completion of Type
 130 III EPDs that conform to ISO Standard 14025 at concrete production facilities and enable the numeric
 131 global warming potential and environmental impact comparisons between concrete mixes fulfilling the
 132 same functions.

133 B. 1. For taxable years beginning on or after January 1, 2022, but before January 1, 2025, a
 134 taxpayer that is a producer of concrete, including producers of major concrete components, cement, and
 135 aggregate, shall be allowed a nonrefundable credit against the tax imposed pursuant to § 58.1-320 or
 136 58.1-400 for amounts paid in the taxable year for EPD technology implementation costs incurred for an
 137 EPD analysis at up to eight concrete, cement, supplementary cementitious materials, or aggregate
 138 production facilities owned and operated by the taxpayer in Virginia.

139 2. For taxable years beginning on or after January 1, 2025, but before January 1, 2026, a taxpayer
 140 that is a producer of concrete, including producers of major concrete components, cement, and
 141 aggregate, shall be allowed a nonrefundable credit against the tax imposed pursuant to § 58.1-320 or
 142 58.1-400 for amounts paid in the taxable year for EPD technology implementation costs incurred for an
 143 EPD analysis at a single concrete, cement, supplementary cementitious materials, or aggregate
 144 production facility owned and operated by the taxpayer in Virginia.

145 C. The credit shall equal the lesser of the amount actually paid in the taxable year for such EPD
 146 technology implementation costs or \$5,000.

147 D. The amount of the credit that may be claimed in any single taxable year shall not exceed the
 148 total amount of tax imposed by this chapter for that taxable year. If the amount of the credit allowed
 149 under this section exceeds the taxpayer's tax liability for the taxable year during which the EPD
 150 technology implementation costs were incurred, the amount that exceeds the tax liability may be carried
 151 over for credit against the income taxes of the taxpayer in the next five taxable years or until the total
 152 amount of the tax credit has been taken, whichever is sooner.

153 E. The Tax Commissioner shall develop guidelines implementing the provisions of this section. Such
 154 guidelines shall be exempt from the provisions of the Administrative Process Act (§ 2.2-4000 et seq.).

155 **2. That the Materials Division of the Department of Transportation shall, by January 1, 2023,**
 156 **complete an evaluation of the durability, strength, and structural performance of portland**
 157 **limestone cement, and such cement shall be included on the list of approved materials if the**
 158 **evaluation finds that inclusion is consistent with the goals of public safety and cost efficiency.** For
 159 **purposes of this enactment, "portland limestone cement" means Type IL or Type IT blended**
 160 **hydraulic cement (ASTM C595) that includes up to 15 percent pulverized limestone as a substitute**
 161 **for clinkers.**

2022 SESSION

SENATE SUBSTITUTE

22105171D

SENATE BILL NO. 272

AMENDMENT IN THE NATURE OF A SUBSTITUTE

(Proposed by the Senate Committee on Agriculture, Conservation and Natural Resources
on January 25, 2022)

(Patron Prior to Substitute—Senator Hashmi)

A BILL to review and recommend policies related to the climate impact of concrete.

Be it enacted by the General Assembly of Virginia:

8 1. *§ 1. A. The Department of General Services (DGS) shall convene a stakeholder work group (Work*
9 *Group) to review the climate impact of concrete and recommend policies and practices to incentivize the*
10 *reduction of air emission impact of the production of concrete procured by agencies of the*
11 *Commonwealth for Commonwealth-funded projects.*

11 Commonwealth for Commonwealth funded projects.

12 B. The Work Group shall be selected by the Director of DGS and shall consist of at the following:

13 two licensed professional engineers, two licensed registered architects, one representative of the

14 construction industry, one representative of the concrete producer industry, one representative of the

15 concrete testing and validation industry, one representative of an accredited school of civil engineering,

16 two representatives of environmental non-governmental organizations, one representative of the

17 Department of Transportation, one representative of DGS, and one representative of DEQ.

18 C. The Work Group shall consult with any relevant associations that set industry standards for the
19 procurement of low carbon concrete and shall consult with affected contractors and subcontractors to
20 consider the air emissions and related impacts, as well as the health and safety impacts, of concrete.

21 *D. The Work Group shall consider:*

22 1. The use of environmental product declarations to measure the climate impact of concrete procured
23 by agencies of the Commonwealth;

24 2. The use of performance incentives to encourage the adoption of low carbon materials and
25 methods by concrete manufacturers that provide concrete for Commonwealth-funded projects;

3. The establishment of an expedited product evaluation, testing, and approval protocol for low carbon concrete projects; and

4. The implementation of performance-based specification standards for concrete, including requirements that a structural material achieve specified performance based outcomes from the use of the structural material, such as outcomes related to material, strength, durability, permeability, and other attributes related to the function of the building material for the applied uses, as opposed to requiring that a structural material be produced using a specified manufacturing process, design feature, technology, or proportion of materials. The Advisory Group shall examine the use of methods of compliance, including maximum cement content specifications and specifications based on maximum potential for global warming.

36 E. The Work Group and DGS shall allow for the submission of public comments to the Work Group,
37 and shall report its findings, including any public comments received, and recommendations to the
38 Governor and the Chairmen of the House Committee on Agriculture, Chesapeake and Natural Resources
39 and the Senate Committee on Agriculture, Conservation and Natural Resources no later than November
40 1, 2023.

Appendix B: September 19, 2022 Meeting Materials

This appendix contains the meeting materials from the September 19, 2022 Workgroup meeting.

1. Agenda
2. Approved Meeting Minutes

Public Body Procurement Workgroup

<http://dgs.virginia.gov/dgs/directors-office/procurement-workgroup/>

Meeting # 5

Monday, September 19, 2022, 9:30 a.m.
Conference Rooms C, D, and E

James Monroe Building
101 N 14th St, Richmond, Virginia 23219

AGENDA

I. Call to Order; Remarks by Chair

Sandra Gill, Deputy Director
Department of General Services

II. Approval of Meeting Minutes from the August 31, 2022 Workgroup Meeting

III. Public Comment on Draft Recommendation for SB 575

IV. Finalize Recommendations on SB 575

V. Public Comment on Draft Recommendations for SB 550

VI. Finalize Recommendations on SB 550

VII. Introduction of Study of SB 272 – Review and recommend policies related to the climate impact of concrete

Sandra Gill, Deputy Director
Department of General Services

VIII. Public Comment

IX. Discussion

X. Adjournment

Members

Department of General Services
Virginia Information Technologies Agency
Department of Planning and Budget
Virginia Association of State Colleges and
University Purchasing Professionals

Department of Small Business and Supplier Diversity
Virginia Department of Transportation
Virginia Association of Government Purchasing

Representatives

Office of the Attorney General
Senate Finance Committee

House Appropriations Committee
Division of Legislative Services

Staff

Jessica Budd, Legal Policy Analyst, DGS
Jessica Hendrickson, Director of Policy and Legislative Affairs, DGS

Meeting Minutes

Public Body Procurement Workgroup

Meeting # 5

**Monday, September 19, 2022, 9:30 a.m.
Conference Rooms C, D, and E
James Monroe Building
101 N 14th St, Richmond, Virginia 23219**

<http://dgs.virginia.gov/dgs/directors-office/procurement-workgroup/>

The Public Body Procurement Workgroup (the Workgroup) met in-person in conference rooms C, D, and E in the James Monroe Building in Richmond, Virginia, with Sandra Gill, Deputy Director of the Department of General Services (DGS), presiding. The meeting began with remarks from Ms. Gill, followed by presentations, discussion, and public comment. Materials presented at the meeting are available through the [Workgroup's website](#).

Workgroup members and representatives present at the meeting included Sandra Gill (Department of General Services), Matthew James (Department of Small Business and Supplier Diversity), Joshua Heslinga (Virginia Information Technologies Agency), Lisa Pride (Virginia Department of Transportation), Jason Saunders (Department of Planning and Budget), , John McHugh (Virginia Association of State Colleges and University Purchasing Professionals), Leslie Haley (Office of the Attorney General), Andrea Peeks, (House Appropriations Committee), Adam Rosatelli (Senate Finance and Appropriations Committee) and Joanne Frye (Division of Legislative Services). Elizabeth Dooley with the Virginia Association of Governmental Procurement was absent.

I. Call to Order; Remarks by Chair

***Sandra Gill, Deputy Director
Department of General Services***

Ms. Gill called the meeting to order and informed the Workgroup that today it will receive public comment and finalize its recommendations on SB 575 and SB 550. She noted that the draft language of the final recommendations for SB 575 and SB 550 was shared with the Workgroup and members of the public for their review in advance of today's meeting. She requested that stakeholders who have already provided public comment to the Workgroup at previous meetings limit their comments to any new information that they wish to share with the Workgroup.

II. Approval of Meeting Minutes from the August 31, 2022 Workgroup Meeting

Mr. Heslinga made a motion to approve the meeting minutes from the August 11, 2022 meeting of the Workgroup. The motion was seconded by Mr. James and unanimously approved by the Workgroup.

III. Public Comment on Draft Recommendations for SB 575

Ms. Gill invited stakeholders to provide public comment on the draft recommendations for SB 575. There was no public comment.

IV. Finalize Recommendations on SB 575

Draft of Final Recommendation for SB 575

The Workgroup finds that it is not appropriate at this time to require DGS and all other state agencies to use a TCO calculator for medium-duty and heavy-duty vehicles, but the Workgroup recommends that the General Assembly consider directing VDOT, DRPT, and other state agencies to (i) investigate and determine the appropriate factors that need to be included in a TCO calculator for medium-duty and heavy-duty vehicles and (ii) determine when it may be appropriate to implement a requirement that state agencies use a TCO calculator for medium-duty and heavy-duty vehicles.

Next, Ms. Gill asked the Workgroup for their comments on the draft version of the Workgroup's final recommendation for SB 575. Mr. McHugh asked whether the Workgroup had intended to use the term "TCO calculations" instead of "TCO calculator" in the final recommendation. Mr. Heslinga noted that SB 575 uses the term "calculator." Ms. Gill echoed Mr. Heslinga's comment and stated that for consistency she recommends sticking with the term "calculator" in the final recommendation. The rest of the Workgroup members indicated their agreement with Ms. Gill's recommendation. Mr. McHugh then also indicated his agreement. There was no further discussion on the draft version of the final recommendation for SB 575.

Mr. Heslinga then made a motion for the Workgroup approve the final recommendation on SB 575. The motion was seconded by Ms. Pride. The motion carried by a vote of 5-0-1.¹

V. Public Comment on Draft Recommendations for SB 550

Ms. Gill then invited stakeholders to provide public comment on the draft recommendations for SB 550. There was no public comment.

¹ Yes: Mr. McHugh, Ms. Pride, Mr. James, Ms. Gill, and Mr. Heslinga. Abstain: Mr. Saunders.

VI. Finalize Recommendations on SB 550

Draft of Final Recommendations for SB 550

I. AMENDMENTS PERTAINING TO ALL OF SB 550

Recommendation #1:

The Workgroup recommends that the General Assembly consider making the definitions of “construction/construction contract,” “contractor/general contractor,” and “subcontractor” that are applicable to SB 550’s payment liability and timing provisions pertaining to public contacts in § 2.2-4354 and to SB 550’s payment liability and timing provisions pertaining to private contracts in § 11-4.6 uniform.

Recommendation #2:

The Workgroup recommends that the General Assembly consider clarifying whether contracts for professional services, including architectural or professional engineering services, should be included within the scope of SB 550’s payment liability and timing provisions.

Recommendation #3:

The Workgroup recommends that the General Assembly consider making the following language in SB 550 uniform in order to enhance the clarity and consistency of the bill:

Lines 12-13: Such contractor shall not be liable for amounts otherwise reducible due to the subcontractor's noncompliance with the terms of the contract.

Lines 57-58: An owner shall not be required to pay amounts invoiced that are subject to withholding pursuant to the contract for the general contractor's noncompliance with the terms of the contract.

Lines 72-73: Such contractors shall not be liable for amounts otherwise reducible pursuant to a breach of contract by the subcontractor.

Recommendation #4:

The Workgroup recommends that the General Assembly consider making the following language in SB 550 uniform where appropriate and intended in order to enhance the clarity and consistency of the bill:

Lines 14-16: However, in the event that the contractor withholds all or a part of the amount promised to the subcontractor under the contract, the

contractor shall notify the subcontractor, in writing, of his intention to withhold all or a part of the subcontractor's payment with the reason for nonpayment.

Lines 59-62: However, in the event that an owner withholds all or a part of the amount invoiced by the general contractor under the terms of the contract, the owner shall notify the general contractor, in writing and with reasonable specificity, of his intention to withhold all or part of the general contractor's payment with the reason for nonpayment.

Lines 74-78: However, in the event that a contractor withholds all or a part of the amount invoiced by any lower-tier subcontractor under the contract, the contractor shall notify the subcontractor, in writing, of his intention to withhold all or a part of the subcontractor's payment with the reason for nonpayment, specifically identifying the contractual noncompliance, the dollar amount being withheld, and the lower-tier subcontractor responsible for the contractual noncompliance.

Recommendation #5:

The Workgroup recommends that the General Assembly consider establishing a timeline for when the notice of withholding payment must be given.

II. AMENDMENTS PERTAINING TO § 2.2-4354 – PUBLIC CONTRACTS

Recommendation #6:

The Workgroup recommends that the General Assembly consider reconciling the provisions added by SB 550 in subdivision 1 of § 2.2-4354 with the existing provisions of the Prompt Payment Act that were moved to subsection 2 of § 2.2-4354 and, in doing so, consider clarifying (i) the type of contracts to which each subdivision applies, (ii) how the “entire amount owed” language in subdivision 1 is intended to interact with the “proportionate share” language in subdivision 2, (iii) that the “entire amount owed” language in subdivision 1 is not intended to affect the VPPA’s retainage provisions, and (iv) when a general contractor must pay a subcontractor when the general contractor has not been paid by the public body.

III. AMENDMENTS PERTAINING TO § 11-4.6 – PRIVATE CONTRACTS

Recommendation #7:

The Workgroup recommends that the General Assembly consider updating the catchline of § 11-4.6 to reflect both the provisions of § 11-4.6 that existed prior to the amendments made by SB 550 and that are still in effect (dealing with the liability of a

contractor for the wages of a subcontractor's employees) and the new provisions added by SB 550 (dealing with payment liability and timing between private owners, general contractors, and subcontractors).

Recommendation #8:

The Workgroup recommends that the General Assembly consider amending the subsection and subdivision lettering in § 11-4.6 to separate out the provisions of § 11-4.6 dealing with the liability of a contractor for the wages of a subcontractor's employees from the new provisions added by SB 550 dealing with owners' and general contractors' payment liability and timing in order to make § 11-4.6 easier to interpret.

Recommendation #9:

The Workgroup recommends that the General Assembly consider clarifying that the provisions of subsection C of § 11-4.6 applies only to construction contracts.

Recommendation #10:

The Workgroup recommends that the General Assembly consider (i) reconciling the inconsistency between the timelines for payment that are set out on lines 55-57 in subsection B of § 11-4.6 for owners and on lines 69-70 in subsection C of § 11-4.6 for general contractors and (ii) reconciling such inconsistency by using the "receipt of invoice" language used on lines 55-57 in subsection B as the trigger for payment in both subsections.

Recommendation #11:

The Workgroup recommends that the General Assembly consider clarifying the inconsistent and confusing terminology used in subsection C of § 11-4.6 by amending it (i) to use only the terms "general contractor" and "subcontractor" (similar to § 2.2-4354 in the VPPA dealing with public contracts) and (ii) by inserting the following language from § 2.2-4354 in the VPPA that would make the provisions of subsection C apply throughout all of the tiers: Any such contract awarded shall further require the contractor to include in each of its subcontracts a provision requiring each subcontractor to include or otherwise be subject to the same payment and interest requirements with respect to each lower-tier subcontractor.

Next, Ms. Gill asked the Workgroup for their comments on the draft versions of the Workgroup's final recommendations for SB 550. There was no discussion by the Workgroup.

Mr. Heslinga then made a motion for the Workgroup approve all of the final recommendations on SB 550. The motion was seconded by Ms. James. The motion carried by a vote of 5-0-1.²

² Yes: Mr. McHugh, Ms. Pride, Mr. James, Ms. Gill, and Mr. Heslinga. Abstain: Mr. Saunders.

VII. Introduction of Study of SB 272 – Review and recommend policies related to the climate impact of concrete

Ms. Gill shared with the Workgroup that its next study will be of SB 272 from the 2022 Regular Session of the General Assembly. She noted that the bill was introduced by Senator Hashmi. She informed the Workgroup that it will take this bill up for study at a future meeting.

VIII. Public Comment

There was no public comment.

IX. Discussion

There was no further discussion among the Workgroup members.

X. Adjournment

Ms. Gill adjourned the meeting at 9:41 a.m. and noted that the Workgroup's staff will send drafts of the final reports for SB 575 and SB 550 to the Workgroup's members for their review prior to submitting them to the General Assembly by their December 1, 2022 due dates.

For more information, see the [Workgroup's website](#) or contact that Workgroup's staff at pwg@dgs.virginia.gov.

Appendix C: November 28, 2022 Meeting Materials

This appendix contains the meeting materials from the November 28, 2022 Workgroup meeting.

1. Agenda
2. PowerPoint Presentation from DEQ
3. Approved Meeting Minutes

Public Body Procurement Workgroup

<http://dgs.virginia.gov/dgs/directors-office/procurement-workgroup/>

Meeting # 6

Monday, November 28, 2022, 9:30 a.m.

Conference Rooms C, D, and E

James Monroe Building

101 N 14th St, Richmond, Virginia 23219

AGENDA

I. Call to Order; Remarks by Chair

Sandra Gill, Deputy Director
Department of General Services

II. Approval of Meeting Minutes from the September 19, 2022 Workgroup Meeting

III. Status of the Final Reports for the Workgroup's Studies of SB 550 and SB 575

IV. Presentation on SB 272 (2022)

The Honorable Ghazala F. Hashmi
Senate of Virginia

V. Public Comment

VI. Presentation on DEQ's Role in Regulating Cement and Concrete Manufacturers in Virginia

Thomas Ballou, Air Data Analysis & Planning Manager
Virginia Department of Environmental Quality

VII. Presentation on VDOT's Use of Concrete for VDOT Projects

Charles A. Babisch, State Materials Engineer
Virginia Department of Transportation

VIII. Presentation on DGS' Use of Concrete for DGS Projects

W. Michael Coppa, Director of the Division of Engineering and Buildings
Virginia Department of General Services

IX. Discussion

X. Public Comment

XI. Adjournment

Members

Department of General Services
Virginia Information Technologies Agency
Department of Planning and Budget
Virginia Association of State Colleges and
University Purchasing Professionals

Department of Small Business and Supplier Diversity
Virginia Department of Transportation
Virginia Association of Government Purchasing

Representatives

Office of the Attorney General
Senate Finance Committee

House Appropriations Committee
Division of Legislative Services

Staff

Jessica Budd, Legal Policy Analyst, DGS
Jessica Hendrickson, Director of Policy and Legislative Affairs, DGS



DEQ Regulation of Cement and Concrete Operations

Public Body Procurement Workgroup Meeting

Tom Ballou
Air Quality Planning & Data Analysis Manager
Virginia Department of Environmental Quality
November 28, 2022

BACKGROUND

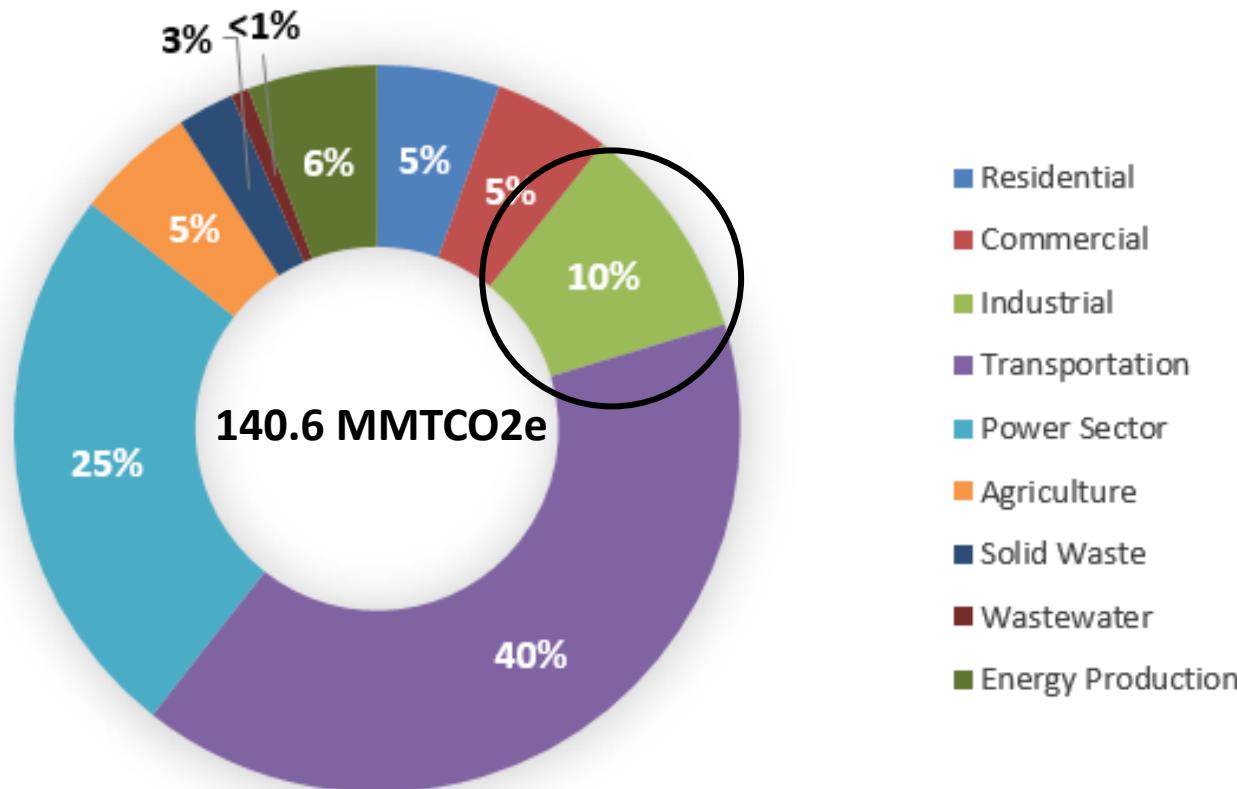
- Concrete (cement) industry is a source of both criteria and carbon emissions
 - 66 Million Metric Tons in 2020 (nationally)
 - ~10% of total industrial emissions
 - Main criteria pollutants - SO₂ and NO_x
- GHG emissions are both combustion and process related
 - Combustion of fossil fuel(s)
 - Process emissions from cement (clinker) production

INDUSTRY OPERATIONS AND AIR EMISSIONS

- DEQ regulates about 224 cement/concrete facilities in Virginia for criteria pollutants (but not CO₂)
- One large cement manufacturing facility – Roanoke Cement
 - Accounts for most of the criteria and GHG emissions
 - ~911,000 metric tons of CO₂ in 2021
 - 2,600 tons of both SO₂ and NO_x
- Remaining facilities mostly concrete batching and handling facilities
 - Minor sources of particulate matter

CURRENT EMISSIONS INVENTORY

2018 Virginia GHG Emissions



<https://www.deq.virginia.gov/air/greenhouse-gases>

VIRGINIA INDUSTRIAL SECTOR GHG EMISSIONS

Industry	CO ₂	HFCs, PFCs, NF ₃ , SF ₆	Total
Cement	0.8102	N/A	0.8102
Lime	0.9726	N/A	0.9726
Limestone & Dolomite	0.2122	N/A	0.2122
Soda Ash	0.0524	N/A	0.0524
Iron & Steel	0.8169	N/A	0.8169
Ammonia	0.9957	N/A	0.9957
Urea	0.0040	N/A	0.0040
ODS	N/A	4.3681	4.3681
Semiconductor	N/A	0.0699	0.0699
Electric T&D	N/A	0.1245	0.1245

Table 4. Process emissions by industry (MMTCO₂e)

OPTIONS FOR CONTROL

- Limited due to nature of the manufacturing process:
 - Fuel Switching (i.e., coal to natural gas, etc.)
 - Changes in raw materials
 - Carbon Capture and Sequestration

Approved Meeting Minutes

Public Body Procurement Workgroup

Meeting # 6

Monday, November 28, 2022, 9:30 a.m.

Conference Rooms C, D, and E

James Monroe Building

101 N 14th St, Richmond, Virginia 23219

<http://dgs.virginia.gov/dgs/directors-office/procurement-workgroup/>

The Public Body Procurement Workgroup (the Workgroup) met in-person in conference rooms C, D, and E in the James Monroe Building in Richmond, Virginia, with Sandra Gill, Deputy Director of the Department of General Services (DGS), presiding. The meeting began with remarks from Ms. Gill, followed by public comment, presentations, and discussion. Materials presented at the meeting are available through the [Workgroup's website](#).

Workgroup members and representatives present at the meeting included Sandra Gill (Department of General Services), Lisa Pride (Virginia Department of Transportation), John McHugh (Virginia Association of State Colleges and University Purchasing Professionals), Patricia Innocenti (Virginia Association of Governmental Procurement), Leslie Haley (Office of the Attorney General), Mike Tweedy (Senate Finance and Appropriations Committee), and Joanne Frye (Division of Legislative Services).

Willis Morris with the Department of Small Business and Supplier Diversity, Joshua Heslinga with the Virginia Information Technologies Agency, Jason Saunders with the Department of Planning and Budget, and Andrea Peeks with the House Appropriations Committee were absent.

I. Call to Order; Remarks by Chair

Sandra Gill, Deputy Director
Department of General Services

Ms. Gill called the meeting to order and welcomed the Workgroup members to the Workgroup's sixth meeting of the year.

II. Approval of Meeting Minutes from the September 19, 2022 Workgroup Meeting

Mr. McHugh made a motion to approve the meeting minutes from the September 19, 2022 meeting of the Workgroup. The motion was seconded by Ms. Pride and unanimously approved by the Workgroup.

III. Status of the Final Reports for the Workgroup's Studies of SB 550 and SB 575

Ms. Gill shared with the Workgroup that the final reports for the Workgroup's studies of SB 550 and SB 575 have been finalized and submitted to the General Assembly. She noted that they are available on the Workgroup's website and through the portal on the General Assembly's Legislative Information System website.

IV. Presentation on SB 272

The Honorable Ghazala F. Hashmi
Senate of Virginia

Senator Hashmi began her remarks by thanking the Workgroup for the opportunity to present SB 272 to the Workgroup. She explained that the bill has two main purposes. The first purpose is environmental – to specifically address the issue of CO₂ emissions that result from cement production. The second purpose is to put Virginia in alignment with the efforts that the cement and concrete industry are already taking to reduce CO₂ emissions resulting from cement and concrete production and to establish Virginia as a leader in this area.

Senator Hashmi explained that the production of cement, which is used to make concrete, requires extreme heat, and stated that such heat is obtained by burning powdered coal or natural gas. She stressed that the chemical reaction resulting from burning the coal or natural gas releases CO₂. She emphasized the profound environmental impact of the production of cement by citing statistics showing that if cement was a country, it would rank third in line for global CO₂ emissions just behind the United States and China. She emphasized that this impact is going to grow overtime as the Commonwealth increases its use of cement and concrete as it seeks to improve its infrastructure, particularly roads and bridges.

With this in mind, Senator Hashmi explained that her original goal for SB 272 and now for the Workgroup's study of SB 272 is for the Workgroup to review the climate impact of cement production and investigate potential incentives that may be offered to the cement and concrete industry to reduce overall CO₂ emissions from the production of cement and concrete that is used in Commonwealth-funded projects. She concluded her remarks by noting her desire that all stakeholders be given the opportunity to share their insights with the Workgroup.

V. Public Comment

The first stakeholder to comment was Eric Koehler, the Director of Quality at Titan America. Mr. Koehler explained that Titan America operates in Virginia as Titan Virginia Ready-Mix and Roanoke Cement Company. He shared that he is a part of Titan America's decarbonization team and they are increasingly working to find ways to decarbonize cement and concrete in all stages of its production – from the raw material extraction through the manufacturing process – and in its eventual delivery to the end user.

Mr. Koehler then described several efforts that Titan America has taken or is currently taking to reduce its carbon emissions. He shared that Titan America has committed to net zero concrete by 2050, as validated by the Science Based Targets initiative. He explained that in its efforts to meet that goal, Titan America will be required to meet interim objectives. Those interim objectives include achieving a 35% reduction target for their scope 1 emissions and a 45% reduction target for their scope 2 emissions by 2030. Given such goal and interim objectives, he stated Titan America is well on its way towards reducing its carbon emissions. Additionally, he shared that Titan America recently announced that they have fully converted their cement production to Type II cement, also known as Portland Limestone Cement, which is about 10 percent lower in CO₂ than traditional Type I and Type II cement. He shared that Titan American first began manufacturing Type II in 2015, and that they appreciated that Virginia's Department of Transportation (VDOT) was one of the first state departments of transportation to adopt Type II cement. He expressed Titan America's desire to accelerate the process for getting innovative new materials into the VDOT's spec mix designs so that progress in reducing carbon emissions from the production of concrete can be achieved more quickly. Further, he noted that Titan America is working on researching carbon capture and utilization.

Mr. Koehler concluded his remarks by thanking the Workgroup for the opportunity to speak. He expressed Titan America's excitement about the study and about the future of concrete in Virginia, which he emphasized brings innovation, economic development, and other benefits to taxpayers.

The second stakeholder to comment was Chris Clow with Holcim Ready Mix Concrete in Virginia. He shared that Holcim is a Swiss-based company and is the world's leader in cement and concrete aggregate production. He stressed that carbon reduction is a significant challenge and goal for their entire industry. He stated that his company appreciates the importance that states across the country are placing on this initiative because it is very important that the right solution is reached. He stressed the importance of allowing all stakeholders to have an opportunity to participate in the Workgroup's study and thanked the Workgroup for the opportunity to speak at today's meeting.

The third and final stakeholder to comment was Nikhil Neelakantan with OpenAir. He explained that OpenAir is a distributed, volunteer-led network that aims to creatively capitalize on opportunities to advance, accelerate, and coinvent CO₂ removal in the real world through collaborative advocacy and research on carbon emissions. He noted that OpenAir does not represent any particular industry group. He shared that OpenAir has been involved in highlighting the role that the cement and concrete industry has in creating a net zero future and shared that OpenAir has been involved with several pieces of legislation on this topic in numerous states and localities.

Mr. Neelakantan informed the Workgroup that there are a number of well-established and innovation-based pathways to reducing the carbon footprint of concrete. He stressed to the Workgroup that the public sector has a critical role to play in leading the transition to lower carbon concrete because state and local governments together are the biggest purchasers of concrete in any given state. He emphasized that in the last two years numerous state and localities have focused on the power of public sector procurement to drive change and listed several examples. First, he shared that in 2020, Colorado passed

its “Buy Clean” law, which includes concrete among several major construction materials that must meet emissions thresholds for public construction projects. Additionally, he noted that Colorado has binding targets for cement emissions reductions that will be phased in over the next three decades. He also shared that over the summer, the New Jersey Senate unanimously passed the Embodied Carbon Concrete Leadership Act (the Act) with significant bipartisan support, and that the Act recently passed the state assembly’s environmental conservation committee and is scheduled for a full vote in the chamber next month. He emphasized that the Act is also supported by New Jersey’s governor. Further, he shared that in 2022 New York passed its own version of the Act and implemented the first low carbon concrete specifications for public projects.

Additionally, he shared that New York also introduced new carbon reduction targets and possible incentives as part of a new executive order, and also described low carbon concrete standards put in place by New York City and the New York Port Authority. Further, he highlighted for the Workgroup that cities such as Austin, Portland, and Honolulu have implemented carbon-based procurement standards of prioritization for concrete, and that Illinois, Massachusetts, Washington, and California have introduced similar legislation in the past year. He stressed that the federal government, under the Inflation Reduction Act, will mobilize significant funding that will flow to states in the coming months and years for low carbon concrete research and incentives, and that states that put in place clear plans and commitments to lower carbon in concrete will be best positioned to capture those resources.

Moving on to discuss international efforts at concrete decarbonization, Mr. Neelakantan pointed the Workgroup to the CO₂ Performance Ladder from the Netherlands. He explained that the Performance Ladder was initiated in 2009 and is a green public procurement instrument that certifies companies’ climate action. In return for companies making commitments to reduce emissions, they receive an award advantage. He noted that the Performance Ladder serves as both a CO₂ management system by guiding the companies’ climate action and as a public policy instrument through which the government can incentivize climate mitigation.

In concluding his remarks, Mr. Neelakantan stressed that action on concrete decarbonization must not come at the expense of safety or quality or overly burden taxpayers. He emphasized, however, that many existing and emerging decarbonization methods and practices are economically competitive and deliver superior quality and durability compared to conventional methods and practices.

VI. Presentation on DEQ’s Role in Regulating Cement and Concrete Manufacturers in Virginia

***Thomas Ballou, Air Data Analysis & Planning Manager
Virginia Department of Environmental Quality***

Thomas Ballou, Air Data Analysis & Planning Manager at the Virginia Department of Environmental Quality (DEQ) gave a presentation to the Workgroup on DEQ’s role in regulating cement and concrete manufacturers in Virginia. He shared that he has been involved in some of the regulatory efforts at DEQ to reduce CO₂ and also that his group

works on emissions inventories, which estimate the level of emissions coming from facilities and manufacturers like cement and concrete producers.

As background, Mr. Ballou explained that the emissions that result from the cement and concrete sector are twofold – they come from the actual process of producing cement *and* from the combustion of fossil fuels (which is required to generate the extreme heat that is needed to produce clinker, a primary ingredient in cement). He noted that nationally, about 66 million metric tons of CO₂ are produced by the approximately 100 cement manufacturers in the country, and that such 66 million metric tons of CO₂ is about 10 percent of the total industrial emission of greenhouse gases (GHGs) in the country. He shared that in addition to emitting GHGs, cement and concrete manufacturers are also a fairly significant source of criteria pollutants, which are emissions identified in and regulated by the Clean Air Act. He highlighted that the primary criteria pollutants that are emitted by cement and concrete manufacturers are sulfur dioxide (SO₂) and nitrogen oxides (NO_x) and noted that both are a product of the combustion of fossil fuels.

Mr. Ballou shared with the Workgroup that in Virginia specifically, DEQ regulates approximately 224 cement and/or concrete facilities. He stressed that DEQ regulates them only for criteria pollutants. They do not currently regulate them for CO₂. He noted that DEQ has generally only ventured into regulating CO₂ for two sectors – the power sector and motor vehicles. He emphasized that those two sectors are the main sources of CO₂ both in Virginia and in the country. He shared that there is one large cement manufacturer in Virginia – Roanoke Cement Company and noted that in 2021 Roanoke Cement Company emitted just under a million tons of CO₂ and approximately 2,600 tons of both SO₂ and NO_x. He explained that such criteria pollutant emissions are fairly significant, and that he would qualify Roanoke Cement Company as a substantially regulated source of criteria pollutants. Mr. Ballou explained that the 223 remaining cement and/or concrete facilities that are regulated by DEQ are mostly concrete batching and/or handling facilities and they are generally smaller operations. He noted that the main pollutants of concern at such facilities are particulate matter, and such facilities do not produce much CO₂.

Mr. Ballou then showed the Workgroup a pie chart illustrating the latest GHG inventory assembled by DEQ to provide the Workgroup with a general idea of the major sectors in GHG emissions. The chart showed that in total in 2018 there was approximately 140 million metric tons of CO₂ emitted in Virginia. He pointed out that the largest sector for GHG emissions is transportation, followed by the power sector. He highlighted that the industrial sector (which includes cement and concrete production) accounted for 10 percent of the total GHG emissions, and that the cement and concrete industry, specifically, produced just under a million metric tons of CO₂, which he categorized as a fairly small component of Virginia's GHG inventory.

Mr. Ballou then gave the Workgroup a brief overview of some of the control technologies that are being developed and/or promoted as possible solutions for reducing carbon emissions resulting from the cement industry. He discussed carbon capture and sequestration or utilization as a potential solution, but shared that this potential solution is most likely a longer-term goal and can also be somewhat technologically and economically challenging. Further, he mentioned that cement manufacturers can switch

to cleaner burning fuels to lower the amount of CO₂ that is emitted during the combustion process. Finally, he mentioned that cement manufacturers can use different raw materials, which can reduce CO₂ emissions during the production process.

VII. Presentation on VDOT's Use of Concrete for VDOT Projects

Charles A. Babis, State Materials Engineer
Virginia Department of Transportation

Andy Babis, State Materials Engineer with VDOT, spoke to the Workgroup about VDOT's use of concrete and its current practices related to carbon footprint reduction. He shared that according to a recent study done by the Balmoral Group for VDOT, it is estimated that VDOT's consumption of concrete in Virginia for the calendar year 2022 is approximately 525,000 cubic yards. He explained that such amount is approximately six percent of the total estimated concrete production in Virginia.

Mr. Babis then discussed some current efforts VDOT is taking to reduce its carbon footprint. He shared that VDOT allows the use of waste-stream byproducts, commonly referred to as supplementary cementitious materials (SCMs), in their concrete mixes as an alternative to portland cement. He cited examples of SCMs, including fly ash, which is a byproduct of coal-fire and coal-generated production facilities; slag cement, which is a byproduct of steel production; and silica fume, which is a byproduct of metal production. He explained that these SCMs have a small amount of cementing materials in them, and they react with cement to produce compounds with cementitious properties. As such, SCMs can replace some portland cement.

Additionally, Mr. Babis shared that VDOT also allows Type IL cement to be used in their mixes. He explained that Type IL cement is a newer cement in the marketplace that has become more commonplace in concrete production over the last three to four years. He noted that Type IL cement has more limestone content than the more commonly used "Type I" or "Type II" cements and takes less energy to manufacture, thus reducing its carbon footprint by about 10% (according to the Portland Cement Association).

Further, Mr. Babis noted that VDOT has been specifying maximum cementitious material contents for most of their structural concrete, especially for bridge decks, to prevent and mitigate shrinkage cracking. Doing so, he explained, promotes longevity and durability in the structural concrete and reduces carbon footprint at construction and through the life of the structures.

Finally, Mr. Babis shared that VDOT has been looking at some carbon sequestration technologies and methods with the help of the Virginia Transportation Research Council and the industry as additional means of reducing VDOT's carbon footprint. He noted that they have been evaluating such technologies and methods for a few years to see how they may help with VDOT's long-term carbon reduction efforts.

VIII. Presentation on DGS' Use of Concrete for DGS Projects

W. Michael Coppa, Director of the Division of Engineering and Buildings

Virginia Department of General Services

Mike Coppa, the Director of the Division of Engineering and Buildings (DEB) for DGS, spoke to the Workgroup about DGS' use of concrete. Based upon the amount of money spent on construction annually in Virginia, Mr. Coppa shared that he estimates that DGS uses approximately 40,000 cubic yards of concrete per year, which is about one-half of a percent of the concrete used in Virginia per year.

Mr. Coppa noted that DEB writes the Construction and Professional Services Manual (CPSM), which agencies throughout the Commonwealth must follow for their construction. He explained that the CPSM looks for a 50-year lifecycle in buildings and simply requires the concrete mixes used for buildings to include at least 50 percent portland cement. They rely upon the project's structural engineers to design the specific concrete mixes within the parameters laid out in the CPSM, and DEB then looks at the appropriateness of such mixes based upon factors such as the need to reduce the heat of vibration or the need to increase strength.

Mr. Coppa summarized his remarks by reiterating that DGS uses a very small amount of concrete in its projects, the projects' architects and engineers are the ones to design the specific concrete mixes, and the CPSM looks for a long lifecycle for the Commonwealth's buildings.

IX. Discussion

Ms. Gill asked the Workgroup if they would like to engage in any discussion on the presentations and public comment received by the Workgroup thus far. Ms. Innocenti asked for clarification as to why the Workgroup is studying SB 272 given that the substitute version of SB 272 does not specifically request the Workgroup to undertake the study. Ms. Gill explained that SB 272 was not passed by the General Assembly during the 2022 Regular Session but was instead tabled in the House Committee on Agriculture, Chesapeake and Natural Resources with the committee's chairmen expressing his intent to ask VDOT and DGS to study the bill. She shared that over the summer, Delegate Leftwich sent a letter to DGS asking DGS to initiate a study on SB 272 and review ways to continue to reduce carbon emissions in concrete and cement without sacrificing the integrity of the product and cost competitiveness. She noted that a copy of the letter from Delegate Leftwich was included in the meeting materials for today's meeting. She shared that for today's meeting, she called the Workgroup together to hear from Senator Hashmi, stakeholders, DEQ as the relevant Virginia regulatory agency for air emissions, and VDOT and DGS as the primary state agency users of concrete in Virginia to give presentations to the Workgroup and assist it with assessing the climate impact of cement and concrete and considering possible recommendations for reducing the climate impact of cement and concrete used on Commonwealth projects.

X. Public Comment

There was no further public comment.

XI. Adjournment

Ms. Gill adjourned the meeting at 10:13 a.m. and noted that the Workgroup's staff will reach out to the Workgroup's members to schedule the next meeting. She shared that at the next meeting the Workgroup will hear additional public comment and begin discussing potential recommendations.

For more information, see the [Workgroup's website](#) or contact that Workgroup's staff at pwg@dgs.virginia.gov.

Appendix D: May 2, 2023 Meeting Materials

This appendix contains the meeting materials from the May 2, 2023 Workgroup meeting.

1. Agenda
2. Meeting Materials
 - a. Public Body Procurement Workgroup 2023 Proposed Work Plan
 - b. Outline of Information Presented at the November 28, 2022 Workgroup Meeting on SB 272
 - c. PWG SB 272 Survey – Local Government Usage of Concrete
3. Approved Meeting Minutes

Public Body Procurement Workgroup

<http://dgs.virginia.gov/dgs/directors-office/procurement-workgroup/>

Meeting # 1

Tuesday, May 2, 2023, 1:00 p.m.

House Room 1

The Virginia State Capitol

1000 Bank Street, Richmond, Virginia 23218

AGENDA

- I. **Call to Order; Remarks by Chair**
- II. **Introduction of Workgroup Members, Representatives, and Staff**
- III. **Approval of Meeting Minutes from the November 28, 2022 Workgroup Meeting**
- IV. **Recap of 2022 Work and Overview of Proposed 2023 Work Plan**
- V. **Consideration and Discussion of Public Comment, Presentations, and Other Information Received by the Workgroup on SB 272**
- VI. **Findings and Recommendations on SB 272**
- VII. **Public Comment**
- VIII. **Discussion**
- IX. **Adjournment**

Members

Department of General Services
Virginia Information Technologies Agency
Department of Planning and Budget
Virginia Association of State Colleges and
University Purchasing Professionals

Department of Small Business and Supplier Diversity
Virginia Department of Transportation
Virginia Association of Government Purchasing

Representatives

Office of the Attorney General
Senate Finance Committee

House Appropriations Committee
Division of Legislative Services

Staff

Jessica Budd, Legal Policy Analyst, DGS
Jessica Hendrickson, Director of Policy and Legislative Affairs, DGS

Public Body Procurement Workgroup

<http://dgs.virginia.gov/dgs/directors-office/procurement-workgroup/>

2023 PROPOSED WORK PLAN

Meeting #1 – May 2, 2023 at 1:00 p.m.

1. Introduction of Workgroup Members, Representatives, and Staff
2. Recap of 2022 Work and Overview of Proposed 2023 Work Plan

During the 2023 Session, the General Assembly unanimously passed two bills that implemented the recommendations from the Workgroup's study of SB 550 (2022) [Sen. Bell] – SB 1313, patroned by Sen. Bell, and SB 2500, patroned by Del. Wiley.

The Workgroup began studying SB 272 (2022) [Sen. Hashmi] at its last meeting on November 28, 2022. The Workgroup must complete this study and report its findings and recommendations by December 1, 2023.

Additionally, during the 2023 Session, the General Assembly referred the following four new bills to the Workgroup for study:

- *SB 859 (2023), patroned by Senator Cosgrove, which would remove the requirement that local public bodies publish notice of a Request for Proposal on DGS' central electronic procurement website (eVA) if they elect not to publish notice of the Request for Proposal in a newspaper of general circulation in the area in which the contract is to be performed. Currently, local public bodies must publish notice of a Request for Proposal either on eVA or in a newspaper of general circulation in the area in which the contract is to be performed. They may choose to also post such notice on an "appropriate website." The bill would allow local public bodies to satisfy the VPPA's notice requirements for a Request for Proposal by simply posting notice of the Request for Proposal on an "appropriate website."*
- *SB 912 (2023), patroned by Senator Ruff, which would prohibit public bodies, in the case of proposals for information technology, from requiring offerors to state in their proposal any exceptions they may have to any of the contractual terms and conditions, including any liability conditions, contained in the Request for Proposal. The bill would require such offerors to instead state any such exceptions in writing at the beginning of negotiations, and require public bodies to consider such exceptions during negotiation.*
- *SB 954 (2023), patroned by Senator Petersen, which appears to (i) narrow the definition of "complex project" such that projects would be required to meet stricter criteria in order to be deemed complex and therefore appropriate for utilizing construction management and design-build (CM/DB) procurement methods; (ii) prohibit the use of CM/DB procurement methods for projects totaling less than \$5*

million; and (iii) for projects totaling between \$5 million and \$125 million, require public bodies to (a) obtain approval from the Secretary of Administration to use CM/DB procurement methods and (b) conduct a two-step procurement process in which the public body must first award a contract for preconstruction services, and, upon completion of such contract, award a second contract for construction services using competitive sealed bidding.

- *SB 1115 (2023), patroned by Senator DeSteph, which would (i) require state public bodies to decrease the price of any bid offered by (a) seven percent for a “Virginia end product” and (b) two percent for a “U.S. end product”; (ii) require that when the lowest responsive and responsible bidder, after price preferences have been taken into account, who is a resident of Virginia is within five percent or \$10,000, whichever is less, of the lowest responsive and responsible bidder who is a resident of another state, the bidder who is a resident of Virginia be given the opportunity to match the price of the bidder who is a resident of another state; and (iii) provide that if a state public body receives three or more bids from manufacturers that use materials or product components made in Virginia or in the U.S., such public body may only select from among such bids.*

The Workgroup must complete its studies of each of these bills and report its findings and recommendations to the bills’ patrons and the appropriate committee chairmen by November 1, 2023.

3. SB 272 – Make preliminary findings and recommendations.

Meeting #2 – May 16, 2023 at 1:00 p.m.

1. SB 272 – Finalize findings and recommendations.
2. SB 859 –
 - a. Hear presentations and public comment.
 - b. Make preliminary findings and recommendations.
3. SB 912
 - a. Hear presentations and public comment.
 - b. Make preliminary findings and recommendations.

Meeting #3 – June 6, 2023 at 1:00 p.m.

1. SB 859 – Finalize findings and recommendations.
2. SB 912 – Finalize findings and recommendations.
3. SB 1115 –
 - a. Hear presentations and public comment.

Meeting #4 – June 27, 2023 at 1:00 p.m.

1. SB 1115 –
 - a. Review information received at previous meeting and receive any additional information.
 - b. Make preliminary findings and recommendations.

Meeting #5 – July 18, 2023 at 9:30 a.m.

4. SB 1115 – Finalize findings and recommendations.
5. SB 954 –
 - a. Hear presentations and public comment.

Meeting #6 – August 8, 2023 at 1:00 p.m.

2. SB 954 –
 - a. Review information received at previous meeting and receive any additional information.
 - b. Make preliminary findings and recommendations.

Meeting #7 – August 22, 2023 at 1:00 p.m.

1. SB 954 – Finalize findings and recommendations.

November 1, 2023

1. Reports on the Workgroup's findings and recommendations on SB 859, SB 912, SB 954, and SB 1115 due to the bills' patrons and committee chairmen.

December 1, 2023

1. Reports on the Workgroup's findings and recommendations on SB 272 due to the General Assembly.

**OUTLINE OF INFORMATION PRESENTED AT NOVEMBER 28, 2022
PROCUREMENT WORK GROUP MEETING ON SB 272:**

I. What is the issue?

a. Sen. Hashmi:

- i. CO₂ emissions that result from cement production.
 - 1. Sen. Hashmi's request to PWG –
 - a. Review the climate impact of cement production and investigate potential incentives that may be offered to the cement and concrete industry to reduce overall CO₂ emissions from the production of cement and concrete that is used in Commonwealth-funded projects.

II. What is the magnitude of the issue?

a. DEQ:

- i. Concrete batching and/or handling facilities do not produce much CO₂. CO₂ is instead emitted during cement production.
- ii. The emissions that result from cement production are twofold. They come from -
 - 1. The actual process of producing cement *and*
 - 2. The combustion of fossil fuels (which is required to generate the extreme heat that is needed to produce clinker, a primary ingredient in cement).
- iii. Scope of emissions
 - 1. Nationally -
 - a. The approximately 100 cement manufacturers in the country produce about 66 million metric tons of CO₂.
 - i. = about 10% of total industrial GHG emissions in the country.
 - 2. Virginia -
 - a. In 2018, approximately 140 million metric tons of CO₂ was emitted in Virginia.
 - i. The largest sector for emissions in transportation, followed by the power sector.
 - ii. The industrial sector (which includes cement and concrete production) accounted for about 10% of the total CO₂ emissions (just under a million metric tons of CO₂).
 - Virginia only has one large cement manufacturer (Roanoke Cement Company), which in 2021 emitted just under a million tons of CO₂.
 - This is a fairly small component of Virginia's GHG inventory.

iv. Scope of DEQ's regulatory authority

- 1. DEQ regulates -

- a. Criteria pollutants (emissions identified in and regulated by the federal Clean Air Act)
- b. GHGs (CO₂) emitted by the two sectors that emit the largest amount of GHGs - the power sector and motor vehicles.
 - i. Otherwise, DEQ does not regulate CO₂ from other sources (including cement producers).

III. How much do state and local government projects contribute to the issue?

- a. OpenAir (environmental group):
 - i. CO₂ emissions from the cement and concrete industry must be addressed if we are to work towards a net zero carbon future.
 - ii. The public sector has a critical role to play in leading the transition to lower carbon concrete because state and local governments together are the biggest purchasers of concrete in any given state.
- b. VDOT:
 - i. A recent study done by the Balmoral Group for VDOT estimated that VDOT's consumption of concrete in Virginia for the calendar year 2022 is approximately 525,000 cubic yards = 6% of the total estimated concrete production in Virginia.
 - 1. This figure includes local transportation projects.
- c. DGS:
 - i. Based upon the amount of money spent on construction annually in Virginia, DEB estimates that DGS uses approximately 40,000 cubic yards of concrete per year = 0.5% of the concrete used in Virginia per year.

IV. What is currently being done to address the issue?

- a. Industry
 - i. Titan America
 - 1. Has a decarbonization team.
 - 2. They are increasingly working to find ways to decarbonize cement and concrete in all stages of its production - from the raw material extraction through the manufacturing process - and in its eventual delivery to the end user.
 - 3. They have fully converted their cement production to Type IL cement (aka Portland Limestone Cement), which is about 10% lower in CO₂ than traditional Type I and Type II cement.
 - a. They have been producing Type 1L cement since 2015.
 - b. VDOT was one of the first state departments of transportation to adopt Type IL cement.
 - 4. They have committed to net zero concrete by 2050, as validated by the Science Based Targets initiative.
 - a. They are required to meet interim objectives.
 - i. For example, they must achieve a 35% reduction target for their scope 1 emissions and 45% reduction target for their scope 2 emissions by 2030.
- b. VDOT

- i. Allows the use of materials in their concrete mixes that create less CO₂:
 - 1. VDOT allows the use of waste-stream byproducts (supplementary cementitious materials, or SCMs) in their concrete mixes as an alternative to replace some Portland Cement.
 - a. This is like recycling, so less CO₂ is emitted since less Portland Cement is used in the mix.
 - 2. VDOT allows Type IL cement to be used in their mixes.
 - a. Type IL cement has more limestone content than the more commonly used Type I or Type II cements. It takes less energy to manufacture, so its carbon footprint is about 10% less than the traditional Type I and Type II cements.
 - 3. VDOT specifies maximum cementitious material content for most of their structural concrete in order to prevent and mitigate shrinkage cracking and therefore promote longevity and durability. Doing so also reduces the concrete's carbon footprint both at construction and through the life of the structures.
 - 4. VDOT has been working with the Virginia Transportation Research Council and the industry for a few years to investigate carbon sequestration technologies and methods to see how they may help with VDOT's long-term carbon reduction efforts.
- c. DGS
 - i. CPSM requires that concrete mixes contain at least 50% Portland Cement in order to ensure a long life cycle for the building.
 - 1. Structural engineers then design the rest of the mix based upon the building's additional needs (e.g., the need to reduce the heat of vibration or the need to increase strength) and DEB reviews the appropriateness of such mixes based upon such additional needs.
- d. DEQ
 - i. Potential solutions:
 - 1. Manufacturers can switch to cleaner burning fuels to lower the amount of CO₂ that is emitted during the construction process.
 - 2. Manufacturers can use different raw materials, which can reduce CO₂ emissions during the production process.
 - 3. Carbon capture and sequestration or utilization
 - a. This potential solution is most likely a longer-term goal and can also be somewhat technologically and economically challenging.

V. What can be done to further address the issue?

- a. Titan America – Would like to see the process for getting innovative new materials into VDOT's spec mix designs accelerated so that progress in reducing carbon emission from the production of concrete can be achieved more quickly.
- b. Open Air – Per OpenAir, other states/cities and countries have passed legislation requiring or incentivizing the use of lower carbon concrete.

PWG/SB 272 Survey - Local Government Usage of Concrete						
Questions	Response #1	Response #2	Response #3	Response #4	Response #5	Response #6
<i>What is your name?</i>	Patti Innocenti	Wendy Cole	Steven Lee	Hollie Casey	James Bisbee	Connie Gibson
<i>What is your title?</i>	Procurement Manager	Procurement Coordinator	Executive Director of Materials Management	Procurement Officer	Supervisor of Procurement & Risk Management	Procurement Manager
<i>What is your email address?</i>	patricia.innocenti@ramaxvag.com	colewe@staffordschools.net	leecit@evms.edu	hcasey@dinwiddieva.us	bisbeejg@ci.waynesboro.va.us	connie.gibson@pittgov.org
<i>responding? Please specify county, city, town, K-12 school system, authority, etc. in your response (Example: Henrico County, Henrico County Public Schools).</i>	City of Fairfax	Stafford County Public Schools	Eastern Virginia Medical School	Dinwiddie County Government	City of Waynesboro	Pittsylvania County Board of Supervisors
<i>vertical construction contracts awarded in FY 2022?</i> <i>Please only include locally-funded projects, NOT state-funded projects.</i>	\$0	\$9,649,725.60	\$0	\$0	\$0	\$0

Public Body Procurement Workgroup

Draft of Final Recommendation for SB 272

The Workgroup finds that it is not appropriate at this time for the state to enact procurement incentives for the cement and concrete industries to reduce overall CO₂ emissions resulting from the manufacturing cement and production of concrete that is used in state-funded projects because (i) the cement and concrete industries are already making significant strides to reduce overall CO₂ emissions resulting from the manufacturing of cement and production of concrete and has committed to making additional progress in the future, (ii) the Virginia Department of Transportation permits and advocates for lower carbon concrete to be used in its specifications and has been working with the cement and concrete industries for several years to reduce the amount of CO₂ associated with the concrete used in transportation projects, and (iii) the state agencies that use concrete on vertical construction projects use a very small amount of the total cement produced in Virginia each year (one-half percent).

Approved Meeting Minutes

Public Body Procurement Workgroup

Meeting # 1

**Tuesday, May 2, 2023, 1:00 p.m.
House Room 1
The Virginia State Capitol
1000 Bank Street, Richmond, Virginia 23218**

<http://dgs.virginia.gov/dgs/directors-office/procurement-workgroup/>

The Public Body Procurement Workgroup (the Workgroup) met in-person in House Room 1 in the Capitol in Richmond, Virginia, with Joe Damico, Director of the Department of General Services (DGS), presiding. The meeting began with remarks from Mr. Damico, followed by discussion and recommendations for SB 272, public comment, and further discussion by the Workgroup members. Materials presented at the meeting are available through the Workgroup's website.

Workgroup members and representatives present at the meeting included Joe Damico (Department of General Services), Willis Morris (Department of Small Business and Supplier Diversity), Joshua Heslinga (Virginia Information Technologies Agency), Lisa Pride (Virginia Department of Transportation), Jonathan Howe (Department of Planning and Budget), Patricia Innocenti (Virginia Association of Governmental Procurement), John McHugh (Virginia Association of State Colleges and University Purchasing Professionals), Leslie Haley (Office of the Attorney General), Andrea Peeks (House Appropriations Committee), and Mike Tweedy (Senate Finance and Appropriations Committee), and Joanne Frye, representing the Division of Legislative Services.

I. Call to Order; Remarks by Chair

***Joe Damico, Director*
Department of General Services**

Mr. Damico called the meeting to order and thanked the House Clerk's Office for allowing the Workgroup to hold its meetings in House Room 1 in the Capital Building. He informed the Workgroup that this year he and Sandra Gill, Deputy Director of the Department of General Services, will alternate as Chair of the Workgroup.

II. Introduction of Workgroup Members, Representatives, and Staff

III. Approval of Meeting Minutes from the November 28, 2022 Workgroup Meeting

Mr. Tweedy made a motion to approve the meeting minutes from the November 28, 2022 meeting of the Workgroup. The motion was seconded by Ms. Pride and unanimously approved by the Workgroup.

IV. Recap of 2022 Work and Overview of Proposed 2023 Work Plan

Next, Mr. Damico asked Ms. Gill to present a recap of the work accomplished by the Workgroup in 2022, as well as the proposed workplan for the Workgroup's 2023 studies.

Mr. Gill reminded the group that two bills were originally referred to the Workgroup by the General Assembly in 2022 (SB 550 and SB 575), and that a third bill was referred to the Workgroup later in the year (SB 272). Ms. Gill provided a summary of the work undertaken by the Workgroup related to SB 575 (which pertained to the use of a total cost of ownership calculator for medium-duty and heavy-duty vehicles) and SB 550 (which pertained to payment of subcontractors). Ms. Gill noted that two bills (SB 1313 and SB 2500) were introduced and passed by the General Assembly during the 2023 Session that implemented the Workgroup's recommendations on SB 550.

Moving to the proposed 2023 work plan, Ms. Gill provided an overview of the four new bills that were referred to the Workgroup by the General Assembly during the 2023 Session: SB 859, patroned by Senator Cosgrove; SB 912, patroned by Senator Ruff; SB 954, patroned by Senator Petersen; and SB 1115, patroned by Senator DeSteph. She stated that the proposed work plan includes tentative dates for six additional meetings for the workgroup to complete its studies of these four bills.

V. Consideration and Discussion of Public Comment, Presentations, and Other Information Received by the Workgroup on SB 272

Ms. Gill noted that workgroup began its study of SB 272 at its last meeting on November 28, 2022. She provided the Workgroup with an overview of the information that was shared with the Workgroup on SB 272 at that meeting by stakeholders and subject matter experts. She also noted that since the last meeting DGS staff conducted a survey of local governments to determine the amount of concrete they use, but only six responses to the survey were received.

She then presented the Workgroup with several considerations for it to discuss as possible recommendations on SB 272. Those considerations were: (1) codify procurement preferences and initiatives in the bill for low carbon concrete, (2) address the issue with policy through preferences or incentives, (3) not make changes to the law or implement

policy because the industry is already moving towards low carbon concrete, (4) create tax incentives for the industry to move towards low carbon concrete, or (5) consider whether the Virginia Department of Environmental Quality should regulate CO₂ emissions for cement and concrete.

Mr. Damico asked Ms. Gill to clarify which agencies would be impacted by the bill as introduced. She stated that the bill amends the DGS code section, therefore agencies under DGS purview would be impacted and it would be DGS' responsibility to establish policy. Mr. Damico asked Ms. Gill for clarification as to how the Virginia Department of Transportation (VDOT) would be impacted by the bill, and she responded that the bill does not specifically exclude roads and bridges, however based on DGS' enabling legislation there could be an interpretation that roads and bridges are not under DGS' authority. Mr. Damico then confirmed with Ms. Gill that testimony provided to the Workgroup at its previous meeting indicated that VDOT uses approximately six percent of the total amount of concrete used in Virginia each year, and that DGS uses approximately one-half of one percent of the total amount of concrete used in Virginia each year.

Mr. Damico asked the Workgroup if they have any thoughts or comments. Ms. Pride stated that VDOT has been working diligently for several years to allow the use of lower carbon concrete in its specifications and to work with the industry to continue to lower the amount of carbon associated with the concrete it uses in its projects. She indicated that she would like the Workgroup to move forward with the third recommendation presented by Ms. Gill, which was to not impose additional requirements on the industry because they are already making progress on this issue and VDOT has also been moving in the right direction. She also reiterated how small the amount of concrete used by state agencies is compared to the private sector.

Mr. Damico asked Ms. Gill about DEQ's testimony at the previous meeting and whether they stated that they currently monitor CO₂ emissions from the production of cement and concrete. She stated that DEQ testified that they do not currently regulate CO₂ emissions from the production of cement and concrete. He then asked if there was any indication in the previous meeting as to whether DEQ is in a position to monitor the industry's commitment to move toward a CO₂ emissions-free cement and concrete manufacturing process. Ms. Gill stated the DEQ did not testify that they have any intent to regulate, monitor, or track CO₂ emissions from the production of cement and concrete. Mr. Damico asked the Workgroup members whether they feel that it would be appropriate to ask DEQ if they could monitor and report on the CO₂ emissions from the production of cement and concrete in order to track the industry's progress toward moving towards lower carbon concrete. Mr. Heslinga sought clarification as to whether Mr. Damico is contemplating asking DEQ to monitor the industry's progress as opposed to affirmatively regulating the industry's CO₂ emissions. Mr. Damico answered in the affirmative.

VI. Findings and Recommendations on SB 272

Mr. Damico asked Ms. Pride to restate her recommendation. Ms. Pride stated that she recommends that the Workgroup allow VDOT to continue the work that has done regarding permitting the use of lower carbon concrete in its specifications and allow the industry to continue the progress that it has made in reducing the amount of carbon in concrete, allow those two things to be the drivers of the reduction of carbon in concrete. Mr. Heslinga stated he would second the recommendation and sought clarification on the process of finalizing the recommendation. Mr. Damico called for a vote of the Workgroup. Prior to the voting Mr. Morris asked for clarification as to whether there would be voluntary reporting by VDOT and/or the industry on progress towards this initiative. Ms. Pride stated VDOT does not currently do such reporting, but they keep track of their specifications and could report on those changes. The Workgroup voted in favor of the recommendation made by Ms. Pride¹. Next, Mr. Damico asked the Workgroup for approval to engage DEQ regarding its capacity to monitor the industry's progress towards producing emissions-free cement. The Workgroup unanimously approved his request.

VII. Public Comment

The first stakeholder to comment was Walton Shephard with the Natural Resources Defense Council. Mr. Shephard stated that he wanted to clarify that the bill never contemplated imposing any requirements and that it only contemplated rewarding voluntary actions that the industry is indeed already taking. He asked the state to recognize those actions by codifying provisions that would use the state's purchasing power to show a preference for cleaner concrete or cement similar to provisions implemented in New Jersey. He acknowledged that Virginia does allow the use of cleaner cement and concrete but stressed that he would like the state proactively encourage its use.

Mr. Morris asked Mr. Shelton for clarification regarding the voluntary rewards system. Mr. Shephard responded that when bids come in and a particular bidder's concrete is verified to be cleaner than average, such bidder would receive a slight bonus in the bid stack. Mr. Damico asked for clarification as to how such a preference would work if there is one cement manufacturer in Virginia, and further asked about the potential cost impacts of bringing in lower carbon concrete from manufacturers located outside of Virginia. Mr. Shelton responded that he is not sure of the answers to such questions, but that he assumes that theoretically such procurement preference would still incentivize Virginia's one manufacturer to clean up its production process because the state could purchase cement from a producer in Maryland or North Carolina instead of the one manufacturer in Virginia.

¹ The votes on recommendation the recommendation were as follows: Yes – Patricia Innocenti, John McHugh, Jonathan Howe, Joe Damico, Lisa Pride, and Joshua Heslinga, Willis Morris; Abstain – Andrea Peeks, Mike Tweedy, Leslie Haley, and Joanne Frye

The second stakeholder to comment was Kisia Kimmons, a technical services manager with Roanoke Cement. Ms. Kimmons confirmed that Roanoke Cement is the only cement manufacturer in Virginia, but there are also several producers from outside of the state that deliver product within the state that also provide lower carbon cement products. She stated that such other products come from places such as South Carolina and various locations in the North East, and that some are imported.

Mr. McHugh asked whether low carbon concrete is more expensive than traditional concrete. Ms. Kimmons responded that typically in many markets Type II cement has cost the same as traditional Type I/II concrete and that it has been a one-to-one replacement. Ms. Frye asked whether the low carbon cement produced by Roanoke Cement is lower in carbon than the other low carbon cement products on the market. Ms. Kimmons responded that it can vary depending on the product. Mr. Heslinga asked if there are existing reporting on the adoption of lower carbon cement. Ms. Kimmons stated that she is not aware of any required reporting, however from a manufacturing perspective it is not difficult for them to provide replacement factor information. Mr. Morris asked Ms. Kimmons for clarification that Roanoke Cement is the only cement manufacturer in Virginia, which she confirmed, and asked whether they have experienced any supply chain challenges. Ms. Kimmons responded that they are not experiencing any such challenges at this time, and reiterated that the state has resources from other facilities as well that feed into this market.

The third stakeholder to comment was Phil Abraham with the Vectre Corporation. Mr. Abraham spoke to the Workgroup concerning its study of SB 550 last year and the legislation subsequently passed by the General Assembly during the 2023 Session (SB 1313 and HB 2500) implementing recommendations made by the Workgroup on SB 550. He expressed concern that SB 1313 and SB 2500 require contractors on public construction contracts to make payment to their subcontractors within 60 days of completion of their work regardless of whether such a contractor has received payment from the state or local government, as applicable, for such work. He shared that general contractors are concerned about how this requirement would impact them in situations in which they have not been paid by the state or local government and in which there has been no fault on the part of the contractor that would justify the state or local government to withhold such payment. Mr. Abraham stated that he would like to work with the Workgroup on a tweak to the law to address this concern.

Ms. Peeks asked Mr. Abraham whether the issue he described has occurred, or whether he is looking to address this potential situation in the event that it might occur. He stated that it is rare, but it has occurred.

Mr. Shephard, the first stakeholder to comment, spoke to the Workgroup again to clarify that cement is a component of concrete, so while the concrete used on a specific project is usually made locally to a project's location, the cement used in such concrete does not necessarily have to have been produced locally to the project's location.

VIII. Discussion

Mr. Tweedy asked if either VDOT or DGS track how much low carbon concrete they use. Both DGS and VDOT stated that they do not currently track this information.

IX. Adjournment

Mr. Damico adjourned the meeting at 1:53 p.m. and noted that the Workgroup's next meeting is tentatively scheduled for May 23, 2023. He stated, however, that this date may change and that once staff has finalized the meeting date and location such information will be announced to the Workgroup members and stakeholders.

For more information, see the [Workgroup's website](#) or contact that Workgroup's staff at pwg@dgs.virginia.gov.

Appendix E: May 16, 2023 Meeting Materials

This appendix contains the meeting materials from the May 16, 2023 Workgroup meeting.

1. Agenda
2. Meeting Materials
 - a. Final Recommendation for SB 272
3. Approved Meeting Minutes

Public Body Procurement Workgroup

<http://dgs.virginia.gov/dgs/directors-office/procurement-workgroup/>

Meeting # 2

Tuesday, May 16, 2023, 1:00 p.m.

House Committee Room

Pocahontas Building

900 E. Main St, Richmond, Virginia

AGENDA

- I. **Call to Order; Remarks by Chair**
- II. **Approval of Meeting Minutes from the May 2, 2023 Workgroup Meeting**
- III. **Public Comment on Draft Recommendation for SB 272**
- IV. **Finalize Recommendation on SB 272**
- V. **Presentation on SB 859**
- VI. **Public Comment on SB 859**
- VII. **Findings and Recommendations on SB 859**
- VIII. **Presentation on SB 912**

*The Honorable Frank M. Ruff, Jr.
Senate of Virginia*

- IX. **Presentations on SB 912**
Joshua Heslinga
Virginia Information Technologies Agency
Jennifer Stieffenhofer
Virginia Association of Governmental Procurement
Leslie Allen
Office of the Attorney General
- X. **Public Comment on SB 912**
- XI. **Findings and Recommendations on SB 912**
- XII. **Public Comment**
- XIII. **Discussion**
- XIV. **Adjournment**

Members

Department of General Services
Virginia Information Technologies Agency
Department of Planning and Budget
Virginia Association of State Colleges and
University Purchasing Professionals

Department of Small Business and Supplier Diversity
Virginia Department of Transportation
Virginia Association of Governmental Procurement

Representatives

Office of the Attorney General
Senate Finance Committee

House Appropriations Committee
Division of Legislative Services

Staff

Sandra Gill, Deputy Director, DGS
Jessica Hendrickson, Director of Policy and Legislative Affairs, DGS

Public Body Procurement Workgroup

Draft of Final Recommendation for SB 272

The Workgroup finds that it is not appropriate at this time for the state to enact procurement incentives for the cement and concrete industries to reduce overall CO₂ emissions resulting from the manufacturing cement and production of concrete that is used in state-funded projects because (i) the cement and concrete industries are already making significant strides to reduce overall CO₂ emissions resulting from the manufacturing of cement and production of concrete and has committed to making additional progress in the future, (ii) the Virginia Department of Transportation permits and advocates for lower carbon concrete to be used in its specifications and has been working with the cement and concrete industries for several years to reduce the amount of CO₂ associated with the concrete used in transportation projects, and (iii) the state agencies that use concrete on vertical construction projects use a very small amount of the total cement produced in Virginia each year (one-half percent).

Approved Meeting Minutes

Public Body Procurement Workgroup

Meeting # 2

Tuesday, May 16, 2023, 1:00 p.m.

House Committee Room

The Pocahontas Building

900 E. Main Street, Richmond, Virginia 23219

<http://dgs.virginia.gov/dgs/directors-office/procurement-workgroup/>

The Public Body Procurement Workgroup (the Workgroup) met in-person in the House Committee Room in the Pocahontas Building in Richmond, Virginia, with Joe Damico, Director of the Department of General Services (DGS), presiding. The meeting began with remarks from Mr. Damico, followed by finalization of the recommendation for SB 272, discussion and public comment on SB 912, and statements regarding SB 859. Materials presented at the meeting are available through the [Workgroup's website](#). A recording of the meeting is available on [the House of Delegates video streaming site](#).

Workgroup members and representatives present at the meeting included Joe Damico (Department of General Services), Willis Morris (Department of Small Business and Supplier Diversity), Joshua Heslinga (Virginia Information Technologies Agency), Lisa Pride (Virginia Department of Transportation), Jason Saunders (Department of Planning and Budget), Elizabeth Dooley (Virginia Association of Governmental Procurement), John McHugh (Virginia Association of State Colleges and University Purchasing Professionals), Leslie Haley (Office of the Attorney General), Mike Tweedy (Senate Finance and Appropriations Committee), and Joanne Frye (the Division of Legislative Services). A representative from the House Appropriations Committee was not in attendance.

I. Call to Order; Remarks by Chair

Joe Damico, Director
Department of General Services

Mr. Damico called the meeting to order and announced that Andrea Peeks with the House Appropriations Committee is not able to attend, and that Elizabeth Dooley is in attendance for the Virginia Association of Governmental Procurement.

II. Approval of Meeting Minutes from the May 2, 2023 Workgroup Meeting

Mr. Saunders requested a small amendment to the draft meeting minutes, citing that on page one “the Department of General Services” was missing after “Deputy Director of” and made a motion to approve the meeting minutes from the May 2, 2023 meeting of the Workgroup as amendment. The motion was seconded by Mr. Heslinga and unanimously approved by the Workgroup.

III. Public Comment on Draft Recommendation for SB 272

Next, Mr. Damico invited the public to provide comment on the draft recommendation for SB 272. There was no public comment.

Mr. Damico reminded the workgroup that at the last meeting, the Workgroup approved DGS’ request to engage DEQ to identify a process to monitor greenhouse gas emissions from cement manufacturing in Virginia. Mr. Damico asked Jessica Hendrickson to report DEQ’s response. Ms. Hendrickson reported that DEQ does not directly collect greenhouse gas emissions data from regulated sources in the state, however the sources of interest are required to submit annual reports of greenhouse gas emissions data to the EPA. The EPA data is publicly available and DEQ will add the link to the EPA report on DEQ’s greenhouse gas emissions inventory website for the purpose of reviewing and tracking specific facility emissions in the Commonwealth.

IV. Finalize Recommendation on SB 272

Draft of Final Recommendation for SB 272

The Workgroup finds that it is not appropriate at this time for the state to enact procurement incentives for the cement and concrete industries to reduce overall CO2 emissions resulting from the manufacturing cement and production of concrete that is used in state-funded projects because (i) the cement and concrete industries are already making significant strides to reduce overall CO2 emissions resulting from the manufacturing of cement and production of concrete and has committed to making additional progress in the future, (ii) the Virginia Department of Transportation permits and advocates for lower carbon concrete to be used in its specifications and has been working with the cement and concrete industries for several years to reduce the amount of CO2 associated with the concrete used in transportation projects, and (iii) the state agencies that use concrete on vertical construction projects use a very small amount of the total cement produced in Virginia each year (one-half percent).

Mr. Heslinga made a motion to move the recommendation forward and Mr. Pride seconded the motion. The motion carried by a vote of 8-0-2¹.

¹ Yes: Mr. Morris, Mr. McHugh, Ms. Dooley, Ms. Pride, Mr. Saunders, Mr. Heslinga, Ms. Haley, Mr. Damico. Abstain: Ms. Frye, Mr. Tweedy

Mr. Damico made an additional motion to include in the report on SB 272 that DEQ is willing to stand up a link to the EPA database for reviewing greenhouse gas emissions on their website. Ms. Pride seconded the motion. The motion carried by a vote of 8-0-2².

V. Presentation on SB 859

None.

VI. Public Comment on SB 859

There was no public comment.

Mr. Damico shared that this bill will be redirected to a different workgroup under the Code Commission and made a motion to not discuss this bill while awaiting formal guidance from the Senate. Mr. Saunders seconded. The motion was unanimously approved.

VII. Findings and Recommendations on SB 859

None.

VIII. Presentation on SB 912

Senator Ruff began his remarks by explaining the importance of obtaining the best value at the best price in procurement. He shared that he would like to move forward with something to ensure taxpayers dollars are well spent and stated that there have been past instances where the state purchased technology that was not as successful as desired. Senator Ruff called on Mr. Andrew Lamar with the Richmond Technology Council to further explain.

Mr. Lamar, speaking on behalf of the Richmond Technology Council. He shared that during the 2023 session, SB 912 was introduced to bring a small change to the procurement act that they believe will result in more business participation in information technology procurements for the Commonwealth. Mr. Lamar stated that each of the nine regional technology councils support this change. He explained that in 2016 similar legislation was passed by the General Assembly regarding exceptions to liability terms and conditions, which resulted in more vendors having the opportunity to compete on the technical proposal and move to the negotiation phase. Mr. Lamar shared that the process being proposed is similar to architects and engineers, where exceptions to terms and conditions are not submitted with the proposal and are discussed at the negotiation stage which would be beneficial for information technology procurements.

Mr. Lamar shared that the problem members are facing is the increasing frequency in proposal scoring done by agencies on a vendor's willingness to wholly accept the terms and conditions in the proposal without the opportunity to discuss concerns or revisions.

² Yes: Mr. Morris, Mr. McHugh, Ms. Dooley, Ms. Pride, Mr. Saunders, Mr. Heslinga, Ms. Haley, Mr. Damico. Abstain: Ms. Frye, Mr. Tweedy

He shared that some agencies score proposals based on whether a vendor takes exception to terms and conditions causing highly qualified vendors being ranked lower than less capable vendors. He stated that rewarding a vendor for not taking exceptions to terms and conditions is not the right approach. He shared that vendors who do not take exceptions or seek clarification should be a red flag to the Commonwealth and that Richmond Technology Council advocates for policies that increase opportunities and competition, and proposals should be evaluated on their merit, best solution, and ability to perform.

Mr. Lamar shared that SB 912 would allow agencies to select the most qualified proposals and allow for thoughtful conversations on appropriate terms and conditions. He stated that agencies can still insist on any terms they believe are essential for a particular contract and concluded his remarks by thanking Mr. Heslinga with VITA for continued dialogue and believes that a solution can be found that will help everyone meet their needs.

Mr. McHugh asked Mr. Lamar if the goal is to prohibit suppliers from proposing exceptions to terms and conditions at the time of the proposal? Mr. Lamar responded that, under SB912, the public body would be prohibited from requiring the vendor to state exceptions, however, that does not prohibit the vendor from indicating exceptions on their own. Mr. Lamar further explained that the goal is to allow evaluation of proposals based on the merit of the proposal and the technical abilities to perform and not exclude vendors from the process based on exceptions to terms and conditions without an understanding of those exceptions. Mr. Lamar expressed concern over public bodies scoring proposals when some proposals have redlines and others do not and the influence that might have over the scoring.

Mr. Damico thanked Mr. Lamar for speaking on behalf of Senator Ruff and the bill's proponents and providing a thorough explanation.

IX. Presentations on SB 912

Next, Mr. Damico called for presentations on SB 912 and indicated that each presenter is limited to three minutes.

Joshua Heslinga was the first to present the Workgroup and began by thanking Senator Ruff and Richmond Technology Council for their continued dialogue. He shared that VITA is not aware of instances identified by the proponents where suppliers are being scored significantly lower or excluded from negotiation due to suppliers taking exceptions to terms and conditions. Mr. Heslinga explained VITA's process for evaluating proposals and stated that in cases where VITA does score exceptions, it is usually a minor component that does not significantly impact the overall scoring. He stated that VITA agreed with the proponents of SB912 that increasing participation in procurement is a good thing, that negotiations can resolve a majority of contract issues identified, and that when suppliers quickly accept all terms and conditions without exceptions that does not always result in a better contract. Mr. Heslinga shared that if there are cases where vendors are being penalized or kicked out of negotiations because of a supplier's robust compliance department, that is a problem worth remedying. He

explained that the bill as introduced could have negative effects on public bodies, however, by denying public bodies information that is useful in the evaluation process, by potentially delaying the process, and by weakening the negotiation position of the public body. Mr. Heslinga stated that, by requiring exceptions be stated upfront, public bodies can better prepare for the negotiation process by ensuring the appropriate subject matter experts or legal resources are engaged.

Mr. Heslinga shared the proposed amendments VITA provided ahead of the meeting and explained that the proposed amendments address the problem identified by the bill's proponents by prohibiting public bodies from considering exceptions during the initial evaluation of proposals, while also addressing the concerns of public bodies by allowing public bodies to obtain exceptions with the submission of proposals. Mr. Heslinga concluded his remarks summarizing the two proposed amendments provided by VITA.

Jennifer Stieffenhofer with the Virginia Association of Governmental Procurement (VAGP) was second to present to the Workgroup. She shared that VAGP represents over 1,100 procurement professional across Virginia and is unaware of practices that establish scoring criteria for exceptions to contractual terms and conditions as exceptions are addressed during the negotiation phase. She requested examples of such practices.

Gerrit VanVoorhees, the Director of Information Technology at the City of Petersburg was third to present to the Workgroup, representing the Virginia Local Government IT Executives (VaLGITE). Mr. VanVoorhees asked why information technology is singled out and why not change procurement across the state. He stated that he is unclear of the problem this is trying to solve. Mr. VanVoorhees shared that there are instances where it is important to know upfront the exceptions vendors take in order to avoid a prolonged process. He shared that he is unaware of vendors that have been excluded based solely on exceptions taken to terms and conditions. He concluded his remarks by stating that this change could cause problems by making the process less efficient and slower.

Michael Thomas with McGuireWoods Consulting was the fourth person to present. He shared that terms and conditions are there for a variety of reasons, relate to the type of proposal, and can influence the cost of services, which are better understood when discussed in negotiations. He stated that it is beneficial for vendors to think out of the box and offer more innovative proposals. He shared that the proposed terms and conditions that agencies include in the request for proposal do not always fit what is being proposed and stated that, while a redlined document can look daunting and overwhelming to the evaluation panel, allowing negotiations provides the opportunity for explanation and better understanding of the redlines.

Mr. Damico called on Pete Stamps, the Director of Purchases and Supply (DPS) at the Department of General Services, to speak on the process DPS has regarding exceptions to terms and conditions in proposals. Mr. Stamps shared that DPS requests vendors to document exceptions to terms and conditions in proposal responses, however, such exceptions are not evaluated until the negotiations stage.

Mr. Morris asked Mr. Stamps if he is aware of instances where a vendor has been scored lower for redlining terms and conditions. Mr. Stamps stated that he is unaware of instances where vendors have been scored lower for redlining terms and conditions.

Mr. Heslinga asked if the bill is amended to require that public bodies will not score contract exceptions as VITA has proposed, does DGS believe this should apply to more than information technology? Mr. Stamps replied that DPS does not currently score on contract exceptions, therefore it would have minimal impact.

Ms. Dooley asked Mr. Stamps if there is concern from DGS with not knowing all the information ahead of going into a negotiation and dealing with risks. Mr. Stamps stated that is why DPS asks for exceptions upfront, even though DPS does not evaluate on the information, it is used to prepare for negotiation.

X. Public Comment on SB 912

The first stakeholder to comment was Chris Nolen, of McGuireWoods Consulting. Mr. Nolen explained the issue is that the request for proposals states that vendors are deemed to have accepted the terms and conditions in the proposal if no objection is taken. He stated that redlining of terms and conditions is based on the vendors view of risk and without context, it is impossible to know if the vendor really understands the agency proposal.

Mr. Damico asked Mr. Nolen his thoughts on the two ideas before the Workgroup, (i) do not ask vendors to identify exceptions with their proposal submission, or (ii) ask vendors to identify exceptions with their proposal submission and prohibit agencies from evaluating exceptions during the initial evaluation process. Mr. Nolen shared he understands wanting the information submitted at the beginning of the process and the question is whether the exceptions are a part of the proposal. Mr. Nolen stated a desire to ensure that stated exceptions are kept separate from scoring of the proposal. Mr. Lamar agreed with Mr. Nolen and stated a desire to work together to meet everyone's needs.

The second stakeholder to speak was Mark Perry, a member of VaLGITE. Mr. Perry explained the importance of knowing exceptions upfront in proposals before the process can proceed. He stated that there are many data and legal requirements and that knowing upfront will be more efficient. He expressed a desire to keep terms in there but understands not scoring in the initial phase. Mr. McHugh asked Mr. Perry about local government's evaluation of technical requirements, and Mr. Perry responded that it was important to know upfront to be efficient in the procurement process.

XI. Findings and Recommendations on SB 912

Mr. Heslinga stated that it appears there are no serious concerns with the conceptual approach proposed by VITA to allow public bodies to obtain vendors exceptions with the proposal submission and ensure that public bodies do not hold exceptions against suppliers during the initial review. He noted that there was still some questions about scope.

Mr. McHugh said that IT is very complex procurement and that he would question whether we need to expand this to everything, preferring to keep it focused on the original intent of IT.

Mr. Morris stated that it is good to know upfront what exceptions there are and that more information leads to better evaluations. He expressed concern about the behavior identified by the proponents, which may not be happening much but which would be a problem when it happens.

Mr. Saunders asked whether the comparable language for architects and engineers was in subparagraph (A)(4) of the statute and noted that it has an exception for required terms that is a somewhat different structure. Mr. Heslinga responded, noting that professional services feature negotiations with only one offeror at a time but the goods and nonprofessional services category often features negotiations with multiple suppliers at the same time, creating a greater need to know everything upfront. With respect to the “unless” clause noted by Mr. Saunders for the architects and engineers, Mr. Heslinga stated that not everyone agrees on what’s required and that such language introduces additional complexity.

Ms. Dooley commented that technology procurements are vastly different than architect and engineer contracts. She noted that offerors in technology procurements often bring forward other terms and agreements, such as cloud terms and software license agreements, which are then part of the overall consideration of the proposal package and how to proceed with the procurement and that it would do a disservice to taxpayers to go forward without that information.

Mr. Tweedy shared that, without a complete understanding of the impact to non-information technology procurements, the recommendation should be limited to information technology as that is how the bill was originally drafted and referred to the workgroup.

Mr. Tweedy asked about the existing statute’s language concerning exceptions to liability provisions. Mr. Heslinga responded that VITA would remove that language because there would not be a need for it with the across-the-board approach of not evaluating exceptions and that 2019 legislation dealt with liability provisions for IT projects.

Mr. Damico noted that it can be problematic for buyers to keep up with different requirements for different types of procurements and that consistency is important. He stated that he has heard from the buyer community that it is important to be well informed and avoid lengthening the procurement, but that he has also heard the vendor community’s concern that a redline should not prevent vendors from getting to the table, and that a middle of the road approach can meet both sets of concerns.

In response to Mr. Damico's request for a conceptual recommendation, Mr. Heslinga made a motion to conceptually recommend that for information technology requests for proposals, public bodies would not be prohibited from asking for exceptions to terms and conditions in proposal responses and that any exceptions made by offerors would not be considered as part of the initial scoring or evaluation process for shortlisting offerors for negotiation. Ms. Pride stated that she agrees with the VITA proposals and would like to consider consistency when proposing changes to procurement code to clean up the inconsistencies and variations that make it challenging for procurement officers to navigate. After restatement of the motion, Ms. Dooley seconded. The motion passed 6-0-4.³

Mr. Damico requested a second conceptual recommendation that included non-IT nonprofessional services for further consideration at the next meeting. Mr. Heslinga made a motion for a second conceptual recommendation that for requests for proposals under subsection (A)(3) of §2.2-4302.2, public bodies would not be prohibited from asking for exceptions to terms and conditions in proposal responses and that any exceptions made by offerors would not be evaluated as part of the initial evaluation process for shortlisting offerors for negotiation. Ms. Pride seconded. By a show of hands, the motion was approved 4-2-4.⁴

XII. Public Comment

None.

XIII. Discussion

None.

XIV. Adjournment

Mr. Damico adjourned the meeting at 2:26 p.m. and noted that the Workgroup's next meeting is scheduled for June 6, 2023.

For more information, see the [Workgroup's website](#) or contact that Workgroup's staff at pwg@dgs.virginia.gov.

³ Yes: Mr. Morris, Mr. McHugh, Ms. Dooley, Ms. Pride, Mr. Heslinga, Mr. Damico. Abstain: Ms. Frye, Mr. Tweedy, Mr. Saunders, Ms. Haley

⁴ Yes: Mr. Morris, Ms. Pride, Mr. Heslinga, Mr. Damico. No: Ms. Dooley, Mr. McHugh. Abstain: Ms. Frye, Ms. Haley, Mr. Tweedy, Mr. Saunders