Long Range Planning and Environment Committee

Year-End Report to Academic Senate

30 April 2019

Presented by

dt ogilvie, Chair

Committee Members:

Bernard Brooks (COS)
Lisa Greenwood (CAST)
Jim Heliotis (GCCIS)
Andres Kwasinski (KGCOE)
Qing Miao (CLA)
dt ogilvie (SCB), Chair
John Oliphant (CHST)
Susan Smith Pagano (COS)
Michael Skyer (NTID)
Catherine Zuromskis (CIAS)

At-Large Representatives:

Enid Cardinal (Sr. Sustainability Advisor)
Irene Evans (COS)
Joyce Hertzson (CIAS)

Original Approved Charges

Carryover charges:

1. LRPEC1 Review status of Strategic Plan as it pertains to faculty.
2. LRPEC3 Investigate the impact on global sustainability (e.g. carbon footprint) of sourcing, service items, menu selections, packaging and waste disposal policies at RIT food services and make recommendations in line with RIT's leadership in sustainability.
3. LRPEC4 Compare RIT against our benchmark schools regarding the extent of its Faculty governance. Make recommendations for evolving shared governance at RIT. To be revisited after the Summit on Academic Governance, 12.11.18.
4. LRPEC5 Determine the state of gender inclusivity across the campus.

New charges:

1. Investigate the status restroom facilities in the academic buildings, including how many bathrooms/stalls by gender, gender inclusive status, condition (e.g. worn, broken, not working), last renovation, and building usage (faculty/staff/students). Make recommendations as appropriate in relation to campus welfare, e.g., priority for renovations.
2. Update and clarify charge LRPEC5 with clearer, more actionable language and a longer period of study with a dedicated taskforce and funding to accomplish charge. Consider the charge in the context of a larger, better funded, longitudinal research study with dedicated researchers, full institutional support, and a commitment to act upon its findings. Use specific language to update the charge based on direct feedback from current stakeholders and suggest that additional research is needed to fill in the gaps of knowledge that we have identified.
3. Review current parking policies and processes, such as:
    i. the number of reserved spaces sold in relationship to available spaces
    ii. EVehicles
    iii. Construction implications
    iv. Consider moving spaces for motorcycles to unreserved slots
    v. New fine policies (such as what is the impact on low income students)
    vi. Non-reserved space availability
    vii. Handicapped parking

Renumbered Long Range Planning & Environment Committee Charges

LRPEC1 Review status of Strategic Plan as it pertains to faculty.

LRPEC2 Investigate the impact on global sustainability (e.g. carbon footprint) of sourcing, service items, menu selections, packaging and waste disposal policies at RIT food services and make recommendations in line with RIT's leadership in sustainability.

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LRPEC5 Review current parking policies and processes, such as:

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LRPEC Subcommittees 2018-2019

LRPEC1 - SP

- Qing Miao
- dt ogilvie
- Andres Kwasinski

LRPEC2 - Sustainability

- Enid Cardinal
- Irene Evans
- Lisa Greenwood
- Susan Smith Pagano

LRPEC3 – Faculty governance

- James Heliotis
- Andres Kwasinski

LRPEC4 - Gender/Bathrooms

- Bernard Brooks
- Joyce Hertzson
- John Oliphant
- Catherine Zuromskis

LRPEC5 – Parking DONE

- Qing Miao
- dt ogilvie
- Michael Skyer

Charge 1: Strategic planning

We met with President Munson and Provost Granberg in separate meetings prior to the Trustees approving the final new strategic plan. President Munson indicated that he has some pockets of funds available for small initiatives of the plan.

Provost Granberg is interested in the role of faculty in moving the plan forward.
The main takeaway is that we could revise the charge we have now to identify what are the important questions from the strategic plan that the senate would need to look into. The questions we identify would become next year charges for our committee or for other senate committees.

Points for discussion:

- Goals to increase cross-disciplinary education and research and their relation to tenure and promotion.
- Goal of 12 free hours/student in each program and its implications on curriculum for each program.
- Process for the development of new programs.
- Review & perhaps revise the benchmark schools
- Revisit the salary guidelines (even though this affects RABC's charge, It's something we may wish to think about in this committee: does it affect the SP & its implementation?).
- How do we get faculty buy-in & engagement?

We are scheduled to meet with Provost Granberg again after which we will meet with President Munson to review the new strategic plan as it pertains to faculty.

RIT

Strategic Planning Subcommittee Report

Long Range Planning and Environment Committee

Subcommittee on Strategic Plan
Andres Kwasinski,
Qing Miao, dt ogilvie,

Charge

Review status of Strategic Plan as it pertains to faculty

Actions

President & Provost

- Discussed funding of plan goals with President
- Discussed faculty involvement with Provost

Provost Discussion

Takeaway

- Revise charge to identify the important questions from the SP that the senate would need to look into.
- These questions would become next year's charges.

Provost Meeting

Points for discussion

- Goals - increase cross disciplinary education & research & their relation to tenure & promotion.
- Goal - 12 free hours/student in each program & implications on curriculum for each program.
- Better process for the development of new programs.

Provost Meeting

Points for discussion

- Review & perhaps revise the benchmark schools
- Revisit salary guidelines (although an RABC charge, may affect the SP & its implementation).
- How do we get faculty buy-in & engagement?

Next Steps

Meetings

- Provost
- President

Future Actions

- Survey Senate & faculty to develop future charges
- Address issues raised

Charge 2: Sustainability

RESOLUTION LRPEC-1

SUBJECT: Dining Services sustainability efforts

PRESENTED BY: Long Range Planning and Environment Committee

AUTHORS: Lisa Greenwood, Irene Evans, and Enid Cardinal
Dining Services Sustainability Sub-Committee

Whereas the Academic Senate has brought forth to the Long Range Planning and Environment Committee (LRPEC) the following charge:

> *"Investigate the impact on global sustainability (e.g. carbon footprint) of sourcing, food service items, menu selection, waste disposal policy, and packaging and make recommendations in line with RIT's leadership in sustainability."*

Whereas the LRPEC formed a 3-member sub-committee to oversee the charge execution and obtain all of the data available from Dining Services to complete the charge, and RIT Sustainability utilized two student employees to calculate the carbon footprint of RIT's food purchases;

Whereas Dining Services and RIT Sustainability have been actively working on sustainability within dining operations for several years;

Whereas Dining Services is in the process of developing a sustainability plan; and

Whereas the LRPEC report on Dining Services' sustainability practices and the recommendations contained within have been shared with Dining Services; therefore, be it

Resolved that Academic Senate:

- Instruct the LRPEC to work with Dining Services and RIT Sustainability to provide a report to academic senate every two years detailing progress on sustainability within dining operations.

- Endorse Brick City Café's initiative to switch to all reusable to-go containers.

- Urge Dining Services to reduce its carbon footprint by reducing the portion sizes of beef used in menu items, and continuing to expand plant-based menu offerings.

LRPEC2: Investigate the impact on global sustainability (e.g. carbon footprint) of sourcing, food service items, menu selection, waste disposal policy, and packaging and make recommendations in line with RIT's leadership in sustainability.

RIT Sustainability has been working with Dining Services for several years to examine aspects of global sustainability based on the footprint of dining operations, and to identify opportunities to improve the sustainability of those operations. The current status of sustainability efforts and metrics, as well as planned efforts and activities, are outlined in this report.

In evaluating global sustainability impacts, RIT Sustainability follows the guidance provided by the Association for Advancement of Sustainability in Higher Education's Sustainability Tracking, Assessment and Rating System (STARS), and considers environmental, social well-being, and economic dimensions of sustainability, as indicated in the report. It should be noted that there are many sustainability factors to consider, and tradeoffs can be necessary in order to address competing environmental, social, and economic priorities.

A scan of sustainability across higher education dining services was conducted in 2017 to identify best practices. The practices can be grouped into three major categories: Waste Reduction, Energy and Water Conservation, and Food Sourcing/Menu Planning. To date, most of Dining Services' efforts have been focused on the environmental sustainability aspects of waste reduction and conservation. Menu selection and food sourcing has risen in priority in recent years, and these areas incorporate social well-being aspects of sustainability as well.

Waste Reduction

Food Recovery

Food recovery efforts began in 2013 in partnership with Foodlink and Recover Rochester, a newly established student organization. Through these efforts 8,000-10,000 pounds of left over prepared food that would otherwise be thrown away from dining units are recovered and transported to area shelters meal centers annually.

Reusable to-go containers

Based on the findings of two student research projects examining the lifecycle impacts of reusable versus clamshell to-go containers and a survey of Gracie's customers to understand their carryout behaviors, Gracie's dining center switched to a reusable to-go container system (OZZI system) in AY2014 and eliminated a disposable to-go container option. RIT was one of the first universities in the country to provide only a reusable carryout option. Prior to this change, Gracie's purchased 94,000 to-go containers annually. Since then, reusable to-go containers have become available as a carryout option in Sol's Underground, The Commons, and Brick City Café. Planning is underway to eliminate disposable to-go options in Brick City Café and utilize only reusable containers in AY2020.

Organics Disposal

RIT diverts roughly 150 tons of food waste from the landfill each year. Pre and post-consumer food waste is collected from Gracie's, and pre-consumer food waste is collected from The Commons and the SAU dining venues. The material collected is currently sent to Noblehurst Green Energy's anaerobic digester, which turns the food scraps into a soil amendment and a biogas for electricity

generation. Materials cannot be collected from Crossroads or the Cantina currently because of limitations with their loading docks and Health Department restrictions. Dining Services is looking to get estimates on the renovations that would be needed in order to enable organics collection in those locations.

RIT's current organics outlet does not accept fiber, such as napkins, paper plates, or paper cups. This limits our ability to divert additional organics. RIT Sustainability is researching potential new outlets for this material. NYS just announced new legislation requiring all large food waste generators to divert their organics from the landfill. This legislation could likely increase the number of organics processors in the region and offer new outlets for RIT's material.

Additionally, Dining Services has been actively involved with food waste research being conducted in the Golisano Institute for Sustainability and the NYS Pollution Prevention Institute, even testing food waste processing equipment at Gracie's.

Single Use Plastic Ware

Historically, each RIT dining unit has utilized different single use items in their operations, making it difficult to ensure consistent recyclability or landfill diversion capabilities across dining. Therefore, in AY 2018, RIT Sustainability partnered with Dining Services to analyze all of the single use disposable food services items purchased by each dining unit. The analysis covered thousands of products and identified opportunities to standardize a number of food service items across units with more sustainable options. It also provided guidance on how to prioritize selection of materials for single use items based on compostability or recyclability.

Environmental sustainability is not the only factor that needs to be considered when changing products. Other considerations include durability, ability to withstand hot or cold temperatures, and cost. Dining Services has begun performance testing of a variety of products and is close to finalizing their standards.

This past year saw many restaurants announcing the elimination of plastic straws. While no official announcement has been made, RIT is working to eliminate plastic straws as well. Dining services has been piloting various alternative straw options in catering. Once a suitable option is identified, Dining Services will discontinue use of plastic straws.

Energy and Water Conservation

Dining Services specifies Energy Star products when replacing or adding new equipment. An energy audit was also conducted for Gracie's dining unit in 2014 to identify additional energy savings opportunities. The dishwashing units in Brick City Café and Gracie's were replaced in 2017 and 2018 respectively. Together, these two new units will save approximately 1.18 million gallons of water per year.

Food Sourcing

Local Businesses

RIT's primary food provider, Palmers, and produce supplier, B. Giambrone & Co., are both local, family owned businesses. Additionally Finger Lakes Coffee is served at Ctrl Alt Deli, Beans, and College Grind, and bagels are sourced from The Bagel Shop of Rochester.

Dining Services' unique "Visiting Chef" program, allows the University to feature food from local restaurants during meal service in each of the large dining venues. Through this program more than $900,000 went to 11 different local businesses. The majority of the visiting chefs are small, family businesses, several of which are minority and/or women owned.

Local and/or Sustainably Produced Food

The terms *local* or *sustainably produced* can be interpreted differently by different audiences. For the purposes of this report and RIT Sustainability metrics, we use the guidance provided by the Sustainability Tracking, Assessment and Rating System (STARS), OP-007: Food and Beverage Purchasing included in Appendix A. This is an area in which RIT has a lot of opportunities for improvement as well as many challenges to overcome.

Palmers and B. Giambrone, which provide the majority of RIT's meat, dry goods, and produce have very limited tracking and reporting capabilities in terms of the sustainability attributes of food purchases. This limitation combined with the level of detail that STARS requires, has prevented the university from being able to report on the Food and Beverage Purchasing credit for STARS. While national food distributors have more robust reporting capabilities, they do not provide the same level of community support and engagement. Palmers, for example, regularly donates food to the RIT FoodShare Center.

Cost is a challenge that needs to be considered when discussing sustainably grown or produced foods. There is a tremendous amount of produce grown in this region. Seasonal availability and the higher cost of locally grown produce limit the amount that has to date been purchased on campus. Third party certifications such as Organic, Fair Trade, Certified Humane, Marine Stewardship Council, etc., play an important role in establishing transparent standards and best practices for sustainability in the food industry. However certified products typically have a price premium. At an institutional scale, those premiums can add up to thousands of dollars and need to be considered carefully and coupled with other possible cost reductions.

RIT's milk and yogurt provider, Upstate Farms Cooperative, is a farmer-owned cooperative whose farms are located in Central and Western NY. While these products are locally produced, intensive livestock operations, e.g., Concentrated Animal Feeding Operations (CAFO's), cannot be counted according to STARS guidance.

There are many sustainability considerations in food sourcing, some of which may compete with each other. As an example, which of the following two options is better: a dairy product from California that is certified humane and organic, or a dairy product from a Concentrated Animal Feeding Operation or CAFO in New York State that is part of a cooperative? This depends on which aspects of sustainability are prioritized. If water quality, overuse of antibiotics, or animal welfare are prioritized,

then the first option would be chosen. If however, greenhouse gas emissions or the local economy are determined to be more important, the second option would be chosen. Therefore, in order to make real progress on sustainable food sourcing, RIT needs to first identify and clearly define the sustainability priorities for food sourcing. From there a plan can be developed with targets and metrics that will enable us to measure progress.

Plant Based Menu Planning

In May 2018, Dining Services' head chefs underwent a 2-day training with Food Forward and the Humane Society, that focused on how to prepare plant based recipes. As a result of that training, chefs across campus have begun adding more plant based options to their menus. Dining Services held a tasting and discussion session for the Sustainability and Dining committees of Student Government, the Vegan club, and Academic Senate's Long Range Planning and Environment Committee. The event provided an opportunity for Dining Services to share their progress in this area and better understand the needs of their customers. A second training is planned this summer for line cooks within Dining Services.

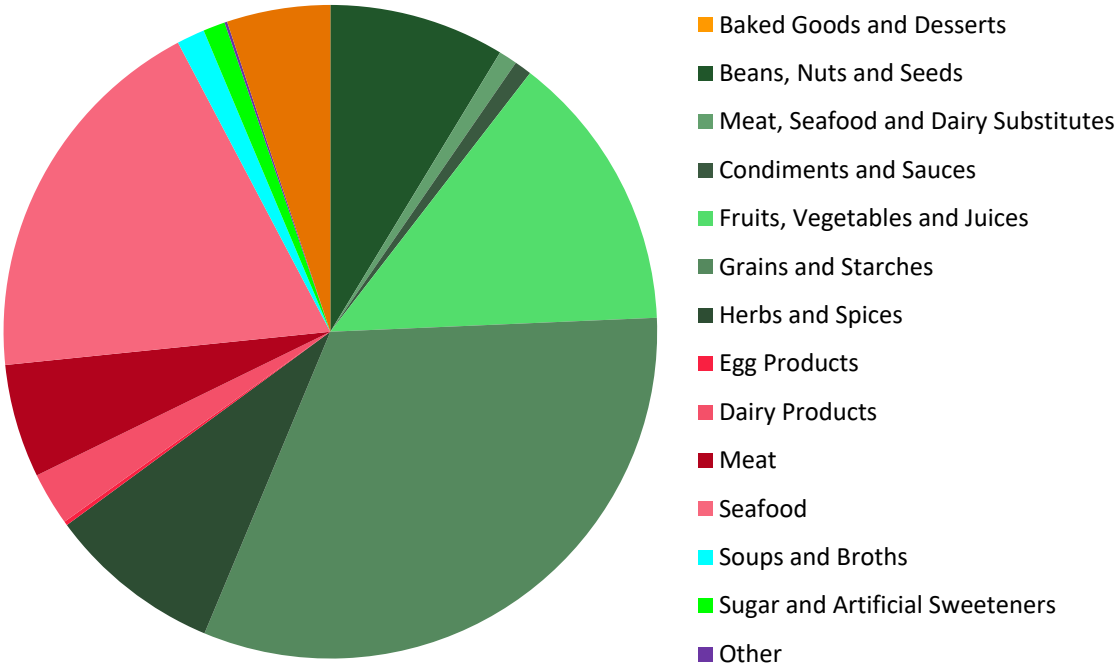
GHG Emissions of Food Purchases

Using purchasing data from 2016, provided by RIT Dining Services, RIT Sustainability developed a greenhouse gas inventory of RIT's food purchases. The full inventory is 158 pages, therefore samples of the inventory from each category can be found in Appendix B. The inventory covers Brick City Café, Gracie's, Commons, and Crossroads. The paper used to determine emission factors was "Greenhouse gas emission estimates of U.S. dietary choices and food loss", written by Heller, M.C. and G.A. Keoleian in the 2014 Journal of Industrial Ecology.

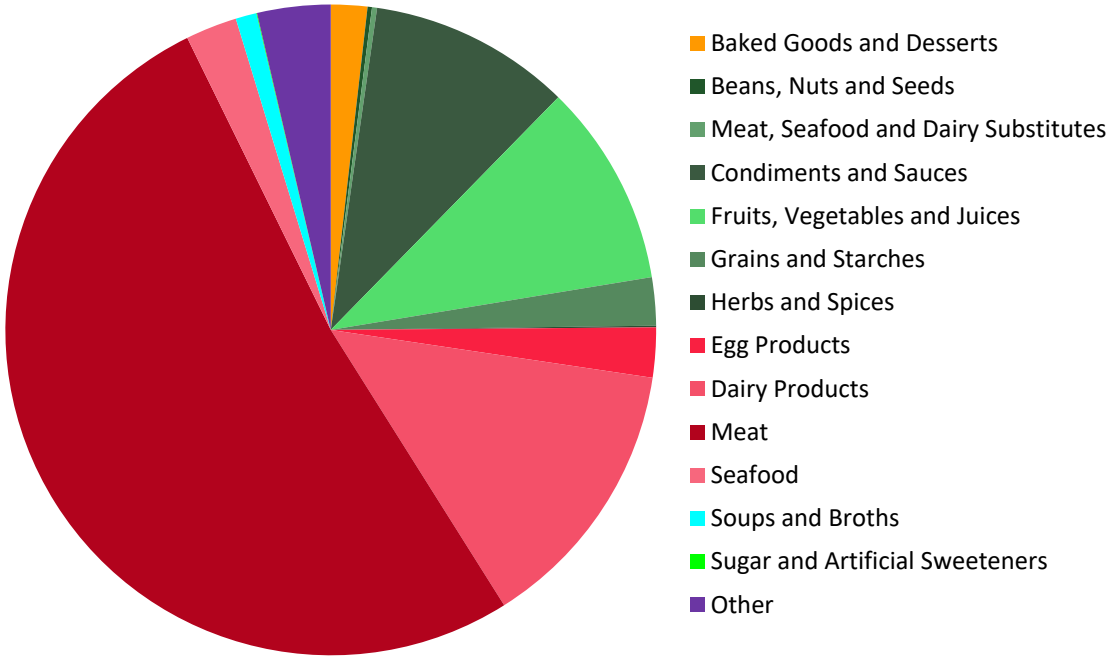
All categories of food are covered, with the exception of several beverages: soda, coffee, tea, hot cocoa, and alcohol. Emission factors for these categories were not available. "Food miles", or the added greenhouse gas emissions from the transportation of food, were also not included, as this data was not available. In instances of food items containing ingredients from multiple categories, the emissions factors for the two ingredients that comprised most of a food item were averaged. Emission factors were also not unavailable for salt, baking soda and vanilla extract; therefore these items were not included in the weight or emissions calculations. Lastly, there were no emission factors available for fresh herbs and several types of exotic fruits and vegetables; in those instances the average fruits' and vegetables' emission factors were used.

The charts on the following page illustrate food purchases by weight and by carbon emissions. The "Other" category consists of purchased prepared foods such as egg rolls, potato salad, ravioli, etc. Animal based products collectively make up nearly 29% of food purchases by weight and 70% of all emissions. "Meat" as a category makes up 19% of food by weight, but 51% of emissions in the food supply.

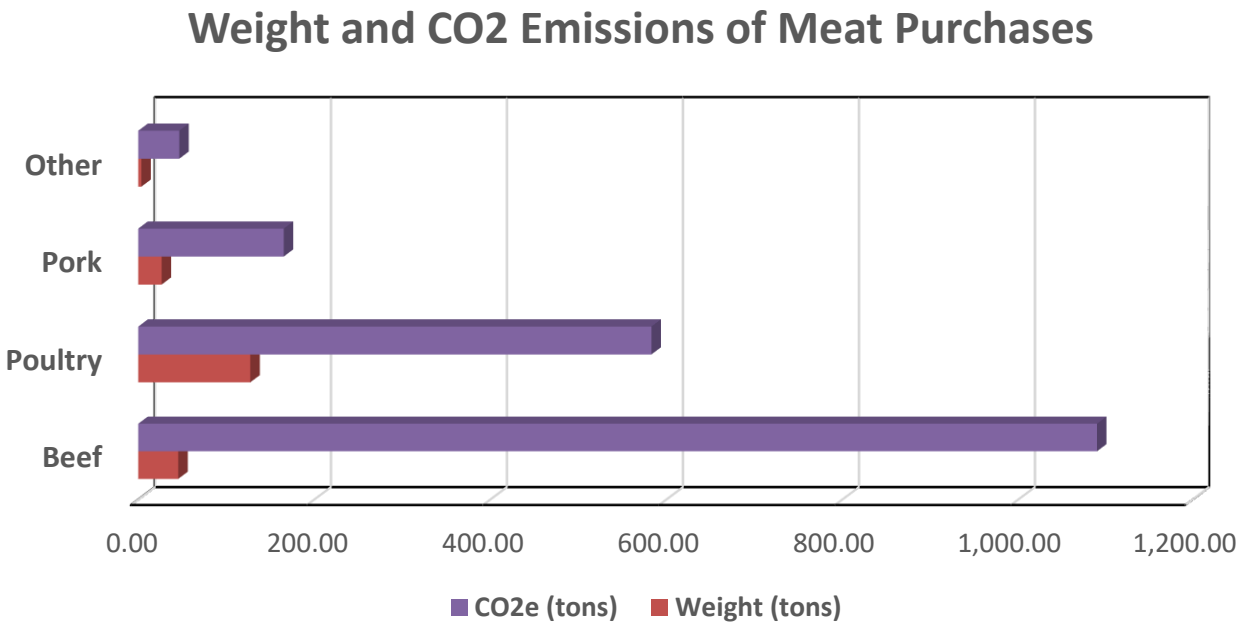
Breakdown of Food Purchases by Weight



Breakdown of Food Purchases by CO2e



The chart below provides a side by side comparison of the weight of meat purchases against their resulting greenhouse gas emissions in CO2 equivalents. The graphic clearly illustrates that beef has by far the greatest impact on the carbon footprint of RIT's food purchases.



The table below lists the weight and greenhouse gas emissions in CO2 equivalents by category. The categories are arranged from smallest to largest average emissions factor. Reducing the amount of animal based products purchased, particularly beef, will yield the greatest reduction of emissions from RIT's food supply.

Category	Weight (tons)	CO2e (tons)
Baked Goods and Desserts	92.96	65.93
Beans, Nuts and Seeds	9.80	7.93
Sugar and Artificial Sweeteners	1.40	1.22
Grains and Starches	92.32	87.08
Meat, Seafood and Dairy Substitutes	9.16	9.16
Fruits, Vegetables and Juices	341.93	367.72
Herbs and Spices	2.13	2.97
Other	54.72	132.88
Condiments and Sauces	148.13	366.47
Egg Products	28.15	90.39
Soups and Broths	11.64	37.84
Seafood	14.80	93.30
Dairy Products	60.08	499.83
Meat	202.15	1,884.66
Total	**1,069.35**	**3,647.37**

Recommendations for Dining Services

The following recommendations have been provided to RIT Dining Services for consideration.

Recommendation: Identify and define sustainability priorities for food sourcing.

Recommendation: Work with Palmer and B. Giambrone to improve reporting capabilities and food sustainability standards that can be applied to RIT's food purchases. Identify opportunities to leverage RIT's expertise and capabilities to assist with the process, including capstone and senior design projects.

Recommendation: Identify food products and their certifications whose sourcing would lead to the greatest impact reduction over the same conventionally sourced products and prioritize the purchase of those certified products.

Recommendation: Increase plant based menu options and reduce portion sizes of meat menu items. Plant based menu items are often less expensive than meat based menu items. Reducing the amount of meat purchases could yield cost savings that could be applied to third party certified products (including meats). This approach would lead to massive greenhouse gas reductions as well. NOTE: This can be done without eliminating meat, but rather reducing portion sizes to align with recommendations from the American Heart Association, American Cancer Society, and others.

Recommendation to Academic Senate

The Long Range Planning and Environment Committee recommends that Academic Senate pass the resolution found in Appendix C in support of Dining Services' sustainability efforts.

Appendix A

OP 7: Food and Beverage Purchasing

6 points available

A. Credit Rationale

This credit recognizes institutions that are supporting sustainable food systems through their food and beverage purchases. Institutions can do this by prioritizing the purchase of environmentally and socially preferable food and beverage items and by minimizing the purchase of industrially produced animal products. These actions reduce the social and environmental impacts of food production and help foster robust local economies and food security; improved conditions for farm workers; healthier animals, soils and waterways; and secure livelihoods for farmers.

B. Criteria

Institution and/or its primary dining services contractor conducts an inventory to identify food and beverage purchases that have the following attributes:

1. **Third Party Verified**. The product is sustainably and/or ethically produced as determined by one or more recognized food and beverage sustainability standards (see G. Standards and Terms).

2. **Local & Community Based**. The product does not qualify as Third Party Verified, but meets the criteria outlined in the table below. This category provides a path for campus farms and gardens and small and mid-sized producers to be recognized in the absence of third party certification.

Consistent with the Real Food Standards, a product must meet the following criteria to qualify as Local & Community Based:

Single-Ingredient Products	A single-ingredient product must meet ALL of the following criteria: A. *Ownership.* Producer must be a privately or cooperatively owned enterprise. Wild-caught seafood must come from owner-operated boats. B. *Size.* Produce: Gross annual sales for individual farms must not exceed $5 million (US/Canadian). Meat, poultry, eggs, dairy, fish/seafood, grocery/staple items (e.g., grains): Producing company's gross annual sales must not exceed $50 million (US/Canadian). C. *Distance.* All production, processing, and distribution facilities must be within a 250 mile (400 kilometre) radius of the institution. This radius is extended to 500 miles (800 kilometres) for meat (i.e., beef, lamb, pork, game).
Single-Ingredient Products Aggregated From Multiple Sources (e.g., fluid milk)	At least 75 percent of the product (by volume) must meet the Ownership, Size, and Distance criteria outlined above.
Multi-Ingredient Products (e.g., baked goods)	Producing company must meet ALL of the following criteria: A. *Ownership.* Company must be a privately or cooperatively owned enterprise. B. *Size.* Company's gross annual sales must be less than or equal to $50

	million (US/Canadian). C. *Distance*. All processing and distribution facilities must be within a 250 mile (400 kilometre) radius of the institution. AND At least 50 percent of the ingredients must come from farms meeting the Ownership, Size, and Distance criteria for Single-Ingredient Products outlined above.

Products from intensive livestock operations (e.g., CAFO-permitted facilities in the U.S.) are excluded. Due to the prevalence of industrial livestock production, meat, poultry, egg, and dairy producers should be assumed to be intensive operations unless the institution can verify otherwise through third party certification, transparent information from the supplier, and/or an appropriate regulatory body.

For additional guidance in identifying products that are Local & Community Based, see the Real Food Calculator.

The institution may also choose to identify purchases that have Other Sustainability Attributes (see E. Reporting Fields), i.e., that are environmentally or socially preferable in ways that are not recognized above. Examples include expenditures on products with credible sustainability claims and labels not formally recognized in the Third Party Verified category and products from local companies and regional farms that do not fully meet the Local & Community Based criteria. Although products reported in this category are considered to be conventionally produced and do not count toward scoring, identifying them can provide a more comprehensive picture of the institution's sustainable purchasing efforts.

Products that meet more than one of the criteria outlined above (e.g., products from small and mid-sized local producers that are Certified Organic) should not be double-counted.

While products with sustainability attributes may be sourced through distributors or other third parties, the attributes of distributors do not count. For example, a product purchased from a local distributor may only be considered local if the product itself meets the criteria outlined above.

Transparency in the supply chain is a fundamental component of a sustainable food system. Products without verifiable sustainability attributes do not count in any of the categories outlined above. For each product that has one or more verifiable sustainability attributes, the inventory provides (at minimum):

- Product description/type.
- Label, brand or producer.
- The category in which the product is being counted (e.g., Third Party Verified, Local & Community-Based), and/or a brief description of the specific sustainability attribute(s) for which it is being counted (i.e., information about the producer and any sustainability certifications or claims justifying its inclusion, e.g., "Certified Organic", "local farm-to-institution program").

Institutions in the U.S. and Canada with students running the Real Food Calculator may upload Calculator results to fulfill the inventory requirement. Likewise, products that have been formally verified through the use of the Real Food Calculator to be "Real Food A" or "Real Food B" may be counted as "third party verified… or Local & Community-Based" (see E. Reporting Fields).

For transparency and to help ensure comparability across institutions, it is strongly recommended that institutions not reporting Real Food Calculator results use the STARS Food and Beverage Purchasing Inventory template to record their purchases, and upload the results as documentation.

This credit includes food and beverage purchases for on-campus dining halls and catering services operated by the institution or the institution's primary dining services contractor (e.g., Aramark, Bon Appétit Management Company, Chartwells, Sodexo). Outlets that are unique to the institution or its primary contractor (e.g., retail concepts developed and managed by the institution or contractor) are included. On-site franchises (e.g., national or global brands), convenience stores, vending services, and concessions may be excluded; they are covered in the Sustainable Procurement credit in Purchasing

Part 1

Institution's dining services purchase food and beverage products that are third party verified under one or more recognized food and beverage sustainability standards or Local & Community-Based.

Part 2

Institution's dining services minimize the purchase of conventional animal products, as measured by the percentage of total dining services food and beverage expenditures on such products.

Conventional animal products include all meat, fish/seafood, poultry, eggs, and dairy products that do NOT qualify in either the Third Party Verified category or the Local & Community-Based category (as outlined above). Please note that products reported in the "other sustainability attributes" category are considered to be conventionally produced.

C. Applicability

This credit applies to all institutions that have on-campus dining services operated by the institution or the institution's primary on-site contractor.

D. Scoring

Each part is scored independently.

Part 1

Institutions earn the maximum of 4 points available for Part 1 of this credit when 75 percent of total food and beverage expenditures are on products that qualify as Third Party Verified or Local & Community-Based. Incremental points are awarded based on the percentage of total food and beverage expenditures dedicated to products that meet the criteria. For example, an institution with expenditures on third party verified and local community-based products totaling 18.75 percent of total food and beverage expenditures would earn 1 point (¼ of the points available).

Points for Part 1 of this credit are calculated automatically in the STARS Reporting Tool as follows:

Attribute	**Factor**		**Percentage of total dining services food and beverage expenditures on products that meet the criteria (0-100)**		**Points earned for Part 1**
Third Party Verified or Local & Community-Based	0.053	×	_____	=	

Other Sustainability Attributes	0		———		
Total points earned →					

Part 2

Institutions earn the maximum of 2 points available for Part 2 of this credit by purchasing no conventional animal products. Incremental points are available for institutions for which conventional animal products comprise less than 30 percent of total dining services food and beverage expenditures comprised of conventional animal products. For example, an institution for which conventional animal products comprise 15 percent of its total food purchases would earn 1 point (half of the points available for Part 2).

Points earned for Part 2 of this credit are calculated according to the formula below. STARS awards only positive points; points will not be deducted if purchases of conventional animal products exceed 30 percent of the institution's total food and beverage expenditures.

$$\text{Points Earned} = 2 \times \{ [(100 - A) - 70] / 30 \}$$

A= Percentage of total dining services food and beverage expenditures comprised of conventional animal products (0-100)

E. Reporting Fields

Required

- □ Percentage of dining services food and beverage expenditures on products that are third party verified under one or more recognized food and beverage sustainability standards or Local & Community-Based (0-100) (Real Food Calculator users report "Real Food A" and "Real Food B" here)
- □ Does the institution wish to pursue Part 2 of this credit (expenditures on conventional animal products)? (If data is not available, respond "No")

  If yes, provide:

  - Percentage of total dining services food and beverage expenditures on conventional animal products (meat, poultry, fish/seafood, eggs, and dairy products that do NOT qualify in either the Third Party Verified category or the Local & Community-Based category) (0-100)
- □ A brief description of the sustainable food and beverage purchasing program, including how the sustainability impacts of products in specific categories are addressed (e.g., meat, poultry, fish/seafood, eggs, dairy, produce, tea/coffee)
- □ An inventory of the institution's sustainable food and beverage purchases that includes for each product: the description/type; label, brand or producer; and the category in which it is being counted and/or a description of the sustainability attribute(s) for which it is being included (upload) (The STARS Food and Beverage Purchasing Inventory template is strongly recommended)
- □ A brief description of the methodology used to conduct the inventory, including the timeframe and how representative samples accounted for seasonal variation (if applicable)

  If uploading output from the Real Food Calculator, provide:

    - Percentage of total dining services expenditures on Real Food A (0-100)
    - Percentage of total dining services expenditures on Real Food B (0-100)
- □ Which of the following food service providers are present on campus and included in the figures reported above?
    - Dining operations and catering services operated by the institution
    - Dining operations and catering services operated by a contractor
    - Student-run food/catering services
    - Franchises (e.g., national or global brands)
    - Convenience stores
    - Vending services
    - Concessions

Optional

- □ A brief description of purchased food and beverage products that have other sustainability attributes not recognized above (e.g., local products that do not qualify as Local & Community-Based, regionally sourced products, and products with credible sustainability claims)
- □ Additional percentage of dining services food and beverage expenditures on conventional products with other sustainability attributes not recognized above (0-100)
- □ The website URL where information about the programs or initiatives is available
- □ Additional documentation to support the submission (upload)
- □ Data source(s) and notes about the submission
- □ Contact information for a responsible party (a staff member, faculty member, or administrator who can respond to questions regarding the data once it is submitted and available to the public)

F. Measurement

Timeframe

Report the most recent data available from within the three years prior to the anticipated date of submission.

Sampling and Data Standards

Institutions may choose to track food and beverage purchases for a 12-month consecutive period or use a representative sample that includes data from at least two full months during a 12-month consecutive period (e.g., fiscal or academic year). When using samples, institutions must accommodate seasonal and other variations in sustainable food and beverage availability and purchasing. For example, an institution could select one month in the autumn when seasonal produce is still available (e.g., September or October) and one month in the winter or early spring that falls outside the normal growing season (e.g., February or March).

This credit is based on total food and beverage expenditures in the following categories:

- Dairy - fluid milk, cheese, yogurt, ice cream
- Meat - beef, lamb, pork, game; including frozen or canned meat products
- Poultry - chicken, turkey, other fowl

- Eggs - shelled eggs, liquid egg product, powdered egg
- Fish/Seafood - all fish or seafood products, including frozen or canned products
- Produce - fresh, cut, or frozen fruits and vegetables
- Grocery/Staple - grains; staples; vegetarian/vegan meat alternatives; most boxed, bottled, jarred, and canned products
- Tea/Coffee - hot and cold coffee and tea products including bottled beverages, coffee beans, loose and bagged tea
- Other Beverages (non-dairy) - soft drinks, sports drinks, milk alternatives
- Baked Goods - baked products (pastries, breads, sweets)

To the extent feasible, all of the product categories and types outlined above should be included in the total food and beverage expenditures figure. If data tracking limitations make it necessary to exclude a product type or category, all products of that type or category must be excluded from both the numerator (expenditures on products that meet credit criteria) and the denominator (total food and beverage expenditures). Exclusions must be documented in the public "Data sources(s) and notes about the submission" field.

G. Standards and Terms

Conventional animal products
Conventional animal products include meat, poultry, fish/seafood, eggs, and dairy products that are not third party verified to meet recognized sustainability standards and do not qualify in the Local & Community-Based category. The percentage of total dining services food and beverage expenditures on conventional animal products should be calculated using the following formula:

$$100 \times [(A - B) / C]$$

A = Expenditures on animal products (meat, poultry, fish/seafood, eggs, and dairy products)
B = Expenditures on animal products that are third party verified under one or more recognized sustainability standards or Local & Community-Based
C = Total food and beverage expenditures

Credible sustainability claims
Consistent with the ISEAL Alliance, credible sustainability claims are clear, accurate and relevant, and are backed up by systems that are transparent and robust. For guidance in determining whether a particular claim is credible or not, visit http://www.challengethelabel.org/

Intensive livestock operations
Consistent with the U.S. Environmental Protection Agency (EPA), intensive livestock operations (ILOs) are:

> ...agricultural operations where animals are kept and raised in confined situations. [These operations] congregate animals, feed, manure and urine, dead animals, and production operations on a small land area. Feed is brought to the animals rather than the animals grazing or otherwise seeking feed in pastures, fields, or on rangeland.

These industrial facilities are also known as "factory farms" or concentrated animal feeding operations (CAFOs). Because of their potential negative impacts on water quality, air quality, human health, and

animal welfare, ILOs are typically regulated by national, state or provincial authorities, e.g., departments of natural resources, water, or the environment.

Because of the prevalence of industrial livestock production in many regions, a producer of animal products should be assumed to be an intensive operation unless the institution can verify otherwise through third party certification, transparent information from the supplier, or an appropriate regulatory body, e.g., the U.S. National Pollutant Discharge Elimination System (NPDES) permit program.

For guidance in identifying ILOs, see the Real Food Assessment Tips.

See also:

- NPDES Permit Writers' Manual for CAFOs and the Regulatory Definitions of Large CAFOs, Medium CAFO, and Small CAFOs (U.S.)
- A Review of Selected Jurisdictions and Their Approach to Regulating Intensive Farming Operations (Ontario Ministry of Agriculture, Food and Rural Affairs)
- Report from the Commission on the reviews undertaken under Article 30(9) and Article 73 of Directive 2010/75/EU on industrial emissions addressing emissions from intensive livestock rearing and combustion plants.

Local & Community-Based

Consistent with the Real Food Standards, food and beverage products that are Local & Community Based:

> ...can be traced to nearby farms, ranches, boats and businesses that are locally owned and operated. Supporting small and mid-size food businesses challenges trends towards consolidation in the food industry and supports local economies.

For guidance in determining if a product qualifies as Local & Community Based, see the Real Food Standards and section B. Criteria, above.

Real Food Calculator

The Real Food Calculator is a tool to track institutional food and beverage purchasing over time. College and university students use the Calculator as a platform for discussion and action with dining services and administrators. The Calculator is managed and hosted by the Real Food Challenge, a U.S.-based campaign and network of student food activists.

Recognized food and beverage sustainability standards

Products with the following attributes may be reported as Third Party Verified for the Food and Beverage Purchasing credit:

Global Standards (applicable to all institutions)

- Biodynamic Certified (Demeter)
- Certified Bird Friendly (coffee)
- Certified Humane Raised and Handled
- Certified Organic under an IFOAM-endorsed standard
- Certified Sustainably Grown (SCS)
- Fair Trade Certified:
    - Ecocert Fair Trade certified (EFT)
    - Fair for Life and other IMO certifications
    - Fairtrade mark (Fairtrade International)

    - FairWild Certified
    - Hand in Hand certified (Rapunzel Fairtrade)
    - Small Producers' Symbol (SPP)
- Green List (i.e. "best choice") fish and seafood (WWF)
- LEAF Marque (Linking Environment and Farming)
- Marine Stewardship Council Blue Ecolabel (paired with MSC Chain of Custody certification)
- Participatory Guarantee Systems (IFOAM)
- Rainforest Alliance Certified (SAN Standard for Sustainable Agriculture)
- Local, national, and regional third party certifications that are consistent with IFOAM's Common Objectives and Requirements of Organic Standards (COROS) and/or standards set by ISEAL Alliance and/or Global Ecolabelling Network members.

U.S. and Canadian Standards

- AGA-Certified Grassfed
- American Humane Certified Free Range & Pasture (egg layers)
- American National Standard for Sustainable Agriculture (ANSI/LEO-4000) Certified Gold or Platinum
- Animal Welfare Approved and AWA Grass Fed
- Certified Local Sustainable (Land Food People)
- Equitable Food Initiative certified (EFI)
- Fair Food Program (Fair Food Standards Council / Coalition of Immokalee Workers)
- Fair Trade Certified (Fair Trade USA)
- Food Alliance Certified
- Food Justice Certified (Agricultural Justice Project)
- Global Animal Partnership Certified (Steps 3-5+ only)
- Green List (i.e. "best choice") fish and seafood:
    - Monterey Bay Aquarium Seafood Watch (U.S.)
    - Sea Choice (Canada)
- Milk with Dignity (Migrant Justice)
- PCO Certified 100% Grassfed
- Protected Harvest Certified
- Salmon Safe Certified
- Transitional Organic (USDA)
- Additional certifications recognized in the Real Food Guide as Green Light or Yellow Light

Scoring Example: Food and Beverage Purchasing

Part 1

Example College spent $10 million on food and beverages during the past year. An inventory of those purchases reveals that:

A. $500,000 was spent on Certified Organic produce, dairy products and meat; Fairtrade coffee and chocolate, Rainforest Alliance certified tea and bananas, and Certified Humane animal products (counted as Third Party Verified)
B. $750,000 was spent on produce, dairy products and eggs purchased directly from small local producers and through a local farm-to-institution program (counted as Local & Community-Based)
C. $150,000 was spent on dairy products from a regional cooperative that aggregates milk from many producers, the majority of which are large farms and/or located more than 250 miles from the institution (counted as Other Sustainability Attributes).
D. $100,000 was spent on products from a local bakery that does not fully meet the Local & Community-Based criteria (counted as Other Sustainability Attributes).

The College's remaining purchases were on products that do not meet any of the credit criteria. Therefore, expenditures on products that are Third Party Verified or Local & Community-Based (A + B) total $1.25 million (12.5 percent of the total). Expenditures on products with Other Sustainability Attributes (C + D) total $250,000 (2.5 percent of the total).

Attributes	**Factor**		**Percentage of total dining services food and beverage expenditures on products in each category (0-100)**		**Points earned**
Third Party Verified or Local & Community-Based	0.053	×	12.5	=	0.6625
Other Sustainability Attributes	0		2.5		0
Total points earned for Part 1 →					**0.663**

Part 2

Of the above purchases, $3 million was spent on animal products, $0.5 million of which were Third Party Verified or Local & Community-Based. The remaining $2.5 million was spent on conventional animal products (both with and without sustainability attributes). Therefore, the percentage of total dining services food purchases comprised of conventionally produced animal products = $2.5 million ÷ $10 million = 25 percent.

A = Percentage of total dining services food and beverage expenditures on conventional animal products = 25 percent

Points earned for Part 2 = 2 × { [(100 – A) – 70] / 30 }
= 2 × { [(100 – 25) – 70] / 30 }
= 2 × { 5 / 30 } = 0.33 points

Appendix B: Inventory Samples from Each Category

Brand/Product	Category	Kilograms	Calculator Descriptor	EF (CO2e/kg)	CO2e (kg)	CO2 (tons)
SAMPLE TWIST ROLLS 5 ROUND	Baked Goods and Desserts	1.81437	total wheat flours	0.58	1.05233	0.00105
SAMPLE TWIST ROLLS 5 ROUND	Baked Goods and Desserts	1.81437	total wheat flours	0.58	1.05233	0.00105
SAMPLE TWIST ROLLS 5 ROUND	Baked Goods and Desserts	1.81437	total wheat flours	0.58	1.05233	0.00105
COOKIE CHOCOLATE CHIP GF 3 OZ IW T&S	Baked Goods and Desserts	2.04116	wheat / egg	2.06	4.20480	0.00420
BUN HAMBURGER GF 4 IW	Baked Goods and Desserts	2.17724	total wheat flours	0.58	1.26280	0.00126
CHEESECAKE SALTED CARAMEL BRULEE	Baked Goods and Desserts	3.06175	wheat / butter	6.25	19.13591	0.01914
COOKIE FORTUNE/400 CT	Baked Goods and Desserts	3.17514	wheat / butter	6.25	19.84465	0.01984
ROLLS SUB 15OZ GF	Baked Goods and Desserts	3.40194	total wheat flours	0.58	1.97313	0.00197
DANISH MINI VARIETY PACK T&S	Baked Goods and Desserts	3.62874	total wheat flours	0.58	2.10467	0.00210
SAMPLE TWIST ROLLS 5 ROUND	Baked Goods and Desserts	3.62874	total wheat flours	0.58	2.10467	0.00210
CAKE ITALIAN LEMON CREAM 12 SLICE	Baked Goods and Desserts	3.74213	wheat / egg	2.06	7.70880	0.00771
CAKE ITALIAN LEMON CREAM 12 SLICE	Baked Goods and Desserts	3.74213	wheat / egg	2.06	7.70880	0.00771
CAKE LEMON MOUSSE 14 SLICE 10.5 MELODY	Baked Goods and Desserts	3.80110	wheat / egg	2.06	7.83027	0.00783
CHEESECAKE PUMPKIN 9 14 CUT	Baked Goods and Desserts	4.02790	wheat / egg	2.06	8.29747	0.00830
CAKE CHOC REESES PB THUNDER 14 SLICE	Baked Goods and Desserts	4.19573	wheat / egg	2.06	8.64320	0.00864
MUFFIN RAW BLUEBERRY RTB 4.25 OZ PANFREE	Baked Goods and Desserts	4.35448	total wheat flours	0.58	2.52560	0.00253
CAKE STACK LEMON BERRY CREAM UNCUT	Baked Goods and Desserts	4.53592	wheat / egg	2.06	9.34400	0.00934
CRACKER GRAHAM CRUMBS	Baked Goods and Desserts	4.53592	wheat / egg	2.06	9.34400	0.00934
ROLL DINNER ASSORTED ARTISAN 1.8 OZ	Baked Goods and Desserts	4.76272	total wheat flours	0.58	2.76238	0.00276
BREAD CIABATTA BAGUETTE 22	Baked Goods and Desserts	4.98951	total wheat flours	0.58	2.89392	0.00289
DANISH MINI ASSORTED RTB 1.5 OZ	Baked Goods and Desserts	5.03487	wheat / egg	2.06	10.37183	0.01037
CAKES GERMAN CHOCOLATE CAKE HALF SHEETS	Baked Goods and Desserts	5.09384	wheat / egg	2.06	10.49331	0.01049
CHEESECAKE DULCE DE LECHE 14 SLICE	Baked Goods and Desserts	5.19816	wheat / egg	2.06	10.70822	0.01071
ROLL HAMBURG SLIDER ROUND 2.5 SLICED	Baked Goods and Desserts	5.31610	total wheat flours	0.58	3.08334	0.00308
TOPPING MARSHMALLOW CREME	Baked Goods and Desserts	5.44310	sugar	0.96	5.22538	0.00523
MARSHMALLOW MINI WHITE 1# BAGS	Baked Goods and Desserts	5.44310	sugar	0.96	5.22538	0.00523
PIE SHELL IN TIN 9 RTB	Baked Goods and Desserts	5.78330	total wheat flours	0.58	3.35431	0.00335
CAKE VANILLA BEAN DREAM HALF SHEETS	Baked Goods and Desserts	5.82866	wheats, nuts	0.875	5.10008	0.00510
BAKLAVA TRADITIONAL 2.2 OZ	Baked Goods and Desserts	5.89670	wheats, nuts	0.875	5.15961	0.00516
BAKLAVA TRADITIONAL 2.2 OZ	Baked Goods and Desserts	5.89670	total wheat flours	0.58	3.42008	0.00342
BAGEL PLAIN SLICED 3 OZ T&S	Baked Goods and Desserts	6.12349	wheat, butter	6.25	38.27183	0.03827
BROWNIE SALTED CARAMEL W PRETZEL CRUST	Baked Goods and Desserts	6.12349	total wheat flours	0.58	3.55163	0.00355
ROLL BRIOCHE SLIDER ROUND 2 SLIVER DOLL	Baked Goods and Desserts	6.35029	total wheat flours	0.58	3.68317	0.00368
MOUSSE MIX STRAWBERRY	Baked Goods and Desserts	6.38204	sugar	0.96	6.12676	0.00613
WRAP ROASTED RED PEPPER 12	Baked Goods and Desserts	6.63605	total wheat flours	0.58	3.84891	0.00385
DOUGH PUFF PASTRY 10X15 SHEETS	Baked Goods and Desserts	6.80388	total wheat flours	0.58	3.94625	0.00395
DOUGH PUFF PASTRY 10X15 SHEETS	Baked Goods and Desserts	6.80388	wheat, egg	2.06	14.01599	0.01402

Description	Category	Kilograms	Calculator Descriptor	EF (CO2e/kg)	CO2e (kg)	CO2 (tons)
Pecans	Beans, Nuts and Seeds	0.907184	total tree nuts	1.17	1.06140528	0.00106141
Cashews	Beans, Nuts and Seeds	2.721552	total tree nuts	1.17	3.18421584	0.00318422
Pecan	Beans, Nuts and Seeds	2.721552	total tree nuts	1.17	3.18421584	0.00318422
Pine nuts	Beans, Nuts and Seeds	4.53592	total tree nuts	1.17	5.3070264	0.00530703
Pine nuts	Beans, Nuts and Seeds	4.53592	total tree nuts	1.17	5.3070264	0.00530703
Seasame seeds	Beans, Nuts and Seeds	10.5641577	total tree nuts	1.17	12.36006449	0.01236006
Bean	Beans, Nuts and Seeds	10.886208	processed vegetables: legumes	0.78	8.49124224	0.00849124
Peanuts	Beans, Nuts and Seeds	13.60776	peanuts	1.94	26.3990544	0.02639905
Baked beans	Beans, Nuts and Seeds	19.050864	processed vegetables: canned	1.1	20.9559504	0.02095595
Walnuts	Beans, Nuts and Seeds	20.3299934	total tree nuts	1.17	23.78609232	0.02378609
Almonds	Beans, Nuts and Seeds	20.41164	total tree nuts	1.17	23.8816188	0.02388162
Refried beans	Beans, Nuts and Seeds	20.41164	processed vegetables: legumes	0.78	15.9210792	0.01592108
Beans	Beans, Nuts and Seeds	21.772416	processed vegetables: legumes	0.78	16.98248448	0.01698248
Beans - Black	Beans, Nuts and Seeds	21.772416	processed vegetables: legumes	0.78	16.98248448	0.01698248
Cashews	Beans, Nuts and Seeds	21.772416	total tree nuts	1.17	25.47372672	0.02547373
Lentils	Beans, Nuts and Seeds	21.772416	processed vegetables: legumes	0.78	16.98248448	0.01698248
Lima beans	Beans, Nuts and Seeds	21.772416	processed vegetables: legumes	0.78	16.98248448	0.01698248
Pinto beans	Beans, Nuts and Seeds	22.6796	processed vegetables: legumes	0.78	17.690088	0.01769009
Sunflower kernals	Beans, Nuts and Seeds	24.493968	total tree nuts	1.17	28.65794256	0.02865794
Chesnuts	Beans, Nuts and Seeds	29.029888	total tree nuts	1.17	33.96496896	0.03396497
Walnuts	Beans, Nuts and Seeds	29.48348	total tree nuts	1.17	34.4956716	0.03449567
Pecans	Beans, Nuts and Seeds	32.431828	total tree nuts	1.17	37.94523876	0.03794524
Almonds	Beans, Nuts and Seeds	32.658624	total tree nuts	1.17	38.21059008	0.03821059
Black beans	Beans, Nuts and Seeds	34.0194	processed vegetables: legumes	0.78	26.535132	0.02653513
Pecans	Beans, Nuts and Seeds	34.926584	total tree nuts	1.17	40.86410328	0.0408641
Green beans	Beans, Nuts and Seeds	36.28736	processed vegetables: legumes	0.78	28.3041408	0.02830414
Garbanzo beans	Beans, Nuts and Seeds	37.7660699	processed vegetables: legumes	0.78	29.45753454	0.02945753
Almonds	Beans, Nuts and Seeds	40.82328	total tree nuts	1.17	47.7632376	0.04776324
Red beans	Beans, Nuts and Seeds	40.82328	processed vegetables: legumes	0.78	31.8421584	0.03184216
Beans	Beans, Nuts and Seeds	41.730464	processed vegetables: legumes	0.78	32.54976192	0.03254976
Black beans	Beans, Nuts and Seeds	43.544832	processed vegetables: legumes	0.78	33.96496896	0.03396497
Black beans	Beans, Nuts and Seeds	43.544832	processed vegetables: legumes	0.78	33.96496896	0.03396497
Cashews	Beans, Nuts and Seeds	43.544832	total tree nuts	1.17	50.94745344	0.05094745
Garbanzo beans	Beans, Nuts and Seeds	45.3592	processed vegetables: legumes	0.78	35.380176	0.03538018
White beans	Beans, Nuts and Seeds	57.152592	processed vegetables: legumes	0.78	44.57902176	0.04457902
Cashews	Beans, Nuts and Seeds	59.874144	total tree nuts	1.17	70.05274848	0.07005275
Almonds	Beans, Nuts and Seeds	61.23492	total tree nuts	1.17	71.6448564	0.07164486

Description	Category	Kilograms	Calculator Descriptor	EF (CO2e/kg)	CO2e (kg)	CO2 (tons)
1000 island dressing	Condiments and Sauces	79.42396	salad and cooking oils	1.63	129.46105	0.129461
1000 island dressing	Condiments and Sauces	20.87884	salad and cooking oils	1.63	34.03251	0.034033
1000 island dressing	Condiments and Sauces	67.16790	salad and cooking oils	1.63	109.48368	0.109484
1000 island dressing	Condiments and Sauces	13.66673	salad and cooking oils	1.63	22.27676	0.022277
1000 island dressing	Condiments and Sauces	87.08966	salad and cooking oils	1.63	141.95615	0.141956
Alfredo sauce	Condiments and Sauces	1669.21856	other added fats and oils	6.3	10516.07693	10.516077
Alfredo sauce	Condiments and Sauces	3020.92272	other added fats and oils	6.3	19031.81314	19.031813
Alfredo sauce	Condiments and Sauces	535.23856	other added fats and oils	6.3	3372.00293	3.372003
Alfredo sauce	Sauces and Condiments	18.14368	other added fats and oils	6.3	114.30518	0.114305
Alfredo sauce mix	Sauces and Condiments	615.07075	other added fats and oils	6.3	3874.94574	3.874946
Au Jus Prep	Condiments and Sauces	36.76363	salad and cooking oils	1.63	59.92472	0.059925
Au Jus sauce	Condiments and Sauces	22.05818	salad and cooking oils	1.63	35.95483	0.035955
Balsamic vinaigrette	Sauces and Condiments	296.70360	salad and cooking oils	1.63	483.62687	0.483627
Balsamic Vinegar	Sauces and Condiments	57.51547	salad and cooking oils	1.63	93.75021	0.093750
Balsamic vinegarette	Condiments and Sauces	81.19750	salad and cooking oils	1.63	132.35193	0.132352
Balsamic vinegarette	Condiments and Sauces	131.86827	salad and cooking oils	1.63	214.94527	0.214945
Balsamic vinegarette	Condiments and Sauces	4.53592	salad and cooking oils	1.63	7.39355	0.007394
Balsamic vinegarette	Condiments and Sauces	313.18713	salad and cooking oils	1.63	510.49503	0.510495
Balsamic vinegarette	Condiments and Sauces	33.08046	salad and cooking oils	1.63	53.92116	0.053921
Balsamic vinegarette	Condiments and Sauces	181.31887	salad and cooking oils	1.63	295.54975	0.295550
Balsamic vinegarette	Condiments and Sauces	13.60776	salad and cooking oils	1.63	22.18065	0.022181
Balsamic vinegarette	Condiments and Sauces	14.96854	salad and cooking oils	1.63	24.39871	0.024399
Balsamic white vinegar	Condiments and Sauces	11.56660	salad and cooking oils	1.63	18.85355	0.018854
BBQ sauce	Condiments and Sauces	967.51174	other added fats and oils	6.3	6095.32394	6.095324
BBQ sauce	Condiments and Sauces	33.52952	other added fats and oils	6.3	211.23598	0.211236
BBQ sauce	Condiments and Sauces	8.16466	other added fats and oils	6.3	51.43733	0.051437
BBQ sauce	Condiments and Sauces	1509.31831	other added fats and oils	6.3	9508.70534	9.508705
BBQ sauce	Condiments and Sauces	18.08925	other added fats and oils	6.3	113.96227	0.113962
BBQ sauce	Condiments and Sauces	215.90979	other added fats and oils	6.3	1360.23169	1.360232
BBQ sauce	Condiments and Sauces	246.54086	other added fats and oils	6.3	1553.20742	1.553207
BBQ sauce	Sauces and Condiments	720.65790	other added fats and oils	6.3	4540.14476	4.540145
BBQ Sauce	Sauces and Condiments	29.02989	other added fats and oils	6.3	182.88829	0.182888
BBQ Sauce	Sauces and Condiments	19.35023	other added fats and oils	6.3	121.90648	0.121906
BBQ sauce	Sauces and Condiments	19.35023	other added fats and oils	6.3	121.90648	0.121906
BBQ sauce?	Sauces and Condiments	239.49658	other added fats and oils	6.3	1508.82843	1.508828
Black pepper	Condiments and Sauces	11.83875	other added fats and oils	6.3	74.58413	0.074584
Blue cheese dressing	Condiments and Sauces	167.69750	other added fats and oils	6.3	1056.49424	1.056494

Brand/Product	Category	Kilograms	Calculator Descriptor	EF (CO2e/kg)	CO2e (kg)	CO2 (tons)
CHS BLUE CRUMBLE	Dairy Products	38.5553	total cheese	9.78	377.0710296	0.37707103
CHS BLUE CRUMBLE	Dairy Products	145.1494	total cheese	9.78	1419.561523	1.41956152
CHS BLUE CRUMBLE	Dairy Products	127.0058	total cheese	9.78	1242.116333	1.24211633
CHS BLUE CRUMBLE	Dairy Products	72.5747	total cheese	9.78	709.7807616	0.70978076
DRESSING DELUXE BLUE CHS 813	Dairy Products	411.6211	other added fats and oils	6.3	2593.213133	2.59321313
BUTTER PRINTS UNSALTED AA SHIELD	Dairy Products	277.5983	butter	11.92	3308.971784	3.30897178
BUTTER CUP WHIPPED 720 CT	Dairy Products	58.0598	butter	11.92	692.0725299	0.69207253
BUTTER PRINTS SALTED AA SHIELD	Dairy Products	424.5621	butter	11.92	5060.780375	5.06078038
BUTTER LIQUID ALTERNATIVE ZTF	Dairy Products	419.1190	butter	11.92	4995.898575	4.99589858
BUTTER CUP WHIPPED 720 CT	Dairy Products	68.9460	butter	11.92	821.8361293	0.82183613
TOP BUTT S/S 6OZ USDA CHOICE	Dairy Products	2.4222	butter	11.92	28.87240086	0.0288724
BUTTER PRINTS UNSALTED AA SHIELD	Dairy Products	816.4656	butter	11.92	9732.269952	9.73226995
BUTTER LIQUID ALTERNATIVE ZTF	Dairy Products	796.3261	butter	11.92	9492.207293	9.49220729
BUTTER CUP WHIPPED 720 CT	Dairy Products	50.8023	butter	11.92	605.5634637	0.60556346
BUTTER PRINTS SALTED AA SHIELD	Dairy Products	881.7828	butter	11.92	10510.85155	10.5108515
TOP BUTT S/S 6OZ USDA CHOICE	Dairy Products	44.2071	butter	11.92	526.9483497	0.52694835
BUTTER FOIL AA 59 CT	Dairy Products	61.6885	butter	11.92	735.327063	0.73532706
BUTTERMILK QUART	Dairy Products	46.2936	fluid milk	1.34	62.03342336	0.06203342
BUTTERMILK QUART	Dairy Products	17.6901	fluid milk	1.34	23.70471792	0.02370472
CHS MOZZ FEATH SHREDDED LMWM	Dairy Products	3320.2934	total cheese	9.78	32472.46984	32.4724698
CHS AMRCN YLLW 160 SLI	Dairy Products	680.3880	total cheese	9.78	6654.19464	6.65419464
CHS MOZZ WM LOAF	Dairy Products	497.2865	total cheese	9.78	4863.46214	4.86346214
CHS CHEDDAR SHARP YELLOW	Dairy Products	380.6227	total cheese	9.78	3722.489566	3.72248957
CHS CHEDDAR MLD SHRD Y FEATHER	Dairy Products	435.4483	total cheese	9.78	4258.68457	4.25868457
CHS MONT PEPPER JACK LOAF	Dairy Products	308.4426	total cheese	9.78	3016.568237	3.01656824
CHS CHEDDAR SHARP SLICED	Dairy Products	244.9397	total cheese	9.78	2395.51007	2.39551007
CHS PROV LOAF 12 LB	Dairy Products	363.4224	total cheese	9.78	3554.271525	3.55427153
CHS MOZZARELLA SLICED	Dairy Products	285.7630	total cheese	9.78	2794.761749	2.79476175
CHS SWISS CHEESE SLICED .75 oz	Dairy Products	212.2811	total cheese	9.78	2076.108728	2.07610873
CHS SWISS	Dairy Products	267.0432	total cheese	9.78	2611.682674	2.61168267
CHS PROVOLONE SLICED 3/4 OZ	Dairy Products	208.1987	total cheese	9.78	2036.18356	2.03618356
CHS MONTEREY JACK SHREDDED	Dairy Products	161.0252	total cheese	9.78	1574.826065	1.57482606
CHS CUBES SWISS 6/2 LB	Dairy Products	92.5328	total cheese	9.78	904.970471	0.90497047
CHS PARMESAN GRATED IMPORTED	Dairy Products	127.0058	total cheese	9.78	1242.116333	1.24211633
CHS CUBES Y CHEDDAR 6/2 LB	Dairy Products	108.8621	total cheese	9.78	1064.671142	1.06467114
CHS ASIAGO SHREDDED TOPPERS	Dairy Products	81.6466	total cheese	9.78	798.5033568	0.79850336
CHS FETA CRUMBLES	Dairy Products	127.0058	total cheese	9.78	1242.116333	1.24211633

Brand/Product	Category	Kilograms	Calculator Descriptor	EF (CO2e/kg)	CO2e (kg)	CO2 (tons)
EGGS LARGE CARTON 15 DZ	Egg Products	1298.4071	Eggs	3.54	4596.361134	4.59636113
EGG HARD COOKED FRESH	Egg Products	462.66384	Eggs	3.54	1637.829994	1.63782999
EGG LIQUID W/CITRIC FRESH	Egg Products	394.62504	Eggs	3.54	1396.972642	1.39697264
EGG PASTEURIZED 15 DZ	Egg Products	40.82328	Eggs	3.54	144.5144112	0.14451441
EGG HARD COOKED	Egg Products	13.60776	Eggs	3.54	48.1714704	0.04817147
EGG LIQUID W/CITRIC FRESH	Egg Products	1959.51744	Eggs	3.54	6936.691738	6.93669174
EGG HARD COOKED FRESH	Egg Products	1052.33344	Eggs	3.54	3725.260378	3.72526038
EGGS LARGE CARTON 15 DZ	Egg Products	16.782904	Eggs	3.54	59.41148016	0.05941148
EGGS LARGE 15 DZ	Egg Products	13.60776	Eggs	3.54	48.1714704	0.04817147
EGG PASTEURIZED 15 DZ	Egg Products	2428.98516	Eggs	3.54	8598.607466	8.59860747
EGG LIQUID W/CITRIC FRESH	Egg Products	3143.39256	Eggs	3.54	11127.60966	11.1276097
EGG PATTY FRIED NATURAL SHAPE	Egg Products	521.517402	Eggs	3.54	1846.171603	1.8461716
EGG HARD COOKED FRESH	Egg Products	771.1064	Eggs	3.54	2729.716656	2.72971666
EGG WHITES HI WHIPPED FROZEN	Egg Products	45.93526184	Eggs	3.54	162.6108269	0.16261083
EGGS LARGE 15 DZ	Egg Products	13.60776	Eggs	3.54	48.1714704	0.04817147
EGG LIQUID W/CITRIC FRESH	Eggs Products	9507.28832	Eggs	3.54	33655.80065	33.6558007
EGG PASTEURIZED 15 DZ	Eggs Products	1469.63808	Eggs	3.54	5202.518803	5.2025188
EGG HARD COOKED FRESH	Eggs Products	1115.83632	Eggs	3.54	3950.060573	3.95006057
EGG PATTY FRIED NATURAL SHAPE	Eggs Products	642.96666	Eggs	3.54	2276.101976	2.27610198
APP QUICHE MINI ASSORTMENT	Eggs Products	34.0194	Eggs	3.54	120.428676	0.12042868
EGG PATTY WHITE CKD T&S 1.75 OZ	Eggs Products	142.88148	Eggs	3.54	505.8004392	0.50580044
EGG WHITES HI WHIPPED FROZEN	Eggs Products	244.93968	Eggs	3.54	867.0864672	0.86708647
EGG LIQUID NO CITRIC	Eggs Products	90.7184	Eggs	3.54	321.143136	0.32114314
EGG LIQUID W/CITRIC FRESH	Eggs Products	108.86208	Eggs	3.54	385.3717632	0.38537176
	Total				90390.58489	90.3905849

Brand/Product	Category	Kilograms	Calculator Descriptor	EF (CO2e/kg)	CO2e (kg)	CO2 (tons)
AMARANTH	Fruits, Vegetables and Juices	36.2874	processed fruit	1.03	37.37598	0.03737598
APPLESAUCE CHUNKY SWEETENED	Fruits, Vegetables and Juices	35.3802	processed fruit	1.03	36.44158	0.03644158
APPLESAUCE UNSWEETENED #10 CAN	Fruits, Vegetables and Juices	229.9711	processed fruit	1.03	236.87028	0.23687028
APPLESAUCE SWEETENED #10 CAN	Fruits, Vegetables and Juices	18.3705	processed fruit	1.03	18.92159	0.01892159
ARTICHOKE HEARTS QUARTERS	Fruits, Vegetables and Juices	153.0873	artichokes	0.73	111.75373	0.11175373
ARTICHOKE HEARTS QUARTERED	Fruits, Vegetables and Juices	17.1730	artichokes	0.73	12.53628	0.01253628
ARTICHOKE HEARTS WHOLE 30/40CT	Fruits, Vegetables and Juices	10.8862	artichokes	0.73	7.94693	0.00794693
ARTICHOKE HEARTS WHOLE 30/40CT	Fruits, Vegetables and Juices	217.7242	artichokes	0.73	158.93864	0.15893864
ARTICHOKE HEARTS WHOLE 30/40CT	Fruits, Vegetables and Juices	108.8621	artichokes	0.73	79.46932	0.07946932
ARTICHOKE HEARTS QUARTERS	Fruits, Vegetables and Juices	34.0194	artichokes	0.73	24.83416	0.02483416
ARTICHOKE HEARTS QUARTERS	Fruits, Vegetables and Juices	119.0679	artichokes	0.73	86.91957	0.08691957
AVOCADO DICED IQF SIMPLOT FROZEN	Fruits, Vegetables and Juices	54.4310	avacado	1.27	69.12742	0.06912742
AVOCADO CHUNKY PULP FRESH	Fruits, Vegetables and Juices	5.4431	avacado	1.27	6.91274	0.00691274
SPINACH BABY	Fruits, Vegetables and Juices	1.8144	spinach	0.13	0.23587	0.00023587
SPINACH BABY	Fruits, Vegetables and Juices	7.2575	spinach	0.13	0.94347	0.00094347
BAMBOO SHOOTS SLICED	Fruits, Vegetables and Juices	139.7063	Average vegetable	0.84	117.35332	0.11735332
PEPPER BANANA MLD RINGS	Fruits, Vegetables and Juices	938.9354	bell peppers	0.88	826.26319	0.82626319
PEPPER BANANA MLD RINGS	Fruits, Vegetables and Juices	755.2307	bell peppers	0.88	664.60300	0.664603
PEPPER BANANA HOT SLICED	Fruits, Vegetables and Juices	203.2092	bell peppers	0.88	178.82411	0.17882411
PEPPER BANANA MLD RINGS	Fruits, Vegetables and Juices	20.4116	bell peppers	0.88	17.96224	0.01796224
PEPPER BANANA HOT SLICED	Fruits, Vegetables and Juices	551.5679	bell peppers	0.88	485.37973	0.48537973
BEETS SLICED MEDIUM FANCY #10 CAN SB	Fruits, Vegetables and Juices	247.6612	average vegetable	0.84	208.03543	0.20803543
PEAS BLACK EYED 25# BAG BULK	Fruits, Vegetables and Juices	34.0194	legumes	0.78	26.53513	0.02653513
OLIVES BLACK SLICED RIPE	Fruits, Vegetables and Juices	696.7173	processed vegetable: canned	1.1	766.38904	0.76638904
OLIVES BLACK SLICED RIPE	Fruits, Vegetables and Juices	283.0414	processed vegetable: canned	1.1	311.34555	0.31134555
BLUEBERRIES WHOLE IQF USA CULTIVATED	Fruits, Vegetables and Juices	45.3592	blueberries	0.33	14.96854	0.01496854
BLUEBERRIES WHOLE IQF USA CULTIVATED	Fruits, Vegetables and Juices	353.8018	blueberries	1.33	470.55634	0.47055634
EGGPLANT BREADED LONG (NAPLES)	Fruits, Vegetables and Juices	4.5359	eggplant	1.3	5.89670	0.0058967
EGGPLANT BRD ROUND	Fruits, Vegetables and Juices	95.2543	eggplant	1.3	123.83062	0.12383062
BROCCOLI FLORETS	Fruits, Vegetables and Juices	5.4431	broccoli	0.4	2.17724	0.00217724
BROCCOLI FLORETS	Fruits, Vegetables and Juices	27.2155	broccoli	0.4	10.88621	0.01088621
BRUSSEL SPROUTS MEDIUM USA	Fruits, Vegetables and Juices	32.6586	brussels sprouts	0.33	10.77735	0.01077735
SQUASH BUTTERNUT CKD USA	Fruits, Vegetables and Juices	130.6345	squash	0.09	11.75710	0.0117571
CAPERS NONPAREIL	Fruits, Vegetables and Juices	16.3293	processed vegetable: canned	1.1	17.96224	0.01796224
CAPERS NONPAREIL	Fruits, Vegetables and Juices	7.2575	processed vegetable: canned	1.1	7.98322	0.00798322
CAPERS NONPAREIL	Fruits, Vegetables and Juices	1.8144	processed vegetable: canned	1.1	1.99580	0.0019958
CAPERS NONPAREIL	Fruits, Vegetables and Juices	0.9072	processed vegetable: canned	1.1	0.99790	0.0009979

Brand/Product	Category	Kilograms	Heller et al. (2014) Category	EF (CO2e/kg)	CO2e (kg)	CO2 (tons)
CORN BABY WHOLE 150-180 CT	Grains and Starches	152.4069	sweet corn	0.73	111.25705	0.11126
CORN BABY WHOLE 150-180 CT	Grains and Starches	239.4966	sweet corn	0.73	174.83250	0.17483
FLOUR ALL PURPOSE BLEACHED MEDALLION	Grains and Starches	204.1164	total wheat flours	0.58	118.38751	0.11839
FLOUR ALL PURPOSE BLEACHED MEDALLION	Grains and Starches	657.7084	total wheat flours	0.58	381.47087	0.38147
FLOUR ALL PURPOSE BLEACHED MEDALLION	Grains and Starches	657.7084	total wheat flours	0.58	381.47087	0.38147
PICKLE BREAD AND BTR 5/16 KK	Grains and Starches	277.1447	total wheat flours	0.58	160.74393	0.16074
BREAD WHITE LOAF GF 33 OZ SLD	Grains and Starches	35.7204	total wheat flours	0.58	20.71781	0.02072
BREAD SOFT WHITE PULLMAN 28 SL	Grains and Starches	6.8039	total wheat flours	0.58	3.94625	0.00395
RICE PARBOILED BROWN WHOLE GRAIN BULK	Grains and Starches	646.3686	rice	1.14	736.86020	0.73686
RICE PARBOILED BROWN WHOLE GRAIN BULK	Grains and Starches	306.1746	rice	1.14	349.03904	0.34904
RICE PARBOILED BROWN WHOLE GRAIN BULK	Grains and Starches	1723.6496	rice	1.14	1964.96054	1.96496
NOODLE SOBA BUCKWHEAT AMOY	Grains and Starches	417.3046	total wheat flours	0.58	242.03669	0.24204
CEREAL COUNTRY CORN FLAKE	Grains and Starches	4.4906	total wheat flours	0.58	2.60453	0.00260
CEREAL OAT & HONEY GRANOLA	Grains and Starches	234.9607	total wheat flours	0.58	136.27718	0.13628
CEREAL ASST GOODNESS CUP	Grains and Starches	79.0792	total wheat flours	0.58	45.86595	0.04587
CEREAL OAT & HONEY GRANOLA	Grains and Starches	82.5537	total wheat flours	0.58	47.88117	0.04788
CEREAL CINN TOAST CRUNCH	Grains and Starches	5.9874	total wheat flours	0.58	3.47270	0.00347
CEREAL LUCKY CHARMS BULK	Grains and Starches	301.6387	total wheat flours	0.58	174.95043	0.17495
CEREAL CINN TOAST CRUNCH	Grains and Starches	353.2574	total wheat flours	0.58	204.88932	0.20489
CEREAL REESES PUFFS BULK	Grains and Starches	291.2061	total wheat flours	0.58	168.89952	0.16890
CEREAL HONEY NUT CHEERIOS BULK	Grains and Starches	275.9654	total wheat flours	0.58	160.05992	0.16006
CEREAL SPECIAL K RED BERRIES BULK PACK	Grains and Starches	204.5700	total wheat flours	0.58	118.65060	0.11865
CEREAL COCOA PUFFS BULK	Grains and Starches	170.6640	total wheat flours	0.58	98.98511	0.09899
CEREAL KASHI GO LEAN CRUNCH BULK	Grains and Starches	192.7766	total wheat flours	0.58	111.81043	0.11181
CEREAL FROSTED MINI WHEAT BULK	Grains and Starches	177.8081	total wheat flours	0.58	103.12868	0.10313
CEREAL CHEERIOS BULK	Grains and Starches	116.8453	total wheat flours	0.58	67.77027	0.06777
CEREAL CHOC RICE CHEX GLUTEN FREE BULK	Grains and Starches	111.1300	total wheat flours	0.58	64.45542	0.06446
CEREAL TRIX BULK	Grains and Starches	94.3018	total wheat flours	0.58	54.69503	0.05470
CEREAL FROSTED FLAKES	Grains and Starches	48.1715	total wheat flours	0.58	27.93945	0.02794
CEREAL FRUIT LOOPS BULK	Grains and Starches	21.0920	total wheat flours	0.58	12.23338	0.01223
CEREAL CORN POPS BULK	Grains and Starches	15.8757	total wheat flours	0.58	9.20792	0.00921
CEREAL RICE KRISPIES BULK	Grains and Starches	9.5254	total wheat flours	0.58	5.52475	0.00552
CEREAL COCOA KRISPIES BULK	Grains and Starches	4.2547	total wheat flours	0.58	2.46772	0.00247
CORN COB 3 GOLDEN JUBILEE FRZ	Grains and Starches	14.0614	corn products	0.66	9.28049	0.00928
CORN CUT YELLOW GRADE A USA FZN	Grains and Starches	1066.8484	corn products	0.66	704.11993	0.70412
CORN BABY WHOLE 150-180 CT	Grains and Starches	239.4966	corn products	0.66	158.06774	0.15807
CORN WHOLE KERNEL FANCY #10 CAN	Grains and Starches	17.6901	corn products	0.66	11.67546	0.01168

Brand/Product	Category	Kilograms	Heller et al. (2014) Category	EF (CO2e/kg)	CO2e (kg)	CO2 (tons)
SPICE GARLIC CHOPPED IN WATER	Herbs and Spices	157.85002	garlic	0.33	52.090505	0.052091
SPICE GARLIC GRANULATED LG JUG	Herbs and Spices	44.22522	garllic	0.33	14.594323	0.014594
SAUCE HOISIN	ondiments and Sauc	2.26796	other added fats and oils	6.3	14.288148	0.014288
MIX SAUCE DEMI GLACE	Herbs and Spices	4.76272	other added fats and oils	6.3	30.005111	0.030005
MIX SAUCE DEMI GLACE	Herbs and Spices	6.35029	other added fats and oils	6.3	40.006814	0.040007
SPICE ALLSPICE GROUND BOTTLE	Herbs and Spices	2.72155	processed vegetables: processed and	1.3	3.538018	0.003538
SPICE ALLSPICE GROUND BOTTLE	Herbs and Spices	0.45359	processed vegetables: processed and	1.3	0.589670	0.000590
SPICE BAKING POWDER LG BOTTLE	Herbs and Spices	1.97766	processed vegetables: processed and	1.3	2.570959	0.002571
SPICE BASIL LEAVES PREMIUM JUG	Herbs and Spices	11.11300	processed vegetables: processed and	1.3	14.446905	0.014447
SPICE BASIL LEAVES PREMIUM JUG	Herbs and Spices	3.17514	processed vegetables: processed and	1.3	4.127687	0.004128
SPICE BASIL LEAVES PREMIUM	Herbs and Spices	0.52617	processed vegetables: processed and	1.3	0.684017	0.000684
SPICE BASIL LEAVES PREMIUM	Herbs and Spices	1.05233	processed vegetables: processed and	1.3	1.368033	0.001368
BATTER MIX A/P PRE-DIP G7001.2	Herbs and Spices	284.85578	processed vegetables: processed and	1.3	370.312509	0.370313
SPICE BAY LEAVES WHOLE LG BOTTLE	Herbs and Spices	0.12247	processed vegetables: processed and	1.3	0.159211	0.000159
SPICE BAY LEAVES WHOLE LG BOTTLE	Herbs and Spices	0.12247	processed vegetables: processed and	1.3	0.159211	0.000159
BATTER MIX BEER G2455.21	Herbs and Spices	170.91347	processed vegetables: processed and	1.3	222.187505	0.222188
BATTER MIX BEER G2455.21	Herbs and Spices	56.97116	processed vegetables: processed and	1.3	74.062502	0.074063
BATTER MIX BEER G2455.21	Herbs and Spices	142.42789	processed vegetables: processed and	1.3	185.156254	0.185156
SPICE PEPPER BLK TABLE GRIND 30 MESH JUG	Herbs and Spices	9.07184	processed vegetables: processed and	1.3	11.793392	0.011793
PEPPER P/C 6000 CT	Herbs and Spices	5.26167	processed vegetables: processed and	1.3	6.840167	0.006840
SPICE PEPPER BLACK 18 MESH COARSE BOTTLE	Herbs and Spices	2.14095	processed vegetables: processed and	1.3	2.783241	0.002783
SPICE PEPPER BLK TABLE GRIND 30 MESH JUG	Herbs and Spices	9.07184	processed vegetables: processed and	1.3	11.793392	0.011793
SPICE PEPPER BLK TABLE GRIND 30 MESH JUG	Herbs and Spices	4.53592	processed vegetables: processed and	1.3	5.896696	0.005897
SPICE PEPPER BLK TABLE GRIND 30 MESH JUG	Herbs and Spices	11.33980	processed vegetables: processed and	1.3	14.741740	0.014742
SEASONING BOMBOY KARE	Herbs and Spices	18.14368	processed vegetables: processed and	1.3	23.586784	0.023587
CAJUN SEASONING JUG	Herbs and Spices	18.14368	processed vegetables: processed and	1.3	23.586784	0.023587
SPICE CAJUN SEASONING RUB LG BOTTLE	Herbs and Spices	8.08301	processed vegetables: processed and	1.3	10.507912	0.010508
SPICE CAJUN SEASONING RUB LG BOTTLE	Herbs and Spices	4.40891	processed vegetables: processed and	1.3	5.731589	0.005732
SPICE CAJUN SEASONING RUB LG BOTTLE	Herbs and Spices	8.08301	processed vegetables: processed and	1.3	10.507912	0.010508
SPICE CARAWAY SEED WHOLE LG BOTTLE	Herbs and Spices	0.98883	processed vegetables: processed and	1.3	1.285480	0.001285
SPICE CARAWAY SEED WHOLE LG BOTTLE	Herbs and Spices	0.49442	processed vegetables: processed and	1.3	0.642740	0.000643
SPICE PEPPER RED CAYENNE JUG	Herbs and Spices	6.80388	processed vegetables: processed and	1.3	8.845044	0.008845
SPICE CAYENNE PEPPER 40K LG BOTTLE	Herbs and Spices	2.14095	processed vegetables: processed and	1.3	2.783241	0.002783
SPICE CAYENNE PEPPER 40K LG BOTTLE	Herbs and Spices	5.88762	processed vegetables: processed and	1.3	7.653911	0.007654
SPICE CELERY SALT LG BOTTLE	Herbs and Spices	1.07501	processed vegetables: processed and	1.3	1.397517	0.001398
SPICE CELERY SALT LG BOTTLE	Herbs and Spices	2.15003	processed vegetables: processed and	1.3	2.795034	0.002795
SPICE CELERY SALT LG BOTTLE	Herbs and Spices	1.07501	processed vegetables: processed and	1.3	1.397517	0.001398

Brand/Product	Category	Kilograms	Heller et al. (2014) Category	EF (CO2e/kg)	CO2e (kg)	CO2 (tons)
VEAL ITALIAN BRD ITALIETTE	Meat	13.60776	Beef	26.45	359.925252	0.35992525
BF GND PATTY 85/15 CAB 3/1 WIDE	Meat	4005.21736	Beef	26.45	105937.9992	105.937999
BEEF ROAST DELI CKD MED RARE PUMPED	Meat	586.8573296	Beef	26.45	15522.37637	15.5223764
MEATBALL ITALIAN CKD 1 OZ	Meat	902.64808	Beef	26.45	23875.04172	23.8750417
BEEF STEAK FAST CUT 4 OZ	Meat	503.48712	Beef	26.45	13317.23432	13.3172343
BEEF GROUND ROUND 85/15 CAB	Meat	658.8877392	Beef	26.45	17427.5807	17.4275807
BEEF CORNED RD CKD BTM FLAT	Meat	516.7320064	Beef	26.45	13667.56157	13.6675616
BEEF RAGU STRIPS	Meat	247.20764	Beef	26.45	6538.642078	6.53864208
BEEF TOP BUTT CAB	Meat	132.9478152	Beef	26.45	3516.469712	3.51646971
(MP) BEEF GROUND ROUND 85/15 CAB (PC)	Meat	128.593332	Beef	26.45	3401.293631	3.40129363
BEEF STRIPLOIN 0X1 CHOICE (PC)	Meat	46.98305936	Beef	26.45	1242.70192	1.24270192
BEEF SIRLOIN STEW	Meat	86.18248	Beef	26.45	2279.526596	2.2795266
BEEF STRIPLOIN 0X1	Meat	64.9543744	Beef	26.45	1718.043203	1.7180432
BEEF RIBEYE BNLS SELECT	Meat	38.8274752	Beef	26.45	1026.986719	1.02698672
BEEF ROAST RED OSIER WHOLE	Meat	54.657836	Beef	26.45	1445.699762	1.44569976
BEEF CHUCK ROAST BNLS 2/5# CAB	Meat	50.26706544	Beef	26.45	1329.563881	1.32956388
BEEF FLANK STEAK (PC)	Meat	43.75348432	Beef	26.45	1157.27966	1.15727966
BEEF CHUCK POT ROAST IN BAG	Meat	43.10031184	Beef	26.45	1140.003248	1.14000325
BEEF ROUND TOP CC CAB	Meat	53.1609824	Beef	26.45	1406.107984	1.40610798
BEEF TENDER CLND BLK RDY SEL	Meat	9.77944352	Beef	26.45	258.6662811	0.25866628
BEEF FLANK STEAK	Meat	39.6439408	Beef	26.45	1048.582234	1.04858223
BEEF RIBEYE BNLS SELECT (PIECE)	Meat	17.40886096	Beef	26.45	460.4643724	0.46046437
(MP) BEEF STRIPLOIN 0X1 (PIECE)	Meat	14.57844688	Beef	26.45	385.59992	0.38559992
CAB L/OFF RIBEYE STK 6-8OZ	Meat	10.00623952	Beef	26.45	264.6650353	0.26466504
BEEF BRISKET CHOICE	Meat	26.08154	Beef	26.45	689.856733	0.68985673
BEEF GRND PATTY 80/20 3/1 WIDE	Meat	18.14368	Beef	26.45	479.900336	0.47990034
BEEF BRISKET CORNED RAW CH	Meat	18.14368	Beef	26.45	479.900336	0.47990034
BEEF PATTY 4/1 HALAL THIN FRZ	Meat	18.14368	Beef	26.45	479.900336	0.47990034
TOP BUTT STEAK BNLS C/C 5 OZ	Meat	4.8534344	Beef	26.45	128.3733399	0.12837334
VEAL & BEEF PATTY BREADED	Meat	4.53592	Beef	26.45	119.975084	0.11997508
BF GND PATTY 85/15 CAB 3/1 WIDE	Meat	4789.93152	Beef	26.45	126693.6887	126.693689
BEEF ROAST RED OSIER WHOLE	Meat	1031.876441	Beef	26.45	27293.13186	27.2931319
BEEF GROUND ROUND 85/15 CAB	Meat	1156.931755	Beef	26.45	30600.84493	30.6008449
BEEF STEAK FAST CUT 4 OZ	Meat	730.28312	Beef	26.45	19315.98852	19.3159885
BEEF FLANK STEAK (PC)	Meat	459.7427075	Beef	26.45	12160.19461	12.1601946
MEATBALL ITALIAN CKD 1 OZ	Meat	789.25008	Beef	26.45	20875.66462	20.8756646
BEEF FLANK STEAK	Meat	419.4365224	Beef	26.45	11094.09602	11.094096

Brand/Product	Category	Kilograms	Heller et al. (2014) Category	EF (CO2e/kg)	CO2e (kg)	CO2 (tons)
CHIX TNDR FRIT STKHOUSE 80CT UC	Meat	158.7572	Poultry	5.05	801.72386	0.80172386
CHIX BRST B/S 5OZ SINGL FRSH	Meat	63.50288	Poultry	5.05	320.689544	0.32068954
CHIX QUARTERED 3.0 LB WOG	Meat	73.2097488	Poultry	5.05	369.7092314	0.36970923
CHIX DELI BRST BUFFALO STYLE	Meat	26.3536952	Poultry	5.05	133.0861608	0.13308616
CHIX BRST B/S LARGE RNDM	Meat	72.57472	Poultry	5.05	366.502336	0.36650234
CHIX SPLIT 3.5 LB WOG	Meat	41.99354736	Poultry	5.05	212.0674142	0.21206741
CHIX CRUMBLES CKD	Meat	36.28736	Poultry	5.05	183.251168	0.18325117
CHIX BRST FILET FC GRILL NAE	Meat	9.07184	Poultry	5.05	45.812792	0.04581279
CHIX THIGH B/S FSH/FZN	Meat	18.14368	Poultry	5.05	91.625584	0.09162558
CHIX PULLED B/S LS FC	Meat	4.53592	Poultry	5.05	22.906396	0.0229064
CHIX MEAT PULLED WHITE	Meat	4.53592	Poultry	5.05	22.906396	0.0229064
CHIX TNDR BRD HMSTYLE 80CT UC	Meat	5579.1816	Poultry	5.05	28174.86708	28.1748671
CHIX WING JUMBO 8/13 CT FC	Meat	2952.88392	Poultry	5.05	14912.0638	14.9120638
CHICKEN BREAST DOWN HOME BRD	Meat	2260.738815	Poultry	5.05	11416.73102	11.416731
CHIX BRST B/S LARGE RNDM	Meat	7112.32256	Poultry	5.05	35917.22893	35.9172289
CHIX BRST NUGGET TEMPURA UC NAE	Meat	4558.5996	Poultry	5.05	23020.92798	23.020928
CHIX BRST IF NATURELLE PRESSED 5OZ	Meat	2104.66688	Poultry	5.05	10628.56774	10.6285677
CHIX BRST B/S WBF 8OZ FRESH	Meat	408.2328	Poultry	5.05	2061.57564	2.06157564
CHIX QUARTERED 3.5 LB WOG	Meat	431.8014403	Poultry	5.05	2180.597274	2.18059727
CHICKEN SAUSAGE LINKS 4/1 T.C.	Meat	190.50864	Poultry	5.05	962.068632	0.96206863
CHIX WING BNLS PEPPER BRD UC	Meat	185.97272	Poultry	5.05	939.162236	0.93916224
CHIX WING CUT JUMBO	Meat	181.4368	Poultry	5.05	916.25584	0.91625584
CHIX SPLIT 3.5 LB WOG	Meat	145.2945894	Poultry	5.05	733.7376767	0.73373768
CHIX TNDR FRIT HMSTYLE RTC SWEET GEORGIA	Meat	195.04456	Poultry	5.05	984.975028	0.98497503
BASE CHICKEN NO ADDED MSG	Meat	45.3592	Poultry	5.05	229.06396	0.22906396
CHIX TNDR FRIT STKHOUSE 80CT UC	Meat	90.7184	Poultry	5.05	458.12792	0.45812792
CHIX WING CUT JUMBO CVP	Meat	72.57472	Poultry	5.05	366.502336	0.36650234
CHIX BRST B/S RNDM FRH/FZN	Meat	90.7184	Poultry	5.05	458.12792	0.45812792
CHIX THIGH B/S FRSH	Meat	36.28736	Poultry	5.05	183.251168	0.18325117
CHIX BRST 4 OZ FIRE BRAISED CKD	Meat	4.6039588	Poultry	5.05	23.24999194	0.02324999
CHIX STEAK BREAKAWAY 4 OZ	Meat	4.762716	Poultry	5.05	24.0517158	0.02405172
CHIX TNDR BRD HMSTYLE 80CT UC	Meat	3524.40984	Poultry	5.05	17798.26969	17.7982697
CHIX BRST 4 OZ FIRE BRAISED CKD	Meat	691.1834896	Poultry	5.05	3490.476622	3.49047662
CHIX BRST IF NATURELLE PRESSED 6OZ	Meat	920.79176	Poultry	5.05	4649.998388	4.64999839
CHIX MEAT PULLED WHITE	Meat	412.76872	Poultry	5.05	2084.482036	2.08448204
CHIX BRST FAJITA STRIP FC	Meat	231.33192	Poultry	5.05	1168.226196	1.1682262
CHIX BRST B/S LARGE RNDM	Meat	453.592	Poultry	5.05	2290.6396	2.2906396

Brand/Product	Category	Kilograms	Heller et al. (2014) Category	EF (CO2e/kg)	CO2e (kg)	CO2 (tons)
HOTDOG FRZ WHITE N/C 6/1	Meat	108.86208	Pork	6.87	747.8824896	0.74788249
HOTDOG FRZ RED N/C 4/1	Meat	10.886208	Pork	6.87	74.78824896	0.07478825
HOTDOG FRZ WHITE N/C 4/1	Meat	10.886208	Pork	6.87	74.78824896	0.07478825
PEPPERONI SLICED	Meat	11.3398	Pork	6.87	77.904426	0.07790443
PORK RIB ST.LOUIS 2.75/DN	Meat	28.3495	Pork	6.87	194.761065	0.19476107
SAUSAGE TOPPING SPICY (10pc/oz)	Meat	63.50288	Pork	6.87	436.2647856	0.43626479
CHORIZO SAUSAGE FRZN ROPE T.C.	Meat	22.6796	Pork	6.87	155.808852	0.15580885
MILD ITAL.SAUS BULK 5#TC.STOCK	Meat	22.6796	Pork	6.87	155.808852	0.15580885
SAUSAGE ITALIAN RAW BULK MILD	Meat	24.94756	Pork	6.87	171.3897372	0.17138974
(MP) BRATWURST SAUS. LINK FRZ	Meat	9.07184	Pork	6.87	62.3235408	0.06232354
SAUSAGE TOPPING LG 10P/OZ	Meat	4.53592	Pork	6.87	31.1617704	0.03116177
SAUSAGE LINK BFST CKD 1OZ SKNL	Meat	326.58624	Pork	6.87	2243.647469	2.24364747
MILD ITAL.SAUS BULK 5#TC.STOCK	Meat	285.76296	Pork	6.87	1963.191535	1.96319154
SAUSAGE TOPPING SPICY (10pc/oz)	Meat	149.68536	Pork	6.87	1028.338423	1.02833842
SAUSAGE ANDOUILLE 4/1 FROZEN	Meat	49.89512	Pork	6.87	342.7794744	0.34277947
SAUSAGE TOPPING LG 10P/OZ	Meat	18.14368	Pork	6.87	124.6470816	0.12464708
SAUSAGE IRISH BANGER CKD 4/1	Meat	5.443104	Pork	6.87	37.39412448	0.03739412
CHORIZO SAUSAGE LINK FRZN T.C.	Meat	4.53592	Pork	6.87	31.1617704	0.03116177
PORK SAUSAGE PATTY 1.33 OZ FAST N EASY	Meat	1397.06336	Pork	6.87	9597.825283	9.59782528
MILD ITAL.SAUS BULK 5#TC.STOCK	Meat	263.08336	Pork	6.87	1807.382683	1.80738268
SAUSAGE ITAL LINK 4/1 CKD	Meat	141.520704	Pork	6.87	972.2472365	0.97224724
CAPICOLA HOT	Meat	80.20413744	Pork	6.87	551.0024242	0.55100242
SAUSAGE PATTY BFST CKD 1.5 OZ	Meat	81.64656	Pork	6.87	560.9118672	0.56091187
SAUS ITALIAN CKD 4/1 FRZ	Meat	21.772416	Pork	6.87	149.5764979	0.1495765
SAUSAGE ANDOUILLE 4/1 FROZEN	Meat	18.14368	Pork	6.87	124.6470816	0.12464708
SAUSAGE ITAL use TC204N 4/1 ckd links	Meat	13.60776	Pork	6.87	93.4853112	0.09348531
MILD ITL SAUS PAT 4/1 FRZ T.C.	Meat	9.07184	Pork	6.87	62.3235408	0.06232354
SAUS BRATWURST 5/1 FRZ	Meat	6.80388	Pork	6.87	46.7426556	0.04674266
SAUSAGE ITAL SWT CKD 4/1 LINK	Meat	5.443104	Pork	6.87	37.39412448	0.03739412
ANDOUILLE SAUSAGE LINK FZ T.C.	Meat	4.53592	Pork	6.87	31.1617704	0.03116177
SAUSAGE LINK BFST CKD 1OZ SKNL	Meat	417.30464	Pork	6.87	2866.882877	2.86688288
SAUSAGE TOPPING SPICY (10pc/oz)	Meat	317.5144	Pork	6.87	2181.323928	2.18132393
SAUS ITALIAN CKD 4/1 FRZ	Meat	163.29312	Pork	6.87	1121.823734	1.12182373
KIELBASA POLISH ROPE CKD SMKD	Meat	183.70476	Pork	6.87	1262.051701	1.2620517
MILD ITAL SAUS ROPE 2/5# TC	Meat	231.33192	Pork	6.87	1589.25029	1.58925029
(MP) KIELBASA SAUS.LINK 4/1 FZ	Meat	185.97272	Pork	6.87	1277.632586	1.27763259
SAUSAGE PATTY BFST CKD 1.5 OZ	Meat	176.90088	Pork	6.87	1215.309046	1.21530905

Brand/Product	Category	Kilograms	Heller et al. (2014) Cate	EF (CO2e/kg)	CO2e (kg)	CO2e (ton)
BURGER BLACK BEAN 3.4 OZ	Meat, Seafood and Dairy Substitutes	138.79915	legume	0.78	108.2633	0.108263
BUTTER LIQUID ALTERNATIVE ZTF	Meat, Seafood and Dairy Substitutes	852.20865	margarine	1.36	1159.0038	1.159004
SOY MILK CHOCOLATE ASEPTIC PURE	Meat, Seafood and Dairy Substitutes	236.61173	legume	0.78	184.5572	0.184557
MILK COCONUT	Meat, Seafood and Dairy Substitutes	10.88621	legume	0.78	8.4912	0.008491
MILK COCONUT	Meat, Seafood and Dairy Substitutes	65.31725	legume	0.78	50.9475	0.050947
MILK COCONUT	Meat, Seafood and Dairy Substitutes	54.43104	legume	0.78	42.4562	0.042456
MILK COCONUT	Meat, Seafood and Dairy Substitutes	348.35866	legume	0.78	271.7198	0.271720
CRABLESS CAKE 8.8 OZ	Meat, Seafood and Dairy Substitutes	11.97483	legume	0.78	9.3404	0.009340
GOLDEN FISHLESS FILET BULK	Meat, Seafood and Dairy Substitutes	27.21552	legume	0.78	21.2281	0.021228
MARGARINE LIQUID	Meat, Seafood and Dairy Substitutes	500.08518	margarine	1.36	680.1158	0.680116
MARGARINE LIQUID	Meat, Seafood and Dairy Substitutes	635.02880	margarine	1.36	863.6392	0.863639
MARGARINE CUP GF TFF 5 GRAM	Meat, Seafood and Dairy Substitutes	23.94966	margarine	1.36	32.5715	0.032572
MARGARINE WHIPPED TUBS 5 LB	Meat, Seafood and Dairy Substitutes	217.72416	margarine	1.36	296.1049	0.296105
MARGARINE PRINT ALL VEG ZTF	Meat, Seafood and Dairy Substitutes	122.46984	margarine	1.36	166.5590	0.166559
MARGARINE LIQUID	Meat, Seafood and Dairy Substitutes	150.81934	margarine	1.36	205.1143	0.205114
MARGARINE CUP 5 GRAM WHIPPED	Meat, Seafood and Dairy Substitutes	13.60776	margarine	1.36	18.5066	0.018507
TENDERS BREADED MEATLESS	Meat, Seafood and Dairy Substitutes	48.98794	legume	0.78	38.2106	0.038211
READED SCALLOPINI MEATLESS CHIK PATT	Meat, Seafood and Dairy Substitutes	308.62400	legume	0.78	240.7267	0.240727
TENDERS BREADED MEATLESS	Meat, Seafood and Dairy Substitutes	32.65862	legume	0.78	25.4737	0.025474
TENDERS BREADED MEATLESS	Meat, Seafood and Dairy Substitutes	38.10173	legume	0.78	29.7193	0.029719
OPPING NON DAIRY ON TOP PASTRY BAG 1	Meat, Seafood and Dairy Substitutes	218.81278	legume	0.78	170.6740	0.170674
TOPPING NON DAIRY ON TOP PASTRY BAG	Meat, Seafood and Dairy Substitutes	45.93980	legume	0.78	35.8330	0.035833
OPPING NON DAIRY ON TOP PASTRY BAG 1	Meat, Seafood and Dairy Substitutes	22.37116	legume	0.78	17.4495	0.017450
OPPING NON DAIRY ON TOP PASTRY BAG 1	Meat, Seafood and Dairy Substitutes	11.48495	legume	0.78	8.9583	0.008958
SOY MILK CHOCOLATE BAG DISPENSER	Meat, Seafood and Dairy Substitutes	956.60738	legume	0.78	746.1538	0.746154
SOY MILK VANILLA BAG DISPENSER	Meat, Seafood and Dairy Substitutes	912.87204	legume	0.78	712.0402	0.712040
OY MILK VANILLA ASEPTIC 8 OZ ORGANIC \	Meat, Seafood and Dairy Substitutes	70.21604	legume	0.78	54.7685	0.054769
SOY MILK ALMOND VAN ASEPTIC PURE	Meat, Seafood and Dairy Substitutes	65.72548	legume	0.78	51.2659	0.051266
SOY MILK PLAIN ASEPTIC 32 OZ	Meat, Seafood and Dairy Substitutes	11.58928	legume	0.78	9.0396	0.009040
SOY MILK VANILLA ASEPTIC 32 OZ	Meat, Seafood and Dairy Substitutes	348.22258	legume	0.78	271.6136	0.271614
SOY MILK VANILLA ASEPTIC PURE	Meat, Seafood and Dairy Substitutes	168.40057	legume	0.78	131.3524	0.131352
CHILI VEGETARIAN H&S	Meat, Seafood and Dairy Substitutes	333.84371	legume	0.78	260.3981	0.260398
BURGER BLACK BEAN 3.4 OZ	Meat, Seafood and Dairy Substitutes	536.69005	legume	0.78	418.6182	0.418618
BURGER GARDEN PATTY 3.5 OZ	Meat, Seafood and Dairy Substitutes	89.81122	legume	0.78	70.0527	0.070053
BURGER BLACK BEAN 3.4 OZ	Meat, Seafood and Dairy Substitutes	87.90613	legume	0.78	68.5668	0.068567
BURGER GARDEN ORIGINAL 3.4 OZ	Meat, Seafood and Dairy Substitutes	83.27949	legume	0.78	64.9580	0.064958
BURGER BLACK BEAN 3.4 OZ	Meat, Seafood and Dairy Substitutes	9.25328	legume	0.78	7.2176	0.007218

Brand/Product	Category	Kilograms	Heller et al. (2014) Category	EF (CO2e/kg)	CO2e (kg)	CO2 (tons)
ANCHOVY FILLETS W/OLIVE OIL	Seafood	0.793786	canned fish & shellfish	4.11	3.26246046	0.00326246
ANCHOVY FILLETS IN SUN OIL	Seafood	1.48778176	canned fish & shellfish	4.11	6.114783034	0.00611478
BARRAMUNDI SKN/BNLS 7/9 OZ IVP	Seafood	4.53592	fresh & frozen fish	3.83	17.3725736	0.01737257
CATFISH FILLET S/B IQF 5/7 OZ	Seafood	68.0388	fresh & frozen fish	3.83	260.588604	0.2605886
CATFISH FILLET S/B IQF 5/7 OZ	Seafood	88.45044	fresh & frozen fish	3.83	338.7651852	0.33876519
CATFISH FILLET S/B IQF 5/7 OZ	Seafood	136.0776	fresh & frozen fish	3.83	521.177208	0.52117721
CATFISH FILLET IQF S/B 7/9 OZ	Seafood	13.60776	fresh & frozen fish	3.83	52.1177208	0.05211772
CLAM MEAT SEA IQF	Seafood	27.21552	fresh & frozen fish	3.83	104.2354416	0.10423544
BASE CLAM GOLD NO MSG 1LB	Seafood	22.92453968	fresh & frozen fish	3.83	87.80098697	0.08780099
BASE CLAM NO MSG ADDED & GF	Seafood	8.164656	fresh & frozen fish	3.83	31.27063248	0.03127063
CLAMS CHOPPED OCEAN	Seafood	83.460928	fresh & frozen shellfish	11.74	979.8312947	0.97983129
CLAMS CHOPPED OCEAN	Seafood	229.517552	fresh & frozen shellfish	11.74	2694.53606	2.69453606
CLAMS CHOPPED OCEAN	Seafood	563.361264	fresh & frozen shellfish	11.74	6613.861239	6.61386124
COD LOIN PACFC SKNLS/BNLS 6 OZ	Seafood	13.60776	fresh & frozen fish	3.83	52.1177208	0.05211772
COD SKNLS/BNLS IQF 6/8 OZ	Seafood	13.60776	fresh & frozen fish	3.83	52.1177208	0.05211772
COD BTRD FISH N CHIP WSTRN 3OZ	Seafood	140.61352	fresh & frozen fish	3.83	538.5497816	0.53854978
COD LOIN PACFC SKNLS/BNLS 6 OZ	Seafood	95.25432	fresh & frozen fish	3.83	364.8240456	0.36482405
CRABMEAT BLUE CLAWMEAT	Seafood	10.886208	fresh & frozen shellfish	11.74	127.8040819	0.12780408
CRAB SNOW CLUSTERS 5/8 OZ	Seafood	108.86208	fresh & frozen shellfish	11.74	1278.040819	1.27804082
CRAB MEAT IMITN SUPREME FLAKES	Seafood	22.6796	fresh & frozen shellfish	11.74	266.258504	0.2662585
CRAB MEAT SNOW COMBO KOREAN	Seafood	2.26796	fresh & frozen shellfish	11.74	26.6258504	0.02662585
CRAB MEAT SNOW COMBO KOREAN	Seafood	9.07184	fresh & frozen shellfish	11.74	106.5034016	0.1065034
CRAB MEAT IMITN SUPREME FLAKES	Seafood	13.60776	fresh & frozen shellfish	11.74	159.7551024	0.1597551
SWAI SKNLS/BNLS FLT IQF 7/9 OZ	Seafood	142.88148	fresh & frozen fish	3.83	547.2360684	0.54723607
HADDOCK SKNLS/BNLS IQF 6/8 OZ	Seafood	576.06184	fresh & frozen fish	3.83	2206.316847	2.20631685
HADDOCK SKNLS/BNLS IQF 6/8 OZ	Seafood	267.61928	fresh & frozen fish	3.83	1024.981842	1.02498184
HADDOCK SKNLS/BNLS IQF 8/10 0Z	Seafood	1496.8536	fresh & frozen fish	3.83	5732.949288	5.73294929
HADDOCK SKNLS/BNLS IQF 10/12	Seafood	476.2716	fresh & frozen fish	3.83	1824.120228	1.82412023
HADDOCK TAIL BRD 4 OZ	Seafood	22.6796	fresh & frozen fish	3.83	86.862868	0.08686287
LOBSTER TAIL BRAZIL 7 OZ	Seafood	54.43104	fresh & frozen shellfish	11.74	639.0204096	0.63902041
BASE LOBSTER 1#	Seafood	14.968536	fresh & frozen shellfish	11.74	175.7306126	0.17573061
BASE LOBSTER 1#	Seafood	5.443104	fresh & frozen shellfish	11.74	63.90204096	0.06390204
LOBSTER TAIL CANADIAN 4/5 OZ	Seafood	22.6796	fresh & frozen shellfish	11.74	266.258504	0.2662585
LOBSTER TAIL CANADIAN 5/6 OZ	Seafood	13.60776	fresh & frozen shellfish	11.74	159.7551024	0.1597551
MAHI MAHI SKNLS BNLS IVP 6 OZ	Seafood	13.60776	fresh & frozen fish	3.83	52.1177208	0.05211772
MAHI MAHI SKNLS BNLS IVP 5 OZ	Seafood	4.53592	fresh & frozen fish	3.83	17.3725736	0.01737257
MAHI MAHI SKNLS BNLS IVP 6 OZ	Seafood	9.07184	fresh & frozen fish	3.83	34.7451472	0.03474515

Brand/Product	Category	Kilograms	Heller et al. (2014) Category	EF (CO2e/kg)	CO2e (kg)	CO2 (tons)
SOUP BOSTON SHRIMP CHOWDER	Soups and Broths	6.21421	canned fish & shellfish, Vegeta	2.3	14.2927	0.0143
SOUP THREE PEPPER LAMB CHILI	Soups and Broths	12.42842	Lamb, vegetable	11.7	145.4125	0.1454
SOUP CREAM OF ASPARAGUS FRZN	Soups and Broths	92.53277	light & heavy cream, Asparagu	6.33	585.7324	0.5857
SOUP CREAM OF BROCCOLI FRZN	Soups and Broths	43.54483	light & heavy cream, Brocolli	2.09	91.0087	0.0910
SOUP CRM OF BROCCOLI (GF,AN)	Soups and Broths	24.85684	light & heavy cream	2.09	51.9508	0.0520
SOUP CREAM OF BROCCOLI FRZN	Soups and Broths	5.44310	light & heavy cream	2.09	11.3761	0.0114
SOUP CRMY CHIX BROCCOLI (GF)	Soups and Broths	6.21421	light & heavy cream	2.09	12.9877	0.0130
SOUP CRM OF BROCCOLI (GF,AN)	Soups and Broths	55.92789	light & heavy cream	2.09	116.8893	0.1169
SOUP CREAM OF CELERY #5 CAN	Soups and Broths	43.54483	light & heavy cream	2.09	91.0087	0.0910
SOUP CREAM OF MUSHROOM FRZ	Soups and Broths	81.64656	light & heavy cream	2.09	170.6413	0.1706
SOUP CRM OF WILD MUSHROOM (GF,AN)	Soups and Broths	49.71368	light & heavy cream	2.09	103.9016	0.1039
SOUP CRM OF WILD MUSHROOM (GF,AN)	Soups and Broths	18.64263	light & heavy cream	2.09	38.9631	0.0390
SOUP CREAM OF POTATO FRZN	Soups and Broths	119.74829	light & heavy cream	2.09	250.2739	0.2503
SOUP CREAM OF POTATO FRZN	Soups and Broths	10.88621	light & heavy cream	2.09	22.7522	0.0228
SOUP CREAMY TOMATO FLORENTNE	Soups and Broths	12.42842	light & heavy cream	2.09	25.9754	0.0260
SOUP CRM OF WILD MUSHROOM (GF,AN)	Soups and Broths	49.71368	light & heavy cream	2.09	103.9016	0.1039
SOUP CREAMY TOMATO FLORENTNE	Soups and Broths	12.42842	light & heavy cream	2.09	25.9754	0.0260
SOUP HEARTY BEAN W/SMKD HAM	Soups and Broths	5.44310	Pork, Vegetable	3.64	19.8129	0.0198
SOUP HEARTY BEAN W/SMKD HAM	Soups and Broths	5.44310	Pork, Vegetable	3.64	19.8129	0.0198
SOUP SWT CORN CHOWDER/BACON (GF)	Soups and Broths	37.28526	Pork, Vegetable	3.64	135.7184	0.1357
SOUP SWT CORN CHOWDER/BACON (GF)	Soups and Broths	68.35631	Pork, Vegetable	3.64	248.8170	0.2488
SOUP SWT CORN CHOWDER/BACON (GF)	Soups and Broths	55.92789	Pork, Vegetable	3.64	203.5775	0.2036
SOUP PORTUGUESE kALE/PORK (D,GF)	Soups and Broths	12.42842	Pork, Vegetable	3.64	45.2395	0.0452
SOUP POTATO W/ BACON	Soups and Broths	59.87414	Pork, Vegetable	3.64	217.9419	0.2179
SOUP IT SAUS WHT BN BROCC RABE	Soups and Broths	6.21421	Pork, Vegetable	3.64	22.6197	0.0226
SOUP IT SAUS WHT BN BROCC RABE	Soups and Broths	12.42842	Pork, Vegetable	3.64	45.2395	0.0452
SOUP SPLIT PEA W/DBL SMK BACON (D,GF,AN)	Soups and Broths	31.07105	Pork, Vegetable	3.64	113.0986	0.1131
SOUP SPLIT PEA W/ HAM FRZ	Soups and Broths	16.32931	Pork, Vegetable	3.64	59.4387	0.0594
SOUP SWT POTATO CHORIZO BISQUE (GF)	Soups and Broths	18.64263	Pork, Vegetable	3.64	67.8592	0.0679
SOUP SWT POTATO CHORIZO BISQUE (GF)	Soups and Broths	24.85684	Pork, Vegetable	3.64	90.4789	0.0905
SOUP TOMATO ROMAN SAUSAGE & PEPPER (GF)	Soups and Broths	12.42842	Pork, Vegetable	3.64	45.2395	0.0452
SOUP CHIX/SAUS JAMBALAYA(D,GF)	Soups and Broths	62.14210	Pork / Poultry, Vegetable	2.15	133.6055	0.1336
SOUP CHIX FIESTA	Soups and Broths	49.71368	Poultry, Vegetable	2.78	138.2040	0.1382
SOUP GRILL CHIX QUESADILLA	Soups and Broths	18.64263	Poultry, Vegetable	2.78	51.8265	0.0518
SOUP 7 HERB CHIX BISTRO (GF)	Soups and Broths	18.64263	Poultry, Vegetable	2.78	51.8265	0.0518
SOUP MOROCCAN CHIX(GF,D,RH, L)	Soups and Broths	12.42842	Poultry, Vegetable	2.78	34.5510	0.0346
SOUP ARROZ CON POLLO (D,GF)	Soups and Broths	6.21421	Poultry, Vegetable	2.78	17.2755	0.0173

Brand/Product	Category	Kilograms	Heller et al. (2014) Category	EF (CO2e/kg)	CO2e (kg)	CO2 (tons)
SUGAR SUB P/C YELLOW SPLENDA	Sugar and Artitificial Sweeteners	9.97902	added sugar and sweeteners	0.96	9.579863	0.009580
SUGAR BROWN LIGHT POLY 2#	Sugar and Artitificial Sweeteners	34.42763	added sugar and sweeteners	0.96	33.050527	0.033051
SUGAR PACKET ICON	Sugar and Artitificial Sweeteners	34.01940	added sugar and sweeteners	0.96	32.658624	0.032659
SUGAR GRANULATED 10/4-LB	Sugar and Artitificial Sweeteners	38.10173	added sugar and sweeteners	0.96	36.577659	0.036578
SUGAR CONFECTIONERY 10X PLY	Sugar and Artitificial Sweeteners	11.47588	added sugar and sweeteners	0.96	11.016842	0.011017
SUGAR BROWN LIGHT POLY 2#	Sugar and Artificial Sweeteners	137.71053	added sugar and sweeteners	0.96	132.202110	0.132202
SUGAR GRANULATED 10/4-LB	Sugar and Artificial Sweeteners	83.64236	added sugar and sweeteners	0.96	80.296670	0.080297
SUGAR CONFECTIONERY 10X PLY	Sugar and Artificial Sweeteners	11.47588	added sugar and sweeteners	0.96	11.016842	0.011017
SUGAR BROWN LIGHT POLY 2#	Sugar and Artificial Sweeteners	114.75878	added sugar and sweeteners	0.96	110.168425	0.110168
SUGAR GRANULATED EFG 25-LB	Sugar and Artificial Sweeteners	56.69900	added sugar and sweeteners	0.96	54.431040	0.054431
SUGAR BROWN LIGHT POLY 2#	Sugar and Artificial Sweeteners	229.51755	added sugar and sweeteners	0.96	220.336850	0.220337
SUGAR CONFECTIONERY 10X PLY	Sugar and Artificial Sweeteners	183.61404	added sugar and sweeteners	0.96	176.269480	0.176269
SUGAR GRANULATED 10/4-LB	Sugar and Artificial Sweeteners	190.50864	added sugar and sweeteners	0.96	182.888294	0.182888
SUGAR PACKET ICON	Sugar and Artificial Sweeteners	113.39800	added sugar and sweeteners	0.96	108.862080	0.108862
SUGAR SUB P/C YELLOW SPLENDA	Sugar and Artificial Sweeteners	7.98322	added sugar and sweeteners	0.96	7.663890	0.007664
SUGAR SUB P/C BLUE ASPARTAME	Sugar and Artificial Sweeteners	9.07184	added sugar and sweeteners	0.96	8.708966	0.008709
SUGAR IN THE RAW 2 LB	Sugar and Artificial Sweeteners	3.62874	added sugar and sweeteners	0.96	3.483587	0.003484
	Total	1270.01224			1219.211751	1.219212

Brand/Product	Category	Kilograms	Heller et al. (2014) Category	EF (CO2e/kg)	CO2e (kg)	CO2 (tons)
EGG ROLL VEGETABLE MINH 3 OZ	Other	55.1114	ıverage vegetable, total wheat flour	0.54	29.760171	0.029760
EGG ROLL VEGETABLE MINH 3 OZ	Other	551.1143	ıverage vegetable, total wheat flour	0.54	297.601711	0.297602
EGGPLANT BRD ROUND	Other	63.5029	eggplant	1.3	82.553744	0.082554
EGGPLANT BRD ROUND	Other	331.1222	eggplant	1.3	430.458808	0.430459
FF BTRD BITES SEASONED CRISP	Other	1371.6622	processed vegetables	1.3	1783.160870	1.783161
FF JIFFI CRISP CRUNCH 3/8	Other	22179.2880	processed vegetables	1.3	28833.074431	28.833074
FF LATTICE SEASONED CRISS CUT	Other	293.9276	processed vegetables	1.3	382.105901	0.382106
FF SEASONED CRISP LOOPS SAVORY	Other	381.0173	processed vegetables	1.3	495.322464	0.495322
FF WEDGE 8 CUT CC SEASON CRISP	Other	612.3492	processed vegetables	1.3	796.053960	0.796054
FRENCH TOAST STICKS .88 OZ	Other	1229.2343	egg, total wheat flours	2.06	2532.222699	2.532223
GELATIN ASSORTED CITRUS	Other	40.8233	lard and beef tallow	11.92	486.613498	0.486613
GELATIN ASSORTED RED	Other	40.8233	lard and beef tallow	11.92	486.613498	0.486613
GROUPER TENDER DIPT'N DUSTED	Other	32.6586	chicken	5.05	164.926051	0.164926
HASH CORNED BEEF #10 CAN	Other	279.8572	Beef	26.45	7402.222733	7.402223
HASH CORNED BEEF #5 CAN	Other	221.1261	Beef	26.45	5848.785345	5.848785
HUSHPUPPIES SOUTHERN REG 250 CT	Other	4.5359	corn products	0.66	2.993707	0.002994
HUSHPUPPIES SOUTHERN REG 250 CT	Other	68.0388	corn products	0.66	44.905608	0.044906
LASAGNA CHS SANDWICH 50 CT	Other	79.3242	total cheese, total wheat flours	5.14	407.726228	0.407726
LASAGNA SHEET EGG P/CK 11X11	Other	86.1825	total cheese, total wheat flours	5.14	442.977947	0.442978
LEAVES GRAPE VINE STUFFED	Other	22.6796	processed vegetables	0.5	11.339800	0.011340
MACARONI AND CHEESE BUFFALO	Other	12.4284	Poultry, cheese, total wheat flours	5.11	63.509230	0.063509
MACARONI AND CHEESE BUFFALO	Other	12.4284	Poultry, cheese, total wheat flours	5.11	63.509230	0.063509
MOZZ STICK BATTERED	Other	2117.3675	total cheese	9.78	20707.853720	20.707854
ONION RING BEER BATTERED 3/8	Other	22.6796	processed vegetables	1.3	29.483480	0.029483
ONION RING BEER BATTERED 3/8	Other	462.6638	processed vegetables	1.3	601.462992	0.601463
ONION RING BLK TAN BEER BATRD	Other	5.4431	processed vegetables	1.3	7.076035	0.007076
ONION RINGS BEER BTRD 5/8 BREWCITY	Other	34.0194	processed vegetables	1.3	44.225220	0.044225
PAN GRILL SPRAY WATER BASE	Other	2.8939	salad and cooking oils	1.63	4.717085	0.004717
PAN SPRAY NON GMO/ALLERGEN FREE	Other	245.6926	salad and cooking oils	1.63	400.479008	0.400479
PAN SPRAY NON GMO/ALLERGEN FREE	Other	292.0497	salad and cooking oils	1.63	476.041085	0.476041
PAN SPRAY NON GMO/ALLERGEN FREE	Other	60.2642	salad and cooking oils	1.63	98.230700	0.098231
PASTA LASAGNA #1 IMPORT ITAL	Other	54.4310	total cheese, total wheat flours	5.18	281.952787	0.281953
PASTA RIGATONI CHEESE STUFFED	Other	14.6283	total cheese, total wheat flours	5.18	75.774812	0.075775
PASTA TORTELLINI CHEESE PRECKD	Other	136.0776	total cheese, total wheat flours	5.18	704.881968	0.704882
PASTA TORTELLINI CHEESE TRI-COLOR CK	Other	235.8678	total cheese, total wheat flours	5.18	1221.795411	1.221795
PASTA TORTELLINI CHEESE TRI-COLOR CK	Other	77.1106	total cheese, total wheat flours	5.18	399.433115	0.399433
PEPPERONI SANDWICH	Other	353.1939	average meat, total wheat flours	6.84	2415.846596	2.415847

Produce purchases from all dining units

Item	Kilograms	Heller et al. (2014) Category	EF (kg CO2e/kg)	CO2e (kg)	CO2 (tons)
AGAVE NECTAR 23oz	3.912	average vegetable	0.58	2.26909	0.00226909
AGAVE NECTAR 23oz	6.520	average vegetable	0.58	3.78182	0.00378182
ALFALFA SPROUTS	0.652	Legumes	0.78	0.50859	0.00050859
ALFALFA SPROUTS	1.956	Legumes	0.78	1.52577	0.00152577
ALFALFA SPROUTS	7.172	Legumes	0.78	5.59449	0.00559449
ALFALFA SPROUTS	13.693	Legumes	0.78	10.68039	0.01068039
ALFALFA SPROUTS	14.997	Legumes	0.78	11.69757	0.01169757
ALFALFA SPROUTS	17.605	Legumes	0.78	13.73193	0.01373193
ALFALFA SPROUTS	20.865	Legumes	0.78	16.27488	0.01627488
ALFALFA SPROUTS	41.730	Legumes	0.78	32.54976	0.03254976
SLICED ALMONDS 5#	2.268	Legumes	0.78	1.76901	0.00176901
APPLE CHIPS 60/.07oz	0.119	Processed Fruits	1.03	0.12264	0.00012264
APPLE CHIPS 60/.07oz	0.119	Processed Fruits	1.03	0.12264	0.00012264
APPLE CHIPS 60/.07oz	0.238	Processed Fruits	1.03	0.24528	0.00024528
APPLE CHIPS CAARMEL 60/.07oz	0.119	Processed Fruits	1.03	0.12264	0.00012264
APPLE CHIPS CARAMEL 60/.07oz	0.119	Processed Fruits	1.03	0.12264	0.00012264
APPLE CHIPS CARAMEL 60/.07oz	0.119	Processed Fruits	1.03	0.12264	0.00012264
APPLE CHIPS CINNAMON 12/2.5OZ	1.701	Processed Fruits	1.03	1.75200	0.00175200
APPLE CHIPS CINNAMON 12/2.5OZ	3.402	Processed Fruits	1.03	3.50400	0.00350400
APPLE CHIPS ORIGINAL 12/2.5oz	8.505	Processed Fruits	1.03	8.76000	0.00876000
12/12oz APPLE CIDER	69.400	Fruit juices	1.03	71.48156	0.07148156
12/12oz APPLE CIDER	102.058	Fruit juices	1.03	105.11995	0.10511995
12oz apple cider each	5.103	Fruit juices	1.03	5.25600	0.00525600
24/12oz APPLE CIDER	16.329	Fruit juices	1.03	16.81919	0.01681919
24/12oz APPLE CIDER	40.823	Fruit juices	1.03	42.04798	0.04204798
24/12oz APPLE CIDER	24.494	Fruit juices	1.03	25.22879	0.02522879
APPLE CIDER 6/1	10.886	Fruit juices	1.03	11.21279	0.01121279
APPLE CIDER 6/1	141.521	Fruit juices	1.03	145.76633	0.14576633
APPLE CIDER 6/1	176.901	Fruit juices	1.03	182.20791	0.18220791

Sustainability in Dining
LRPEC2 Charge

Long Range Planning and Environment Committee

Charge:

Investigate the impact on global sustainability (e.g. carbon footprint) of sourcing, food service items, menu selection, waste disposal policy, and packaging and make recommendations in line with RIT's leadership in sustainability.

Waste Reduction and Conservation

- Food recovery (donation to meal centers): 8,000-10,000 lbs/year
- Food waste disposal through anaerobic digestion: 150 tons/year
- Single use plastics reductions:
  - Eliminated 94,000 disposable to-go containers/year in Gracie's replaced with reusable to-go containers
  - Working to standardize to-go containers and prioritize compostability
  - Phasing out plastic straws
- Spec Energy STAR equipment
- New dishwashers in 2 locations save 1.18 million gal of water/year

Food Sourcing

- Local businesses utilized: 11 different Visiting Chef's, primary food and produce distributors (Palmers and B Giambrone), Finger Lakes Coffee Roasters, and Bagel Shop of Rochester
- Locally produced food: milk and yogurt from Upstate Farms Cooperative
- Charge Report identifies a number of opportunities and related challenges with local food sourcing

Carbon Footprint of RIT's Food Supply

Category	Weight (tons)	CO2e (tons)
Baked Goods and Desserts	92.96	65.93
Beans, Nuts and Seeds	9.80	7.93
Sugar and Artificial Sweeteners	1.40	1.22
Grains and Starches	92.32	87.08
Meat, Seafood and Dairy Substitutes	9.16	9.16
Fruits, Vegetables and Juices	341.93	367.72
Herbs and Spices	2.13	2.97
Other	54.72	132.88
Condiments and Sauces	148.13	366.47
Egg Products	28.15	90.39
Soups and Broths	11.64	37.84
Seafood	14.80	93.30
Dairy Products	60.08	499.83
Meat	202.15	1,884.66
Total	**1,069.35**	**3,647.37**

Category	Weight (tons)	CO2e (tons)
Beef	45.44	1,090.23
Poultry	127.29	583.14
Pork	26.52	165.26
Other	3.49	46.58

Resolutions:

- Instruct the LRPEC to work with Dining Services and RIT Sustainability to provide a report to academic senate every two years detailing progress on sustainability within dining operations.
- Endorse Brick City Café's initiative to switch to all reusable to-go containers.
- Urge Dining Services to reduce its carbon footprint by reducing the portion sizes of beef used in menu items, and continuing to enhance plant-based menu offerings.

Charge 3: Faculty governance

RESOLUTION LRPEC-2

SUBJECT: Resolution on the subject of faculty governance.

PRESENTED BY: Long Range Planning and Environment Committee

AUTHORS: Andres Kwasinski and James Heliotis,
Faculty Governance Sub-Committee LRPEC3

Whereas the Academic Senate had charged the Long-Range Planning and Environment Committee (LRPEC) to compare RIT against our benchmark schools regarding the extent of faculty governance and to make recommendations for evolving shared governance at RIT [LRPEC3]; and

Whereas a Summit on Academic Governance was organized on 11/12/18 by the Office of the Provost and an ad-hoc committee from the academic senate, where a number of motions were discussed and voted; now, therefore, be it

Resolved, that the LRPEC

1. urges the Faculty Affairs Committee of the Academic Senate (AS) to study policy with the goal of increasing recognition for leadership in service involving University governance, considering all issues related to effective and fair mechanisms to enable that recognition;
2. urges the AS to create a taskforce to develop policies and procedures to increase and improve communication from all levels of administration (department, college, vice-president and president) regarding budgetary and decision-making information;
3. urges the Global Education Taskforce to undergo a transition from an ad hoc committee to a standing committee of the AS, and that the newly formed standing committee is charged with the development of policy and procedures to ensure effective participation of RIT's global campuses at all levels of RIT's governance system;
4. urges the Academic Affairs Committee of the AS to study a change in senate voting rights whereby (a) only faculty, (b) including permanent lecturers, have senate voting rights;
5. urges the creation of an ad hoc committee by the AS to define the governance principles of interest based on current policy, AAUP guidelines, and a process by which the units' and colleges' policies and procedures are checked for compliance to those principles;
6. urges the Executive Committee of the AS to organize, on at least an annual basis, a meeting that will act as an orientation on faculty governance roles and procedures, as well as a forum for the discussion and development of best practices in faculty governance; and
7. urges the Executive Committee of the AS to revise the procedure that defines committee charges so that the charges
    a. yield actionable requests to the most appropriate committee(s),

b. include all needed background information (including the identification of the originator/s of the charge) for the committee to fully understand the context of the charge, and
c. incorporate into the procedure the possibility of passing the charge to other RIT organizations beyond the Academic Senate such as Campus Safety or Facilities Management.

Report from the Subcommittee on Faculty Governance, LRPEC3

Andres Kwasinski – Chair

James Heliotis

The Subcommittee on Faculty Governance addressed LRPEC's carryover charge, LRPEC3: "Compare RIT against our benchmark schools regarding the extent of its Faculty governance. Make recommendations for evolving shared governance at RIT."

The subcommittee completed a comparison against our benchmark schools during the past academic year. This academic year the subcommittee discussed recommendations for evolving shared governance, particularly those that followed from the Summit on Academic Governance, organized on 11/12/18 by the Office of the Provost and an ad-hoc committee from the academic senate. For this, the methodology that was followed was to analyze and compile those motions presented at the summit that received a strong support (majority voted YEA). Recognizing that the resolution aligned with a few "themes", the subcommittee divided the resolutions into four categories (representative of the themes): Recognition, Transparency, Representability, and General Governance. The resolutions that received strong support are listed next for each of the categories.

- Recognition:
    - Faculty affairs committee be charged to find a way to increase recognition of service leadership and codify a way to report service leadership with documented accomplishments. Senate requests the provost to provide course releases to members of the executive committee and chairs of heavy workload committees.

- Transparency:
    - Require department chairs, deans, and university leadership to annually disseminate information on revenue and spending across broad categories and provide a forum for faculty to discuss revenue and spending information.
    - We propose a taskforce to write a policy geared specifically to promote decision-making, transparency and communication between faculty, heads, chairs, directors, dean and the provost, president, and board of trustees. A system of documentation of communication between levels should be established.
    - Require more regular upward evaluation of administration [over a period of] less than three to five years.
    - Identify and implement systematic college-level policies and procedures by which faculty, including those at RITs international campuses, evaluate their peers and college administrators on a regular, predetermined schedule.

- Representability:
    - Reconstitute/restructure academic senate so that voting rights reside solely with the faculty.
    - Create equitable representation of all faculty groups across all elements of governance (this is regarding the role of lecturers in shared governance).
    - To ensure participation of global campuses at all levels of RITs governance system:
        1) Each global campus will have elected senators on the RIT academic senate.
        2) Transition the global education taskforce from an ad hoc committee to a standing committee of senate.

3) Each global campus will elect faculty members from existing RIT programs offered abroad to serve on those department/college curriculum committees at the main campus.

- General Governance:
    - Every college shall have an internal governance system that is proposed and approved by the faculty of the college. Furthermore (2) every department/academic unit shall have an internal governance system that is consistent with principles approved by the faculty of the college, and (3) academic senate shall establish a process for assessing whether department and college practices are in compliance with approved governance policy.
    - Each college will have a representative faculty governing body or committee, which follows a set of core best practices consistent with RIT policy and AAUP guidelines. Moreover, each college will send a governing body representative to a retreat of all college governing bodies in order to share best practices.
    - Discussed Within LRPEC: The AS's committee charge system is broken. Charges are created and passed to committees without sufficient consideration of proper disposition. Reports are submitted at the end of each year with no procedure to ensure that either the Senate as a whole or administration ever follows through on any recommendations in those reports.

Recommendations

- Recognition:
    - Charge the Faculty Affairs Committee with the study of policy to increase recognition for leadership in service involving University governance. While the motion presented at the summit reflects the need to address shortcomings in the recognition for leadership in service involving University governance, it does not consider multiple issues of practical nature. Therefore, our recommendation is to address the shortcoming by conducting a more detailed study of issues as whether is even possible to come up with a metric that would identify some committee assignments as "heavy workload", or how to address the reality that different individuals will treat a committee assignment with varying degrees of diligence.

- Transparency:
    - Task the Academic Senate with the creation of a taskforce to develop policies and procedures to increase and improve the communication from administrators of budgetary and decision-making information at each level of administration (department, college, vice-president and president). This involves the definition of a system of communication and documentation, the scope of information that can be disseminated, and the creation of forum or other mechanism for faculty to discuss and provide feedback on the information.
    - The other resolutions, which addressed different issues related with evaluation (upward evaluation, peer evaluation, etc.) received a weaker support, having a narrow majority voting YEA. Because of this, there is no further recommendation made for the category of "Transparency".

- Representability:
    - Transition the global education taskforce from an ad hoc committee to a standing committee of the Academic Senate. Charge the newly formed standing committee with the development

of policy and procedures to ensure effective participation of RIT's global campuses at all levels of RIT's governance system.
    - Task the Academic Affairs Committee to study academic senate voting rights solely for the faculty and lecturer participation in governance.

- General Governance:
    - Create an ad hoc committee to define the governance principles of interest based on current policy and AAUP guidelines. The committee must also follow a process by which the units' and colleges' policies and procedures are checked for compliance to those principles.
    - Motions under this category points to the need for systematic and significant education on the shared governance institution, policies and procedure for those involved in service activities related to shared governance. For this, it is recommended to task the Academic Senate Executive Committee with the organization on at least a yearly basis of a meeting that will act as an orientation on faculty governance role and procedures, as well as for the discussion and development of best practices in faculty governance.
    - Task the Academic Senate Executive Committee with the revision of the procedure to define committee charges so that with an updated processes, the charges: (1) yield actionable requests to the committees, (2) include all needed background information (including the identification of the originator/s of the charge) for the committee to fully understand the context of the charge, and (3) incorporate the possibility of passing the charge to other RIT organizations beyond the Academic Senate (e.g. a charge related to campus facilities may be better addressed by RIT's Facilities Management).

Title: Report on Academic Governance Summit
To: Academic Senate
From: Ad-hoc Organizing Committee

Contents:
1) Charge
2) Planning Process
3) The Summit
4) Outcomes

1. Charge

a) The Senate Executive Committee and Provost Haefner jointly proposed the formation of an Ad-Hoc Organizing Committee to be charged with planning and facilitating a day-long summit entitled *Academic Governance: Purposes, Challenges, Opportunities*. The Senate approved the charge on Sept. 21, 2017. (see Appendix A)
b) Purposes of the summit:

- to consider existing governance structures and practice across the university in light of the 2017 Middle States Report and in relation to best practice in the national context;
- to engage a broad and diverse range of university faculty;
- to discuss areas of potential improvement.

c) Ad-Hoc Organizing Committee membership: Eileen Feeney-Bushnell and Hossein Shahmohamad (co-chairs), Stephen Aldersley, Timothy Engström, Elizabeth Lawley, Heidi Nickisher, and Tracy Worrell (members); Mark Rosica (Summit Facilitator).

2. Planning Process

a) Focus Groups
Three focus groups were convened in order to:

- determine areas of greatest concern regarding governance at department, college, and university levels;
- determine level of interest in a summit and to gather input from a diverse range of faculty by college and rank;
- collect information to inform a faculty survey on governance (see Appendix B);

b) Faculty Survey
Based on information collected from the focus groups, a survey was distributed to all members of the faculty in order to:

- provide significantly broader guidance to the committee regarding governance issues of concern to the faculty;
- ensure the thoroughness and legitimacy of summit preparation;
- to encourage interest, sense of inclusion, and engagement for the work of the summit (see Appendix B)

c) Research
In order to ensure understanding of larger national/international context of academic governance, the committee reviewed governance literature from a variety of academic sources and university websites, focusing especially on challenges and opportunities and the range of structural/constitutional arrangements at other universities (For select bibliography, see Appendix C)

d) Additional Planning Input

- Recognizing that RIT faculty include those serving on our global campuses, the Committee met with Dr. Zack Butler, chair of the Global Education Task Force and Dr. James Myers, Associate Provost of International Education and Global Programs in order to facilitate the participation of global faculty;
- As planning for the summit took shape, the Committee met with Provost Granberg

e) Summit Design Principles

In designing the form of the summit, the Committee wished to:

- ensure that the summit itself would exemplify active governance practices, including fact-finding, information sharing, deliberation, preparation of motions, and voting;
- ensure that outcomes would be reflective of participants' present experience of governance and as well as their aspirations—at department, college, and university levels;
- ensure that summit outcomes would be delivered to the Senate for its further consideration (see Appendix D).

f) Summit Webpage

In order to inform the community of the summit to the fullest extent possible, the Committee developed a webpage, which included:

- links to relevant materials/sources for preparatory reading;
- a registration link
- the summit agenda
- a video of the summit for those unable to attend

f) Invited speakers

- Dr. Mary Sullivan, co-chair/author of RIT-CIA Review Panel/Report, and past chair of Faculty Council;
- Dr. Irene Mulvey, Professor, Fairfield University and National AAUP representative

3. The Summit

a) Introduction

"History & Challenges for RIT Academic Governance," Dr. Mary Sullivan established a shared context of the history and challenges for academic governance at RIT.

b) Morning Working Session

Participants were each assigned to one of 18 tables at which they were asked to consider a particular topic pertaining to governance at the department, the college and the university level.

Topics included:

- Curriculum – proposal process
- Curriculum – approval process
- Hiring – of Faculty
- Hiring – of Administrators
- Evaluation – of Faculty
- Evaluation – of Administrators
- Budget – prioritization
- Budget – allocation
- Representation on Senate – what is the right number and proportion of constituencies
- Structure of Senate – what is the right number and kind of Standing Committees

- Support – what kind/amount of support is needed to sustain effective academic governance
- Effectiveness – of current Academic Senate in representing faculty views/concerns to senior administration
- Effectiveness – of current Academic Senate in representing faculty views/concerns to Board of Trustees

After reviewing and assessing their current experience pertaining to their assigned topic at department, college, and university levels, participants at each table:

- Identified their top five areas of concern;
- Developed a brief rationale for priorities;
- Reported out results of discussion to entire summit.

Results were used to determine the topics for further deliberation and straw voting in afternoon session.

c) Lunch
Dr. Irene Mulvey gave the keynote speech in which she addressed the national context of academic governance challenges and opportunities as these might apply to RIT.

The Organizing Committe collated key areas of shared concern developed in the morning for the afternoon working groups.

Participants were invited to select a topic of their interest for further group deliberation in the afternoon.

d) Afternoon Working Session
Each table developed a specific recommendation in the form of a motion to present to entire summit.

e) Reports and voting
Each group presented its motion for consideration and voting of the whole.

f) Closing remarks
President Munson gave closing remarks

g) Reception

4. Outcomes
The following information is commended to the Senate for its further consideration.

The motions presented by the working groups and the votes taken of summit participants are here listed in the order of when they were read (motion #), which table they came from, and the vote tally of summit participants.
These motions and votes were intended as a governance-driven means of capturing the concluding sentiments of summit participants.

Motion 1: Table 10 (Determine support required to sustain governance practices)
Faculty affairs committee be charged to find a way to increase recognition of service leadership and codify a way to report service leadership with documented accomplishments. Senate requests the provost to provide course releases to members of the executive committee and chairs of heavy workload committees.

Yay = 63 Nay = 0 Abstain = 2 Total Votes=65

Motion 2: Table 4 (Representation of faculty in budget decision-making process)
Require department chairs, deans, and university leadership to annually disseminate information on revenue and spending across broad categories and provide a forum for faculty to discuss revenue and spending information.
Yay = 51 Nay = 4 Abstain = 15 Total Votes= 70

Motion 3: Table 1 (Redefine the representation model in academic senate)
Moves that academic senate be reconstitute/restructured so that voting rights reside solely with the faculty.
Yay = 65 Nay = 9 Abstain = 5 Total Votes = 79

Motion 4: Table 6 (Role of lecturers in shared governance at the dept and college level)
Create equitable representation of all faculty groups across all elements of governance.
Yay=46 Nay=11 Abstain=14 TotalVotes=76

Motion 5: Table 14 (Transparency and accountability of decision-making at all levels)
A Explore/require more regular communication for information regarding policy, hiring, whatever standing committees are charged with and the constituents including a review period prior to bringing issues to the senate floor so that the faculty in order to inform and incorporate feedback from the constituents. More regular communication from administration to faculty prior to first draft policy being delivered.
Yay=34 Nay=23 Abstain=34 TotalVotes=91
B. Require more regular upward evaluation of administration less than three to five years.
Yay=40 Nay=2 Abstain=27 TotalVotes=69

Motion 6: Table 8 (Consistency of governance across departments and colleges)
Every college shall have an internal governance system that is proposed and approved by the faculty of the college furthermore 2)every department/academic unit shall have an internal governance system that is consistent with principles approved by the faculty of the college 3)academic senate shall establish a process for assessing whether department and college practices are in compliance with approved governance policy.
Yay=54 Nay=3 Abstain=13 TotalVotes=70

Motion 7: Table 3 (Inclusion of global faculty in governance at all levels) To ensure participation of global campuses at all levels of RITs governance system we move the following 1) each global campus will have elected senators on the RIT academic senate 2) Transition the global education taskforce from an ad hoc committee to a standing committee of senate 3) each global campus will elect faculty members from existing RIT programs offered abroad to serve on those department/college curriculum committees at the main campus.
Yay = 59 Nay = 2 Abstain = 7 Total Votes = 68

Motion 8: Table 16 (Role of lecturers in shared governance at the dept and college level)
Rewrite institute policies on lecturers and the promotion of lecturers. Issues to be addressed should include 1) length of initial contract {should be longer than one year} 2) removal of "non-tenure track" label {teaching faculty should be considered "full time faculty" and not "contingent" faculty.} 3) more "tenure like" career paths 4) equity in terms of workload, salary, opportunities for professional development and administrative positions.

Yay=33 Nay=9 Abstain=30 TotalVotes=72

Motion 9: Table 2 (Redefine the representation model in academic senate)
We move that the senate shall appoint a committee to revise and rewrite the charter of academic governance and its bylaws, giving particular attention to: A. established proportion of senators from all faculty ranks including contingent faculties B. nominating and voting procedures for representation in a standardized and improved format across colleges. C. voting procedures within senate.
Yay=24 Nay=14 Abstain=28 TotalVotes=66

Motion 10: Table 5 (Faculty input in evaluation of peers and administrators)

Identify and implement systematic college-level policies and procedures by which faculty, including those at RITs international campuses, evaluate their peers and college administrators on a regular, predetermined schedule.
Yay = 38 Nay = 5 Abstain = 24 Total Votes = 67

Motion 11: Table 7 (Transparency and accountability of decision-making at all levels)
We propose a taskforce to write a policy geared specifically to promote decision-making, transparency and communication between faculty, heads, chairs, directors, dean and the provost, president, and board of trustees. A system of documentation of communication between levels should be established.
Yay=48 Nay=3 Abstain=23 TotalVotes=74

Motion 12: Table 9 (Establish a set of "best practices" of governance at dept. and college levels and review regularly)

Each college will have a representative faculty, governing body or committee, which follows a set of core best practices consistent with RIT policy and AAUP guidelines. Moreover, each college will send a governing body representative to a retreat of all college governing bodies in order to share best practices.
Yay = 46 Nay = 3Abstain = 17 Total Votes = 66

Motion 13: Table 13 (Faculty input in evaluation of peers and administrators)

Conduct annual 360 evaluations, that is a formative evaluation from one's supervisors, peers, and subordinates/students.
Yay = 16 Nay = 36 Abstain = 18 Total Votes = 70

Appendix A

Committee Charge

DRAFT Motion:

From: Executive Committee and Provost Haefner

Motion to Academic Senate: Academic Senate approves the motion to form an ad hoc Organizing Committee, to be appointed jointly by the Senate Executive Committee and Provost Haefner, to plan a Day-long Summit, Academic Governance: Purposes, Challenges, Opportunities, to be jointly and collaboratively sponsored and supported by the Senate and the Office of the Provost. The Organizing Committee, once constituted, will be charged to develop and present its proposed plans for a summit, at its earliest convenience, for discussion and approval by Academic Senate.

Context and Timing: The recent Middle States report made valuable suggestions regarding our governance system, and these should be considered; Associate Provost Myers, with the support of the Provost, recently facilitated a Global Governance Summit in Dubrovnik with our global partners in which several senators participated and out of which several proposals emerged that deserve further consideration; we have all been engaged with RIT's strategic planning, and we know that Academic Governance must be a robust and sustainable partner if RIT is to succeed at realizing its strategic goals and becoming a major international university.

Guiding Questions: Is our system of academic governance able to partner as fully as it might wish in realizing our strategic goals? What structural and organizational review and forms of assessment, re-considerations and potential changes might strengthen its capacities as a full partner in this process? What constitutes a "successful" governance system of academic governance more generally? What peer institutions, conceptions of governance, and benchmark comparisons would we benefit from considering? What concrete outcomes might we want to see emerge out of an initial summit?

Opportunity for Leadership: We believe a summit would give us not only additional perspective but contribute to the larger national and international discourse on how universities adapt and contribute to a changing world. We believe such a summit could improve and better position RIT in this larger context, and that it would help us set an informed and appropriately ambitious standard for assessing our own system's capacities. And we believe, with the arrival of a new president to RIT, that the time is right for us to take the lead with such an initiative.

Draft charge to the organizing committee: The Organizing Committee is charged to develop the program, plan the logistics, and serve as the point of contact for a day-long summit entitled Academic Governance: Purposes, Challenges, Opportunities. This summit will be open to all RIT faculty. Specifically, the Committee is to:

1. Identify the purpose, objectives, and outcomes of the summit; 2. Propose a date that accommodates enough planning as well as availability of faculty; 3. Develop the agenda that fulfills the purpose, identify speakers and facilitators, and plan for the individual sessions; 4. Research governance systems and identify best practices; 5. Develop a budget for the summit; and 6. Support the execution of the summit.

Appendix B

Focus Group and Survey Methods and Findings

In preparation for the summit the organizing committee conducted both secondary and primary research regarding academic governance and for the primary research, specifically examining RIT faculty perceptions of academic governance. Primary research was first conducted through focus groups, after the focus group information was analyzed a specific survey was distributed to the RIT faculty. What follows is the specific methodology and results.

Focus Group Methods

All current (2017-2018), full-time faculty members were sent an email on January 17, 2018 to invite them to participate in a focus group regarding RIT academic governance (for full email see below). Interested participants were then split into groups based on rank. The committee believed that each group would be more open if they were in a group of individuals of similar rank. Three focus groups were conducted (one with non-tenured and full-time lecturers, two with tenured faculty members) with nine to ten faculty members within each group. Focus group questions were discussed and finalized amongst the organizing committee and group leaders were provided with information regarding properly conducting a focus group.

Focus groups were asked a number of questions regarding what they know about academic governance ("How would you define academic governance?" "What is the purpose of academic governance"), and their perceptions of RIT's governance ("What is your perception of academic governance at RIT?" "What do you see as a challenge to academic governance, overall and at RIT?"), as well as whether governance should be improved ("How and why should or could academic governance be improved at RIT?"). Participants were then asked more specific questions regarding possible changes and what could be addressed at an academic governance summit ("What changes would you like to see to the academic governance structure at RIT?" "What would you like to see discussed at an academic governance summit?"). Focus groups ended with asking about the timing of such a summit within the academic year or potentially during the summer.

Focus Group Results

After completing the focus groups, organizing committee members were given each groups audio as well as notes taken to examine for common themes or ideas. Committee members then reported to the overall group what they perceived to be prevalent from the three focus groups. Three main themes emerged related to academic governance: participation, communication, and consistency and transparency. There were also ideas that were related directly to a potential summit that came out during the focus groups.

Participation was seen in the fact that many RIT faculty were not aware of the roles for faculty or even how those roles might be defined. This would be a large barrier for faculty participation in academic governance. Other areas within participation were the distribution of those engaged in governance from across the institution and rank. Suggestions were made to alert new faculty to the positions available and their responsibilities, essentially how to and who can participate in governance. With this suggestion also came the need for training of faculty when they do take on new positions. Further, there was concern for who should be on RIT's academic senate.

Communication came up in all of the focus groups ranging in concern from how faculty get information to how faculty can know that those in positions of governance "hear" what faculty is saying. Preliminary vetting of information to all campus groups for clarity and making sure that everyone (faculty, presenters,

senators, etc) are prepared for discussions on the numerous issues that exist on a college campus were discussed. Improvement on all means of communication was suggested, particularly to make sure that faculty are not just receiving communication *after* something has occurred (e.g. a policy change). The concern of whether voices are being heard was also discussed (e.g. even if decisions are being made that are not in line with what faculty has expressed, knowing that the viewpoint was taken into consideration).

Discussions of consistency and transparency were university-wide. There was a need to examine the redundancy of not only the committee work being conducted but the people and information within academic governance. Faculty expressed a need to have more consistency across colleges, that governance is not just at the university level. A specific concern also arose regarding the disconnect between faculty input for the previous strategic plan for RIT but no obvious input into the changes for the new plan.

When discussing an academic governance summit all of the aforementioned themes were brought up as interesting avenues for discussion. There was a hope to have a "rich group" of external speakers and "administrative free" discussions/panels for more open input. Faculty expressed interest in utilizing workshopping or training opportunities here as well. But, discussed that a summit with clear goals and outcomes would engage faculty.

Survey Methods

Following the discussion of the focus groups the organizing committee determined that more information was necessary for planning a successful event. A 53-item survey was constructed and sent to all RIT full-time faculty. Based on the focus group themes of participation, communication, consistency and transparency the survey focused on these ideas at three levels, department, college, and university. At each level faculty were asked which groups of individuals (e.g. the president's office, student government, full-time faculty) have a role to play in the academic governance at that level. This was followed by asking for each respondent's "ideal" composition of academic governance should be and specifically what role faculty should play. (At the university level this was specific to academic senate.) At the department level faculty were also asked if faculty were elected or appointed within their departments. Faculty were then asked a series of 5-point Likert scale questions regarding communication and transparency for each of the levels. At the department level there were eight items such as, "Information from those in governance at the department level is clearly communicated to faculty" and "I feel that faculty are heard by those within department level governance." Moving to the college level the same eight-items were used but reflecting college level governance such as, "The Dean seeks faculty input when making decisions." Finally, at the university level six-items were asked about the university and five-items focused specifically on academic senate such as, "Faculty on campus have easy access to information from those at institute-level governance" and "Information from academic senate is clearly communicated to the faculty."

Following the Likert items, three semantic-differential scales were used to examine the concern regarding the number and work of committees at these three levels. The questions asked whether there were too many or too few committees, exclusivity versus overlap of committees, and clear or unclear communication of committees at the department, college, and university level. Additionally, faculty were asked who they believe the voting members of academic senate should be from the president's office to students.

The survey concluded with asking faculty what they would like to see a summit focus on here at RIT and whether they would attend a summit on a reading day, they were then given some specific dates to choose from. Three demographic questions were also included to determine rank and college appointment as well

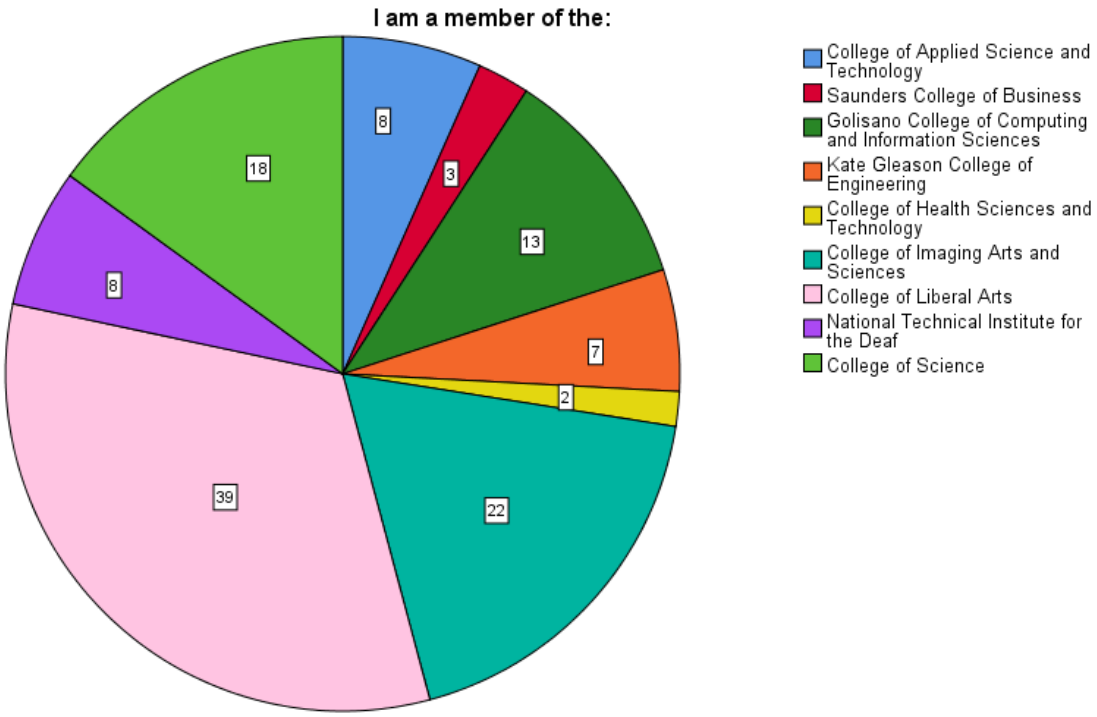
as whether the individual currently was or had been in an administrative position (see the Appendix for the full survey).

The survey was sent to all full-time RIT faculty on March 19, 2018 (see below for email text). Organizing committee members encouraged their Deans and Academic Senate representatives to encourage faculty to complete the survey. Faculty were asked to go to the Qualtrics link and fill out the survey by March 23rd.

Survey Results

There were a total of 155 participants with the majority reporting as Professor (30%) or Associate Professor (26%) rank. The remaining faculty reported as Assistant Professor (10%), Principal Lecturer (2%), Senior Lecturer (4%), Lecturer (8%), with 20% of respondents not reporting their rank. College representation was fairly spread out (see Table 1), with the majority of faculty reporting from the College of Liberal Arts. A total of 35 individuals did not report their college affiliation. The majority of respondents (75%) did not or had not assumed a Dean, Assistant/Associate Dean or Director/Chair position.

Table 1 showing representation of Colleges by counts



When asked specifically about an Academic Governance summit and what they would like to see said summit focus on, “Improving RIT’s governance system” was the highest ranked topic. This was followed by “Understanding best practices in governance” and “Explaining RIT’s governance system.” Following the top three came “Having my voice heard regarding RIT’s governance,” “Hearing from experts in Academic Governance,” “Hearing from RIT’s governance leaders,” and finally “Learning more about how to participate in RIT’s governance.” These choices of topics correspond well to the more quantitative data gathered within the survey as well as the following demonstrates.

When asked about whom should have a role in academic governance at the various levels faculty were clearly interested in keeping "higher" administrative positions out of department level governance whereas there was an interest in having virtually all constituents play a role at the university level. These numbers were reinforced with open ended responses asking for ideal composition.

Table 2: Role to play in Academic Governance at the _____ level

	Department	**College**	**University**
The president's office	48	65	106
Academic Senate	57	63	103
Staff Council	15	22	58
Student Government	18	19	61
Provost's office	73	85	108
College Deans	105	107	97
Department Heads	135	99	60
Program Directors	106	69	50
Full-time faculty	129	75	67
Staff	40	33	35

When examining whether faculty were elected to positions at the department level it was interesting to look at the colleges individually (see Table 3).

Table 3: Faculty elected to department governance

	Department	
College	**Yes**	**No**
CAST	1	7
COB	2	1
GCCIS	0	13
KGCOE	2	5
CHST	1	1
CIAS	14	8
COLA	26	13
NTID	2	6
COS	6	11
Unreported	13	15
Total	67	80

The remaining results will be presented in aggregated form, the college-level data can be made available upon request. As a reminder, each scale was based on 1=Strongly Disagree, 5=Strongly Agree.

When asked specifically regarding whether faculty were well trained for governance positions the participants average was below the middle on all levels with the lowest falling at the university level (M = 2.41, SD = 1.04) with the department level (M = 2.55, SD = 1.26) and the college level at (M = 2.60, SD = 1.13).

When inquiring whether faculty felt that various constituents regularly consult with faculty for input on decisions the averages decreased as faculty moved further from their department to the academic senate.

While faculty seemed to almost agree that department chairs (*M* = 3.59, *SD* = 1.38) consult regularly, college deans (*M* = 3.17, *SD* = 1.41) and academic senate (*M* = 3.16, *SD* = 1.17) were slightly lower (but still positive).

The same pattern emerges when examining if information is clearly being communicated to faculty. Both department (*M* = 3.09, *SD* = 1.33) and college levels (*M* = 3.05, *SD* = 1.30) are slightly above the neutral but both university level (*M* = 2.51, *SD* = 1.15) and academic senate (*M* = 2.92, *SD* = 1.17) reports are on the disagree range of responses.

When examining "bottom up" communication asking if faculty can easily communicate to those in "higher" positions of governance, once again, this is stronger at the department (*M* = 3.70, *SD* = 1.35) levels than on college (*M* = 3.30, *SD* = 1.36) or university (*M* = 2.41, *SD* = 1.19) levels.

Unsurprisingly based on the previous findings, faculty are reporting more strong numbers being "heard" at the department (*M* = 3.41, *SD* = 1.43) level than on college (*M* = 3.05, *SD* = 1.41), university (*M* = 2.24, *SD* = 1.13) and academic senate (*M* = 2.69, *SD* = 1.19). However, it is important to note that "Information is clearly communicated" and "Faculty are heard" is still barely above neutral at the department and college aggregated levels.

Part of the above may also stem from the relatively low perception that faculty have easy access to information at the college (*M* = 3.03, *SD* = 1.29), university (*M* = 2.40, *SD* = 1.19), and academic senate (*M* = 2.93, *SD* = 1.12) levels.

When examining whether or not faculty understand the role of academic governance there is a low level of agreement at the college (*M* = 3.41, *SD* = 1.24) and university level (*M* = 3.25, *SD* = 1.28).

The semantic differential scores showed that committee work was leaning more towards too many committees at all levels, that overlap, and are unclear in their communication.

Table 4: There are too many committees ----- There are too few committees

	Department		College		University	
	Mean	SD	Mean	SD	Mean	SD
Aggregated	2.44	1.00	2.38	1.05	2.26	1.03

Table 5: Committees are doing work overlapping of others --- Doing work exclusive to them

	Department		College		University	
	Mean	SD	Mean	SD	Mean	SD
Aggregated	3.09	1.05	2.90	.91	2.65	.95

Table 6: Committees are unclear in their communication --- Clear in their communication

	Department		College		University	
	Mean	SD	Mean	SD	Mean	SD
Aggregated	3.07	1.17	2.79	1.12	2.63	1.07

Additional Information

Focus Group invitation email:

Dear faculty,

If you have an interest in RIT academic governance, we need your help! We are interested in your reflections about academic governance. For example: What constitutes a successful governance system? Does the existing system of academic governance at RIT enable faculty to engage appropriately in university decision-making?

The recent Middle States report made valuable suggestions regarding our governance system, and the Academic Senate subsequently approved a motion to form an *ad hoc* Organizing Committee to develop and present a proposed plan for a summit, *Academic Governance: Purposes, Challenges, Opportunities*. The committee would like your input as we plan the summit. We are looking for faculty members to participate in focus groups to help us better understand what RIT faculty think is important for consideration within our academic governance.

Please note that all of the information provided during these focus groups will be kept confidential. Each group will be led by a committee member and no identifying information will be kept on record.

Focus groups will be held throughout the day on January 26th. If you are interested and available on this day please respond by clicking the following link: Academic Governance Focus Group.

Please respond by 5PM, Friday, January 19th, 2018.

Thank you,

The Organizing Committee
Eileen Bushnell co-chair
Hossein Shahmohamad co-chair
Stephen Aldersley
Timothy Engström
Elizabeth Lawley
Heidi Nickisher
Tracy Worrell

Survey Invitation Email:

Dear Faculty Colleagues,

In the Fall 2017, the Academic Senate approved a motion to establish an ad hoc committee to develop and present a plan for a faculty summit on academic governance at RIT. Since that date, the committee has been collecting information, data and suggestions as to what such a summit might look like. As we close in on our recommendations, we now put before you a survey (linked here), and ask that you respond at your earliest convenience or by Friday, March 23rd at 5PM, at the latest. We anticipate that your responses will assist us in putting

together the best possible summit agenda which
will in turn lead to a strengthening of faculty governance principles across the university.

Thanking you in advance,

Ad Hoc Organizing Committee

Eileen Bushnell and Hossein Shahmohamad, Committee Co-Chairs
Stephen Aldersley
Timothy Engstrom

Elizabeth Lawley
Heidi Nickisher

Tracy Worrell

* If you have trouble opening the survey link above please copy/paste
https://rit.az1.qualtrics.com/jfe/form/SV_cSY8EHEr6jppSPb into your browser.

Survey:

1. Which of the following have a role to play in the academic governance of your department (please select all that apply):

   The president's office
   Academic Senate
   Staff Council
   Student Government
   The provost's office
   College Deans
   Department Heads
   Program Directors
   Full-time Faculty
   Staff

2. My ideal composition of academic governance at the department level would include: _____

3. What role should faculty governance play at the department level? _____

4. Faculty taking on administrative positions at the department level are elected by the faculty.

   Yes/No

5. Please think about your current home department when replying to the following items. SD – SA (5)

   My department chair regularly consults with faculty seeking their input on decisions.

   Faculty taking on administrative positions at the department level are well trained for those positions.

Information from those in governance at the department level is clearly communicated to faculty.

My department chair encourages faculty participation in college and university governance.

I can easily communicate information to those in positions of governance at the department level.

My department chair is informed about governance at the college and university levels.

My department chair seeks to keep my department informed regarding governance at the college and university levels.

I feel that faculty are heard by those within department level governance.

6. When thinking about the committees at the RIT department level:

There are too many committees _____ There are too few committees

They are doing work exclusive to those committees _____ They are doing work overlapping that of other committees

They are clear in their communication _____ They are unclear in their communication

to faculty to faculty

7. Which of the following have a role to play in the academic governance of your college (please select all that apply):

The president's office
Academic Senate
Staff Council
Student Government
The provost's office
College Deans
Department Heads
Program Directors
Full-time Faculty
Staff

8. My ideal composition of academic governance at the college level would include: _____

9. What role should faculty governance play at the college level? _____

10. Please think about your current home department when replying to the following items. SD – SA (5)

I understand the role of academic governance at the college level.

Faculty taking on administrative positions at the college level are well trained for those positions.

Information from those in governance at the college level is clearly communicated to faculty.

My college has a clearly defined governance structure for making decisions of importance to faculty.

I can easily communicate information to those in positions of governance at the college level.

Faculty on campus have easy access to information from those at the college level governance.

My dean seeks faculty input when making decision.

I feel that faculty are heard by those within college level governance.

11. When thinking about the committees at the RIT college level:

There are too many committees _____ There are too few committees

They are doing work exclusive to those committees _____ They are doing work overlapping that of other committees

They are clear in their communication to faculty _____ They are unclear in their communication to faculty

12. Which of the following have a role to play in the academic governance of our university (please select all that apply):

The president's office
Academic Senate
Staff Council
Student Government
The provost's office
College Deans
Department Heads
Program Directors
Full-time Faculty
Staff

13. My ideal composition of academic governance for RIT would include: _____

14. What role should faculty governance play at the college level? _____

15. Please think about academic governance at RIT when replying to the following items. SD – SA (5)

I understand the role of academic governance at the institute level.

Faculty taking on governance positions at the institute level are well trained for those positions.

Information from those in governance at the institute level is clearly communicated to faculty.

I can easily communicate information to those in positions of governance at the institute level.

Faculty on campus have easy access to information from those at the institute level governance.

I feel that faculty are heard by those within institute level governance.

16. When thinking about the committees at the RIT institute level:

There are too many committees _____ There are too few committees

They are doing work exclusive to those committees _____ They are doing work overlapping that of other committees

They are clear in their communication to faculty _____ They are unclear in their communication to faculty

17. Voting members of academic senate should include (please select all that apply).

The president's office
The provost's office
College Deans or Directors
Full-time Faculty
Staff
Students

18. My ideal composition of academic senate at RIT would include: _____

19. Please think about academic senate at RIT when replying to the following items. SD – SA (5)

Academic senate seeks faculty input when making decisions.

Information from academic senate is clearly communicated to faculty.

Faculty on campus have easy access to information about senate level governance issues.

I feel that faculty are heard by those within academic senate.

The academic senate successfully represents the faculty's voice to Senior Administration and Trustees.

20. I would like to see a summit on academic governance focus on (rank the following by dragging your selections in order with the top selection being the strongest focus):

Improving RITs governance system

Explaining RITs governance system

Understanding best practices in governance

Having my voice heard regarding RITs governance

Hearing from experts in academic governance

Learning more about how to participate in RITs governance

Hearing from RITs governance leaders

Other

21. I would attend a one-day summit on academic governance on a day in which we do not have classes (such as reading day): SD – SA (5)

22. I would likely attend a one-day summit on academic governance on (select all that apply):

During October Break (October 9, 2018)

Reading Day (December 11, 2018)

Before classes start in January (January 11, 2019)

At the end of the Academic Year (April 20, 2019)

23. I am a(n)

Professor

Associate Professor

Assistant Professor

Principal Lecturer

Senior Lecturer

Lecturer

Adjunct

24. I am a member of the:

College of Applied Science and Technology

Saunders College of Business

Golisano College of Computing and Information Sciences

Kate Gleason College of Engineering

College of Health Sciences and Technology

College of Imaging Arts and Sciences

College of Liberal Arts

Golisano Institute of Sustainability

National Technical Institute for the Deaf

College of Science

School of Individualized Study

25. I have been or currently am:

A Dean

An Associate or Assistant Dean

Department Director/Chair

Appendix C

Select Bibliography

Governance: The Role of the University

Barber, Benjamin, *Strong Democracy*, Berkeley, 1984.

Blackmore, J., M. Brennan & L. Zipin, eds., *Re-Positioning University Governance and Academic Work*, Sense, 2010.

Bok, Derek, *Beyond the Ivory Tower: Social Responsibilities of the Modern University*, Harvard, 1982.

Bok, Derek, *Universities in the Marketplace: The Commercialization of Higher Education*, Princeton, 2003.

Bottomley, S., *The Constitutional Corporation: Rethinking Corporate Governance*, Ashgate, 2007.

Dean, Mitchel, *Governmentality: Power and Rule in Modern Society*, London, 2009.

Dewey, John, "Creative Democracy—The Task Before Us," *Later Works of John Dewey, vol. 14*, Cabondale, 1988.

Dewey, John, *Democracy and Education*, Feather Trail, 2009.

Dryzek, J. S., *Foundations and Frontiers of Deliberative Governance*, Oxford, 2010.

Fuller, S., *Governance of Science*, Open University, 2000.

Ginsberg, B., *The Fall of the Faculty: The Rise of the All-Administrative University and Why it Matters*, 2011.

Gomez, P-Y. & H. Korine, *Entrepreneurs and Democracy: A Political Theory of Corporate Governance*, Cambridge, 2008.

Hendrickson, R.M. & Lane, J.E., *Academic Leadership and Governance of Higher Education: A Guide for Trustees, Leaders, and Aspiring Leaders of Two- and Four-Year Institutions*, 2012.

Kjaer, A. M., *Governance: Key Concepts*, Polity, 2004.

Miller, M. T., & J. Caplow, eds., *Policy and University Faculty Governance: Educational Policy in the 21st Century*, 2000.

Mortimer, K.P., Sathre, C., *The Art and Politics of Academic Governance: Relations among Boards, Presidents, and Faculty*, (The ACE Series on Higher Education, 2010.

Paradeise, C., E. Reale, I. Bleiklie & E. Ferlie, eds., *University Governance: Western European Comparative Perspectives*, 2010.

Shattock, Michael, *Managing Good Governance: Managing Universities and Colleges*, 2006.

Tierney, W.G., *Competing Conceptions of Academic Governance: Negotiating the Perfect Storm*, 2009.

Weber, L. E. & W. Z. Hirsch, eds., *Governance in Higher Education: The University in a State of Flux*, 2001.

Appendix D

Motions and Votes from the Summit

Here are the motions from the summit. They are designated with the order of when they were read (motion #) which table they came from and the label that the table had for sign-ups/seat choice. Each motion is followed by the vote from the group. (Please note, as individuals filtered in and out of the room or didn't vote at all for each motion there may be some discrepancy with the total numbers for each motion.)

3. FMS has made a full inventory of all accessible and gender-neutral restrooms on campus to identify where single-use bathrooms are needed:
   - There are currently 116 gender-neutral restrooms across campus.
   - The RIT Interactive Campus Map has been updated to include all gender-neutral/single-use bathrooms on campus.
   - RIT has established requirements that all renovations address issues of accessibility through single-user facilities.
   - As a campus, all new construction now includes single-user bathrooms.

CONCLUSIONS:

FMS is addressing the bathroom situation in a thoughtful and proactive manner, both on a broad institutional level and on an individual case by case basis. That said, the subcommittee does offer a recommendation and 2 resolutions.

Motion 1: Table 10 (Determine support required to sustain governance practices)

Faculty affairs committee be charged to find a way to increase recognition of service leadership and codify a way to report service leadership with documented accomplishments. Senate requests the provost to provide course releases to members of the executive committee and chairs of heavy workload committees.
Yay = 63 Nay = 0 Abstain = 2 Total Votes=65

Motion 2: Table 4 (Representation of faculty in budget decision-making process)

Require department chairs, deans, and university leadership to annually disseminate information on revenue and spending across broad categories and provide a forum for faculty to discuss revenue and spending information.
Yay = 51 Nay = 4 Abstain = 15 Total Votes= 70

Motion 3: Table 1 (Redefine the representation model in academic senate)

Moves that academic senate be reconstitute/restructured so that voting rights reside solely with the faculty.
Yay = 65 Nay = 9 Abstain = 5 Total Votes = 79

Motion 4: Table 6 (Role of lecturers in shared governance at the dept and college level)

Create equitable representation of all faculty groups across all elements of governance.
Yay = 46 Nay = 11 Abstain = 14 Total Votes = 76

Motion 5: Table 14 (Transparency and accountability of decision-making at all levels)

A Explore/require more regular communication for information regarding policy, hiring, whatever standing committees are charged with and the constituents including a review period prior to bringing issues to the senate floor so that the faculty in order to inform and incorporate feedback from the constituents. More regular communication from administration to faculty prior to first draft policy being delivered.
Yay = 34 Nay = 23 Abstain = 34 Total Votes = 91

B. Require more regular upward evaluation of administration less than three to five years.
Yay = 40 Nay = 2 Abstain = 27 Total Votes = 69

Motion 6: Table 8 (Consistency of governance across departments and colleges)

Every college shall have an internal governance system that is proposed and approved by the faculty of the college furthermore 2)every department/academic unit shall have an internal governance system that is consistent with principles approved by the faculty of the college 3)academic senate shall establish a process for assessing whether department and college practices are in compliance with approved governance policy.
Yay = 54 Nay = 3 Abstain = 13 Total Votes = 70

Motion 7: Table 3 (Inclusion of global faculty in governance at all levels)

To ensure participation of global campuses at all levels of RITs governance system we move the following 1) each global campus will have elected senators on the RIT academic senate 2) Transition the global education taskforce from an ad hoc committee to a standing committee of senate 3) each global campus will elect faculty members from existing RIT programs offered abroad to serve on those department/college curriculum committees at the main campus.
Yay = 59 Nay = 2 Abstain = 7 Total Votes = 68

Motion 8: Table 16 (Role of lecturers in shared governance at the dept and college level)

Rewrite institute policies on lecturers and the promotion of lecturers. Issues to be addressed should include 1) length of initial contract {should be longer than one year} 2) removal of "non-tenure track" label {teaching faculty should be considered "full time faculty" and not "contingent" faculty.} 3) more "tenure like" career paths 4) equity in terms of workload, salary, opportunities for professional development and administrative positions.
Yay = 33 Nay = 9 Abstain = 30 Total Votes = 72

Motion 9: Table 2 (Redefine the representation model in academic senate)

We move that the senate shall appoint a committee to revise and rewrite the charter of academic governance and its bylaws, giving particular attention to: A. established proportion of senators from all faculty ranks including contingent faculties B. nominating and voting procedures for representation in a standardized and improved format across colleges. C. voting procedures within senate.
Yay = 24 Nay = 14 Abstain = 28 Total Votes = 66

Motion 10: Table 5 (Faculty input in evaluation of peers and administrators)

Identify and implement systematic college-level policies and procedures by which faculty, including those at RITs international campuses, evaluate their peers and college administrators on a regular, predetermined schedule.
Yay = 38 Nay = 5 Abstain = 24 Total Votes = 67

Motion 11: Table 7 (Transparency and accountability of decision-making at all levels)

We propose a taskforce to write a policy geared specifically to promote decision-making, transparency and communication between faculty, heads, chairs, directors, dean and the provost, president, and board of trustees. A system of documentation of communication between levels should be established.
Yay = 48 Nay = 3 Abstain = 23 Total Votes = 74

Motion 12: Table 9 (Establish a set of "best practices" of governance at dept. and college levels and review regularly)

Each college will have a representative faculty, governing body or committee, which follows a set of core best practices consistent with RIT policy and AAUP guidelines. Moreover, each college will send a governing body representative to a retreat of all college governing bodies in order to share best practices.
Yay = 46 Nay = 3 Abstain = 17 Total Votes = 66

Motion 13: Table 13 (Faculty input in evaluation of peers and administrators)

Conduct annual 360 evaluations, that is a formative evaluation from one's supervisors, peers, and subordinates/students.
Yay = 16 Nay = 36 Abstain = 18 Total Votes = 70

RIT

Faculty Governance Subcommittee Report

Long Range Planning and Environment Committee

Subcommittee on Faculty Governance:
Andres Kwasinski
James Heliotis

Summary of Charge and Background

- Carryover charge *LRPEC3: "Compare RIT against our benchmark schools regarding the extent of its Faculty governance. Make recommendations for evolving shared governance at RIT."*
- Subcommittee completed a comparison against our benchmark schools during the past academic year.
- This academic year: discussed recommendations for evolving shared governance.
  - Based work on the "Summit on Academic Governance", organized on 11/12/18 by the Office of the Provost and an ad-hoc committee from the academic senate.
- Four themes/categories in motions voted at the summit and receiving strong support:
  - Recognition,
  - Transparency,
  - Representability,
  - General Governance.

RIT

Category: Recognition

- Theme:
  - need to find a way to increase recognition of service leadership and codify a way to report service leadership with documented accomplishments.

- Subcommittee recommendation:
  - *Charge the Faculty Affairs Committee to consider policy revisions to increase recognition for leadership in service, perhaps specifically involving University governance.*

RIT

Category: Transparency

- Theme:
  - Call for increasing and improving the communication from administrators of budgetary and decision-making information at all levels of administration.

- Subcommittee recommendation:
  - Task the Academic Senate with the creation of a taskforce to develop policies and procedures to increase and improve the communication from administrators of budgetary and decision-making information at each level of administration.

RIT

Category: Representability

- Themes:
  - Voting rights in Academic Senate reside solely with the faculty.
  - Equitable representation of all faculty groups (impetus: lecturer representation).
  - Ensure participation of global campuses at all levels of RITs governance system
- Subcommittee recommendation:
  - Transition the global education taskforce to a standing committee of the Academic Senate and charge it with the development of policy and procedures to ensure effective participation of RIT's global campuses at all levels of RIT's governance system.
  - Task Academic Affairs Committee to study academic senate voting rights solely for the faculty and lecturer participation in governance.

RIT

Category: General Governance

- Themes:
  - *Consistent faculty governance system at all levels of academic units.*
  - *Identify, disseminate and adopt best practices.*
  - *Need to fix AS Committee charges system.*
- Subcommittee recommendation:
  - *Create an ad hoc committee to define the governance principles of interest based on current policy and AAUP guidelines. It must also follow a process by which the units' and colleges' policies and procedures are checked for compliance to those principles.*
  - *Task the AS Executive Committee to organize, at least annually, an orientation meeting on faculty governance roles and procedures and for discussion and development of best practices.*
  - *Task the Academic Senate Executive Committee to revise the procedure for defining committee charges so that with updated processes, the charges: (1) yield actionable requests to the committees, (2) include all needed background information needed to comprehend the charge (including the identification of the originator/s of the charge), and (3) allow the possibility of passing the charge to other RIT organizations beyond the Academic Senate.*

Charge 4: Gender/Bathrooms

RESOLUTION LRPEC-3

Be it resolved that the faculty senate request that FMS allocate funds for Wayfinding signage on the interior of buildings as a stopgap measure to direct people to bathrooms that may not be immediately apparent (in adjacent buildings, on other floors, etc).

RESOLUTION LRPEC-4

Be it resolved that FMS shall be requested to provide an annual data update to Senate on the number and status of gender neutral bathrooms and bathroom signage in a September Senate meeting.

Report of the LRPEC4 Subcommittee on Bathrooms

Subcommittee: Catherine Zuromskis, Joyce Hertzon, John Oliphant, Bernard Brooks

Charge:

Investigate the status restroom facilities in the academic buildings, including how many bathrooms/stalls by gender, gender inclusive status, condition (e.g. worn, broken, not working), last renovation, and building usage (faculty/staff/students). Make recommendations as appropriate in relation to campus welfare, e.g., priority for renovations.

Introduction:

The following report is based on a March 6, 2019 meeting with:

- John Moore, Assistant Vice President for Facilities Management Services
- Tori Budgeon-Baker, Senior Architect, Planning and Design Services
- Dave Harris, Director, Training, Utilities, and Environmental Management

The LRPEC committee was represented by committee members Catherine Zuromskis, Enid Cardinal, Jim Heliotis, and Joyce Hertzon.

Based on the information gathered at that meeting, the subcommittee has determined that Facilities Management Services (FMS) is actively engaged in addressing and improving the bathroom situation across the academic and residential buildings on campus with all of the above-mentioned issues taken into consideration.

Overview of Findings:

I. Needs: In general, FMS assesses restrooms across campus on a continuous basis in order to identify and address needs when and where they arise. These needs may include:
   A. More gender-neutral (single-use) restrooms
   B. More accessible restrooms
   C. Appropriate balance of gendered restroom facilities
   D. Maintaining existing restrooms when they fall into disrepair, and to increase water efficiency by installing low-flow fixtures. (There are over 400 existing restrooms on campus, not counting the residence halls.)
   E. Increasing the number of men's and women's stalls where building usage increases to keep in accordance with New York State building codes.
   F. Producing and maintaining signage and maps to direct faculty, staff, students, and visitors to the appropriate facilities

II. Challenges: While FMS is attentive to bathroom issues across campuses, they do face certain challenges

   A. Cost: Based on the Capital Budget and cash flow plans for the university, FMS budgets renovations over a fixed period of time. FMS follows the same budget hearing process as all of the colleges. FMS has a campus overview, prioritized by weighting factors like:

Condition (possibility of failure) and traffic or location. These factors determine where they allocate funds. However:

1. Funds are not sufficient to address all problems or speed up currently planned construction and maintenance.
2. Funding for bathrooms must also compete with other FMS projects (electric, roofs, windows, etc.)
3. When dealing with growing usage in particular buildings, occupant load of a building must be increasing by 10% or more in order to initiate renovations and new construction, per the NYS code.
4. New bathroom construction is expensive! Recently completed 4-5 stall wash rooms average $75,000 to $100,000 to renovate.

B. State building codes: New York State code requires that bathroom facilities *must* be divided by gender, so gender neutral facilities have to be added as additional facilities, and cannot be converted from gender specified facilities unless existing toilets are in excess of the mandated amount or a variance is received from NYS.

III. Steps taken: FMS is taking steps at both the broad institutional level and on a case by case basis to identify and resolve issues with bathroom facilities across campus

A. FMS is in the process of performing a facilities conditions assessment across the campus (both academic and residential buildings).
   1. This assessment addresses existing facilities, what is needed, and how to prioritize these needs.
   2. To date, this assessment is completed for the building nos. 1-15 (the oldest academic buildings on campus).
   3. This will produce a prioritized list based on that objective data with which to approach upper administration and make a case with a price and a plan.

B. FMS incorporates improvements wherever possible (a broken standard fixture will be replaced with low flow fixture, for example).

C. FMS has made a full inventory of all accessible and gender-neutral restrooms on campus to identify where single-use bathrooms are needed:
   1. They are working with Chris Hinesley at the Q center on the issue of gender-neutral bathrooms. There are currently 116 gender-neutral restrooms across campus.
   2. The RIT Interactive Campus Map (available on the website and on the RIT app) has been updated to include all gender-neutral/single-use bathrooms on campus.
   3. RIT has established requirements that all renovations address issues of accessibility through single-user facilities.
   4. As a campus, all new construction now includes single-user bathrooms. (see, for example, the MAGIC building)

D. Some other changes include:

1. Eastman 3rd floor had 2 men's room and 1 women's room with 2 stalls, so the converted one of the men's rooms to a women's room
2. Building 9 (engineering) also converted men's room to women's in the late 1990s.
3. The Polissini Center also now accommodates more women.
4. The A level of SAU has renovated their locker room space.
5. FMS is currently designing renovations for all restrooms in Gosnell Hall for parity, handicapped accessibility, and added a single user toilet.

Conclusions and Recommendations:

It is clear the FMS is addressing the bathroom situation in a thoughtful and proactive manner, both on a broad institutional level (via ongoing facilities assessments, outreach, and building and renovation requirements) and on an individual case by case basis. There is little the academic senate can or should do to address the situation, as it is already being addressed very capably by FMS. That said, our meeting produced lots of useful information and the subcommittee does offer a recommendation and two resolutions:

I. If individuals or groups in a specific building identify a problem, FMS encourages them to go directly to facilities management, not to the administration. Submit requests to John Moore via the facilities managers or operations managers in the department, division or building. FMS does renovate on a case by case basis, and these requests can and have been very helpful in prioritizing renovations.

BATHROOM REPORT

CHARGE:

Investigate the status restroom facilities in the academic buildings, including how many bathrooms/stalls by gender, gender inclusive status, condition (e.g. worn, broken, not working), last renovation, and building usage (faculty/staff/students). Make recommendations as appropriate in relation to campus welfare, e.g., priority for renovations.

NEEDS:

Facilities Management Services (FMS) assesses restrooms across campus on a continuous basis in order to identify and address needs such as:

- Number of gender-neutral (single-use) restrooms
- Number of accessible restrooms
- Balance of gendered restroom facilities
- Condition of existing restrooms (including water efficiency of fixtures).
- Keeping number of men's and women's stalls in accordance with NYS building codes based on building occupancy.
- Signage and maps to direct faculty, staff, students, and visitors to the appropriate facilities

CHALLENGES:

1. COST: Funding for bathrooms must also compete with other FMS projects. And new bathroom construction is expensive! Recently completed 4-5 stall washrooms have averaged $75,000 to $100,000 to renovate.

2. STATE BUILDING CODES: New York State code requires that bathroom facilities *must* be divided by gender, so gender neutral facilities have to be added as additional facilities, and cannot be converted from gender specified facilities unless existing toilets are in excess of the mandated amount or a variance is received from NYS.

STEPS TAKEN:

1. FMS is in the process of performing a facilities conditions assessment across the campus as a basis for prioritizing future renovation. To date, this assessment is completed for the building nos. 1-15 (the oldest academic buildings on campus).

2. FMS incorporates improvements wherever possible (a broken standard fixture will be replaced with low flow fixture, for example).

RECOMMENDATION:

If individuals or groups in a specific building identify a problem, FMS encourages them to go directly to facilities management, not to the administration. Submit requests to John Moore via the facilities managers or operations managers in the department, division or building. FMS does renovate on a case by case basis, and *these requests can and have been very helpful in prioritizing renovations.*

RESOLUTIONS:

I. Be it resolved that the faculty senate shall request that FMS allocate funds for Wayfinding signage on the interior of buildings as a stopgap measure to direct people to bathrooms that may not be immediately apparent (in adjacent buildings, on other floors, etc).

II. Be it resolved that the FMS shall be requested to provide an annual data update to Senate on the number and status of gender neutral bathrooms and bathroom signage in a September Senate meeting.

Charge 5: Parking

LRPEC5 Parking Subcommittee Report

Qing Miao, dt ogilvie, Michael Skyer

Charge: Review current parking policies and processes, such as:

i. the number of reserved spaces sold in relationship to available spaces
ii. EVehicles
iii. Construction implications
iv. Consider moving spaces for motorcycles to unreserved slots
v. New fine policies (such as what is the impact on low-income students)
vi. Non-reserved space availability
vii. Handicapped parking

Report based on the October 30, 2018 report from and February 14, 2019 meeting with Kate Mason, Director of Parking & Transportation Services

1. The number of reserved spaces sold in relationship to available spaces

a. Approximately 20% of parking spaces on campus are designated as "reserved" this year (1895 spaces)
b. Next fall (2019) the goal is to decrease the number of reserved spaces and increase the number of general spaces
c. Parking & Transportation services has a stated goal of reducing the 'gap' in fees between price points relative to general and reserved spots
d. Prioritization based on location and preference to lot (proximity to academic buildings)

2. The number and location of eVehicles spaces and number of eVehicles

a. We do not currently have a way to track accurately all Electric Vehicles on campus. Right now, we have 28 spaces allocated for EV with charging station access. There are 12 spaces in D Lot, 2 in M Lot, 11 in T Lot, 1 in CIMS West (Tesla) and 2 in the Admin Lot. We are looking at opportunities to add charging stations to campus, particularly in the south side lots.
b. Current EV charging stations = 12 in existence
c. EV charging stations are located in lots U,S,L,E and outside Polisini (Ice rink), the SAU, and near the (new) Alumni House

3. Implications of construction on parking spaces

a. We work closely with FMS to understand and plan for any impacts of current/pending construction on campus. We do not expect the Cyber Security Building will have a significant impact on parking spaces.
b. New buildings but not new parking—a standing issue
c. Vendor parking in fire lanes—perception of "abuse of fire lanes" by Vendors increased communication with vendors is needed
d. P&T is not currently looking at above or below ground parking construction, instead working with what we have
e. Dilemmas related to wetlands protections, such as Lot U

f. Lot N is slated for expansion

4. **The number and location of spaces for motorcycles**
   a. There are currently 17 spaces designated for motorcycles in C, D, F, J, L, S and T Lots.
5. **New fine policies and their impact on low income students**
   a. There are staggered citation fees (2nd infraction is fined more than the first);: parking citation fines increase by $5 per citation after the first citation is issued to deter "repeat parking offenders," but found that this is not enough of a deterrent to poor parking behaviors, as the number of citations issued has not significantly decreased
   b. Mason has no way of knowing how many of the repeat violators would impact low income students

6. **The number of non-reserved spaces**
   a. Approximately 47% of parking spaces on campus are designated as "general" this year (4544 spaces)
   b. Set to increase next year based on usage

7. **The number and location of handicapped parking spaces**
   a. There are currently 310 handicapped parking spaces on campus. Those spaces are in D, E, F, J, L, M, R, S, T and U Lots, as well as in the Res Hall circles, NRH, and the Admin lot
   b. B and J lots will see increased HC parking next year
   c. Goals for 2019-2020 include lots L, S, R for increased HC parking

8. **Additional data** uncovered that do not meet any specific charge but remain relevant to parking:
   a. Paid parking is here to stay—it is not going away; Mason remarked that "parking fees are *not* a money-making operation"
   b. Increase of Flexible Options such as shuttle services between academic buildings and lots that are distant from them, "accommodations are generally available"
   c. A Special Events policy was implemented to handle parking issues that affected faculty & staff access to parking spaces during daytime events
   d. Development of a Social-Media based Parking Meter App – an App-based solution to parking, meant to coordinate and assist with special events
   e. Park Mobile for short term parking
   f. D Lot - Metered parking, 2-hour limit (should it increase to 3.5 hours?)
   g. Permit rates did not increase during this academic year. Permit rate increases have to be approved by the Administration and likely will increase overall in general in the coming years
   h. Good behavior incentives – P&T Director wants to reward good behavior; this is a concept that has yet to be rolled out
   i. Gated parking – not on the table anymore
   j. Executive Lots – those who use Exec. Lots should see an increase in fee

k. Data collection from License scanners versus tags stickers, etc (see attached report—90-day retention of data)
l. Student Activism
    1. AI “Hacking”
    2. Phony Parking Ticket/Survey

Parking & Transportation Data Retention Report

Currently, all LPR read and hit settings are configured for a 90-day retention period before they are deleted. A change in the retention period would require that either Joel Mazeika, John Connelly, or Derek Ridings be contacted to make the change, with confirmation from Joel Mazeika or John Connelly. A "read" in the LPR software is defined as every license plate that the LPR cameras detect during a patrol car's route, or that pass by the camera located in front of the Welcome Center. A "hit" is any read that is flagged for either a parking violation, or appears in a Parking and Transportation defined list.

Data recorded in a read are as follows:

- Plate number (including any letters)
- Plate state
- Speed and heading of the patrol car at the time of the read
- Latitude and longitude of where the camera recorded the read
- Timestamp
- Application specific identification of:
    - Patrol unit and camera unit that recorded the read
    - The parking lot the read was recorded in
    - Reference to license plate image
- License plate image

Data recorded in a hit are as follows:

- Timestamp
- Reference ID for the associated read
- Application specific identification of:
    - The associated rule that the plate was flagged for
    - Reference to license plate image
- License plate image
- Whether the hit was accepted or rejected

All data for hits and reads, with the exception of license plate images, are stored on the Genetec database server within ITS, separate from the server which hosts the application. License plate images are encrypted separately and stored on the application server, with access only possible through the Genetec software itself.

Data for parking permits are received from T2 and stored on the application server. Each entry includes:

- Lot ID
- Plate state
- Plate number
- T2 parking permit number

Anytime an update or maintenance is performed on the application or database server, it is done so through an ITS representative with login credentials to that server.

RIT

Faculty Governance Subcommittee Report

Long Range Planning and Environment Committee

Subcommittee on Parking

Qing Miao, dt ogilvie, Michael Skyer

Charge

Review current parking policies and processes

i. the number of reserved spaces sold in relationship to available spaces
ii. EVehicles
iii. Construction implications
iv. Consider moving spaces for motorcycles to unreserved slots
v. New fine policies (such as what is the impact on low income students)
vi. Non-reserved space availability
vii. Handicapped parking

1.

The number of reserved spaces sold in relationship to available spaces

- 20% of parking spaces are “reserved” this year (1895 spaces)
- goal to decrease the number of reserved spaces & increase the number of general spaces

2.

number of eVehicles spaces & number of eVehicles

- currently no way to track all Electric Vehicles on campus.
- 28 spaces with charging station access.
- See report for locations

3.

Implications of construction on parking spaces

- New buildings but not new parking

4.

number of spaces for motorcycles

- currently 17 spaces designated for motorcycles

5.

New fine policies & their impact on low income students

- staggered citation fees: fines increase by $5 per citation after 1st citation
- no way to know impact on low income students

6.

number of non-reserved spaces

- 47% of parking spaces are designated as "general" (4544 spaces)
- Set to increase next year based on usage

7.

number of handicapped spaces

- currently 310 handicapped parking spaces on campus.
- B and J lots will see increased HC parking next year
- Goals for 2019-2020 include lots L, S, R for increased HC parking

8.

More information

- Paid parking is here to stay but *not* a money-making operation”
- Increase of Flexible Options e,g,, shuttle services
- A Special Events policy for daytime events
- Social-Media based Parking Meter App

More information

- Park Mobile for short term parking
- D Lot - Metered parking, 2-hour limit
- Possible good behavior incentives
- Executive parking increase in fee
- License scanner data has a 90-day retention