



TO: Mayor and Council Members
FROM: Council Member McCarthy
COPY: City Council and City Clerk
SUBJECT: Resolution – Authorizing the Use of Council Contingency Funds for a Purple Air Sensors Pilot Project – December 18, 2018
DATE: December 11, 2018

SUMMARY:

Resolution authorizing the use of up to \$15,000 of City Council Contingency Funds for the purpose of partnering with the Puget Sound Clean Air Agency (PSCAA) to purchase air sensors and create a two-year pilot program in order to educate and engage the public in air quality monitoring, to be evaluated thereafter; and directing the City Manager to negotiate and execute an agreement with PSCAA outlining the scope of work and deliverables for the funding to include consultation regarding the most optimal locations for pollution detection, to identify members of the community to site sensors, and to provide public education regarding air quality and the use of air sensors.

COUNCIL SPONSORS:

Mayor Woodards, Council Members McCarthy and Mello.

STRATEGIC POLICY PRIORITY:

The use of the City Council Contingency Funds to work with PSCAA to purchase air sensors will align with the following strategic policy priorities:

- Strengthen and support a safe city with healthy residents.
- Ensure all Tacoma residents are valued and have access to resources to meet their needs.
- Foster a vibrant and diverse economy with good jobs for all Tacoma Residents.
- Encourage thriving residents with abundant opportunities for life-long learning.
- Cultivate a vibrant cultural sector that fosters a creative, cohesive community.
- Assure outstanding stewardship of the natural and built environment.
- Encourage and promote an efficient and effective government, which is fiscally sustainable and guided by engaged residents.

BACKGROUND:

On November 13, 2009, EPA formally designated part of Tacoma (the Wapato Hills-Puyallup River Valley area) as ‘nonattainment’, meaning that the air quality does not meet (or "attain") federal health standards. Air quality in our community is influenced by our topography and the shape of our land, meteorology and weather patterns, and the sources of pollution located in our community. Industry, cars, trucks and ships emit fine particle pollution, but the biggest source of our wintertime pollution is wood smoke. Pollution from wood smoke reaches unhealthy levels on cold, clear winter days when air is trapped close to the land ("inversion" conditions) and there is little wind to blow the smoke away. Poor air quality affects everyone, but children, the elderly, and people with existing respiratory or cardiac health problems are especially at risk. The very tiny size of fine particle pollution allows it to be inhaled deeply in the lungs and even cross into the bloodstream, increasing the potential for health risks. Thanks to the efforts of Tacoma and Pierce County residents – complying with air quality burn bans and participating in a program to remove 5,000 old polluting wood stoves – air quality has significantly improved and EPA returned the area to ‘attainment’ status in 2015.



Monitoring air quality is essential to understanding and addressing air quality, and the Tacoma airshed is one of the most studied airsheds in the State. While robust air monitoring facilities have historically been expensive to buy, site and manage, new advances in technology and market conditions have yielded lower cost air sensors suitable for residential consumers to purchase and install. Currently, the PSCAA is piloting the deployment of ‘PurpleAir’ air sensors in a short-term North Kitsap winter study. In addition, the PSCAA is considering a future air sensor residential loan program, and independently, the NE Tacoma neighborhood council has purchased air sensors to better understand air quality in the neighborhood. While these sensors primarily serve educational purposes, they can also provide reliable data for understanding air quality throughout our community. Once obtained, the information collected by the air sensors is shared and mapped with the ‘Purple Air’ website and may be utilized by the PSCAA to obtain additional information regarding air quality in a variety of locations.

ISSUE:

While the City of Tacoma is not specifically responsible for managing local air quality, the City has a duty to better understand and improve community health. Further, community interest in air quality has grown, particularly as it relates to the impacts of industrial uses on the air quality in abutting neighborhoods. The timing is appropriate for the City to participate in helping to gather more information about air quality throughout the City. A relatively small investment in PurpleAir sensors will provide our community with more information about our air quality and improve our ability to further understand and positively impact air quality for all Tacoma residents. Community confidence in air quality and our ability to address air quality will be improved by gathering more information and the data collected will help better inform our community about the condition of our air. Installation and maintenance costs are included in the budget request.

ALTERNATIVES:

The Council could take no action; the Council could seek to fund a different air monitoring device; and the Council could seek out a different partnership for administering this pilot program.

RECOMMENDATION:

City Council approve a resolution to use up to \$15,000 of Council Contingency Funding for costs associated with partnering with the PSCAA to administer a two-year pilot program in order to educate and engage the public in air quality monitoring.

FISCAL IMPACT:

EXPENDITURES:

FUND NUMBER & FUND NAME *	COST OBJECT (CC/WBS/ORDER)	COST ELEMENT	TOTAL AMOUNT
1030 Council Contingency Fund	660000	5310100	\$15,000
TOTAL			\$15,000

* General Fund: Include Department



REVENUES:

FUNDING SOURCE	COST OBJECT (CC/WBS/ORDER)	COST ELEMENT	TOTAL AMOUNT
1030 Council Contingency Fund	660000	6311010	\$15,000
TOTAL			\$15,000

FISCAL IMPACT TO CURRENT BIENNIAL BUDGET: \$15,000

ARE THE EXPENDITURES AND REVENUES PLANNED AND BUDGETED? Yes

IF EXPENSE IS NOT BUDGETED, PLEASE EXPLAIN HOW THEY ARE TO BE COVERED. N/A