

PLANNING AND ECONOMIC DEVELOPMENT MEETING

April 1, 2020

8:30 a.m.

WebEx Remote Meeting

Council Member Francoise Bergan, Chair
Council Member Crystal Murillo, Vice Chair
Council Member Allison Hiltz, Member

Be a great place to locate, expand and operate a business and provide for well-planned growth and development.

1. Approval of March 11 draft Minutes - Council Member Bergan 8:30 a.m.
2. Evaluating the Public Health Impact of O&G Emissions - Dr. McMullin 8:35 a.m.
3. Update on Business Assistance during COVID-19 - Andrea Amonick 8:55 a.m.
4. Miscellaneous Matters for Consideration - Council Member Bergan 9:25 a.m.
 - Aurora Economic Development Council
 - Havana Business Improvement District
 - Aurora Chamber of Commerce
 - Planning Commission
 - Oil and Gas Committee
5. Confirm Next Meeting - Council Member Bergan 9:35 a.m.
May 13, 2020

**PLANNING AND ECONOMIC DEVELOPMENT (PED)
POLICY COMMITTEE MEETING**

March 11, 2020

Members Present: Councilmember Francoise Bergan, Chair; Councilmember Crystal Murillo, Vice Chair; Councilmember Allison Hiltz

Others Present: Jason Batchelor, George Adams, Bob Oliva, Vinessa Irvin, Dan Money, Scott Berg, Tod Kuntzelman, Mindy Parnes, Brandon Cammarata, Mac Callison, Huiliang Liu, Jose Rodriguez, Mark Smith, Victor Rachel, Heather Lamboy, Sara Wile, Andrea Barnes, Ryan Loomis, Julianna Berry, Liz Fuselier, Karen Hancock, Mark Topping, Mark Withiewicz, Dennis Lyon, Gayle Jetchick, Rusty Deane, Julie Patterson, Jeffrey Moore, Bruce Dalton, Bob Gaiser, Margee Sobey, Brad Pierce, Stephenie Baca

APPROVAL OF MINUTES

February 12, 2020 minutes were approved.

STATUS OF 2019 PED AGENDA ITEMS

Summary of Issue and Discussion:

Planning & Development Services Director George gave an overview of all the 2019 PED agenda items that were heard last year and noted that most of the items were informational items. He focused on the Northeast Aurora Market & Zoning Analysis – Final Draft Recommendations item that was presented in February 2019 that included the EPS study that was conducted for that area. He shared that a market analysis study was conducted to address zoning concerns about bringing more economic activity to the area. The findings showed there was an excess of commercial zoning and property in the area and recommended to have strategic focus rather than have such a broad area zoned as commercial. The 64th Avenue Multimodal Study resulted as a follow-up of the market and zoning analysis.

Other 2019 agenda items were summarized to familiarize the committee of the last year's discussed items.

Outcome: This item was for informational purposes only

Follow-up Action: No follow-up action required.

64TH AVENUE MULTIMODAL STUDY UPDATE

Summary of Issue and Discussion:

Mr. Adams presented the item giving history, update and progress of the design study. The departments of Planning, Public Works, PROS, and Consultant David Evans and Associates were all involved in this study.

Project background:

- Area was designated as Regional Activity Center in 2009 Comprehensive Plan and Urban District in the 2018 Comprehensive Plan now called Aurora Places.
- NE Aurora Zoning & Market Analysis conducted by EPS
 - Begins in April 2018
 - Preliminary findings were presented to PED in September 2018
 - Shared the preliminary findings with stakeholders in February 2019
- March 2019 the NE Aurora Development Coordination Meeting lead up to discussions that were conducted at ICSC for:
 - Future development to NE aurora could increase size of Aurora by 1/3 (A City within a City)
 - Potential significant future sales tax revenue

- The follow-up of the EPS study set efforts to focus on identifying 64th Avenue, E-470 to Himalaya
 - 64th Avenue as a destination placemaking and layout conceptual roadway sections
- July 2019 the 64th Avenue Study was initiated

The project goals were to:

- Leverage the success of Gaylord of the Rockies to create a unique place with associated economic benefits
- Modify roadway section to a more urban “main street” design
- Maximize re-use of existing constructed roadway and associated infrastructure elements
- Accommodate all transportation modes and their relationship to placemaking
- Ensure stakeholder input, coordination and support

Project processes:

- Study began in July 2019
 - Consultant reviewed the study area context and existing conditions analysis
 - Consultant conducted one-on-one interviews with stakeholders in the area
- First Stakeholder Workshop held August 2019
 - Existing conditions
 - Preliminary traffic analysis
 - Discuss vision for the area as; urban design and multimodal transportation
 - Conceptual roadway sections
- Section Stakeholder Workshop held in September 2019
 - Proposed 4-lanes concept and intersection analysis for 64th Avenue
 - Review of the draft vision
 - Stakeholder discussion
- Individual meetings were held as needed in December 2019
- February 5, 2020 letter received from 64th Avenue Stakeholder’s Coalition
- February 24, 2020 meeting held with Painted Prairie stakeholders
- March 11, 2020 presentation to PED Committee

The existing and planned roadway network, urban design framework and the initial proposed cross-section were shared.

The stakeholder feedback highlights:

- Desire to created unique space / place across from Gaylord of the Rockies by multiple landowners and stakeholders
- Improvements need to be mutually beneficial
- Importance of moving traffic along 64th / convenient access from E-470 and DEN
- Timing is critical / Need clear direction from the city regarding 64th Avenue cross-section

Additional Stakeholder Input:

- There was a consensus letter from 64th Avenue Stakeholders Coalition (RIDA Highpoint Land, LLC; Painted Prairie Owner, LLC; and Highpoint, LLC)
 - No delay in processing development applications
 - Retain existing roadway improvements north of the centerline
 - No additional easement or right-of-way
 - Details of what stakeholders thought would be an acceptable design:
 - Four land section with on-street parking
 - Landscape bulb outs and pedestrian refuge bulb outs at intersections

- Modifications to northern parking lane at city's expense
- No enhanced design standards

Q: Councilmember Bergan asked if plans are able to be approved quickly as requested by the stakeholders?

A: Plans will be processed according published schedules. The FDP that was originally submitted is in the final stage of review and a separate master plan submission is required for the town center and is being amended to fit the location's infrastructure and design phase.

Outcome: This item was for informational purposes only.

Follow-up Action: No follow-up action required.

DEVELOPMENT REVIEW STAFFING REQUEST

Summary of Issue and Discussion:

Manager Office of Development Assistant Vinessa present the item and mentioned that management is requesting the activation of three (3) of the designated over-hire FTE positions to meet the workload demands in the Public Works – Engineering Division.

She said that although the workload statistics in most development review divisions have continued to increase and remain above historical averages, the increases being experienced in PW Engineering have been significant. The civil engineering review workload saw an increase of approximately 70% over 2018. Based on data from January and February of this year, PW Engineering is on pace to exceed the number of civil plan approvals for the 1st quarter of 2020 when compared to the 1st quarter of 2019. As a result, their ability to meet the established performance goals has been affected.

All of the measures listed in the policy to adjust for additional workload have been implemented with the exception of the 3rd party consultant. This option is being explored, but thus far has not been implemented. The city has reached out to several firms with the expertise to assist, however, because of the increased activity being experienced throughout the industry, none of the consultants contacted have the capacity to take on the additional work.

She highlighted that the history of the Development Review Fund (DRF) was created to account for all the revenues and expenditures of the city's development review activities. City staff worked closely with the development community to establish timeframes and set fees commensurate with costs to review and approve plans and conduct inspections for the projects being developed within the timeframes allotted.

A framework for managing development review staffing levels relative to the economy was previously established. The framework outlines criteria, guidelines and process for adding or reducing staffing relative to development activity, economic environment and revenue shifts within the fund.

The current policy for managing staffing in the Development Review Fund relative to the economy was adopted in the 2016. This policy is summarized below:

The method uses the historical average workload and the relationship to the optimum workload that allows staff to meet the performance measurement goals that have been established for each department. Staff will review development activity, workload, performance statistics and fund balance on a quarterly basis. If activity levels have consistently increased above the historic average, then the following measures will be taken (in no particular order):

- Overtime will be instituted
- Supervisors will conduct plan review and inspection duties
- Some services may be provided by commissioning of a 3rd party consultant on a temporary basis
- Prioritizing workload to meet performance measures for services that directly impact customers

These measures should be sufficient to withstand an increase for a short time. If the increase is sustained, then process for activation of the over-hire FTE position should begin.

There were a total of 15 over-hire positions authorized but unfunded within the Development Review Fund. The process for activation of these positions is to notify the Planning and Economic Development Council Policy Committee with justification for activating positions and then include in the next budget supplemental process. The policy further outlines that the minimum fund balance is to be maintained at \$10 million to sustain staffing level through a downturn in development activity. This fund balance requirement was revised last year to account for the increase in staffing levels since its adoption in 2016. Thus far, ten (10) of the 15 over-hire positions have been activated.

Q: Chair Bergan asked if temporary services to find Engineers would be a possibility and if the city is making the job salary competitive.

A: Victor Rachel said that finding high-level positions through temporary agencies was highly unlikely to be able to attract experienced Engineers and that the job is posted on several different job sites with competitive pay. Mr. Batchelor said that if there are no applicants then Human Resources would get involved to review and make adjustments to the overall position criteria.

Q: Ms. Irvin asked if the committee agreed to activate three over-hire positions within the Development Review Fund.

A: The committee was in favor of activating three additional positions within the Development Review Fund.

Outcome: The request for three (3) over-hire positions was approved by the committee.

Follow-up Action: The item will move forward to study session.

CONSTRUCTION EDUCATION FOUNDATION

Summary of Issue and Discussion:

Ms. Irving presented and informed the committee that the HBA met with Building Official Scott Berg on the subject of bring forward High School Skilled Trades Training program and the importance that construction shop return to schools. The program consists of careers in construction which is training high school students to meet the high demand to skilled trades jobs and careers.

The idea is to collect \$25.00 from each building permit that will be added to the permit fee that is submitted as a donated sum that would assist this program. A list of participating schools in the Metro Denver and Southern Colorado areas was mentioned. In Aurora, Cherry Creek Innovation Campus and Vista Peak Preparatory were both listed.

Q: The committee asked for follow-up information of how to move forward and of how schools are selected for the program's implementation.

A: Ms. Irvin said she could get additional information regarding specifics on the program and would pass it on to committee members via email. The committee was in favor of moving forward with implementing the program.

Outcome: This item was for informational purposes only.

Follow-up Action: No follow-up action required.

MISCELLANEOUS MATTERS

Aurora Economic Development Council Update (Yuriy Gorlov):

Absent

Havana Business Improvement District (Chance Hourichi):

Absent

Aurora Chamber of Commerce Update (Kevin Hougen):

Absent

Planning Commission Update (Dennis Lyon):

- Planning Commissioners attended and educational training from the Rocky Mountain Land Use Institute which they found very valuable.
- One item to be heard of interest was an annexation initial zoning on 6th Avenue and Picadilly – Colorado Christian Fellowship Church and other mixed-use development.
- Two vacancies are needing to be filled and it is about a 40 hour per month commitment involving site visits, meetings, study session attendance, review of amendments and Planning documents to make educational decisions, etc.

Oil & Gas Advisory Committee Update (Brad Pierce):

- Jeffrey Moore was introduced as filling the position of the Manager of Oil and Gas Division, will serve as the local government designee and will also attend all Oil and Gas Advisory Committee meetings.
- The 1st quarter report is being prepared and will be presented at the next meeting.

It was announced that the Planning and Development Services Department has reorganized to add a Comprehensive Division to the department. Mindy Parnes will take over as the Manager of that division and Brandon Cammarata will fill the position of Manager of the Planning Division.

Approved: _____
Francoise Bergan, PED Committee Chair

Next meeting date: April 11, 2020 at 8:30 a.m. Webex meeting



Planning and Economic Development Policy Committee Agenda Item Commentary

Item Title: Evaluating the Public Health Impact of Oil and Gas Emissions
Item Initiator: Jeffrey Moore
Staff Source: Jeffrey Moore Manager Oil & Gas Division
Deputy City Manager Signature:
Outside Speaker: Dr. Tami McMullin
Council Goal: 5.1: Support an environment conducive to business development and expansion

ACTIONS(S) PROPOSED *(Check all appropriate actions)*

- Approve Item and Move Forward to Study Session
- Approve Item and Move Forward to Regular Meeting
- Information Only

HISTORY *(Dates reviewed by City council, Policy Committees, Boards and Commissions, or Staff. Summarize pertinent comments. ATTACH MINUTES OF COUNCIL MEETINGS, POLICY COMMITTEES AND BOARDS AND COMMISSIONS.)*

Dr. McMullin presented this information to the Oil & Gas Advisory Committee at their meeting on January 15, 2020. Council Member Bergan indicated she would like to bring this to the April PED meeting.

ITEM SUMMARY *(Brief description of item, discussion, key points, recommendations, etc.)*

An Overview of Recent CDPHE and Operator Studies.

QUESTIONS FOR Committee

For information only.

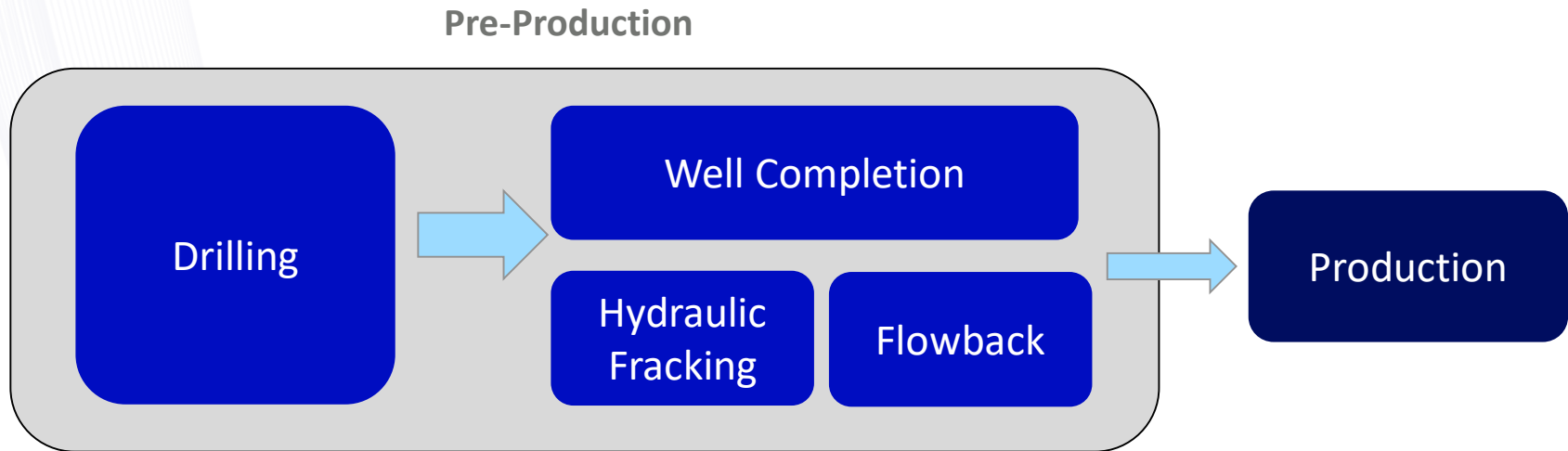
EXHIBITS ATTACHED:

Oil and Gas Emissions to Volatile Organic Compounds and Local Public Health Impacts – Connecting the dots

An Overview of Recent Studies

*Tami McMullin, Ph.D.
Senior Toxicologist*

OIL AND GAS OPERATIONS



- Different phases of development
- Different durations of activities
- Multiple chemicals
 - Ancillary Chemicals used for pre-production
 - Naturally occurring hydrocarbons
- Site specific operations

SAFE OR NOT SAFE?...THAT IS THE QUESTION

Do OG extraction activities emit hazardous chemicals that result in exposures to that may harm the health of people living nearby?



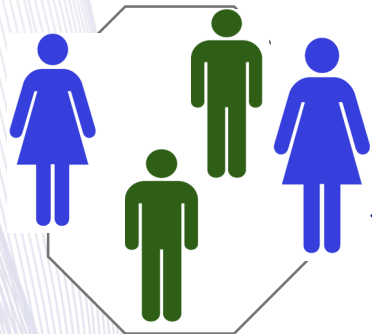
NOT
SAFE?

SAFE?

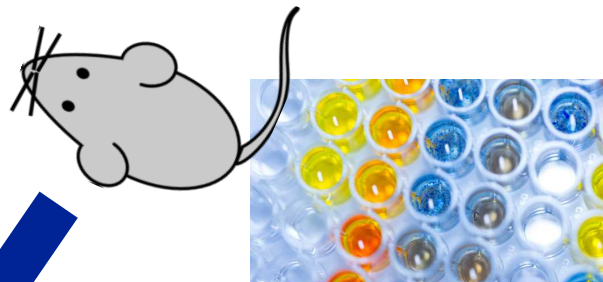


HOW DO SCIENTISTS DETERMINE SAFE?

Epidemiology
(Human studies)



Lab Studies

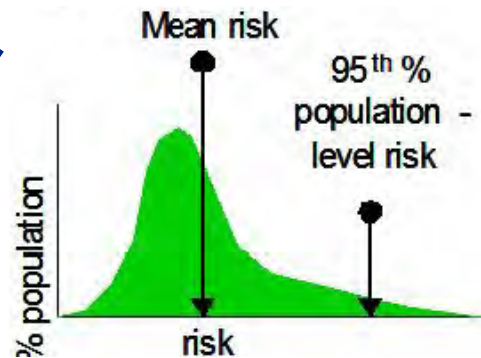


Environmental Data



Health
Risks

Computer Model
Estimations



EPA/100/R-14/004 July 2014



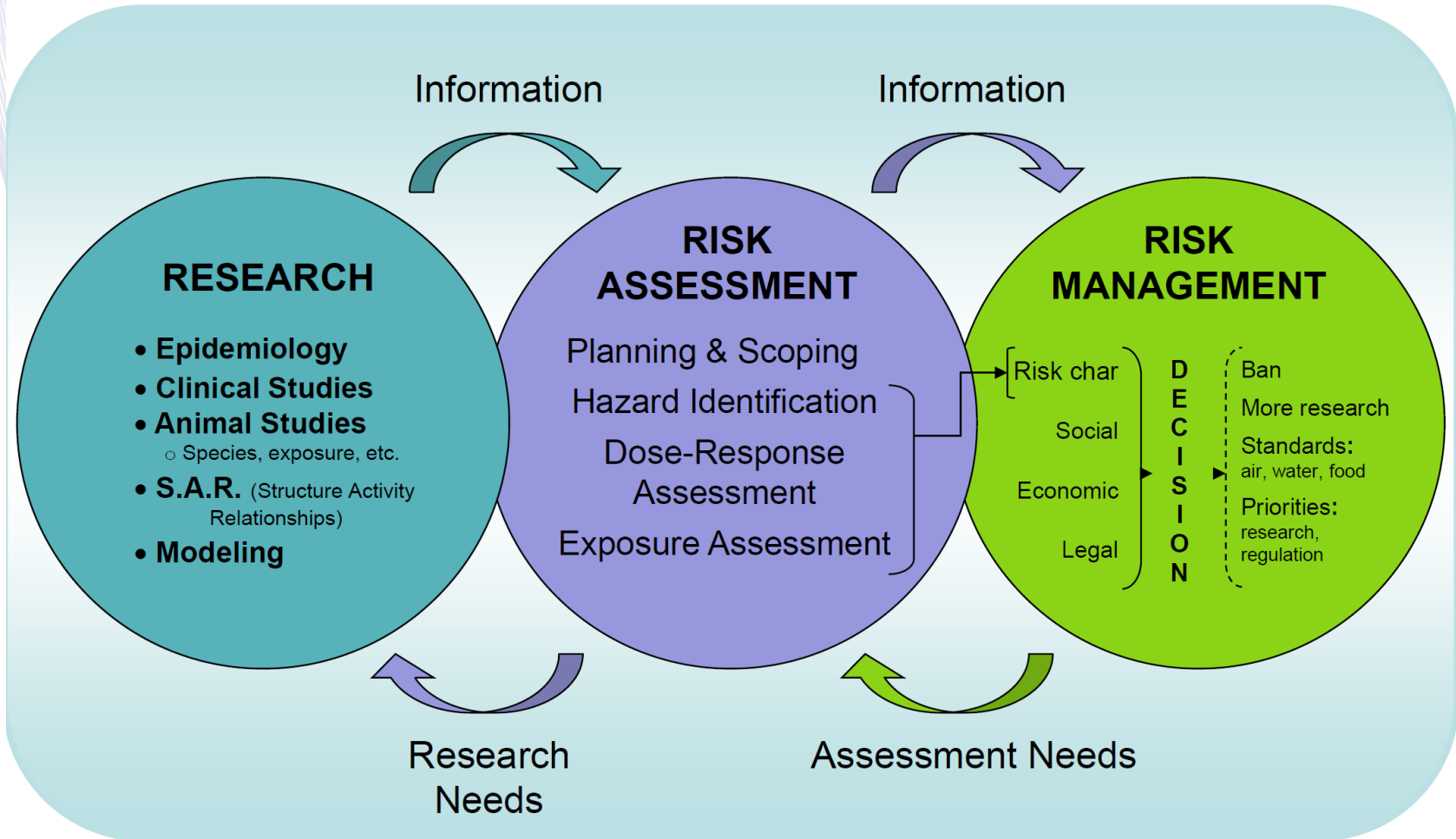
WHAT IS RISK ASSESSMENT?

Risk Assessment

Scientific screening tool to determine the increased chance that an individual's health may be affected as a result of exposure to environmental chemicals

- ✓ Uses Environmental Data
- ✓ not an exact science
- ✓ Iterative process (worst-case to realistic)
- ✓ cannot be used to make realistic predictions of biological effects

WHAT IS A RISK ASSESSMENT INTENDED TO DO?



- Risk assessment results are intended to be used to inform risk management decisions
- Results do NOT inform whether a person has health effects because of an exposure

HOW IS HEALTH RISK ESTIMATED?

$$\mathbf{RISK} = \frac{\mathbf{EXPOSURE}}{\mathbf{HEALTH RISK SCREENING VALUE}}$$

*pertains to non-cancer risk

- Compares the exposure data to a health risk screening value (the toxicity information for the specific chemical)
- Estimates the likelihood that adverse effects will occur in people who are exposed (US EPA)
- Includes several assumptions and uncertainties

ESTIMATING HEALTH RISK

$$\mathbf{RISK^*} = \frac{\mathbf{EXPOSURE}}{\mathbf{HEALTH RISK SCREENING VALUE}}$$

*for simplification, example pertains to non-cancer risk

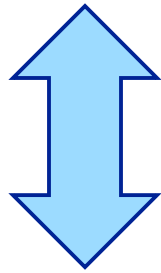
HOW ARE EXPOSURES ESTIMATED?



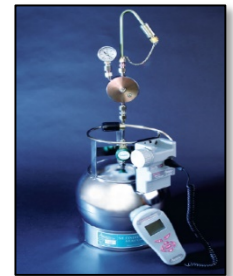
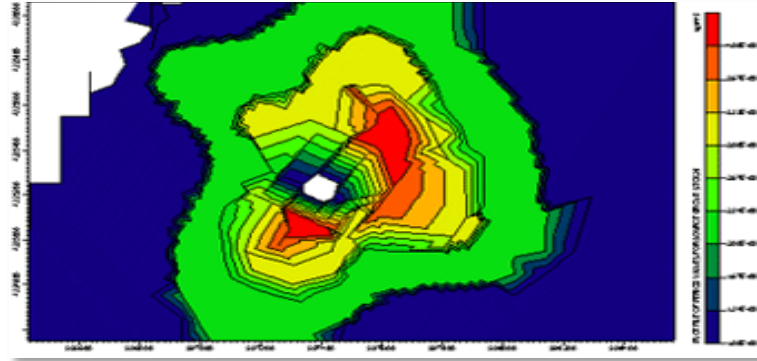
- How much of the hazardous substance are people exposed to during a specific time period?
- Emissions \neq Exposure
- Estimated indirectly through measuring concentrations in the environment

WHAT METHODS ESTIMATE EXPOSURE?

**PREDICTIVE
MODEL**



**AIR
MEASUREMENTS**



ESTIMATING HEALTH RISK

$$\mathbf{RISK^*} = \frac{\mathbf{EXPOSURE}}{\mathbf{HEALTH RISK SCREENING VALUE}}$$

*for simplification, example pertains to non-cancer risk

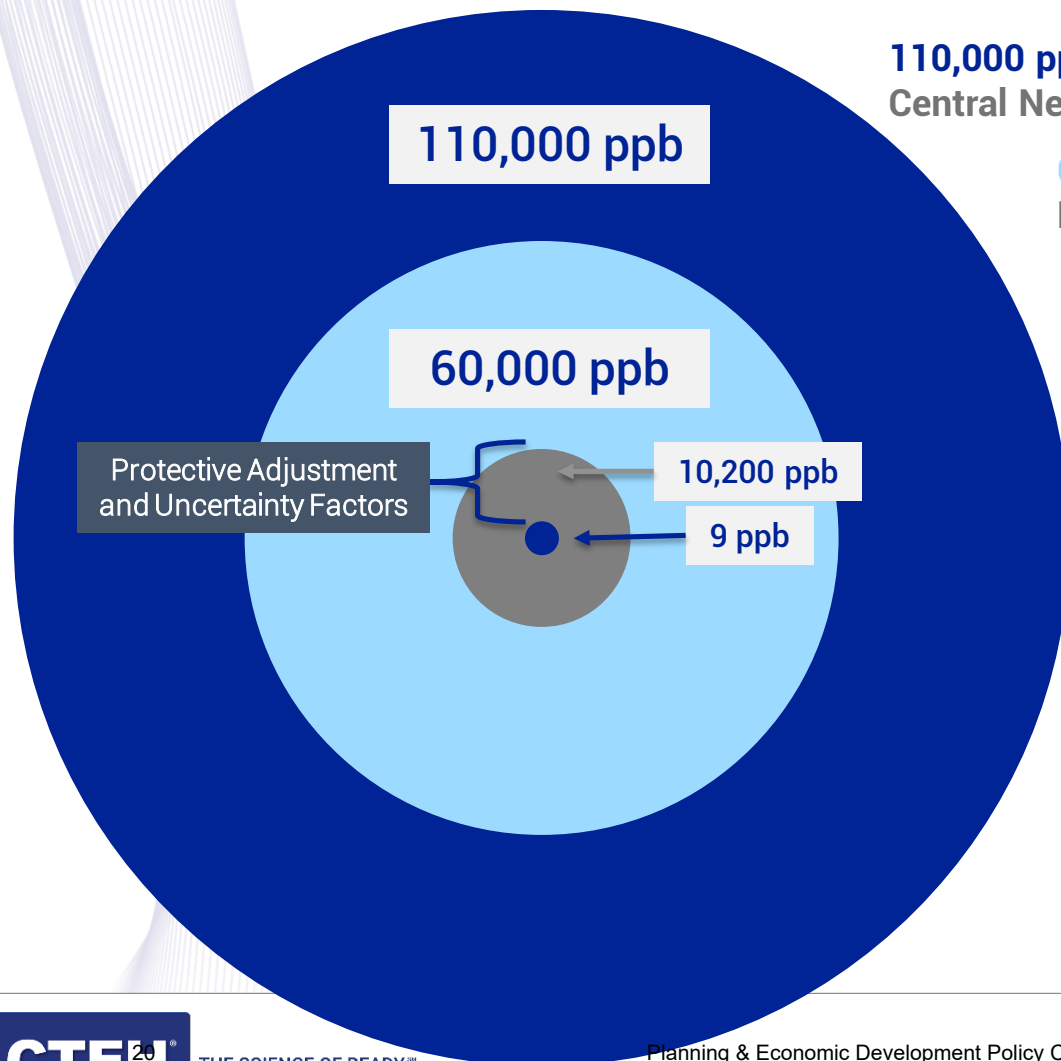
HEALTH RISK SCREENING VALUES

“All substances are poisons: the right dose differentiates a poison from a remedy” Paracelsus 1493-1541

- An estimate of the amount of a chemical a person can breathe each day without a measurable risk to health
 - Over a specified period of exposure
 - Including sensitive subpopulations
- Built in margin of safety to ensure public health protection
- “If someone is exposed to an amount above the risk screening level, it does not mean that health problems will happen...it means that they may want to look more closely at a site. ” *Agency for Toxic Substances and Disease Registry*

RISK SCREENING VALUES ≠ HEALTH EFFECTS

BENZENE



110,000 ppb

Central Nervous System Effects (headaches) - Humans^d

60,000 ppb

Nasal Irritation - Humans^c

10,200 ppb

Lowest acute observed adverse
Effect level (mice)^b

9 ppb

Acute Health Guideline Value^a

Acute = 1-14 days continuous exposure (ATSDR)

^a Agency for Toxic Substances and Disease Registry (ATSDR) (2007). Toxicological Profile for Benzene

^b Rozen et al. (1984)

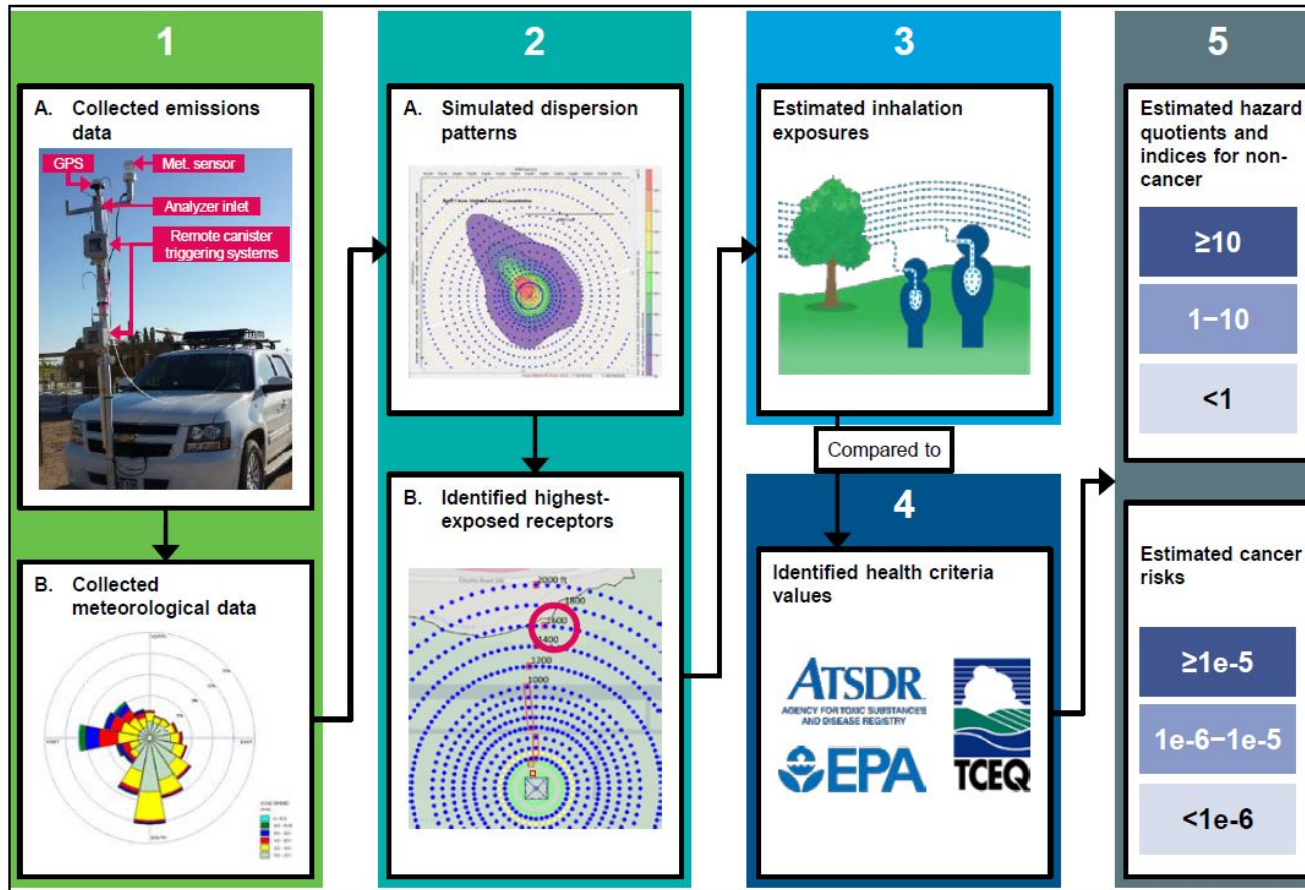
^c Midzenski et al. (1992).

^d Wells and Nelder (1991).

RECENT AIR STUDIES EVALUATING EXPOSURES AND RISK

- CDPHE Studies
 - 2017 –Review of Existing Air Data (CDPHE, 2017; McMullin et al, 2018) <https://drive.google.com/file/d/0B0tmPQ67k3NVVFc1TFg1eDhMMjQ/view>
<https://www.ncbi.nlm.nih.gov/pubmed/30012994>
 - 2019 - Modeling Study (Carr et al, 2019)
https://drive.google.com/file/d/1pO41DJMXw9sD1NjR_OKyBJP5NCb-AO0I/view
<https://www.ncbi.nlm.nih.gov/pubmed/31621516>
 - 2017 – 2020 Mobile Laboratory Community Investigations
<https://www.colorado.gov/pacific/cdphe/oil-and-gas-community-investigations>
- CTEH Industry Specific Studies

CDPHE MODELING STUDY DESIGN



Notes: The methods for each step of the figure are more fully described as noted: 1A = Section 2.3; 1B = Section 2.5; 2A = Section 2; 2B = Sections 2.7.3 and 2.8; 3 = Section 3; 4 = Section 4; 5 = Section 5. Figure depicting collection of emissions data is from Figure 2.3 of (CSU, 2016a).

Figure 1-1. Illustration of the Steps in the Risk Assessment

from *Final Report: Human Health Risk Assessment for Oil & Gas Operations in Colorado* (Carr et al, 2019)

WHAT DID THE MODELING SHOW?

- Long-term health effects
 - Average levels of volatile organic compounds (VOCs) are unlikely to exceed screening levels people living within 2000 feet from a wellpad
- Short term health effects
 - Infrequent, worst-case scenario for the highest exposed person
 - ❖ no exceedances for most of the VOCs
 - ❖ benzene primary hazard
 - ❖ highest during flowback, lowest during production
 - ❖ Up to 2000 feet
- Did NOT show correlation of symptoms with the types of risks estimated by this model

WHAT DO THE RESULTS MEAN?

- The highly variable emissions over very short periods of time need to be studied more closely using site specific monitoring to measure actual, rather than modeled, chemical exposures
- “Our identification of these estimated exceedances of acute health guidelines is highly conservative...” Carr et al (2019)
 - Generic nature of the emissions, model assumptions and time frame of data collection
 - Relevance to current best management practices?
- “Additional measurements could help to refine the risk estimates in these assessments and/or allow for assessments that are more site-specific.” Carr et al (2019)

STATE COMMUNITY EXPOSURE INVESTIGATIONS



- Mobile lab generally located between OG wellpad and community.
- Continuous ambient air sampling - hourly measurements for 24 hours/day overall several days to weeks.
- A single one hour measurement of benzene out of thousands of hours of sampling slightly exceeded its health guideline value.

REVIEWS OF EXPOSURE AND RISK

- Extensive number of VOCs measured
- Air concentrations of VOCs are not reaching levels that would pose a health concern
- Small sub-set of high priority VOCs, such as benzene
- Flowback > Drilling > Hydraulic Fracturing
- Acute health risks from intermittent, infrequent peak air concentrations not well characterized

CTEH OPERATOR WELLPAD EMISSIONS STUDIES

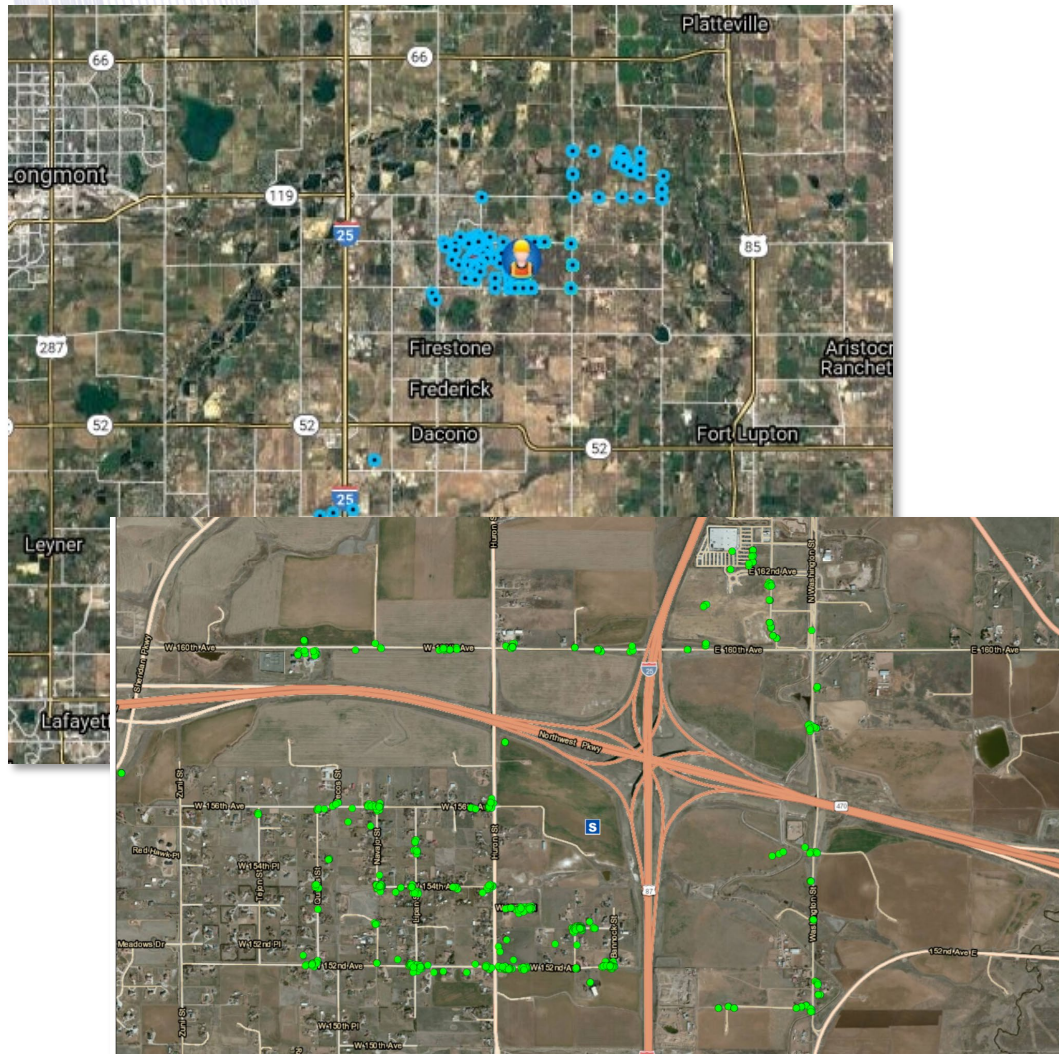
What we did	What it tells us	How it was done	What we measured
Continuous, real-time monitoring	Immediate health impacts- “peak” emissions linked to exposures	People “roaming” on pad and off pad <ul style="list-style-type: none"> • Community locations downwind of pad • Visual and odor observations • 12-24 hours/day 	<ul style="list-style-type: none"> • Total Volatile Organic Compounds (VOCs) • Benzene • Hydrogen sulfide • Particulate matter
Analytical Sampling	Are levels of individual VOCs exceeding health guideline values	<ul style="list-style-type: none"> • 24 hour collection of air • Multiple locations <ul style="list-style-type: none"> • Perimeter of Wellpad • Communities 	High priority OG related VOCs

DATA COLLECTION



- 11 wellpads
- Range of BMPs
- > 100 days of sampling
- Different seasons
- Different basins
- 24,000 real-time measurements
- 650 analytical samples

REAL-TIME MEASUREMENT RESULTS

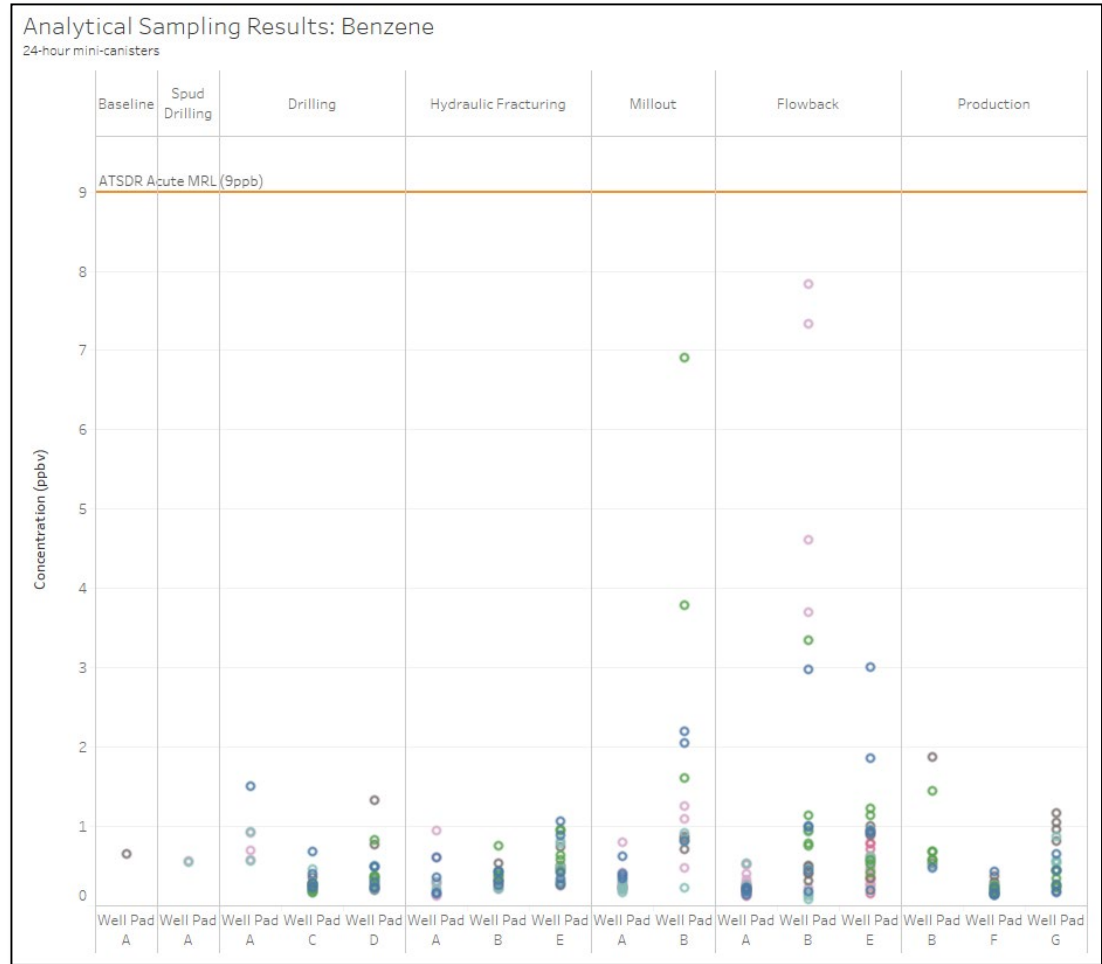


- Capture peaks on the pad and downwind in community
- >25,000 real-time community measurements
- 98% of VOCs were non-detect (<1 ppb)
- No benzene detections

ANALYTICAL RESULTS

- Perimeter of Wellpad and in Communities
- 24 hour samples
- All phases of development

No exceedances of CDPHE short term health guideline values



KEY TAKE HOMES

- Risk assessments are scientific screening tools intended to inform risk management decisions to control risk, **not** to determine if someone is ill or will get ill
- If estimated risks are below screening levels, no further analysis required. Exceedances trigger looking at assumptions more closely and collecting measured data
- Extraction Wellpad Air Studies
 - No individual VOC, including benzene, have exceeded risk screening levels for any pre-production and production phase
 - Current BMPs appear to be minimizing emissions of VOCs to levels that are not expected to harm people's health



Evaluating the Public Health Impact of
Oil and Gas Emissions

Tami McMullin, PhD
tcmullin@cteh.com
Senior Toxicologist



**Planning and Economic Development Policy Committee
Agenda Item Commentary**

Item Title: Business Services/SBDC Update
Item Initiator: Andrea Amonick, Development Services Manager
Staff Source: Andrea Amonick, Marcia McGilley and Elena Vasconez
Deputy City Manager Signature:
Outside Speaker:
Council Goal: 5.4: Improve the health of the city's small business community

ACTIONS(S) PROPOSED *(Check all appropriate actions)*

- Approve Item and Move Forward to Study Session
- Approve Item and Move Forward to Regular Meeting
- Information Only

HISTORY *(Dates reviewed by City council, Policy Committees, Boards and Commissions, or Staff. Summarize pertinent comments. ATTACH MINUTES OF COUNCIL MEETINGS, POLICY COMMITTEES AND BOARDS AND COMMISSIONS.)*

The current economic situation as a result of COVID-19 has put a lot of stress on Aurora's small businesses. On Wednesday, March 18th, the Governor of the State of Colorado requested emergency funding from the SBA for the Economic Injury Disaster Loan program (EIDL). Additionally, the Aurora-South Metro SBDC has been operating remotely providing webinars and assistance to businesses to apply for this funding as well as helping businesses to cope with the current economic situation.

ITEM SUMMARY *(Brief description of item, discussion, key points, recommendations, etc.)*

Development Services staff (Business Services/SBDC) will provide an update on programs and activities currently available to assist businesses in coping with the current economic conditions.

QUESTIONS FOR Committee

Information Only.

EXHIBITS ATTACHED:

None