Noise Review Board
Portland International Raceway
Subcommittee

Final Report & Recommendations

November 26, 2024

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PORTLAND INTERNATIONAL RACEWAY

Portland International Raceway has a long and rich history and over the years it has provided substantial entertainment and economic benefits for the City and the local community.

Portland International Raceway was built on vacant land purchased by the City of Portland from the Army Corps of Engineers in 1960. The site was the former location of the City of Vanport, which was destroyed by the 1948 Memorial Day flood. The sale stipulated that the site could only be used for recreational purposes. Racing began in 1961 with the first Rose Cup races.

The racetrack receives no funding from the City, it is entirely self-financed; paying for operating and capital expenses through revenues generated from track rental, food concessions, and advertising.

With the exception of drag racing events and a yearly automotive swap meet, PIR generally does not put on events; instead facilities are rented to various user groups, such as clubs, racing schools, and promoters of spectator racing events.

PIR is a popular venue that accommodates a wide variety of recreational and other activities, including drag racing, motocross, bicycle racing, police training, professional driving schools, and club events for car enthusiasts.

The racetrack has grown to become a major racing venue on the west coast and attracts major motor vehicle racing events such as IndyCar, and NASCAR.

PIR also holds events that directly benefit the City and local community such as the Street Survival teen driving clinics and the Portland Police training sessions.

According to Travel Portland, more than 350,000 people visit PIR each year to take part in more than 500 scheduled events.

The PIR website states that PIR *"generates an estimated 500 jobs in the area, bringing business to hotels, restaurants, the shops that cater to PIR users, from bicycle racers to car builders and generates an estimated $35 million a year to the regional economy."*

NOISE REVIEW BOARD- PORTLAND INTERNATIONAL RACEWAY SUBCOMMITTEE

Along with the recreational, entertainment and economic benefits from the racetrack comes noise associated with motor vehicle racing radiating into neighborhoods in the North Portland community. Noise is a fact of life at PIR. The facility simply cannot operate without generating noise.

PIR's race season runs from April through October. Depending on weather conditions, drag racing events can begin in mid-March. For motor vehicle racing events, the Oregon Department of Environmental Quality (DEQ) standards set decibel limits at the noise source of 105 dBA as measured at 50 feet from trackside. PIR uses 103 decibels for individual vehicle trackside monitoring. On Mondays, the decibel limit is reduced to 90 decibels.

Since its earliest years, neighbors living near the racetrack have reported that they are negatively impacted by noise from motor vehicle racing at PIR.

Noise pollution is a serious problem impacting human health. The World Health Organization (WHO) considers noise to be a leading environmental cause of health problems, second only to air pollution. Long term exposure to noise in the environment can cause a variety of health issues including impaired learning & concentration, sleep disruption, increased heart rate, cardiovascular disease, and other serious negative physical and psychological effects.

Over the past fifty years, in an attempt to identify effective methods to reduce the noise from the racetrack, the City has convened a number of task forces and hired acoustic experts to conduct noise studies in order to better understand the level of noise from motor vehicle racing events at PIR and the impact of the noise on neighbors of the racetrack.

While some noise reduction has been achieved at PIR, community members continue to report that they suffer from the negative impact of noise generated by events at the racetrack.

In November 2021, based on the continued community feedback, the Noise Review Board formed the Noise Review Board - Portland International Raceway Subcommittee (NRB-PIR Subcommittee).

The Subcommittee consisted of representatives from the Noise Review Board, Portland International Raceway management staff, "racetrack user" representatives, and representatives from the neighboring community. The Noise Control Officer, a former PIR track manager and former NRB Chair and Acoustic Engineer were appointed as subject matter expert consultants to the Subcommittee.

Noise Review Board Subcommittee members:

Noise Review Board Subcommittee Representatives:
- Mary Sipe, NRB Board Chair/Subcommittee Facilitator & Chair
- Derek Trost, NRB Member at large (resigned December 2021)
- Mike Raley, NRB Acoustic Sciences Expert (resigned March 2022)

Neighborhood Subcommittee Representatives:
- Ryan Pittel, Kenton resident, Kenton Neighborhood Association Board
- Angela Moos, Kenton resident, Kenton Neighborhood Association Board
- Marty Knowles, Kenton resident

Racetrack User/Supporter Subcommittee Representatives:
- Jason Henshaw, Friends of PIR Board of Directors/Portsmouth resident
- Charles Freeborn, PIR Driver & Hooked on Racing volunteer driving instructor

PIR Management Subcommittee Representatives:
- Ron Huegli, PIR Manager
- Nichole Gamell, PIR Business Manager

Consultants to Subcommittee:
- Paul Van Orden, Noise Control Officer
- Kerrie Standlee, Former NRB Chair & Acoustic Engineer
- Mark Wigginton, Former PIR Track Manager (resigned November, 2023)

Transparent and inclusive process:
All Noise Review Board Subcommittee meetings were public meetings and followed the Oregon Public Meetings Law.

Meetings were held by Zoom. The link to Zoom meetings was included in the meeting agendas which were posted on the Noise Review Board website in advance of each meeting.

A Public Comment period was allowed at the end of each Subcommittee meeting.

A NRB-PIR Subcommittee section was added to the Noise Review Board website where Subcommittee meeting agendas, meeting summaries and reference documents were posted for the public to access.

The Process:
To establish a framework to guide the work of the Subcommittee, a Work Plan was developed that included a Strategy, Goals & Objectives and a Task List.

The NRB-PIR Subcommittee held 21 work sessions between November 2, 2021 and November 20, 2024 working their way through the fourteen items on the Task List and gathering and reviewing City records and compiling and analyzing data.

Subcommittee meetings were suspended between the months of March and October during PIR's race season and the Noise Control Office busy summer season as it was difficult for City staff to attend meetings during those busy months. While this prolonged the Subcommittee process, the presence of PIR Management staff and Noise Control Office staff at all Subcommittee meetings was crucial.

The goal of the Subcommittee was to bring community members, racetrack users and PIR management staff together to further understand the Portland International Raceway's noise impacts to the community, and to identify productive solutions to allow all parties to co-exist in a more harmonious environment.

The Subcommittee has worked diligently to research and understand all sides of the noise issues related to PIR and presents this report and recommendations for your consideration.

Subcommittee Education – Basic Environmental Acoustics

Mike Raley, Noise Review Board and PIR Subcommittee member who holds a degree in Acoustic Engineering provided the Subcommittee with an overview of Basic Environmental Acoustics to help Subcommittee members understand:

- How sound is measured
- How sound travels
- How sound is perceived

The presentation also reviewed the factors that influence the impact of noise on health

- Exposure frequency (how often)
- Exposure duration (how long)
- Exposure intensity/level (how loud)

Subcommittee members learned about the factors affecting sound propagation such as:

- Geometrical spreading
- Atmospheric absorption
- Barriers
- Ground effects
- Trees & foliage
- Wind & temperature gradients

They learned how sound spreads out in all directions and as sound spreads, its' level at a given point decreases.

Rule of thumb:
Sound decreases by 6 decibels (dBA) for each doubling of distance.

Distance	Sound Level
50 ft	103 dBA
100 ft	97 dBA
200 ft	91 dBA
400 ft	85 dBA
800 ft	79 dBA
1600 ft	73 dBA
3200 ft	67 dBA
6400 ft	61 dBA

The speed of sound can reach 1125 ft/s or 767 mph. Delay between a noise source and a listener a mile apart is about 4.7 seconds. This would explain why on the PIR website a spike showing on the trackside sound level meter does not show a corresponding spike on the Kenton neighborhood sound level meter until a few seconds later.

Subcommittee members learned that noise is one of a number of general biological stressors and that excessive exposure to noise can be considered a health risk and may contribute to the development and aggravation of stress related conditions such as high blood pressure, coronary disease, ulcers, colitis, and migraine headaches. Growing evidence suggests a link between noise and cardiovascular problems. *(Noise Effects Handbook October 1979, Revised July 1981 Office of Noise Abatement and Control U.S. Environmental Protection Agency)*

The Subcommittee also learned that it is not just how loud the noise is but the frequency, duration and tone of the noise that contributes to negative health impacts. This is especially relevant with the nature, frequency and duration of noise form PIR,

RESEARCH & FINDINGS

NOISE COMPLAINT DATA

The subcommittee agreed that one of the first things they needed to do was to validate and establish the scope of the problem they were trying to address by gathering and analyzing noise complaint data.

Noise Control Officer, Paul Van Orden and PIR Business Manager, Nikki Gamell were asked to present reports on 2018, 2019, 2021, 2022 & 2023 noise complaints. The racetrack was shutdown most of the 2020 race season due to COVID, therefore, noise complaint data was not reported for 2020.

FINDINGS:

PIR Business Manager, Nikki Gamell reported that PIR had received 31 email complaints from three different individuals in 2021 and a total 16 telephone complaints for a total of 47 noise complaints. Ms. Gamell reported that PIR received only 2 or 3 noise complaints in 2022 & 2023.

Ms. Gamell reported that the PIR noise complaint data for 2018 & 2019 was not readily available, therefore her report to the Subcommittee included data for only 2021.

A September 2021 Willamette Week article about PIR stated that Portland Parks & Recreation reported that they received a total of 61 noise complaints during the 2018 and 2019 racing season.

Noise Complaints received by PIR

- 2018 - 30
- 2019 - 31
- 2021 – 47
- 2022 - 2
- 2023 - 2

Noise Control Officer, Paul Van Orden provided the Subcommittee with the following noise complaint data:

Online “Track-It” and email Noise Complaints received by the Noise Control Office:

- 2018 - 53
- 2019 - 33
- 2021 - 123
- 2022 - 64
- 2023 - 109
- 2024 - 53

Combined number of Noise Complaints received by PIR & the Noise Control Office:

2018 – 83
2019 – 64
2021 - 170
2022 - 66
2023 - 111
2024 - 53

The majority of noise complaints submitted to the Noise Control Office appear to come from residents in the Kenton, Arbor Lodge and Portsmouth neighborhoods.

Current and past PIR Management and "racetrack user" Subcommittee representatives expressed their belief that the majority of racetrack related noise complaints were submitted by the same three or four neighbors and that the number of complaints do not indicate that the noise from the racetrack is a significant issue.

Noise Control Officer, Paul Van Orden reported that in his 27 years with the City of Portland Noise Control Office, it has been his observation that each year there are approximately 12 to 15 new complainants. Mr. Van Orden also reported to the Subcommittee that the racetrack is the Noise Control Office largest source of complaints in the city for a single location.

- In 2021 noise complaints received by the Noise Control Office were from 29 different addresses/households.
- In 2022 noise complaints received by the Noise Control Office came from 17 different addresses/households.
- In 2023 noise complaints received by the Noise Control Office came from 25 different addresses/households. 18 of those were new complainants who had not submitted noise complaints the previous year.
- In 2024 noise complaints received by the Noise Control Office came from 26 different addresses/households. 20 of those were new complainants who had not submitted noise complaints the previous year.

This is not a new trend. Records show that as far back as 2005, a total of 35 noise complaints were received from 18 different addresses/households during June, July & August. These numbers only reflect Noise complaints submitted to the Noise Control Office and directly to PIR. They do not reflect noise complaints shared at Neighborhood Association meetings, or Noise Review Board meetings.

While noise complaints can be a good indication of the scope of impact from environmental noise, research has shown that the number of people who file complaints represent only a small fraction of the people who are actually being negatively impacted.

Mr. Van Orden told the Subcommittee that it has been his observation that people tend to stop submitting noise complaints when the issue is not resolved.

Responses to the 2006 Grove Insight Survey which was conducted as part of the 2008 Greenbusch North Portland Noise Study revealed:

- *"Most residents are unaware of the City's Noise Regulations."*
- *"If they were aware, there Is a fifty-fifty chance they would file a complaint."*
- *"Not surprisingly, very few have filed noise complaints."*
- *"Of those residents who said they were unaware of where to file a noise complaint, fewer than three in 10 said that it is likely they would if they knew how."*

Sound Pollution in the High Country-Technical Report No. 16-021
January 21, 2016 -Louis A. Zeller

"Residents who take steps to complain…represent but a small fraction of the people who are actually bothered."

Experts have quantified community response. The researchers found:

- *If 1% complained, 17% were highly annoyed*
- *If 10% complained, 43% were highly annoyed.*
- *A few complaints may show a high community-annoyance level."*

Intrusive Community Noise Complaints

Arline L. Bronzaft, Ph.D., Elizabeth Deignan, M.A., Yael Bat-Chava, Ph.D. and Nancy B. Nadler , M.E.D., M.A. | Hearing Rehabilitation Quarterly – Volume 25, Number 1 (2000)

- *… the proportion of the population that complains about noise …is a poor predictor of the prevalence of annoyance."*
- *Commonly only 5 and 10 percent of residents exposed to noise actually complain*
- *…the majority of the people affected by the noise do not complain*
- *…people with low income placed lesser value on quiet because they were more concerned with "basic needs." …It would then follow that poor people might complain less.*
- *…people stop complaining because it had done no good to do so in the past; thus, they simply suffer the pain and stop complaining.*

COMPARISON OF NOISE COMPLAINT DATA TO PIR EVENTS

An item on the Subcommittee's Task List was to do a comparison of PIR noise complaint data to the PIR Calendar of Events in order to identify which events generate the highest number of noise complaints.

The purpose of this comparison was to assist with identifying potential "event specific" noise mitigation efforts and to identify any possible event scheduling revisions that might reduce the impact to the community.

Subcommittee Community representative, Marty Knowles and Former NRB Board Chair, Acoustic Engineer and Consultant to the Subcommittee, Kerrie Standlee drafted a comparison and presented their report at the April 18, 2023 Subcommittee meeting.

FINDINGS:

The analysis found that:

- 75% of the complaints were for non-varianced events
- 25% of the complaints were for varianced events

Top ten events that generated noise complaints 2018-2019-2021-2022

Event Name	Type of Event	Complaints	Average number per year
IndyCar (Varianced)	Road	39	10
OMRRA Motorcycle	Motorcycle	27	7
Cascade Sports Car Club	Road	26	7
Pro Drive	Road	25	6
SVRA (Varianced)	Road	22	6
SCCA	Road	18	5
Road Rage Music Concert	Concert	16	4
Unknown	Unknown	14	3
Drag Race	Drag Race	12	3
Rose Cup Races	Road	12	3

Subcommittee Chair & Facilitator, Mary Sipe produced the following analysis of the 2023 & 2024 noise complaint data compared to the 2023 & 2024 PIR Events Calendar.

Top ten events that generated noise complaints 2023

Event Name	Type of Event	Complaints
NASCAR (Varianced)	Road	25
Pro Drive	Road	14
SCCA	Road	9
Cascade Sports Car Club	Road	8
IndyCar (Varianced)	Road	7
OMRRA Motorcycle	Motorcycle	7
Drag Races	Drag Race	7
Motocorsa	Motorcycle	6
SVRA (Varianced)	Road	4
Rose Cup Races (Varianced)	Road	4

Top nine events that generated noise complaints 2024

Event Name	Type of Event	Complaints
Pro Drive	Road	13
IndyCar (Varianced)	Road	11
OMRRA Motorcycle	Motorcycle	8
SCCA	Road	5
SVRA (Varianced)	Road	4
Hooked on Driving	Road	3
NASCAR (Varianced)	Road	2
Cascade Sports Car Club	Road	2
Motocorsa	Motorcycle	1

The following non-varianced events appear to consistently generate the most noise complaints:

- Pro Drive Racing School
- OMRRA Motorcycle
- Cascade Sports Car Club
- SCCA (Sports Car Club of America)

Over the past five years, Noise complaints about OMRRA Motorcycle racing, Cascade Spors Car Club races and SCCA races have consistently remained in the top four.

Pro Drive has moved from third place to first place with an average of 6 noise complaints per year between 2018 and 2022, to 14 noise complaints in 2023 & 13 noise complaints in 2024.

TITLE 18 NOISE CODE MOTOR VEHICLE RACING REGULATIONS

The Subcommittee conducted a review of Title 18 motor vehicle racing noise regulations, decibel limits and zone designations relating to PIR.

PIR is a City Park, and like all City parks, is zoned Open Space.

However, an exception was made and under Title 18 designating Portland International Raceway as an **Industrial land use zone** of source for purposes of noise code enforcement, allowing PIR to generate noise 10 decibels above what is normally allowed for Open Space zones.

From 7 AM to 10 PM, the maximum decibel limits from an **Industrial land use zone** “source” radiating to a Residential land use zone “receiver” is **65 decibels** as measured at the property line of the receiver. (Maximum decibel levels are reduced to 60 decibels during nighttime hours between 10 PM and 7 AM)

From 7 AM to 10 PM, the maximum decibel limits from an **Open Space land use zone** “source” radiating to a Residential land use zone “receiver” is **55 decibels** as measured at the property line of the receiver. (Maximum decibel levels are reduced to 50 decibels during nighttime hours between 10 PM and 7 AM)

Non-motor vehicle racing activities such as concerts and walk/run events using amplification must meet the normal Open Space Land Use **55 decibel** limit of Title 18, otherwise they must apply for a noise variance.

Title 18.10.010 Land Use Zones.

Zone Categories of **Source**	Zone Categories of **Receiver** (measured at property line)			
	Residential	Open Space	Commercial/ Mixed Use	Industrial
Residential	55	55	60	65
Open Space	**55**	55	60	65
Commercial/ Mixed Use	60	60	70	70
Industrial	**65**	65	70	75

FINDINGS

As a result of the “one off” special Industrial Land Use Zone designation for the purpose of noise code enforcement for motor vehicle racing, residents living near PIR are subjected to sound levels 10 decibels over what residents living in other residentially zoned neighborhoods near other City parks are expected to tolerate for non-varianced events.

An increase of 10 decibels represents a 10-fold increase in sound intensity and a doubling of the perceived loudness.

Note: Noise Codes such as Title 18 generally use decibel levels to limit and monitor environmental noise levels. The following statements from an article published by the American Public Health Association speaks to the limits of only using decibel levels to measure the health impacts from noise.

American Public Health Association (APHA)
Noise as a Public Health Hazard October 26, 2021

- *“Metrics and methods for evaluating the health effects of environmental noise are underdeveloped.”*

- *“Use of sound pressure levels (in decibels) as the sole measure of health impacts from noise is insufficient.”*

- *“Data on factors such as noise pattern and duration, frequency band distribution, frequency of exposure, and time of exposure that bear on human response are needed.”*

- *“…Metrics other than A-weighted decibels that account for characteristics such as frequency, tonality, and intermittency would allow decision makers to more accurately assess the harmful effects that noise may have on communities”*

TRACKSIDE DECIBEL LEVEL LIMIT

DEQ Regulation Limits

- For motor vehicle racing events, the Oregon Department of Environmental Quality (DEQ) standards set decibel limits at the noise source of 105 dBA as measured at 50 feet from trackside.

- PIR uses 103 dBA when monitoring individual vehicles for compliance.

- The DEQ, upon Legislative approval, terminated their Noise Control Program in July 1991 as an agency cost-saving measure due to reduction in General Fund support. As a result, DEQ does not monitor or enforce noise regulations or have a noise variance process.

- All monitoring, enforcement and noise variance procedures are the responsibility of the City of Portland Noise Control Office under the provisions of City’s Noise Code, Title 18.

FINDINGS:

The City of Portland Noise Code, Title 18 does not regulate the decibel limit at trackside, it regulates the decibel level in the neighborhood.

Noise Control Officer, Paul Van Orden commented at the April 18, 2023 NRB-PIR Subcommittee Meeting:

- *"The situation at PIR is unique. We do not have another source where we allow measurement to be taken from the source property. Measurement for compliance is taken at the property line of the receiver."*

The DEQ maximum allowable trackside 105 decibel limit has never been incorporated into Title 18.

It has not been confirmed if 105 or 103 dBA at trackside equates to 65 dBA in the neighborhood.

Noise Control Officer, Paul Van Orden commented at the January 18, 2022 NRB-PIR Subcommittee meeting:

- "W*e do not know conclusively if a level of 103 dBA at trackside equivocates to 65 dBA in the neighborhood and meets the land use zone limits"*

NRB Acoustic Professional Representative, Mike Raley also commented at the January 18, 2022 NRB-PIR Subcommittee meeting:

- "W*e don't have conclusive evidence that 105 or 103 at trackside achieves 65 in the neighborhood."*

The 2008 Greenbusch North Portland Noise Study supported this concern.
Greenbusch Report Page 24
5.1.4 *Trackside Measurements for General Compliance Checks*
"These two trackside measurement locations use the perspective that a 103-dBA FAST sound level is in compliance with City Noise Code limits in the neighborhood. This perspective was based on a series of early <u>sound level tests taken in the late 1980's and early 1990's.</u>

Historically, there has been a concern that the limited testing that was used to establish the use of the 103 dBA level is not the correct level to establish full compliance with City's Noise regulations of Title 18 of the City Code.

The 103 level that is used by the race community and referred to by some members of the neighborhood should not be seen as a specific compliance regulation level."

As a result of this new study, the trackside level may need to be refined and reduced to assure the community full compliance with the legal expectations of Title 18 to control noise pollution emanating from the raceway at healthy levels."

The NRB-PIR Subcommittee agreed that new noise studies need to be conducted to confirm if 105 or 103 decibel level at 50 feet from the trackside equates to 65 decibels in the neighborhood.

There was also discussion about the Noise Control Office using the decibel level at the property line of the receiver, as it does with all other noise sources in the City to determine compliance rather than using the DEQ trackside decibel level for code enforcement.

SOUND LEVEL METERS

There are two sound level meters that are used to continuously monitor the decibel levels at trackside and in the neighborhood.

The 2016 PIR Master Plan directs PIR to install and maintain web-based trackside & Kenton neighborhood sound level meters with real-time readings.

2016 PIR Master Plan - Decision of the Hearings Officer
LU 15-186315 MS AD – Master Plan PIR – (Hearings Office 4150041) Page 67

K. " Activities at PIR must comply with Titel 18, Noise Control regulations, including any necessary documentation or coordination requested by the City of Portland Noise Control Office."

M. "Applicant (PIR) shall install and consistently maintain a web-based noise monitoring system at PIR, with real-time readings and recorded data for noise at the existing main racetrack microphone and in the Kenton neighborhood.

The existing location of the community sound level meter in Kenton can be moved to a better location through a co-operative dialog at the Noise Review Board with the racetrack management, the Noise Control Office, and the community through Kenton Neighborhood Association (or a similar community body)…"

Trackside sound level meter:

The PIR trackside sound level meter is mounted on a pole 50 feet from the straightaway, along the southern stretch of the race facility.

The microphone is attached to a digital sound level meter. The data is recorded 24/7 as is audio recordings over the set limit. All the noise files are provided to the City's Noise Control Officer upon request.

In addition to the fixed sound level meter, user groups are required to have a person in charge of events to monitor sound levels and remove vehicles from the track that exceed the PIR adopted noise limit.

The maximum decibel limit used by the racetrack for individual vehicle monitoring is 103 dBA, rather than the DEQ 105 dBA.

The racetrack is very diligent about monitoring and enforcing decibel levels on an individual vehicle basis at trackside.

Typically, a vehicle that exceeds the 103 dBA limit used by PIR is black flagged (taken off the track) and given one chance to make modifications or repairs to be below the limit. A second violation will mean a car will be removed from the competition or event for the rest of the day. On a following day, the vehicle in violation must re-tech, show what was done to remedy the violation, pass tech, and be re-checked on course via the sound level meter. If the vehicle fails again, it is disqualified from the entire event.

Kenton neighborhood sound level meter:

In 2015 a sound level meter was installed in the Kenton neighborhood on North Tyndall Avenue.

Like the PIR trackside sound level meter, the data is recorded 24/7 as is audio recordings over the set limit and all files are provided to the City's Noise Control Officer on request.

For many years, PIR contracted with Michael Minor & Associates, an acoustic consulting firm to maintain both sound level meters and to review and provide data from both meters upon request by the Noise Control Office.

PIR and the Noise Control Office take noise complaints seriously. When the Noise Control Office or PIR receives a noise complaint that might indicate an exceedance of the decibel levels has occurred, PIR contacts the acoustic consult who listens to the recordings from the Kenton neighborhood sound level meter to determine if the source of the noise that was reported or was reflected on the sound level meter was from PIR or another source.

Note:
In January 2023, the acoustic consulting firm, Michael Minor & Associates terminated their contract with PIR. To date, PIR has not contracted with another acoustic consulting firm.

FINDINGS:

During Subcommittee discussions, it became clear that community members had been under the incorrect impression that the purpose of installing the Kenton neighborhood sound level meter was to allow residents to view the meter in real-time on the PIR website in order to identify when there is an exceedance of the decibel limits which they could then report to the Noise Control Office for code enforcement.

Noise Control Officer, Paul Van Order clarified that the Kenton meter was not installed for purposes of code enforcement.

Mr. Van Orden explained that the Kenton sound level meter was installed to allow a comparison of the decibel levels in the neighborhood to the decibel levels at trackside in an effort to help determine if the 105 or 103 dBA at trackside limit equates to 65 dBA in the neighborhood. Due to the limited Noise Control Office staff, data from the sound level meters has never been analyzed to make this determination.

While the data from the trackside sound level meters indicate a high level of compliance with the 103 dBA trackside decibel limit used by PIR for individual vehicle monitoring, sound level meter readings taken in the Kenton neighborhood in 2022 & 2023 by Noise Control Officer, Paul Van Orden reported that there are instances of exceedances of the 65 decibel limit in the neighborhood during some non-varianced race events.

Former NRB Chair, Acoustic Professional, Kerrie Standlee commented at the March 1, 2022 NRB-PIR Subcommittee meeting:

- *"The fact that no violations have been documented does not in itself prove that there are no violations…I just want to make sure that we don't think that because no violations have been documented means that there's not an impact to the community."*

Currently, the location of the Kenton neighborhood sound level meter does not appear to be an optimal location.

Subcommittee Chair, Mary Sipe reported to the Subcommittee that during an on-site visit, during a road race event, she observed that there was a great deal of ambient noise, such as crows, train horns, and other activities in the neighborhood in the area where the Kenton sound level meter is located on North Tyndal Street. Ms. Sipe reported that the sounds from the racetrack were barely audible at that location. However, she observed that sounds from the racetrack near Trenton Park were more audible and there was very little ambient noise at that location as compared to the North Tyndal location. It should be noted that a significant number of noise complaints come from households in the vicinity of Trenton Park.

It would appear that the Kenton sound level meter at its current location is not capturing data that would reflect what neighbors in other locations report hearing.

Analysis of the Kenton sound level meter recordings by the Acoustic Consultant hired by PIR often revealed that the spikes showing on the website reported by neighbors were not from racetrack noise, but crows, train horns, trucks or other activities in the neighborhood. This would tend to support Ms. Sipe's observations.

Kerrie Standlee, who had been on the Noise Review Board for over 31 years, also stated at several Subcommittee meetings that the Kenton sound level meter site was selected to help address noise radiating from drag racing events and not road racing events as drag racing noise was a primary source of noise complaints at that time. There were fewer non-varianced road racing events than drag racing events at that time.

Noise Control Officer, Paul Van Orden and former NRB Chair and Acoustic Professional representative, Kerrie Standlee originally recommended Trenton Park as their top choice to install a community environmental noise data monitor station. The final location selected at N. Tyndall Avenue was one of their last preferences for installation.

At the time the Kenton Meter was installed, Portland Parks and Recreation did not make a pole available to install the environmental sound level data collection meter in Trenton Park.

In January 2023, the acoustic consulting firm, Michael Minor & Associates terminated their contract with PIR. To date, PIR has not contracted with another acoustic consulting firm.

The Noise Control Office has been able to download data received from both noise meters and has been able to create the graphs and reports that were previously provided by the Acoustic Consultant. The Noise Review Board used the reports provided by the Noise Control Office for their review of the 4 varianced events for 2023.

There have been a number of issues with the Kenton neighborhood sound level meter.

In January 2023, the Kenton meter was taken down for calibration and repairs, was reinstalled and is recording data, but due to reported connectivity problems, a damaged modem and hacking issues, the Kenton sound level meter has not been visible to the public on the PIR website since January 2023.

1988 PIR TASK FORCE

Thirty-eight years ago, former City Commissioner, Mike Lindberg convened the 1988 Portland International Raceway Task Force to study the noise issues impacting the North Portland community. Their goal was to identify methods to monitor and reduce the impact of noise from the racetrack on the surrounding neighborhood.

After two years of work, the Task Force drafted Resolution 34626 which contained 23 recommendations addressing, Community Enhancement, Managing PIR, Noise Standards & Variance Process and Noise Control Measures.

The recommendations attempted to strike a balance between the negative impact of racetrack noise on the community, while supporting the race facility as a valuable and legitimate recreational and economic resource for Portland.

Resolution 34626 was adopted by the Portland City Council on October 25, 1989 and has been the main City policy addressing PIR operations along with sections of the City’s Noise Code, Title 18.

However, none of the noise control regulations in Resolution 34626 have been codified in Title 18, making it difficult, if not impossible for the Noise Control Office to enforce those noise regulations in Resolution 34626. The Noise Control Officer only has the authority to enforce provisions within the City’s Noise Code, Title 18.

RESOLUTION 34626

Subcommittee Chair, Mary Sipe and Former NRB Chair & Acoustic Professional consultant to the Subcommittee, Kerrie Standlee presented the Subcommittee with an in-depth review of the 23 recommendations in Resolution 34626.

The purpose of the review was to understand the intent of the 23 recommendations in the resolution, determine if the recommendations have been implemented, if they are still applicable 36 years later and what, if any changes should be made.

While many of the recommendations have been implemented and are still being followed, none of the recommendations related to Noise Standards & Variance Process and Noise Control Measures were ever codified in Title 18.

A Noise Review Board Policy was established related to the recommendation for “multiple-year variances.” The NRB Board Policy for granting multiple-year variances applies to all noise variance applications reviewed by the Board, not just the four PIR noise variances. This appears to be the only NRB Policy that exists. The subcommittee discussed recommending that this Board policy be incorporated into Title 18 along with other recommendations in Resolution 34626 addressing Noise Standards & Variance Process and Noise Control Measures..

A few of the recommendations were never implemented and some may no longer be applicable or are no longer feasible.

It appears that some of the recommendations are no longer being followed.

The following recommendations in Resolution 34626 should be revisited to determine if they should be codified in Title 18, if they should be modified, or if they no longer apply.

Resolution 34626 Recommendation

Develop a policy establishing a maximum of four variance events per year, to include all qualifying, practice and racing associated with that event. An upper dBA limit for the four events shall be established as follows:

1 event at 115 dBA at 50’ (from trackside)
2 events at 112 dBA at 50’ (from trackside)
1 event at 110 dBA at 50’ (from trackside)

These limits are established to provide flexibility yet, the overall intent is to continue to encourage a reduction in noise levels.

The policy shall be re-evaluated in three years with recommendations to be completed after the 1992 racing season.

FINDINGS

The Noise Review Board has consistently followed this recommendation.

However, a written Board Policy has never been generated, there is no Administrative Rule and this directive is not codified in Title 18.

The NRB has established standard conditions for the four variances and does an annual review of data from the trackside and neighborhood sound level meters taken during each varianced event to monitor compliance with the decibel levels and conditions of the variances.

The recommendation indicates the overall intent was to continue to encourage a reduction in noise levels.

No documentation could be found indicating this recommendation has ever been re-evaluated.

Community representatives on the Subcommittee expressed disappointment that there has never been a re-evaluation of the decibel level maximums in the four variances. They expressed a desire for the Noise Review Board to do a periodic analysis of the trackside sound level meter data to determine if the decibel limits of the four variances should be lowered.

Resolution 34626 Recommendation

> *Direct the Noise Review Board and DEQ to work together to develop trackside noise standards for each of the North Portland race facilities.* (The Portland Speedway closed in 2001)

FINDINGS

The Oregon Department of Environmental Quality (DEQ), upon Legislative approval, terminated their Noise Control Program in July 1991 as an agency cost-saving measure due to reduction in General Fund support. As a result, DEQ does not monitor or enforce noise regulations.

The City of Portland Noise Control Office is responsible for monitoring and enforcement of noise regulations in the City's Noise Code, Title 18.

After many attempts over the years to address this directive, the Noise Review Board, never succeeded in identifying a trackside noise level limit that would ensure noise levels in North Portland neighborhoods would comply with the City's noise code limit of 65 decibels at the receiver for non-varianced events.

The 1999 Draft PIR Master Plan document contains wording about an individual vehicle trackside noise limit of 105 dBA. (page 3 and 4 of Appendix G, Noise Control Report of the PIR Master Plan – Final Version)

However, it appears the statement in the 2004 final Master Plan document came from a PIR staff decision and not from any decision made by the Noise Review Board.

Kerrie Standlee commented:

> *"I, Kerrie Standlee, as a member of the Noise Review Board at that time and continually until 2012 and then again from 2015 to 2021, can state that the Noise Review Board never supported the conclusion that the 105 dBA trackside limit was the appropriate limit to ensure noise levels in the neighborhoods would comply with the 65 dBA residential limit. Consequently, I believe Item 2 of the Noise Standards and Variance Process section of Resolution 34626 has never been completed."*

The Subcommittee agreed that a new noise study should be done to determine if a trackside decibel limit of 105/103 dBA equates to 65 dBA in the neighborhood.

Resolution 34626 Recommendation

> *Establish a maximum dBA of 90 at 50' track side on Mondays throughout the year. An exception is to be granted when associated with a major variance event such as CART.*

FINDINGS

The events shown on the PIR website appear to comply with the 90 dBA trackside limit on Mondays. (Monday events are usually bicycle races)

However, a written Board Policy has never been established, there is no Administrative Rule and this directive is not codified in Title 18.

Resolution 34626 Recommendation

> *Restrict <u>variance vehicles</u> to a starting time no earlier than 10:00 a.m. on Sundays. The Commissioner-in-Charge or the Superintendent of Parks may waive this restriction in the event of any unforeseen circumstances such as natural disasters, bad weather, etc.*

FINDINGS

It appears this provision is not always being followed. The PIR Calendar of Events shows varianced race events on Sundays beginning at 9:00 a.m.

It is possible that major event scheduling is dictated by outside forces (i.e., television broadcasting).

If compliance with this directive is not always possible, this directive should be revised.

Again, a written Board Policy has never been generated, there is no Administrative Rule and this directive is not codified in Title 18.

Resolution 34626 Recommendation

> *<u>Practice</u> events at the track shall only be scheduled and run between the hours of 10:00 a.m. and 4:00 p.m. No <u>raceway-sponsored</u> practice sessions shall be scheduled on the weekends.*

FINDINGS

At the April 18, 2023 Subcommittee meeting, former PIR Track Manager, Mark Wigginton advised the subcommittee that “racetrack sponsored” practice sessions were stopped around 2003. Practice sessions are now sponsored by people who rent the racetrack. Typically for varianced events, IndyCar would start at 9 or 10am. Practice sessions for the Rose Cup are part of their weekend, so they are not racetrack sponsored.

Current PIR Business Manager, Nikki Gamell advised the Subcommittee that since she has been at the racetrack the test days are part of the entire event and are scheduled from 9am to 4pm.

This provision is not specific to varianced events.

Currently, Pro Drive appears to sponsor most practice sessions related to varianced events and also has practice sessions that are not related to varianced events as part of their Driving School.

The PIR Events Calendar on the website shows that test and practice sessions are scheduled to begin at 9:00 a.m. rather than 10:00 a.m. (the term “practice” and “test” appears to have the same meaning)

If compliance with this provision is not always possible for varianced events, there should be a revision to this directive.

When it is possible to start practice sessions at 9:00 a.m., then this provision should be enforced, especially for non-varianced events.

Again, a written Board Policy has never been generated, there is no Administrative Rule and this directive is not codified in Title 18.

Resolution 34626 Recommendation

> *The City shall assure an adequate level of funding to the Noise Control office to effectuate these recommendations, especially as they concern monitoring and enforcement. Evaluate as part of next fiscal year’s budget considerations.*

FINDINGS

Both Resolution 34626 adopted by City Council in 1989 and the 2001 Noise Task Force report recommended that the City provide adequate funding to the Noise Control Office.

It appears this recommendation has never been properly addressed. In fact, funding and staffing for the Noise Control Program has steadily decreased while the population and density of the City has increased and the number of motor vehicle racing events at PIR has dramatically increased.

2008 GREENBUSCH NORTH PORTLAND NOISE STUDY

In 2006, in response to ongoing noise concerns within the North Portland community, the Bureau of Developmental Services contracted with an acoustical consulting firm to conduct a study of community noise in the North Portland area.

The Noise Study was conducted by The Greenbusch Group, a multi-disciplinary engineering design firm specializing in acoustical design and environmental noise and vibration consulting.

This was a study of noise all noise generators in North Portland, including trains, truck traffic, airport noise and PIR operations.

A major focus of the study was on sound associated with PIR events in an attempt to correlate data from track-side monitoring positions with resulting community sound levels.

In June, 2008 Greenbusch submitted a draft report of their findings, preliminary recommendations and next steps to the Noise Review Board.

Unfortunately, additional funding was never provided to complete the 2008 Greenbusch North Portland Noise Study and their research and recommendations were never finalized and no action was taken.

NRB Chair & Subcommittee Chair & Facilitator, Mary Sipe extracted all information in the Greenbusch Study that was specific to PIR and shared that information in a summary she presented to the Subcommittee.

FINDINGS

Excerpts from the 2008 Greenbusch draft report specific to noise from PIR included the following comments:

- *"General non-varianced full racetrack modeling identified City Code exceedances in Kenton, Portsmouth and Bridgeton"*
- *"It was also discovered, through measurement of the spectral content, that in some cases where the overall A-weighted value was within City Code limits, the octave band sound levels exceeded octave band City Code limits in some mid frequency bands…"*
- *"The tonal quality of vehicles is frequently perceived as irritating and helps to support one of the community concerns that neighbors have raised in past public meetings."*
- *"The comments that the problem is not solely about decibel levels but also includes the tonal qualities of the sounds from the raceway emanating to residences in the community is supported by this finding."*
- *"While the trackside sound limits are intended to meet permissible City Code levels, City Code compliance is not always attained in residential districts near PIR."*

- *“The 103 level that is used by the race community and referred to by some members of the neighborhood should not be seen as a specific compliance regulation level.”*
- *“As a result of this new study, the trackside level may need to be refined and reduced to assure the community full compliance with the legal expectations of Title 18 to control noise pollution emanating from the raceway at healthy levels."*
- *“State trackside sound limits (105 dBA) were believed to be adequate to ensure compliance with the City Noise Code in the community, and continue to be a reference point for compliance issues.”*
- *“However, the existing permissible trackside sound levels were not adopted by the City Code (Title 18), and the Portland Noise Review Board has expressed concerns of their adequacy.”*
- *“Based on the measurements completed for this study and on our model predictions of community exposure levels for various race configurations, it is likely that sound levels in the community exceed City Code on occasion, during the races.”*
- *“Exceedance depends strongly upon the number of vehicles racing, the total sound emission from all the vehicles, the spectral content of the emission, and meteorological conditions.”*

Potential additional mitigation measures in the Greenbusch report included the following:

- *“Install a second, permanent monitor location near the quarter-mile mark on the southern straightaway to more accurately characterize the sound levels associated with the drags.”*
- *“Establish trackside octave band sound level limits to control mid-range frequency sound emissions from the racetrack and help achieve compliance with City Code permissible octave band sound levels at nearby properties.”*
- *“Install a 16-ft tall Plexiglas barrier along the edge of the track. A reduction of between 6 and 14 dBA could be realized in the Kenton and Portsmouth neighborhoods.”*
- *“Install a 9 ft tall Plexiglas barrier along the edge of the track. A reduction of between 1 and 10 dBA could be realized in the Kenton and Portsmouth neighborhoods.”*
- *“Install a 16-ft tall barrier behind the bleachers on the south side, extending the entire stretch of the southern straightaway. A reduction of between 1 and 9 could be realized in the Kenton and Portsmouth neighborhoods”.*

In the 16 years since the 2008 Greenbusch North Portland Noise Study draft report was presented to the Noise Review Board. Since 2008 the topography of the property has changed and there have been advances in technology with noise barriers.

The Subcommittee was in agreement that a new noise study is needed in order to determine the trackside decibel level necessary to meet the Title 18 maximum neighborhood decibel level of 65 dBA.

The Subcommittee also agreed that a new noise study should include a feasibility study of the availability, effectiveness, safety and cost of noise barriers.

NORTH PORTLAND FUND

An item on the Subcommittee Task List was to review the North Portland Fund and the subsequent Resolutions modifying the-Fund.

The Subcommittee wanted to better understand the current status of the Fund and the provisions in the Resolutions with regard to using funds for noise mitigation.

Racetrack management Subcommittee representatives expressed concern that the subcommittee might be deviating from its initial purpose of addressing noise issues. They felt the Fund did not fall within the scope of the Subcommittee.

The Subcommittee Chair consulted with Noise Control Program management and Portland Parks & Recreation management and they both agreed the North Portland Fund research was within the scope of the Subcommittee due to the fact that the Fund was created as a result of the Variance Process recommendation in Resolution 34626, the contribution to the Fund was created to help offset or compensate the community for the varianced events that exceed the standard decibel limits, the North Portland Fund is directly connected to the four noise variances that are administered by the Noise Review Board and the Noise Control Office and allows fund expenditures to be used for noise mitigation projects.

FINDINGS

A report on the North Portland Fund financial status report and history was presented by at the November 2, 2023 subcommittee meeting.

The North Portland Fund was established in response to a recommendation in Resolution 34626.

The fund was to be a mitigation fund. It reflected a “Good Neighbor” policy as a way to recognize and minimize the negative impacts that the racetrack has on adjacent neighborhoods from the louder events that receive noise variances.

The goal was to offer a compensating benefit to those neighborhoods to improve their livability and vitality.

The intent was to dedicate a fund, financed by a fee assessment on varianced events which would be administered by the Portland Parks Bureau.

The fund would begin awarding grants to the North Portland community in 1993.

In order to achieve that goal, PIR would require major event promoters who are granted noise variances to make an annual payment into the North Portland Fund.

Originally the assessment was to be based on a percentage of the varianced event’s gross number of income admissions for all events that received a noise variance.

However, a North Portland Fund Policy Committee established a flat fee assessment of $35,000 for only the largest events.

Currently only the Grand Prix Indy Car and NASCAR events are required to pay the flat fee assessment.

Because they are smaller events, the Rose Cup, SVRA and SOVREN events are not required to pay the assessment when they are granted a variance.

Since 2015 a total of 29 noise variances have been granted. Contributions to the NPTF have been made by 9 of those varianced events.

The subcommittee asked:

- Should the amount of the contribution to the North Portland Fund be increased?
- Should the contribution be expanded to include all four varianced events regardless of size; with a smaller contribution from the smaller events?

Resolution 34626 states that expenditures for the fund can include noise mitigation.

The subcommittee agreed that any requests for funding for a new noise study would first go to the City. If the City does not provide funding, then funding would be requested from the North Portland Fund. It would be up to the North Portland Network of Neighborhood Association Chairs to ask to reconvene the PIR-North Portland Fund Policy Committee to consider such a request.

In 2021, Portland Parks & Recreation put a hold on the North Portland Grant Program.

As a result of the freeze, no grants were awarded in 2021, 2022 & 2023.

It is not known why the fund was frozen or when the funds will be made available for North Portland Grants Program.

The last grants that were awarded as follows:

- November 2019 grants awarded- paid out in 2020
- November 2020 grants awarded - paid out in 2021
- Some of the payments for 2019 & 2020 grants were made in 2022 & 2023.

It is estimated that at the end of 2024, the North Portland Fund balance will be approximately $348,000.

A $200,000 endowment was created that outlines how funds will be allocated for grants.

Based on the provisions in Resolution #35666, it would appear that approximately $148,000 would be available for grants in 2025.

- $35,000 is currently being allocated each year for community grants
- $11,000 is allocated annually for administration of the Fund.

It would appear that there would be adequate funds for both the Community Grants and funding of a new noise study.

SUMMARY

Health Impact of Environmental Noise

Noise pollution is a serious problem impacting human health. The World Health Organization (WHO) finds that noise is the second largest environmental cause of health problems, just after the impact of air pollution.

It is not just how loud the noise is but the frequency, duration and tone of the noise that contributes to negative health impacts. This is especially relevant with the nature, frequency and duration of noise form PIR.

The City Council acknowledges the City's responsibility to protect residents from the health impacts of excessive noise in the environment in the first paragraph of the Title 18 Policy Statement, where it states:

> *"It is the intent of the City Council to minimize the exposure of citizens to the potential negative physiological and psychological effects of excessive noise and protect, promote and preserve the public health, safety and welfare."*

Noise Complaints

Current and past PIR Management and "racetrack user" Subcommittee representatives expressed their belief that the majority of racetrack related noise complaints were submitted by the same three or four neighbors and that the number of complaints do not indicate that the noise from the racetrack is a significant issue.

While the same three or four neighbors have consistently complained for many years, they are not the only neighbors to submit noise complaints.

Nosie Control Officer, Paul Van Orden has reported to the Subcommittee that each year there are an average of 12 to 15 new complainants.

In 2023, the Noise Control Office received 109 noise complaints related to PIR from a total of 25 individuals; 18 of those individuals were new complainants.

In 2024, the Noise Control Office received 53 noise complaints related to PIR from a total of 26 individuals, 20 of those individuals were new complainants.

Mr. Van Orden has also reported that the racetrack is the largest source of complaints in the city for a single location. He reports that no noise intensive location in the City's 48 year history of the Portland Noise Control Office comes close to the number of complaints, and geographic range as those coming from Portland International Raceway.

Quarterly Noise Control Office noise complaint data reports sorted by city quadrants, shows that the number of noise complaints related to PIR is consistently in the top three category of noise complaints for North Portland.

Noise complaints are a valuable feedback tool. While some might consider the number of PIR related noise complaints to be a small percentage of the North Portland population, we should not dismiss or ignore what neighbors report.

According to a 1978 PIR Noise Control Feasibility Study, *“complaints have existed almost from the start of organized racing at the park, but* (at that time) *there exists no one file of complaints. The fledgling Noise Pollution Control Section of the State Department of Environmental Quality (DEQ) started receiving complaints in early spring of 1972.”*

Prior to and immediately following the July 30, 2024 NRB-PIR Subcommittee meeting, the Noise Control Office received Public Comment emails from **80** North Portland residents sharing how they are negatively impacted by the noise from the racetrack. Four residents also gave verbal testimony at the meeting sharing how the noise from PIR negatively impacts the peaceful enjoyment of their homes and yards. They also shared that they stopped submitting noise complaints when there was no resolution. This would appear to validate that the noise from the racetrack has a significant impact to the community.

Non-conforming use and Zoning Code exceptions

The City of Portland has made special exceptions to the City’s Zoning Code and Noise Code in order for PIR to operate at its current location.

Portland International Raceway is owned by the City of Portland and is a City Park. City Park’s are zoned as “Open Space.” PIR has been zoned Open Space since as far back as 1991.

In December 1998, the Portland City Council adopted a special Portland International Raceway Plan District to address the issue of non-conforming use of the racetrack in an open space zone.

The PIR Plan District and PIR Master Plans allow uses that would typically not be allowed in the Open Space zone.

2003 Land Use Hearing-Decision of the Hearing Officer- LU 99-00971 MS CU EN EV AD - Page 3:

- *“Although Portland International Raceway has operated since 1961, it was never an allowed use. In fact, racetracks are prohibited in the Open Space zone.”*
- *“Currently, racetracks are defined by the Zoning Code as “Major Event Entertainment” uses, which are prohibited in the Open Space zone.”*
- *“In order to resolve the longstanding conflict between the existing use and the existing zoning, the City undertook a legislative project to create a special plan district for the area.”*
- *“In December 1998, the Portland City Council adopted the Portland International Raceway Plan District to address the issue of non-conforming use of the racetrack in an open space zone.”*

Application for 2016 Master Plan – June 15, 2015
Site Plan - Land Use History - Page 5

- *"The earliest available records of zoning at PIR, post-Vanport flood, show that the site was previously zoned M-3, Light Manufacturing.*
- *In 1981, the city re-designated PIR to the "Forest and Farmland" zone, which allowed for park and open space uses…*
- *Open Space zoning was applied to the PIR site as part of a city-wide rezoning project in1991. This base zone still applies to the site. The Open Space zone does not allow racing activities, and the re-zoning did not address this discrepancy.*
- *<u>Because PIR's primary use was prohibited under Open Space zoning, PIR operated as an undocumented use within the Open Space zone through the 1980s and 1990s.</u>*

Noise Code exceptions

The City made another exception for the racetrack in the City's Noise Code, Title 18 when PIR, which is zoned Open Space, was designated, for purposes of noise code enforcement, as an Industrial zoned source of sound.

As a result of this exception, residents living near PIR are subjected to noise levels 10 decibels over what residents living in other residentially zoned neighborhoods near any other City park are expected to tolerate for non-varianced events.

An increase of 10 decibels represents a 10-fold increase in sound intensity and a doubling of the perceived loudness.

Although Title 18 stipulates that measurement for compliance is taken at the property line of the receiver, PIR currently uses the trackside decibel level of 103 decibels for noise code enforcement,

We do not have another noise source where we allow measurement to be taken on the source property in order to determine legal compliance with our environmental health standards.

Trackside decibel limit

It has not been confirmed if the DEQ 105 trackside decibel level or the 103 trackside decibel level used by PIR equates to 65 decibels in the neighborhood.

Trackside decibel levels may need to be reduced in order to be in compliance with the noise code maximum decibel limit in the neighborhood.

The Subcommittee agreed that a new noise study is needed to establish the appropriate trackside decibel level to ensure compliance with Title 18 at all residential properties during all non-varianced events.

Compliance with Title 18

Current and former racetrack management and racetrack supporters claim they are not in violation of the City's Noise Code, Title 18. However, they are using the DEQ trackside decibel limit, not the Title 18 limit of 65 decibels as measured at the property line of the receiver.

The 2008 Greenbusch Noise Study found… *"General non-varianced full racetrack modeling identified City Code exceedances in Kenton, Portsmouth and Bridgeton"*

Sound level measurements made by the Noise Control Officer in 2022 & 2023 found that there were times when sound from unvarianced race events at PIR result in community noise levels exceeding the 65 decibel level established in Title 18. These sound level measurements indicate that a trackside 105 or 103 decibel limit might not ensure compliance with the City's Title 18 noise code limits.

Kenton neighborhood sound level meter location

The location of the Kenton neighborhood sound level meter does not appear to be the optimal location to accurately capture noise data.

Noise Control Officer, Paul Van Orden and former NRB Chair and Acoustic Professional representative, Kerrie Standlee agreed that a location in the vicinity of Trenton Park would be a better location for the neighborhood sound level meter**.** Trenton was originally their top choice for a community environmental noise data monitoring station.

The Kenton neighborhood sound level meter has not been visible on the PIR website since January 2023, this does not appear to be in compliance with the requirements in the 2016 PIR Master Plan.

Resolution 34626

Resolution 34626 was adopted by the Portland City Council on October 25, 1989.

None of the recommendations in Resolution 34626 have ever been codified in Title 18. Including the provisions in Resolution 34626 related to Noise Standards & Variance Process and Noise Control Measures into Title 18 would allow for better monitoring of compliance and updating of all PIR noise control regulations.

Community feedback

Members of the community who complain about the noise from the racetrack report they have been characterized by some as whiners who knew the racetrack was there when they moved to the neighborhood, and therefore have no right to complain about the noise and are often advised to buy earplugs or move.

Some residents have reported that they viewed the home they purchased during the winter months when the track was closed. They looked at the information on the PIR website and read the statement …*"A great majority of event days operate at 90 dBA or less, meaning they aren't audible at any point in the neighborhood.* " They report that after reading that statement, they were under the impression that they would not hear noise from the majority of events at the racetrack. They thought they had done their due diligence. Then, in the Spring when the track opened for the season, they were shocked by the level of noise they could hear from motor vehicle racings events at the racetrack.

At this time, the City of Portland does not have any zoning or other regulations requiring disclosure during real estate transactions to inform potential buyers that could be impacted by noise from the racetrack.

Members of the community who have submitted noise complaints often report that they are unable to enjoy their backyards or open their windows during the summer months when motor vehicle racing activities take place at the racetrack. Many members of the community who file noise complaints report negative impacts to their health and report that they flee their homes during motor vehicle racing events to escape the noise from the racetrack.

Balancing Economic and Recreational benefits with Livability

Portland International Raceway has provided substantial entertainment and economic benefits for the City and the local community.

However, the entertainment and economic benefits should not take precedence over the livability and health and welfare of the community.

The Portland City Council has acknowledged this in the second paragraph of the Policy Statement in Title 18 where it states:

> *"It is the intent of the City Council to control the level of noise in a manner that promotes the use, value, and enjoyment of property, conduct of business, sleep and repose and reduces unnecessary and excessive sound in the environment."*

Major Travel Corridor

PIR management and racetrack supporters often pointed out that the area is a major travel corridor and there are other noise sources in North Portland such as the noise from Portland International Airport, trains and commercial trucks that have a negative impact on the community.

While it is true these other environmental noises that exist in the community are a contributing factor to concerns about livability, Title 18 does not regulate airplane, railway or highway noise. The noise complaints the Subcommittee was asked to address were specific to noise from the racetrack, not noise from the airport, railway or highway.

At the November 20, 2024 Subcommittee meeting, Noise Officer Paul Van Order reported that when he made site visits to the Kenton neighborhood during the 2024 race season he focused on the ambient levels in the neighborhood when there was no motor vehicle racing activity at the racetrack.

Paul reported that he observed that the other noise sources such as trains, roadway traffic or commercial planes were not as loud and impactful as the levels from the racetrack. He said it is not about if there is a violation; it is about trying to understand that residents are being negatively impacted even when noise from the racetrack might be within the 65 dBA limit.

Paul commented that it would not be proper or factual for us to say that the ambient levels in the neighborhood are as loud as the racing. There are short-term sounds (such as train horns) that are as loud as the racing, but based on his observations the ambient levels are quieter than we realized.

North Portland residents feel they are unheard

Statement from the 1988 PIR Task Force report:

> *"…many North Portland residents feel their community has been used as a dumping ground. The feeling is that any unwanted uses end up in North Portland. A prevalent opinion voiced by local residents at a community meeting was that City Hall had been unresponsive to North Portland's concern. It is obvious that for some, the problem of PIR and the noise it generates, is perceived as yet another losing battle. This attitude has engendered both rancor and paranoia on both sides."*

Comments made by residents continue to echo this sentiment thirty six years later.

A written public comment from a community member stated:
"The inequity of allowing such noise pollution in historically diverse and working-class neighborhoods is an environmental injustice at best."

The American Public Health Association reported in their 2021 Policy Statement:

- *low-income and minority communities are more likely to be exposed to environmental health hazards, placing them at high risk of poor health and performance outcomes*
- *sources of noise pollution tend to be located in or close to poorer communities*
- *factors may include zoning and land use decisions that favor the wealthy and take advantage of differences in political power defined by race and socioeconomic class.*

Noise Mitigation

The racetrack has been in operation for over sixty years. There have been advances in technology that can and should be employed to reduce the noise levels. Every effort should be made by the City to reduce the level of noise that radiates from the racetrack into the neighborhood.

An increase of 10 decibels represents a 10-fold increase in sound intensity and a doubling of the perceived loudness. Reducing sound by 10 decibels is a perceived halving of the sound.

While reducing the decibels levels at PIR might provide the greatest level of relief, feedback from community members indicates that reducing the frequency and duration of the noise from events at PIR could also provide some relief.

The recommendations in Resolution 34626 were intended to reduce the impact to the community. While the decibel levels have been reduced for some events, the number of events radiating noise into the neighborhood have increased.

The PIR website 2023 Calendar of Events shows a total of 130 days when non-varianced motor vehicle racing events were scheduled between April & October. Approximately half of those events (67) were scheduled to run until 10:00 p.m. Four Varianced motor vehicle racing events which are allowed to reach 110, 112 & 115 decibels were scheduled to take place during June, July & August for a total of 12 days.

As part of Resolution 34626, In 1992 a Noise Barrier Feasibility Study found that barrier systems available at the time "*would not produce a reasonable and corresponding level of benefit for the neighborhood.*" The study reported *"it would be more realistic to eliminate troublesome events."*

There have been advances in the technology and effectiveness of noise barriers since 1992. A number of racetracks across the country have employed the use of these newer, more effective noise barriers.

Subcommittee members agreed that research into noise mitigation is not something the Subcommittee has the expertise to undertake, but that it should be part of a new noise study and noise mitigation feasibility study.

Noise Control Office funding

Over the years, there has been criticism from the community about a lack of response by the Noise Control Office to the PIR noise issues.

The inadequate funding and staffing levels at the Noise Control Office presents a major challenge to monitoring and enforcement of the PIR Noise Control provisions in Resolution 34626 and Title 18.

At the inception of the City's Noise Control Program, there were three full-time field staff; the Noise Control Officer and two Deputized Noise Code enforcement professionals.

Currently the Noise Control Office operates with just one full-time field staff person; the Noise Control Officer. The lack of full-time field staff results in the Noise Control Officer's time being primarily taken up with administering Noise Variances, allowing less than 15% of his time City-wide for field work.

The serious lack of adequate funding and staffing has made it near impossible for the Noise Control Office to effectively monitor and enforce noise regulations at PIR and throughout the City.

2021 NRB – PIR Subcommittee Recommendations

After 3 years of reviewing past noise studies, City Resolutions, Task Force recommendations and the current state of conditions at PIR and in the neighboring community, the NRB-PIR Subcommittee came to the conclusion that more research and analysis is needed.

The Subcommittee concluded that new noise studies and/or noise modeling needs to be conducted to determine if the 103 decibel individual vehicle trackside noise level limit used by PIR or the DEQ 105 trackside decibel limit equates to a maximum of 65 decibels in the neighborhood for all non-varianced events occurring at PIR.

The 2008 Greenbusch North Portland Noise Study stated that based on the results of their modeling, "*the trackside level may need to be refined and reduced to assure the community full compliance with the legal expectations of Title 18 to control noise pollution emanating from the raceway at healthy levels.*"

The results of recent noise level measurements made by the City of Portland's Noise Control Officer show noise levels in some North Portland neighborhoods exceed 65 dBA during some non-varianced motor vehicle racing events at PIR.

The Greenbusch Study made preliminary recommendations to install noise barriers to mitigate the level of noise from the racetrack.

Over the past 32 years, new technology has emerged making noise barriers more effective and less costly. The Subcommittee agreed that a new feasibility study on the effectiveness, and safety of noise barriers should be conducted to determine if this is a viable option to mitigate the noise from the racetrack.

It has been 16 years since the draft report and recommendations from the 2008 Greenbusch North Portland Noise Study was presented to the Noise Review Board and much has changed both in the neighborhoods and in the race vehicles that participate in events at PIR.

The time has come for the City to fund a new study to determine if a trackside decibel limit of 103 or 105 dBA equates to 65 decibels in the neighborhood and to investigate the potential benefits of installing noise barriers to mitigate the noise from the racetrack.

This is research that the Subcommittee cannot undertake. The next steps need to be taken by the City to fund a new noise study and noise barrier feasibility study and to provide the Noise Program with adequate funding to monitor and enforce the City's Noise Code, Title 18 not only as it pertains to PIR, but for the entire city.

The Noise Review Board – Portland International Raceway Subcommittee presents the following recommendations to the Noise Review Board for their consideration.

Recommendation #1

Allocate funding for a new independent Noise Study and Noise Barrier feasibility Study.

The Noise Control Officer will be involved determining the scope of a new noise study when drafting a Request for Proposals.

The Noise Study is to include:

- Noise studies & noise modeling to determine if 103 or 105 dBA at trackside equates to 65 dBA in the neighborhood and to determine what the maximum trackside decibel level should be set at to achieve 65 dBA in the neighborhood for all non-varianced motor vehicle racing events that occur at PIR.
- Noise studies to determine if monitoring trackside decibel levels on an individual vehicle basis is sufficient to achieve 65 dBA in the neighborhood.
- Noise studies to document the frequency and location of exceedances of 65 dBA in the neighborhood.
- An assessment and recommendations for the appropriate number and locations of trackside and neighborhood sound level meters.
- A feasibility study of the availability, effectiveness, safety, location, and cost of noise mitigation/abatement options such as installation of noise barriers.

Recommendation #2

The City to provide adequate funding and staffing to the Noise Control Office

In 1989 Resolution 34626 made the following recommendation:

> "The City shall assure an adequate level of funding to the Noise Control Office to effectuate these recommendations, <u>especially as they concern monitoring and enforcement.</u>

In 2001,the Noise Task Force made the following recommendation:

> "Fund the Noise Control Office adequately to carry out the recommendations in this report including one to two additional staff and noise monitoring equipment reflecting the best technology available.

The Subcommittee recommends that increased funding and staffing to be evaluated with the next fiscal year budget process.