

# **Louisville Sustainability Advisory Board**

## **Agenda**

**Wednesday, August 21, 2013**  
**City Hall, 749 Main Street, Spruce Room**  
**6:30-8:00pm**

**Chair:** Andy Johnson

**Secretary:** Cullen Choi

### **6:30-6:40pm:**

- I. Call to Order
- II. Roll Call
- III. Approval of Current-Meeting's Agenda
- IV. Approval of July 17, 2013 Meeting Minutes
- V. Public Comments on Items Not on the Agenda

### **6:40-7:15pm:**

- VI. Train Noise Quiet Zone Update – (Mary Ann)
- VII. Urban Chickens – Review of recent City Council Meeting Session
- VIII. Update on Urban Gardens (Mary Ann and Claudia)
- IX. Update on Energy Audit Study (Dave)
- X. Update on Building Code Adoption (Andy)

### **7:15-7:55pm:**

- IX. Energy Efficiency and Renewables (Jim)
  - Continuation of discussion about energy efficiency promotion efforts
  - Discussion about staffing the Labor Day celebration booth

### **7:55-8:00pm:**

- X. Items for next meeting (scheduled for September 18)
- XI. Adjourn

## ***Louisville Sustainability Advisory Board***

**Meeting Minutes: Wednesday, July 17th, 2013**

**City Hall, 749 Main Street, Spruce Room**

**I. Call to Order:** The meeting was called to order at 6:37 pm by Jim Bradford. Andy Johnson served as Secretary.

**II. Roll Call:** Members present (*in bold*): **Cullen Choi, Mary Ann Heaney, Andy Johnson, Claudia Lenz, Jim Bradford, Mark Persichetti**; Staff Liaison **Kurt Kowar**, Public Works Director (in place of Dave Szabados); **City-Council Liaison** Emily Jasiack

**III. Approval of Current-Meeting's Agenda:** The agenda was approved with the addition of "Noise Exposure from Locomotive Horns" presentation by Mary Ann.

**IV. Approval of May's Meeting Minutes:** The minutes were approved with no changes.

**V. Public Comments on Items Not on the Agenda:** No public comments.

**VI. Urban Chickens** - (Mary Ann)

Mary Ann reported that the City Council Study Session was positive overall. Troy Russ, Planning Director, made a few changes to the formal white paper put together by LSAB in order to prepare it for a City ordinance. The Police Department was sensitive to the possible increase in work to regulate the new ordinance. Issue to go in front of the Planning Commission to September 12<sup>th</sup>.

**VII. Update on Urban Gardens** (Mary Ann)

Mary Ann reported report that the Urban Garden project is stalled and waiting for additional information regarding the necessity for a 501c status. Kurt responded to questions of logistics and legality, and offered to talk to the City Manager and City Attorney and provide additional information. Denver Urban Gardens has a template for developing community gardens.

**VIII. Noise Exposure from Locomotive Horns** (Mary Ann)

Mary Ann presented a PowerPoint presentation on the health issues associated with noise exposure from locomotive horns. See attached PDF of presentation. Some points from the presentation include:

- Large decibel noise increased from 96db (2006) to 110db.
- There are documented health issues illustrating that children are at a higher risk.
- Any safety measures implemented need to have risk levels lower than the national average.
- Crossing horn pointed at traffic is a good, viable solution for Louisville.

Kurt indicated that \$400k is allotted to creating quiet zones from the 2016, 2017, and 2018 City budgets. He mentioned that there is a need to reduce risk. Kurt is not sure if the schedule to implement quiet zones could be increased. So far it has been a positive topic with public support. Heather Balser is discussing these issues with interest groups.

Cullen suggested that a grassroots effort of collecting noise data using handheld devices.

Jim discussed the drawback of the airplane traffic. Mary Ann suggested the use of a call source with the FAA to file a complaint. Burlington Northern also has a call line to file complaints.

### **VIII. Energy Efficiency/Renewables (Jim)**

Jim presented slides on the fundamentals of energy efficiency and renewables. There was a suggestion of a half time person to help with sustainability efforts at the City. That position could promote energy efficiency efforts at the City and public realm, and could track grant opportunities.

Cullen suggested defining measureable items in terms of R.O.I. over environmental benefits, and suggested that the City support a loan program that could be a money-maker for the City (a PACE-like program).

The point was made that Louisville, compared to Lafayette, Superior and other surrounding cities, has underwhelming sustainability programs. Kurt mentioned that there is a need to provide a visual road map (similar to Boulder County's recent Sustainability Plan). Mary Ann said we need to have a plan in place for when the Energy Audit Study is complete. Kurt said that we need to build up slowly to the discussion about filling a sustainability staff member position.

Cullen asked if we owned our own street lights, and Kurt mentioned that we pay for them but Xcel maintains them.

The group had a discussion about adding funding to the City budget as an incentive from every dollar saved through energy efficiency measures.

Kurt and Dave are to help more with LSAB's discussions on sustainability measures.

### **X. Items for next meeting**

1. Train Noise Quiet Zone Update – (Mary Ann)
2. Urban Chickens – (Mary Ann)
3. Update on Urban Gardens (Mary Ann and Claudia)
4. Update on Energy Audit Study (Dave)
5. Update on Building Code Adoption (Andy)
6. Energy Efficiency and Renewables (Jim)

**XI. Adjourn:** The meeting adjourned at 8:05 pm.

**2013 Schedule is on the next page....**

### 2013 Schedule, Deadlines, Assignments

Please note due dates for sending documents to Kerry.

Circulate Draft Agenda to board for review and comment	Send final Agenda, previous Minutes to Kerry Holle	Meeting Date	Chair	Secretary
January 4	January 8	<b>January 16</b>	Andy	Mary Ann
February 8	February 12	<b>February 20</b>	Mary Ann	Mark
March 8	March 12	<b>March 20</b>	Mark	<del>Ted</del> Jim
April 5	April 9	<b>April 17</b>	<del>Ted</del> Jim	<del>Cullen</del> Mary Ann
May 3	May 7	<b>May 15</b>	Cullen	Claudia
June 7	June 11	<b>June 19</b>	Claudia	<del>Jim</del> Mary Ann
July 5	July 9	<b>July 17</b>	Jim	Andy
August 9	August 13	<b>August 21</b>	Andy	<del>Mary Ann</del> Cullen
September 6	September 10	<b>September 18</b>	Mary Ann	Mark
October 4	October 8	<b>October 16</b>	Mark	Cullen
November 8	November 12	<b>November 20</b>	Cullen	Claudia
December 6	December 10	<b>December 18</b>	Claudia	Jim

\*A name crossed out followed by a second name denotes a substitute for that meeting.

# **Noise Exposure From Locomotive Horns**

**(at Highway-Rail  
Grade Crossings)**

# Why All the Noise?

- Federal Railroad Administration (FRA) 2006 *Final Rule*.
- Requires horns be sounded while trains **approach** and **enter** public crossings.

# Why All the Noise?

- Lead locomotive must sound horn in specific pattern:

2 long blasts, 1 short, 1 long

- Repeated until locomotive in crossing.

# Why All the Noise?

- At least 15 seconds, but no more than 20, before crossing.
- Engineers can vary pattern.
- Minimum **96 dBA** and maximum **110 dBA**.

# How Loud is That? (Typical Levels)

Whisper



Wind Turbine



Office



Stereo System



Jackhammer



10

20

30

40

50

60

70

80

90

100

110

120

130

140

150



Leaves Falling



Bedroom



Home



Interior  
of a car



Factory  
Noise



Jet Plane

# How Loud is That? (Neighborhood Horn Level)

Inside Living Room - 2 Blks From Track



# How Loud is That?

- Noise is Logarithmic - Every increase of 6 dB is **TWICE** as loud.
- Increasing from 96 dB to 110 dB (+14 dB) is over **FOUR TIMES** as loud.
- Longer blasts also **increase** exposure time.

# The Health Hazard

- Train noise is a significant impact to community health.
- Noise has now increased for Louisville homes, offices, schools, daycares, restaurants, shops, outdoor venues, etc.
- Exposure is particularly harmful at night.

# The Health Hazard

Noise is documented to cause:

- Sleep disturbance;
- Cardiovascular disorders including hypertension and ischaemic heart diseases;
- Learning impairment in children;
- Loss of productivity in adults.

# The Health Hazard

- At very low levels, physiological reactions are measured; increase in heart rate, body movements, arousal.
- These occur without awakening.

# The Health Hazard

Disturbed sleep is associated with adverse health:

- Increase in heart rate, arousals, sleep stage changes, awakening.
- Sleep disturbance, increase in medicine use, increase in body movements, insomnia.
- Hormone level changes; cardiovascular illness, depression, other mental illness.

# The Health Hazard

Vulnerable groups include:

- Children, older adults, pregnant women, those with compromised health, shift workers.

Children are considered a higher risk group:

- Equally or more reactive than adults.
- Spend more time in bed – greater exposure time

# What Can Be Done?

Option to establish quiet zones if risk assessment conducted and approved:

## **1. Supplemental Safety Measures:**

- Temporary closure/partial zone;
- Permanent closure;
- Four-quadrant gates;
- Gates/traffic channelization
- One-way street/gate.

# What Can Be Done?

## 2. Alternative Safety Measures

- Modified supplementary safety measure (barrier gate/median; shorter channelization);
- Education and/or enforcement programs – verify effectiveness;
- Engineering improvements;
- Combination of above.

# What Can Be Done?

## **Wayside horn alternative:**

- Automated horns with flashing lights and gates allowed to substitute for horn.
- Certain technical requirements apply.

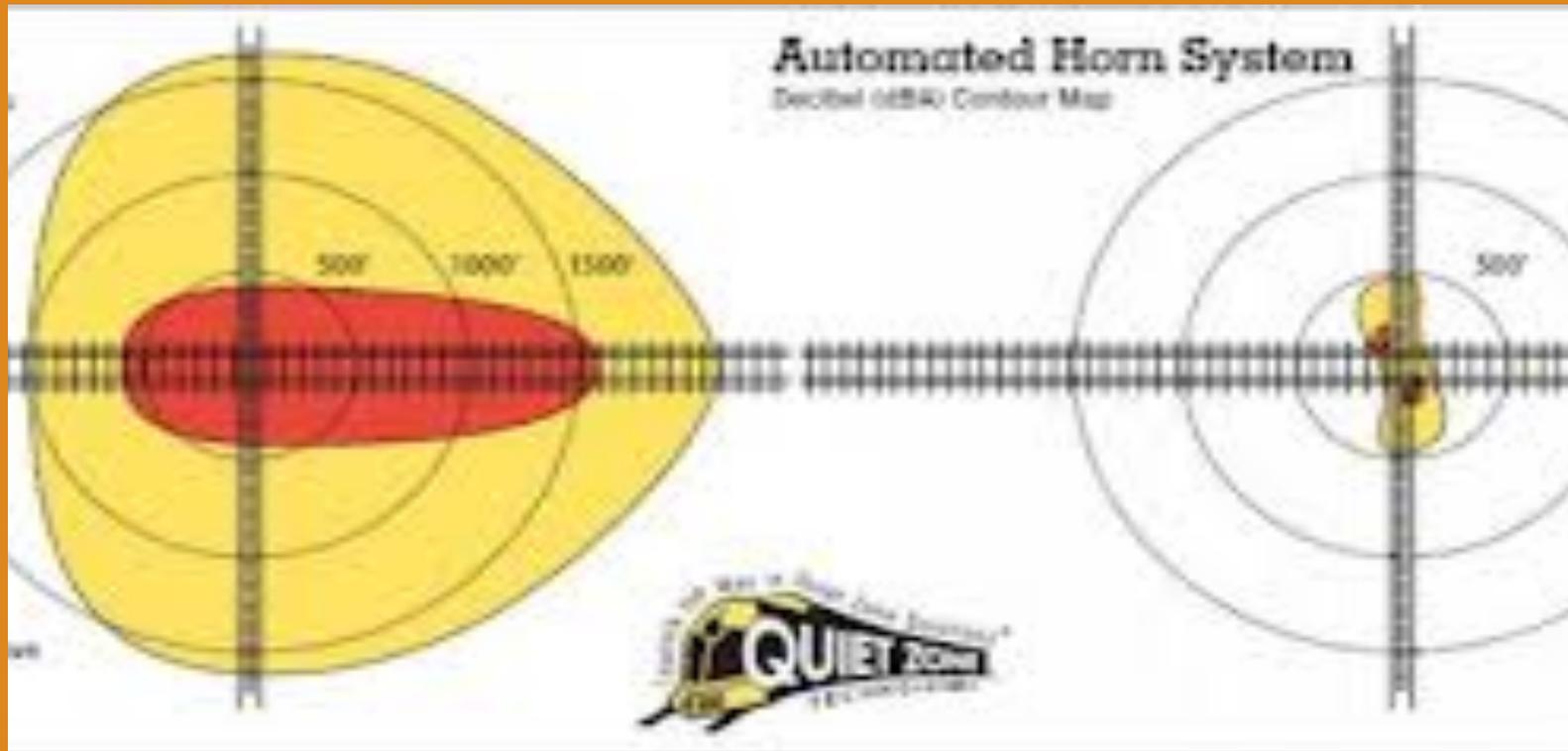
# What Can Be Done? (Gates)



# What Can Be Done? (Wayside Horns)



# Noise Envelope (Train Horn vs. Wayside Horn)



# In Summary

LSAB supports the reduction of train noise in accordance with the Livable City goals.

Elimination of train horns would:

- Enhance the well-being of residents
- Improve the physical health of citizens