

Barbican Association response to the consultation on the Draft Mayor's Transport Strategy for London.

1. The Barbican Association welcomes the opportunity to comment on the draft Mayor's Transport Strategy for London. In particular, it welcomes the Mayor's emphasis on improving public transport and the benefits to residents' (and workers') health that this initiative promises.
2. The Barbican Association is the recognised residents association of c4000 people living on the Barbican Estate. The Barbican is directly adjacent to one of London's worst polluted streets, Beech Street. Accordingly, the Barbican Association recognises the importance of reducing the air pollution created by traffic and the particularly acute problems posed by vehicles using internal combustion engines. Reducing vehicle movements and increasing the use of electric traction are initiatives which we support strongly.
3. However, air pollution, though of vital importance, is but one form of pollution from which London residents suffer. The Barbican Association proposes that the Mayor's strategy raise the priority afforded to reducing another significant source of pollution and nuisance with proven adverse consequences on health and well-being: noise pollution. The Barbican Association welcomes the draft strategy's recognition of the importance of reducing noise and endorses the strategy's acknowledgement (at p 111) that "noise is the second greatest source of environmental health problems". The Barbican Association welcomes the measures foreshadowed in the Mayor's proposal 47 but is concerned that it is Network Rail and train operating companies that are identified as the source of problems and that no explicit acknowledgement is made of the growing problem of noise pollution caused by London Underground.
4. Like other Londoners, residents of the Barbican have become increasingly concerned by the increasing noise and vibration transmitted to homes by the operation of London Underground's trains. The Tube Noise Action Group (see www.tubenoiseactiongroup.com) provides eloquent testimony to the London wide growth in noise pollution due to the operations of London Underground. These concerns are likely to grow as London Underground increases the frequency of its train running (eg through the upgrading of the sub-surface lines in its 4LM plan) and the duration of train operations (Night Tube). Clearly, it's in the interests of all Londoners that London Underground is able to extend the duration and increase the intensity of its train operations. However, this must not take place at the expense of residents who are already suffering significant noise and vibration pollution from the current tempo of operations. In the Barbican, numerous homes experience already intrusive noise and vibration pollution exceeding the World Health Organisation's (WHO) norms. Accordingly, **the Barbican Association believes that the Mayor's draft strategy gives insufficient recognition to TfL's own operations as a major source of noise pollution.**
5. The Barbican Estate is built over London Underground's sub-surface (Circle, Hammersmith and City, Metropolitan) lines. The concrete tunnel box between Barbican and Moorgate stations is a structural part of the Estate and is also, regrettably, a very efficient mechanism for transmitting noise and vibration to the homes above it. Noise nuisance has increased significantly in recent times. London Underground's (LUL) own measurements have shown noise levels of 50db+ inside homes. This level is for a single train and underestimates the noise pollution actually experienced inside homes since LUL (for good operational reasons since it seeks to identify particularly noisy individual trains) discounts measured levels generated

when two trains pass simultaneously. Noise levels thus comfortably exceed 50db in some homes.

6. The Mayor's Draft Transport Strategy encouragingly cites the World Health Organisation (WHO) as evidence that noise poses a significant health risk. The WHO's night noise guidelines state that "adverse health effects are observed at noise levels between 40 and 55db". Levels when two trains pass on LUL's sub-surface lines under the Barbican probably exceed 55db when the WHO states "Adverse health effects occur frequently. A sizeable proportion of the population is highly annoyed and sleep disturbed". A sizeable and growing proportion of the Barbican residential population is indeed highly annoyed because noise levels (measured by LUL) regularly and significantly exceed both WHO and LUL norms with a consequential risk to health.

7. Barbican residents, living in a growing number of areas across the Estate, have complained to London Underground Lines (LUL) about increasing noise and vibration pollution emanating from the sub-surface lines. Regrettably, LUL has stated that it has no plans to reduce this pollution despite the health risk it poses. Further, LUL's own guidance document G1323 (dated 2012) "Noise and Vibration Asset Design Guidance" (which concerns construction of new parts of the railway) specifies that "groundborne noise as measured in a residential dwelling" should "not give rise to an average maximum noise level exceeding 40dB" (para 3.4.2) and that "designers should use reasonable endeavours to meet a more stringent requirement of 35dB" (para 3.4.3). LUL's own measurements show that these levels are exceeded in Barbican homes. **Accordingly, the Barbican Association believes that these thresholds (and the associated vibration thresholds specified in LUL's guidance document) should also govern existing operations and urges that the Mayor's Transport Strategy should require LUL/TfL to upgrade its legacy assets so that a 35db level of noise (and vibration) pollution is/are not exceeded.**

8. Accordingly, the Barbican Association, whilst welcoming the emphasis in the Mayor's Draft Transport Strategy on increasing provision of public transport and increasing investment in public transport infrastructure and operations, asks that **specific provisions are made in the strategy to require London Underground promptly to reduce noise and vibration pollution to the levels specified in its own guidance document. It should do so by adopting appropriate measures including driver training and especially adopting best modern practice in upgrading its tracks (continuously welded rail; resilient noise and vibration reducing fixings such as Pandrol Vanguard clips; sleeper pads etc). LUL should prioritise track upgrading in areas where there is a long standing history of nuisance from noise and vibration pollution arising from LUL's operations.** The London Assembly Environment Committee has referred to an "epidemic" of noise pollution arising from LUL's operations: the Barbican Association believes that the Mayor's Transport Strategy therefore should prioritise reducing the "epidemic" of noise pollution and nuisance arising from LUL's operations.

Jane Smith, Chair, Barbican Association

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