Metro Nature & Human Health ES :: Valuation Challenges ::

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1. Health and Well-being Research

 Contact with metro nature (trees, parks, gardens, open space etc.) generates varied ecosystem services including psychosocial, cognitive, and physiological dimensions of human health and wellness benefits



 Literature review spanning >3,000 articles :: Green Cities – Good Health



3. Research Limitations

- Geographic scope or scale of measurement
- Outcome measures vary substantially
- Acknowledgment of potential confounding factors
- Others: sample sizes, human populations studied, cultural boundaries, etc.
- No integration between metro nature and public health fields

0% 2% 4% 6% 8% 10% 12% 14% 16% 18% Distribution of Articles by Theme (n~3,000)

2. Health Economic Valuation

- U.S. annual health spending is $\sim 18\%$ of G.D.P.
- Health and wellness benefits are associated with health promotion and disease prevention
- Few benefits translated into economic values (i.e., U.S. Forest Service i-Tree models)
- Increasing (but limited) studies associated with the linkages between metro nature benefits and public health/epidemiology (PHE) benefits and

4. Future, Integrated Research

- Increasing urban populations worldwide
- High costs of health decline and disease
- Needed! New interdisciplinary approach that combines urban natural resources, economic valuations, and public

Natural Resources

Economics

Public Health



health/epidemiology





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