

HOUSE OF REPRESENTATIVES

Quezon City

SEVENTEENTH CONGRESS

First Regular Session

HOUSE BILL NO. **6048**



Introduced by HONORABLE LUIS RAYMUND F. VILLAFUERTE, JR.

EXPLANATORY NOTE

The Philippines has a streetscape unfriendly to pedestrians. Streets from one district to the other, one city to another, do not align, rendering sidewalks non-existent in most places. People prefer to travel in vehicles than to brave the dangerous streets. The persistent heat, and ill-made sidewalks discourage even the most ardent of pedestrians. Long and even short distance walking is something to avoid at all costs. Vehicular traffic, unpredictable weather patterns, and unsafe sidewalks all make for a metropolis with a pedestrian problem experienced daily.

A partial solution to this problem is elevated walkways. A network of them is a proven and effective response to overcrowding and urban chaos.¹ Although its primary purpose is to encourage pedestrianization, these systems are attractive to city planners and business leaders because it concentrates transit, real estate, and commercial value in a city. It furthers concepts of inclusive mobility and is an alternative form of transport for commuters. Furthermore these systems expand incrementally according to private and public interest without turning into an obstacle for other interests.²

In effect, elevated walkways in European and American cities have become a common fixture, separating pedestrians from the travails of vehicular

¹ Rotmeyer J.. "Can Elevated Pedestrian Walkways be Sustainable?" *The Sustainable City IV: Urban Regeneration and Sustainability*, (Hong Kong, People's Republic of China: University of Hong Kong, 2006), p. 293-302. Retrieved from:

<http://www.witpress.com/Secure/elibrary/papers/SC06/SC06028FU1.pdf>

² Yoos, Jennifer & James, Vincent. "The Multilevel Metropolis." *Places Journal*. (www.placesjournal.org, May 2016). Retrieved from <https://placesjournal.org/article/multilevel-metropolis-urban-skyways/>

traffic.³ Over 80 U.S. cities use them in their infrastructure.⁴ Small-scale use is also exemplified in Manchester Airport's "Skylink," an aerial walkway that connects the airport to nearby railway stations.⁵ While many studies on walkways have been done regarding the western experience of pedestrianization, very few deal with walkways in tropical countries.⁶ However, elevated walkways are proven effective in Hong Kong and Makati.

In Hong Kong, aerial pedestrian walkways were built in response to overcrowding and as a means of maintaining a functional public space.⁷ The elevated network links commercial and public spaces together to form a complete pedestrian infrastructure. Its network is especially noteworthy for preventing the decay of its ground level streets by ensuring the upper level pedestrian network is well connected to it and allowing business outlets to permeate both.⁸ With 6,100 persons per square kilometer, Hong Kong's high population density benefits from and sustains the port city's elevated walkway system.⁹

In Makati, its walkway system too has proven effective in easing urban congestion. In a 2000 survey, where the elevated walkway plan was yet to be completed, the walkways, and underpasses helped increase pedestrian traffic volume by 200,000 on weekdays. Time travel along main roads were also reduced into 7-10 minutes.¹⁰ The average travel distance covered by pedestrians on foot also significantly increased from 400 meters to 700 meters.¹¹ In a 2009 survey, the people interviewed unanimously preferred passing the elevated walkway due to convenience. The covered walkways reduced pedestrian travel time since they need not wait to cross streets.¹²

This re-filled version of the elevated walkways bill takes inspiration from Senate Bill No. 01146 filed by Senator Grace L. Poe on 19 September 2016. The bill seeks to establish a network of sustainable elevated pedestrian walkways

³ Rotmeyer J., *Elevated Pedestrian Walkways*, 298.

⁴ Ibid.

⁵ "Transpennine Express," *Manchester Airport Travel Links*, Retrieved from: <https://www.tpexpress.co.uk/train-destinations/manchester-airport/travel-links/>

⁶ Galingan C. Z., Alcazaren G. P., Ramos C. G., & Santos B. R., "Pedestrian-Friendly Streetscape in a Tropical Business District." *Journal of Architecture, Landscape Architecture, and the Designed Environment*, (University of the Philippines College of Architecture, 2009), No. 3, p.9, Retrieved from: http://upca.upd.edu.ph/uploads/1/8/5/4/18549486/02_galingan__pedestrian-friendly_streetscape_on_a_tropical_business_district.pdf

⁷ Rotmeyer J., *Elevated Pedestrian Walkways*, 295.

⁸ Ibid, 298-299.

⁹ Ibid, 300.

¹⁰ Galingan C. Z. et al., *Pedestrian-Friendly Streetscape*, 11.

¹¹ Tan, Salvador. "Makati Central Business District Pedetrianization and Traffic Segregation Projects". Forum on Improving Pedestrian Facilities and Bikeways in Metro Manila, (Manila, Philippines: Asian Development Bank, September 6, 2005), Retrieved from: <http://www.cleannairnet.org/caiasia/1412/article-69376.html> (cited in Galinan C.Z. et al. *Pedestrian Friendly Streetscape*)

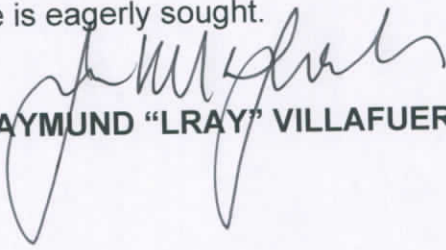
¹² Galingan C. Z. et al., *Pedestrian-Friendly Streetscape*, 11.

along Epifanio de los Santos Avenue (EDSA) traversing Metro Manila and major public thoroughfares in high-density urban areas. For an aerial walkway system to succeed, it needs to be fully sustainable on all accounts: socially, economically and environmentally.¹³ Studies show that high density, connectivity, and quality of life comprise the three topmost elements in maintaining a sustainable elevated walkway system.¹⁴

The ultimate goal is to create a safe, comfortable, well-connected quality of life above the ground (grade) level, reclaiming without killing the street.¹⁵ Elevated walkways must be interlinked in a manner that connects pedestrian movement to retail, residential, commercial, and business activities, as well as adopt essential access points that facilitate pedestrian entry to and exit from ground level walkways. Elevated walkways must make optimal use of densities and cater to the largest percentage of people in a given area. Such a system must also address safety, pollution, law enforcement activity, and social inclusion (especially for PWDs), as well as consider right-of-way (ROW) and air rights issues and legal easements.

To ensure the success and sustainability of aerial pedestrian walkways, this bill sets forth important principles and standards that the implementing agency, i.e. the Department of Public Works and Highways, must consider. These include principles of connectivity, use of densities, temperature and climate control, environmental sustainability, social inclusivity, right-of-way interfacing, and good use of vertical access systems. The bill calls for the establishment of a 'sustainable elevated walkway program', which will include educational and awareness programs on elevated walkway safety and use, health benefits, and social and economic benefits of aerial walkways.

Immediate approval of this measure is eagerly sought.


LUIS RAYMUND "LRAY" VILLAFUERTE, JR.

¹³ Rotmeyer J., *Elevated Pedestrian Walkways*, 294.

¹⁴ Ibid, 301.

¹⁵ Ibid.

Republic of the Philippines
HOUSE OF REPRESENTATIVES
Quezon City

SEVENTEENTH CONGRESS

First Regular Session

HOUSE BILL NO. 6048

Introduced by HONORABLE LUIS RAYMUND F. VILLAFUERTE, JR.

AN ACT ESTABLISHING A NETWORK OF SUSTAINABLE ELEVATED PEDESTRIAN WALKWAYS ALONG EPIFANIO DE LOS SANTOS AVENUE AND PERTINENT MAJOR PUBLIC THOROUGHFARES IN HIGH DENSITY URBAN AREAS, ESTABLISHING APPROPRIATE INFRASTRUCTURE AND FACILITIES, APPROPRIATING FUNDS THEREFORE, AND FOR OTHER PURPOSES.

Be it enacted by the Senate and the House of Representatives of the Philippines in Congress assembled:

SECTION 1. Short Title. - This Act shall be known as the "*Sustainable Elevated Walkways Act of 2017.*"

SECTION 2. Declaration of Policy. - It is the policy of the State to establish a sustainable network of safe, secure, comfortable, and aesthetically pleasing elevated pedestrian walkways which separate pedestrians from vehicular movement, link pedestrians to public transit, integrate human activity with the built environment, and allow for a continuous flow of movement, without interruption from vehicular traffic, stop lights, and pollution.

It is likewise a policy of the State to establish elevated pedestrian networks that are fully sustainable on all accounts, that is, socially, economically, and environmentally, to achieve a well-connected quality of life above the ground layer. High density, connectivity, and quality of life comprise the three topmost elements in maintaining a sustainable elevated walkway system.

Towards this end, the State shall promote the use of sustainable elevated walkway networks and walkway facilities through a comprehensive elevated walkway program. The State shall ensure that the needs and safety of all pedestrians are fully integrated into the planning, design, operation, and maintenance of the country's areal walkway networks.

SECTION 3. *Elevated Walkways.* – There shall be designated elevated walkways in Epifanio de los Santos Avenue, commonly referred to by its acronym “EDSA”, which traverses Metro Manila, and in all major public thoroughfares in high density urban areas, consisting of enclosed or covered footbridges serving as exclusive access-ways for pedestrians, under the parameters set forth in this Act.

Elevated walkways which utilize air rights above the road rights-of-way (RROWs), being part of the public domain, shall be considered public spaces. Motor and non-motor vehicles are prohibited from being driven or parked on all such walkways.

The design, purposes, and specifications of elevated walkways to be established under this Act shall be governed by the following standards:

- (a) *Continuous flow* – Elevated walkways must maintain a continuous flow of pedestrian movement throughout the day and night, allowing pedestrians to move freely without vehicular congestion and interruptions from traffic lights and intersections. Way-finding provisions and directional signages shall facilitate flow within the system;
- (b) *High density* – The design and location of elevated walkways must maximize the use of high density areas in order to relieve pressure from overcrowded streets by catering to the largest percentage of pedestrians throughout urban areas at any given time, displacing ground-level pedestrian movement to several levels, and enhancing movement within city centers;
- (c) *Temperature control* – Elevated pedestrian routes must provide climatically controlled continuous spaces, provide relief from extreme temperatures associated with hot, humid, and wet climates, distance pedestrians from vehicular pollution and vehicular contact, and adopt measures that maximize the use of shaded, cool, open-air zones. Both passive cooling techniques and artificial ventilation devices shall be used in a sustainable manner;
- (d) *Connectivity* – Elevated walkways must be interlinked in a manner that connects pedestrian movement to retail, residential, commercial, and business activities, as well as adopt essential access points that

facilitate pedestrian entry to and exit from ground (grade) level walkways;

- (e) *Safety* – Elevated walkways must directly address issues of pedestrian safety, including the separation of pedestrians from vehicular traffic, exposure to natural hazards, and compliance with disaster resilience and mitigation standards;
- (f) *Environmental sustainability* – The Program must maintain adequate spatial standards between the existing environment and all urban intervention under this Act; address potential ground floor decay and abandoned space; provide necessary safeguards and protection to walkway users who will be exposed to both air and noise pollution; and establish public address systems designed to warn all users of encountering such pollution upon entering and using the walkways. Energy and water conservation as well as solid waste management shall be the key sustainability features of the system;
- (g) *Social inclusivity* – Elevated walkway networks must be socially inclusive by addressing potential social separation caused by the introduction of aerial walkways in areas of different income classes, and by accommodating persons with disability (PWDs) through the installation of structural and vertical access facilities that reasonably enhance their mobility consistently with existing disability laws, including, without limitation, *B.P. Blg. 344*, otherwise known as the Accessibility Law, and *R.A. No. 7277*, as amended, otherwise known as the Magna Carta for Disabled Persons;
- (h) *Right-of-way interfacing* – The design and establishment of elevated walkways must consider affected portions of the road right-of-way and other key portions of the public domain. Of particular importance are the interfaces with grade level sidewalks allotted for exclusive use by pedestrians, for the elevated walkway supports/foundation and for the vertical access system; air rights directly above the sidewalks; required space for connectors that shall utilize air rights above the carriageway portion allotted for the exclusive use of vehicles using the road right-of-way; connection of air rights above the sidewalks at opposite sides of the road right-of-way; legal easements and their air rights along waterways in a manner that would enable such easements to host elevated walkways consistent with *P.D. No. 1067 (s. 1976)*, otherwise known as the Water Code, and *R.A. No. 10752*, otherwise known as the "The Right-of-Way Act".
- (i) *Vertical Access System* – As elevated walkways may have finished floor elevations above sidewalk surfaces, vertical access systems shall be established to connect the walkways to ground level pedestrians.

Vertical access systems established under this Act shall include, without limitation, elevators, stairs, and escalators that shall be gender-sensitive, socially-inclusive, elongated and appropriately sloped, and constructed in a manner that will not unduly constrict connecting sidewalks. Sidewalks adjacent to elevated walkways shall give way to pedestrian drop-off areas catering to public transport commuters and private vehicle riders who desire to avail of vertical access systems to reach elevated walkway systems;

- (j) *Support facilities* – Elevated walkway systems shall include the construction and maintenance of support facilities, such as bicycle parking lots, adequate lighting, crime prevention facilities and well-lit patrolling space for law enforcement personnel, closed-circuit television (CCTV) camera systems, access to restrooms, and adequate drainage. The maintenance of pedestrian infrastructure and functional public spaces above the street level shall be a requisite for sustainable elevated walkways;
- (k) *Active policing* – Elevated walkway networks established under this Act must provide for the administration of active policing and law enforcement coordination to prevent obstructions, nuisances, and illegal vending and squatting along elevated walkways;
- (l) *Adaptability to future technology* – Elevated walkway structures shall be designed in ways that will render them adaptable to future technology and technological capacity, including the capacity to be later fitted with walkalators to increase pedestrian capacity; and
- (m) *Expandability* – Elevated walkway networks must provide for both horizontal and vertical expandability to accommodate increases in capacity.

SECTION 4. Sustainable Elevated Walkway Program. - The Department of Public Works and Highways (DPWH) shall establish a comprehensive sustainable elevated walkway program ("the Program") to promote the establishment and use of sustainable networks of aerial pedestrian walkways along EDSA and major public thoroughfares in high density urban areas throughout the country. This Program shall be governed by the key indicators and standards set forth in the preceding section and in the provisions of this Act.

To promote the objectives of this Act, the DPWH, in cooperation with the Department of Education, the Commission on Higher Education, and affected local governments, shall establish educational and awareness programs on elevated walkway safety and use, general pedestrian safety, pedestrian infrastructure, health benefits, quality of life, and social and economic benefits of aerial walkways.

SECTION 5. *Prohibited Acts.* – The use of elevated walkways and vertical access systems for commercial and personal purposes shall be prohibited. Such prohibited acts include but are not limited to the following:

- (a) Driving or parking motor and non-motor vehicles on all such walkways, including its vertical access points and drop-off areas;
- (b) Vending, selling, or servicing of foods, magazines, newspapers, cigarettes, brooms, watches or jewelries, shoes and other footwear, shoe-shine and shoe repair, and/or any other commodities, items, and services;
- (c) Alms or donation-seeking activities;
- (d) Doing house chores such as washing clothes, hanging clothes, and bathing;
- (e) Repair of vehicles of all types;
- (f) Dumping garbage;
- (g) Sports, games, and amusements;
- (h) Use of walkway to install pens of animals or keep animals in chains or tether;
- (i) Holding picnics/gatherings or storage of foodstuffs and beverages for such gatherings;
- (j) Drinking liquor;
- (k) Storing of junks and recyclable materials;
- (l) Storage of construction materials for sale (pipes, tubings, lumber, cement, and the like);
- (m) Installation of temporary or permanent fences;
- (n) Use of walkways for plants, trees and plant boxes; and
- (o) Signs or signboards above sidewalks and detached from the business establishment.

SECTION 6. *Obstructions as nuisance per se.* – Without prejudice to the prosecution of prohibited acts defined under the immediately preceding section, all obstructions along elevated walkways are hereby presumed or declared nuisances *per se* and, as such, are subject to summary abatement without need of judicial proceedings.

Obstructions include any structure, permanent or otherwise, movable or immovable, erected along, standing on, abutting or in any manner impeding safe and convenient passage through any elevated walkway; *Provided*, That property of the government including structures erected or installed for the purpose of regulating the flow of traffic shall not be deemed obstructions.

SECTION 7. *Penalties.* – The principal penalty for any violation of the provisions of this Act or its implementing rules shall be summary abatement, dismantling, forfeiture, and disposal of the obstruction to the walkway.

In addition, any person, corporation, trust, firm, partnership, association or entity found violating this Act or the rules and regulations promulgated hereunder

shall be punished by a fine of Five Thousand pesos (P5,000.00) which shall accrue to the National Treasury, or imprisonment of not more than 30 days, or both, at the discretion of the court. When the offender is a juridical entity, the officers or agents responsible for the violation shall be meted with said penalties.

Any officer of the duly designated enforcement agency who neglects or fails to enforce the provisions of this Act shall be administratively liable and in addition, punished by a fine of not less than Twenty Thousand Pesos (P20,000.00), without prejudice to the filing of other appropriate administrative charges.

The Secretary may enlist the assistance of other departments or government agencies to carry out this section.

SECTION 8. *Implementing Rules and Regulations.* - Within thirty (30) days after this Act takes effect, a committee composed of the following members shall be created to formulate the draft implementing rules and regulations of this Act:

- a.) The Secretary of DPWH, or an authorized representative, who shall serve as chair of the committee;
- b.) A representative from the Department of Transportation;
- c.) A representative from the Department of Budget and Management;
- d.) A representative from the National Economic and Development Authority;
- e.) A representative from the Department of Environment and Natural Resources;
- f.) A representative from the Metro Manila Development Authority;
- g.) A professor from the University of the Philippines School of Urban and Regional Planning;
- h.) Two (2) representatives from non-government organizations which advocate for alternative modes of transportation; and
- i.) Other representatives of concerned entities and organizations as determined by the committee as members.

Upon the release and consideration of the above draft implementing rules and regulations and in no case beyond six (6) months after this Act takes effect, the Secretary of DPWH shall promulgate and disseminate the implementing rules and regulations.

SECTION 14. *Appropriations.* - To carry out the provisions of this Act, such amount as may be necessary is hereby authorized to be appropriated from the National Treasury. Thereafter, the amount necessary for the continuous operation of the Program shall be included in the annual appropriation of the DPWH.

SECTION 15. *Separability Clause.* - If any provision of this Act is declared unconstitutional or invalid, other parts or provisions hereof not affected thereby shall continue to be in full force and effect.

SECTION 16. *Repealing Clause.* - Any law, presidential decree or issuance, executive order, letter of instruction, administrative order, rule or regulation contrary to or is inconsistent with the provision of this Act is hereby repealed, modified, or amended accordingly.

SECTION 17. *Effectivity Clause.* - This Act shall take effect fifteen (15) days after its publication in the Official Gazette or in a newspaper of general circulation.

Approved,