

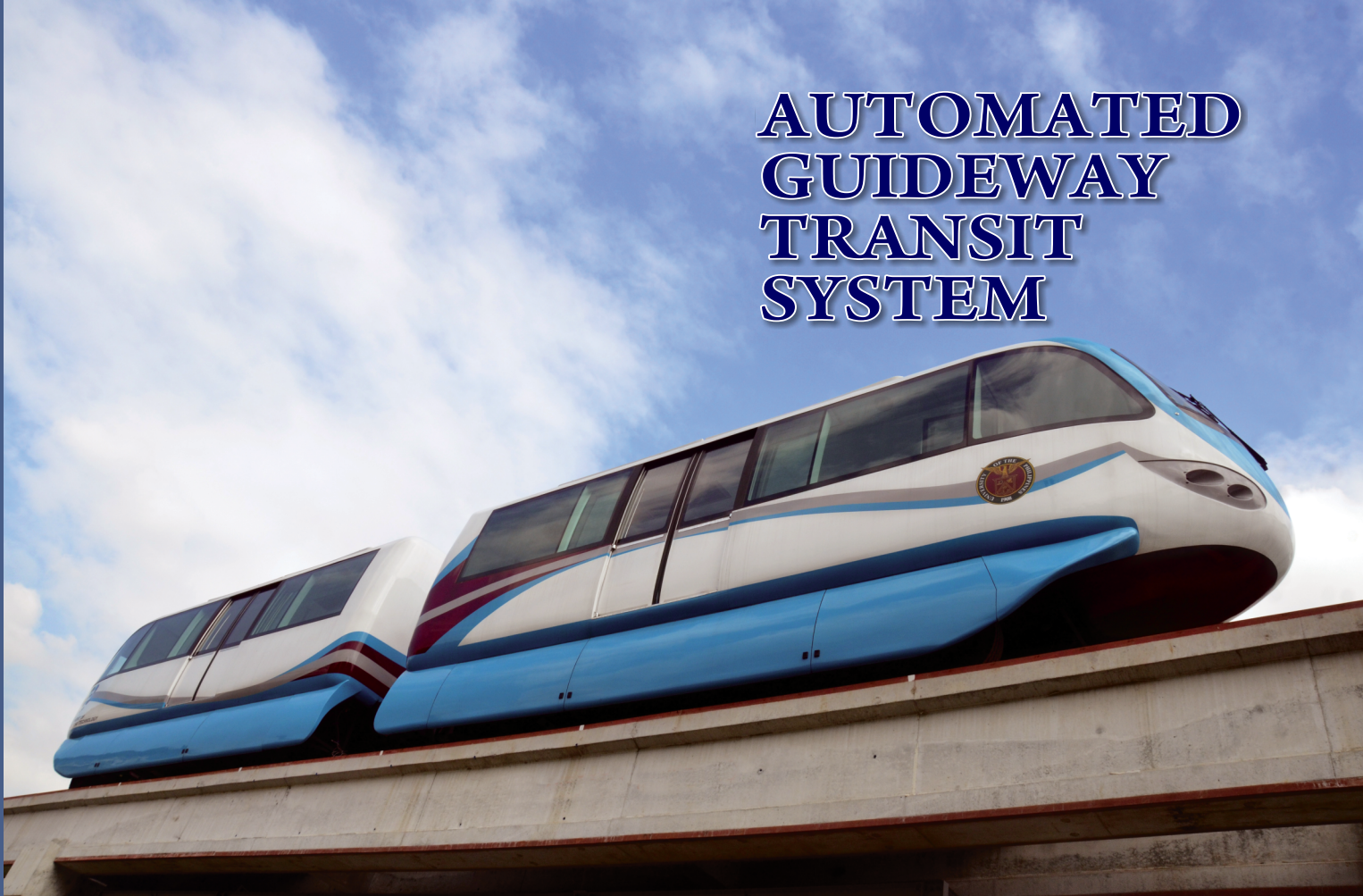


It is envisioned that upon the commercialization of the AGT system, it could help reduce transport costs, cut travel time, and improve accessibility to various areas in Metro Manila. This could also promote greener environment and generate benefits beyond savings in transport costs and time.

## **AGT...** **Ang Galing Talaga** **ng Pinoy!**



# AUTOMATED GUIDEWAY TRANSIT SYSTEM



for more information, please write, fax, call, or email:



**DEPARTMENT OF SCIENCE AND TECHNOLOGY  
METALS INDUSTRY RESEARCH AND DEVELOPMENT CENTER**

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The Department of Science and Technology pioneers the development of the first locally-developed AGT system in the country as an alternative solution to the worsening problems on traffic in the country.



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## Development of Automated Guide-way Transit System in the Philippines

Traffic congestion and traffic-related problems have been a long-standing challenge to the country. The Automated Guideway Transit (AGT) System is a project of the Department of Science and Technology that aims to provide an alternative solution to these challenges. Through the Metals Industry Research and Development Center

(DOST-MIRDC), the AGT was designed with the following features:

- Powered by electricity;
- Automated, driverless;
- Uses rubber tires;
- Runs on an elevated track

### AGT-UP

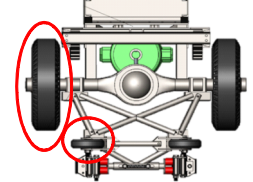
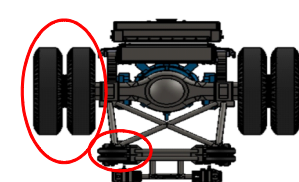
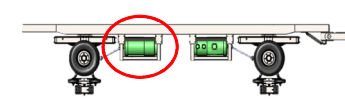
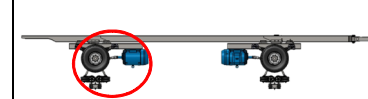
- 2 coaches that carries 30 passengers each
- 465-m track
- Maximum speed of 45 kph
- 2 passenger stations
- Automated fare collection system
- Established communication and safety features



### AGT-Bicutan

- Bigger and improved version
- Results from the tests and evaluation of the AGT-UP were considered in the design of the AGT-Bicutan.
- 2 coaches, can accommodate 120 passengers each
- 372-m track
- Top speed: 60 kph



|                    |   |  |
|--------------------|---|--|
| Elevated Track     | <ul style="list-style-type: none"> <li>-Improvement on the alignment/surfacing of the tracks</li> <li>-Improved surfaces of columns by applying plaster</li> <li>-Installation of Retainer Assembly that will assure the horizontal alignment of the guideway</li> </ul>  |  |
| Rolling Stock      | AGT UP  | AGT Bicutan  |
|                    |  <ul style="list-style-type: none"> <li>-Single Tire, 8.5xR16, 14PR</li> <li>-Single Horizontal Guidewheel</li> <li>-Hydrauvac Brakes</li> </ul>   |  <ul style="list-style-type: none"> <li>-Double Tire, 9xR20, 14PR</li> <li>-Double Horizontal Guidewheel</li> <li>-Air/Hydraulic Brakes</li> </ul>          |
|                    |  <ul style="list-style-type: none"> <li>-Motor attached to the main chassis</li> <li>- Braking Resistor at Driver's Cabin</li> </ul>  |  <ul style="list-style-type: none"> <li>-Motor attached to the bogie chassis</li> <li>-Braking Resistor relocated to rear, underchassis section</li> </ul> |
|                    | <ul style="list-style-type: none"> <li>-60HP Motor, 75HP VFD</li> <li>-230V 1-phase air compressor motor</li> <li>-Supply for 24V uses pure sine inverter</li> </ul>  | <ul style="list-style-type: none"> <li>-125HP Motor, 150HP VFD</li> <li>- 440VAC 3-phase plus VFD</li> <li>- 24V supply gets power straight from 650VDC</li> </ul>   |
| Other Improvements | <ul style="list-style-type: none"> <li>-Gauges are already located on the dashboard</li> <li>-Human Machine Interface (HMI) has better angle for viewing</li> <li>-A/C control is centralized. Can be controlled by either driver's cabin.</li> <li>-Alternator motors (for A/C) have their own VFDs. Can be turned on simultaneously via switch</li> <li>-Improved rectifier. Has better protection devices (i.e. Short Circuit protection, overcurrent protection)</li> </ul> |  |