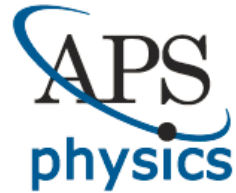**2018 GASEOUS ELECTRONICS CONFERENCE**   **AMERICAN PHYSICAL SOCIETY**
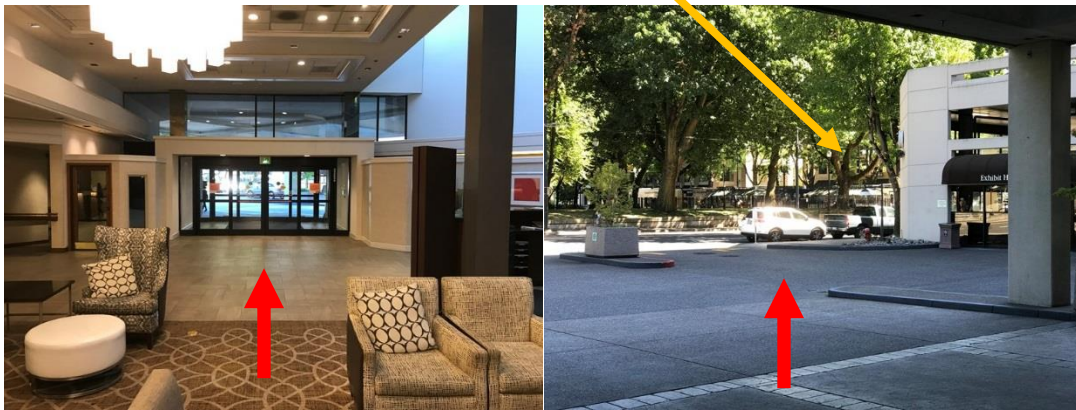
Step-By-Step Instructions for Travel from the Portland DoubleTree Hotel or Oregon Convention Center to the Portland Art Museum

Since Portland offers excellent public transportation, no bus service will be provided to the GEC banquet venue at the Portland Art Museum (PAM). Uber or Lyft are the easiest way to get to the PAM. You begin by downloading either the Uber of Lyft app to your smartphone. Both apps require setup information and a credit card number. You will want to do this before you travel. The cost will be somewhere between $8 and $14 depending on the travel options you select. You can further reduce your cost by splitting a ride with others. After your ride arrives, it should take about 15 minutes of city driving to get to the PAM. If you want to save money or otherwise do not want to use Uber or Lyft, then the best option is the Metropolitan Area Express (MAX) light rail. The MAX has stops just outside the GEC DoubleTree hotel and at the Oregon Convention Center (OCC). Three MAX three lines service these stops: Blue, Green and Red. All three lines will get you to stops within a few blocks of the PAM, but the green line has the shortest walk after you get off the TriMet. The green line stops about 3 city blocks from the PAM (a 6-minute walk). The route taken by the green line also provides a "mini-tour" of downtown Portland. Additional Portland MAX green Line details is found at https://trimet.org/schedules/maxgreenline.htm.

Security: The MAX system is known for its ease of use and safety. TriMet stops are generally well lit and equipped with surveillance cameras. TriMet reports that there are fewer than two reported incidents per every 231,000 rides. It is extremely unlikely that you will have any problems while using the system. However, if you do have a problem (including medical) or see others in difficulty use your smartphone to dial 911. All incidents on the TriMet system are coordinated through the US regional 9-1-1 system, allowing the closest available unit to serve as the first responders.

How to Use the MAX System: Google Maps (https://www.google.com/maps). You can click HERE for specific instructions for travel from the DoubleTree to the PAM. However, if need more detail then please see the step-by-step guide given below to find the TriMet stops, purchase tickets and for travel to the PAM using the Green line.

Step 1 (Departure from the GEC DoubleTree Hotel): Exit the hotel from the doors shown below. After you get outside, you should see the MAX stop in the distance.   Follow the red arrows below.

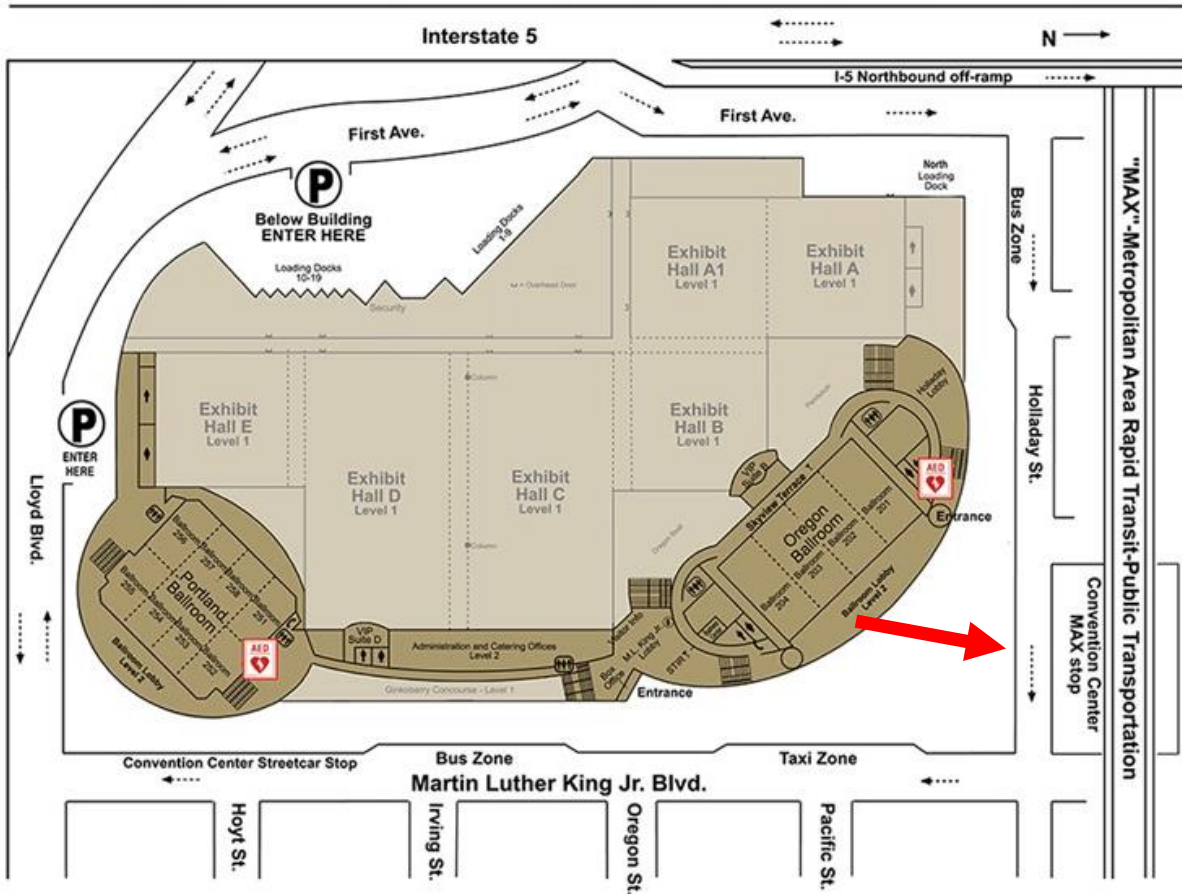Proceed to the corner of NE 11th Ave and NE Holladay Street.

When you arrive at the stop you should see views of the MAX station stop as shown below. Note that you will want the westbound green line.   Walk to the "Lloyd Center"11th street MAX station.   You will want to be heading Westbound when you board the train.

You now should be at MAX station stop ID 8374. if you are using smartphone apps "TriMet Tracker" or "PDX Bus, MAX, Streetcar and WES" the stop you will want to travel to is MAX Station ID 7608. (more about these Apps is given below). If you do not already have a MAX train pass (ticket) then proceed to the ticket purchase machine.   Instructions for purchasing a ticket are in Step 2 below.

Step 1 (Departure from the OCC): Exit the OCC through the Ballroom Lobby (Level 2) and proceed to the corner of Martin Luther King Jr. Boulevard and NE Holladay Street.   Follow the red arrow as shown below.   The MAX stop (station) is at the corner. You will want to get on a westbound MAX train from MAX Station ID 7608.

When you arrive at the OCC MAX line stop you should see views as given below.

You now should be at MAX station stop ID 8376.   if you are using smartphone apps "TriMet Tracker" or "PDX Bus, MAX, Streetcar and WES" the stop you will want to travel to is MAX Station ID 7608. (more about these Apps is given below). As you stand at the OCC MAX stop you should see a view that looks like this. Note the two glass towers. These are often visible from a distance. If you are walking around the area and get lost, your first step is to search the skyline for these two glass towers.
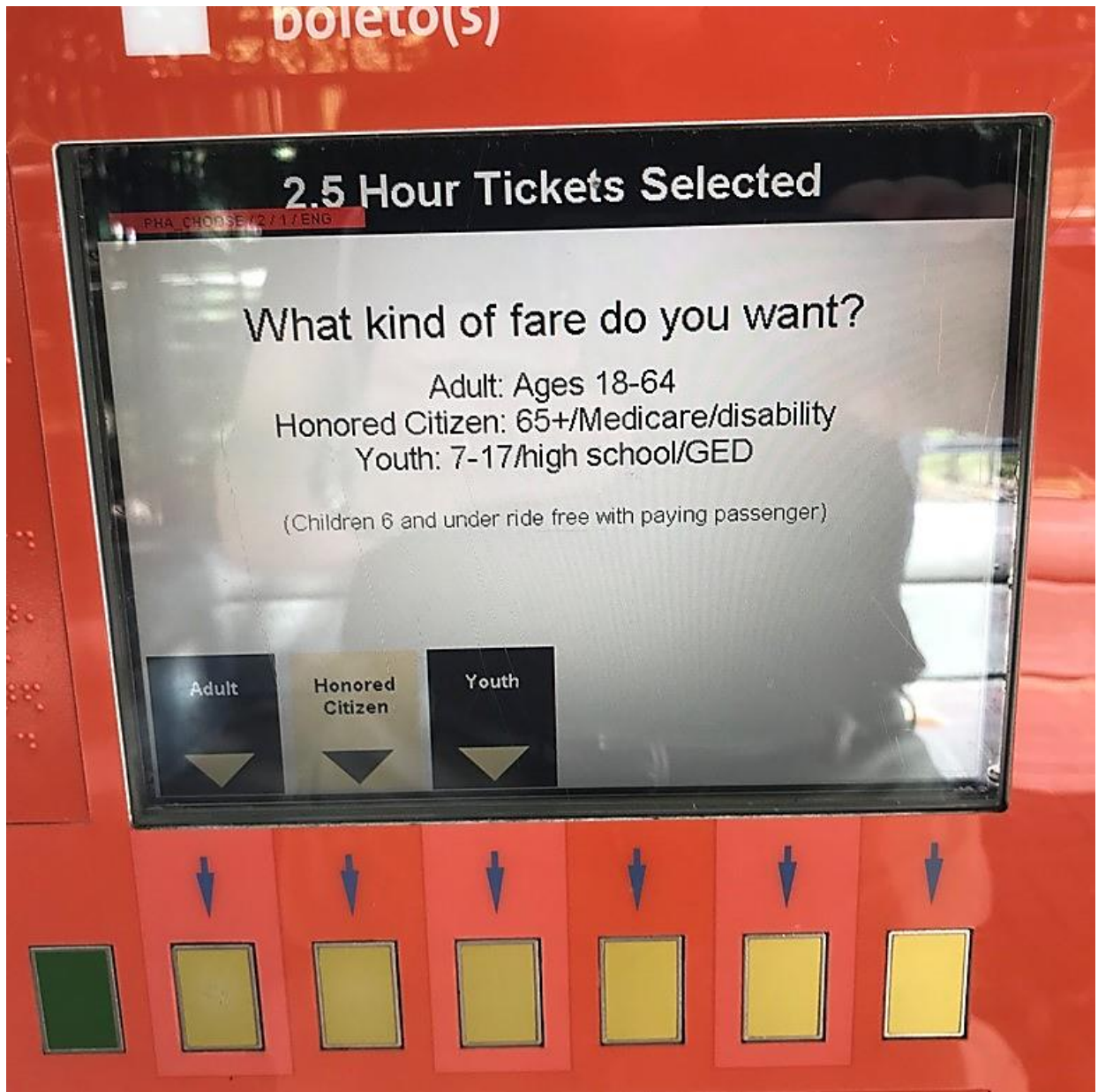

Step 2 (Purchase a MAX Ticket): Look for a machine that looks like the picture below:

Start with the area on front of the machine marked #1. The first screen you will see is the one at right. You will need to pick between a 2.5-hour pass, a 1 day, 7-day, 14-day and 30-day pass. We think it not likely that the GEC Banquet will last 7, 14 or 30 days (in case you were wondering). Select the time you want.

After selecting the amount of time needed you will then be shown a screen which asks which fare type you want.   This screen appears as shown below:
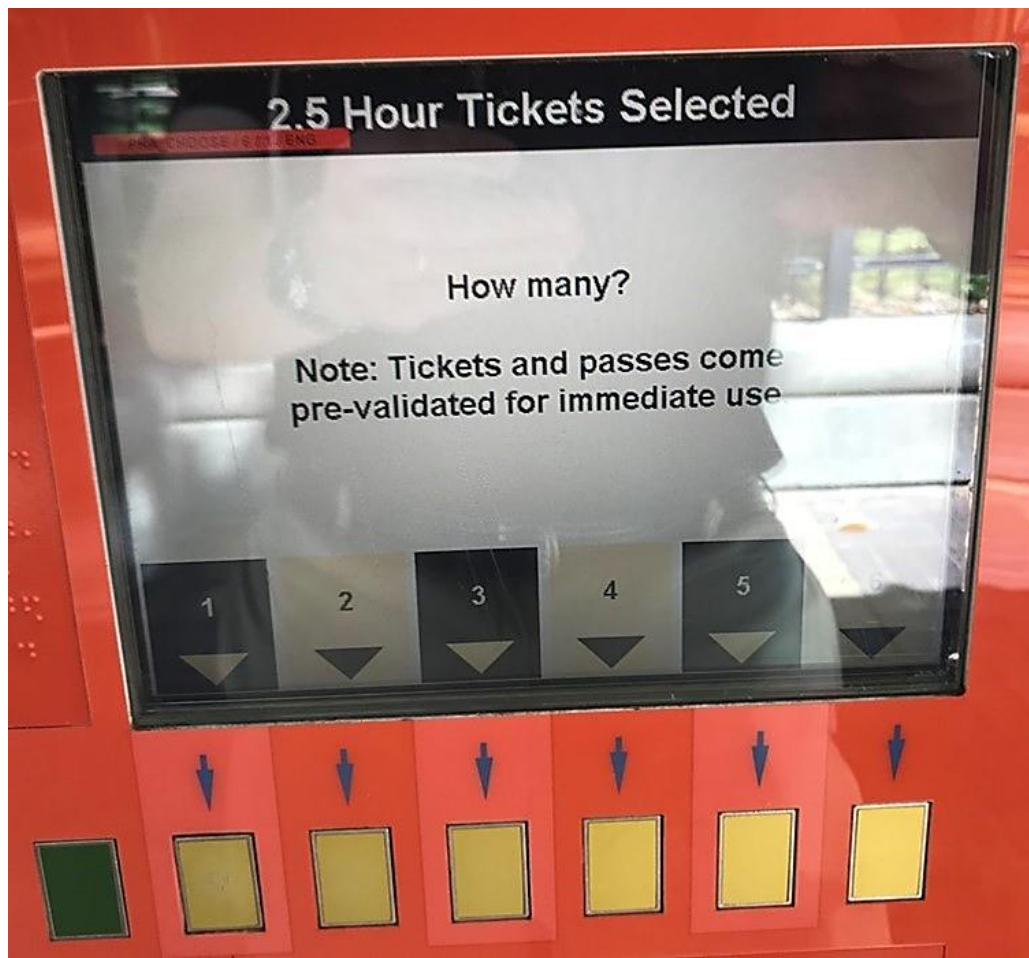

Fare rates are usually not printed on the ticket vending machine or given on this screen, but are as follows:

1. **Adult** (Ages 18 to 64) - Most GEC attendees will want to select this option.
    a.   2.5-hour pass $2.50
    b.   1-day pass $5.00

2. **Honored Citizen** (65+) - this is for Reduced fare for low-income riders, seniors age 65+, Medicare beneficiaries and riders with a mental or physical disability.   MAX trains do have ramps that can extend onto the sidewalk for easy boarding. Instructions for boarding MAX with a Mobility Device (e.g. wheelchair) is available HERE
   a. 2.5-hour pass $1.25
   b. 1-day pass $2.50

3. **Youth** (Ages 18 to 64) - Reduced fare for ages 7–17 and students in high school or pursuing a GED. Proof of eligibility required for ages 15-17 and high school/GED. Children 6 and under ride free with paying passenger. If you are a Graduate Student, you must pay "Adult" fare in Portland.
   a. 2.5-hour pass $1.25
   b. 1-day pass $2.5

After selecting which fare type you want you will then be shown a screen that asks how many tickets you want.   This screen appears as shown below.   Since most of the readers of these instructions have advanced degrees in Physics, our hope is that you can figure this one all by yourself.
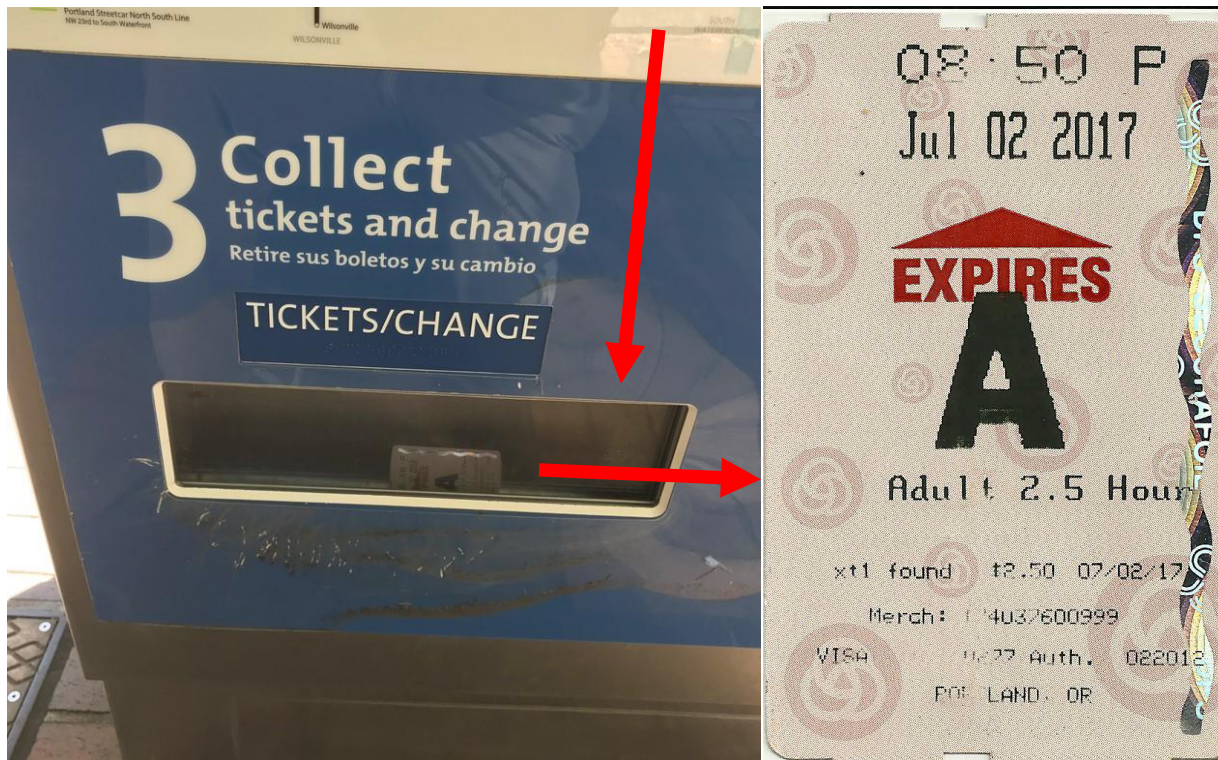
The next screen you will see will ask you for payment.   This takes you to area 2 of the instructions on the machine (see picture below). You can pay with US coins (no paper currency), most credit cards (American Express, Visa, MasterCard and Discover).   Two types of card readers are available.

The ticket come comes "pre-validated" which means that there is a time stamp on the ticket. You will note that when you board a MAX train there are no "turnstiles" or other mechanisms to check your ticket before you board. You just simply board the MAX when it stops. However, there are occasions when TriMet Security will come through the trains to ask to see your ticket. If you were at the GEC meeting in Bochum Germany you will find that the system used in Portland is similar, except there is no option to conduct your business in German. However, here is an option to conduct your business in Spanish. Your ticket will also be valid for travel on any Bus, Portland Streetcar or WES train. The WES for travel to distant suburbs near Portland and you are not likely to use it. However, if you are exploring Portland you may want to use a Bus or Streetcar.

After you complete payment the machine will print a ticket and deposit the ticket in a tray in area 3 of the machine.   Please see picture below.   Do not forget to take your ticket!

Now you are ready for your grand adventure on the Portland MAX train. Time to get excited and do a small "happy dance". It's ok, you are in Portland now and allowed to harmless crazy things. Remember that the un-official city motto is "Keep Portland Weird". After you finish your "happy dance" your next question is likely to be "when is this **@#&*$%** train coming?". Portland has you covered. Most TriMet stops now have monitors that tell you when your MAX train will arrive. Below is a picture of the monitor you should look for.

Remember that you usually will want the green line. Also, highly recommended are the mobile apps smartphone apps "TriMet Tracker" or "PDX Bus, MAX, Streetcar and WES".   These Apps are really handy, and it is recommended that you download these to your smart phone shortly after arriving in Portland. After identifying the stop using the map in the app or by using the station ID you can get a precise schedule as to when the train will arrive and can precisely time when you must leave to catch the train Honestly, using these apps makes you feel like you are in the movie "Mission Impossible", where you can time everything down to the minute or less!

Step 3 (Board the Correct Train): When a train arrives, you need to look for a small LCD display that tells you what "color" train it is.   For the green line you will need to look for a square green LCD display (it is hard to get a good picture of this since this is a rastered display)

MAX trains do have ramps that can extend onto the sidewalk for easy boarding. Instructions for boarding MAX with a Mobility Device (e.g. wheelchair) is available HERE

Step 4 (Ride the Train): Below is a view from inside a MAX train.   When your train departs you can check your progress using the "scrolling" sign shown near the roof of the rail car.   If traveling to the Banquet and the PAM you will want to exit the train at City Hall SW 5th and Jefferson.   This is MAX Station ID 7608.

When you step off of the train you should see a view looking across the street as shown below. The building across the street is the Portland city hall.   We will refrain from political jokes at this point.
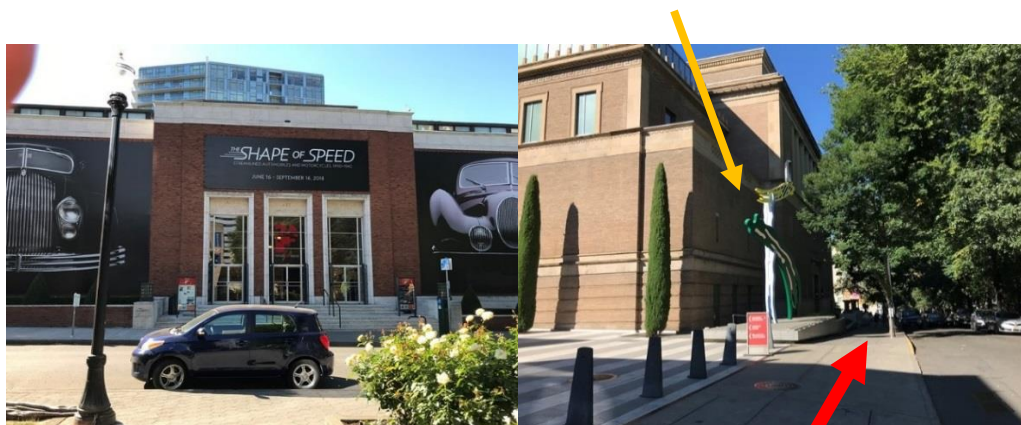
When you get off at this stop, take a quick moment and look for the "Benson Bubbler". These are iconic bronze drinking fountains named after Portland businessman and philanthropist Simon Benson (1852–1942), mostly located in Portland, Oregon, United States. In 1912, Benson donated money to install these fountains around the city.   These fountains have operated (more or less) continuously since 1912. Take a very close look – what are these drinking fountains missing that most modern drinking fountains have?   Why is this item missing? Go to https://www.portlandoregon.gov/water/article/352768 for the full story.

Step 5 (Walk to the PAM Venue): After you get off the MAX train, walk to either 5th and Jefferson or 5th and Madison. After you get to either of these intersections you should head west. If you are climbing a gentle hill then you are heading in the right direction. After 3 city blocks you will come upon a city park. Below is a picture of what you will see if arriving along Jefferson street.   If you are entering this park from along Jefferson street, look to your right and eventually you will see a statue of a man on a horse.   This person is actually Theodore (Teddy) Roosevelt, 26th President of the United States from 1901 to 1909. Why is Teddy here? For details, go to https://en.wikipedia.org/wiki/Theodore_Roosevelt,_Rough_Rider

You can either walk to the statue or proceed to SW Park Avenue.   If you go by the statue, stop at the statue and look west – you are now looking at the entrance to the Portland Art Museum (see picture below at left).   The Portland Art museum is actually two buildings. Walk to the Museum entrance and then head north on SW Park avenue to the second building as seen in the picture below at right. Look for the art sculpture at the corner of the building you should go to.

The entrance to the building for the GEC Banquet is shown in the picture below. This is the "Mark Building" of the Portland Art Museum.   The Mark Building was formerly a Masonic Temple. This is the reason for the unusual symbols and artwork which all has meaning to a "Mason" (do you remember the movie "National Treasure" with Nicolas Gage?).   You have now arrived!

Step 6 (How to start your trip back to DoubleTree Hotel):

To return to the GEC DoubleTree hotel you need to first walk to the corner of SW 6th and Madison streets.   When you get there, you should be at TriMet stop ID 13123. This is not the same place as where you got off when you were traveling to the PAM.   When you arrive, you should see a view as shown in the picture below.   You will want to be going northbound. You will want to wait for a "green" TriMet that also says "Clackamas" on its display.

After you board a MAX green train you will want to ride the train over the Willamette river and beyond until you get to the Lloyd Center 11th Ave MAX station (stop). This will be MAX station stop ID 8374. At this point you will get off the train.   If you look around a bit you should see the GEC conference hotel that you started from.   Walk to the hotel and soon you will be where you want to be!

Things to look for along the way to the PAM

Here are a few items to look for as you journey on the MAX train to the PAM

1. **Electric Scooters** - These were introduced to Portland in the summer of 2018 and it is still an urban experiment.   Portlanders seem to really love these scooters and you see them everywhere.   There are three vendors for these: Skip, Lime and Bird.   If you want to try a scooter you need to first download the apps for these vendors.   After setup and enter of a credit card number the app will direct you to the nearest scooter.   Follow the App instructions for starting up the scooter.   When you are done with scooter you just leave it where you stopped riding it.   There is no return location and so these things get scattered all over the city. You are supposed to wear a bicycle grade helmet, but many do not and there does not seem to be any enforcement.   Below is a picture of a naughty person riding a scooter without a helmet.

2. **Food Carts** - If you are riding the green line, you will come upon a cluster of food carts at the corner of 5th street and Stark.   There are several of these clusters around the city.   Portland is very proud of its "food cart" culture and often the food found there is very good and very unusual.   These "food carts" are closely regulated by the city of Portland and quite safe.   In the case of the cluster at 5th and Stark – the best Gyro's in the city of Portland is found at the food cart at the corner in the picture below.