

“The MAX has been a living nightmare for us”^(over)
The Look of Light Rail



Ugly Overhead Wires



Oversized, out of place condo complexes



Blocked Crosswalks divide neighborhoods



High Density Housing Causes Congestion



Blocked Streets divide neighborhoods



Most new residents still drive so congestion increases

See: DebunkingPortland.com/Transit/RailMenu.html

More at: www.DebunkingPortland.com

“The MAX has been a living nightmare for us”

After listening to testimonials of theft, vandalism, beatings and intimidation, [East Precinct's Sgt. Kim] Preston said there's little likelihood police will increase patrols in the area any time soon.

"The MAX has been a living nightmare for us," Preston said. "I would not ride it at night -- and I'm armed all the time. There are massive fights, guns displayed, stabbings, people being threatened and bullied."
(Oregonian, Thursday, September 20, 2007)

Light rail kills people at 2½ times the rate of Cars

MAX Death Rate in Portland: **1.14 deaths per 100 million** passenger-miles (19/16.66 million miles)

Motor Vehicle Death Rate in Portland: **0.46 deaths per 100 million** passenger-miles

See: www.DebunkingPortland.com/Transit/MAXSafetyChart.html

Light Rail is Not Really Transportation It Is a Tool For High Density Development

Sam Adams: *“I believe we should plan to accommodate our share of projected regional growth ... 300,000 more Portlanders ... within ¼ mile of all existing and to-be-planned streetcar and lightrail transit stops ... Because it will simultaneously encourage responsible, transit-supportive development. What would Portland look like .. it would look a lot like Portland circa 1920 - a time when the main means of motion were your feet, streetcars and bikes.”* City Club Speech July 20, 2007

Light Rail Causes Congestion

Light rail brings high density development along the rail line. The reality is that most of these new people still drive, so this huge number of new people cause large increases in traffic congestion.

Even light-rail advocates no longer claim that train service will reduce congestion. Portland is the national leader in building light rail and is also a national leader in traffic congestion. Trimet admits that MAX only carries a number of people equivalent to 1.2 lanes of freeway, while neglecting to adjust for the fact that most MAX riders would be in buses, not cars, if MAX wasn't built. Adjusting for these 2/3 of MAX riders reveals that MAX only reduced traffic by about 1/3 of one lane of freeway. But MAX costs about 5 times as much per mile as a lane of freeway, so it costs about 10-20 times as much as a road per passenger capacity.

Light rail costs too much and does too little.

Had we spent the money on added road capacity, instead of MAX, Portland probably would not have a traffic congestion problem today. See: www.DebunkingPortland.com/Transit/RailAttractsDrivers2.htm

Light Rail Cost Per passenger-mile

Rail	\$1.11	LRT with construction
Bus (system average)	\$0.84	Calc. from Trimet data: Bus system cost / bus passenger-miles No road maintenance or construction
Lowest cost BUS line in Portland:	\$0.34	Trimet data for the lowest cost BUS line No road maintenance or construction
Cost of Cars	\$0.25	Includes everything. Based on Bureau of Economic Analysis & Federal Highway Administration's Highway Statistics

The cost of cars includes everything, including depreciation, maintenance, insurance and taxes and fees which pay for almost all of the cost of roads. The cost of Buses DO NOT include the cost of road construction or maintenance. Portland transit costs are 80% paid by taxpayers and 20% paid by users.

See: [www.DebunkingPortland.com/Transit/Cost-Cars-Transit\(2005\).htm](http://www.DebunkingPortland.com/Transit/Cost-Cars-Transit(2005).htm)

LookOfLightRail5b.ppt

More at: www.DebunkingPortland.com

False Claim: Mass transit saves money

Cost of Trimet Transit vs Cars & Taxis

Mode	COST/Pass.-Mi.	Source of Number and calculation outline - Click for details
Bus	\$0.835	Calc. from Trimet data: Bus system cost / bus passenger-miles
Rail	\$0.434	Calc. from Trimet data: Rail system cost / rail passenger-miles
Combined	\$0.67	Calc. from Trimet data: all system cost / all passenger-miles
Rail, with construction	\$1.11	Calculated from Trimet data and applying amortization
Lowest cost BUS line in Portland	\$0.34	(Line 33-McLoughlin) Public Information Request
Cost of Cars		
Car (actual cost using national data)	\$0.331 (veh.-mi.)	Calc. by national spending / national vehicle-miles
Car (actual cost using national data)	\$0.202	Calc. by national spending / national passenger-miles
Car (using national data - adjusted for Portland)	\$0.254	Calc. by nat'l spend / nat'l pass-miles x 1.634/1.3
Car (AAA estimate)	\$0.522 (veh.-mi.)	From AAA
Car (AAA derived)	\$0.319	AAA cost (above) / pass per vehicle. See note below
Cost of Portland Streetcar		
Portland streetcar	\$1.25 (per ride)	Calc. from PortlandStreetcar.org: total cost / total trips
Portland streetcar	\$1.67	above \$1.25 / 3/4 mile average trip length per Charlie Hales
Cost of Taxi Fare in portland		
Taxi fare - per mile portion only	\$2.10	Cost quote from local cab co. Additional cost is \$2.50 to board
Taxi fare with 1.6 people - per mile portion only	\$1.31	Cost quote from local cab co. Additional cost is \$1 per extra pass.

Notes:

The Trimet costs and Car (BEA) costs are based of REAL costs and REAL miles, unlike AAA which is theoretical. Light rail has massive construction costs which are ignored in the above (and ignored by Trimet's busmaxstat.pdf) except as noted

The cost of roads is mostly included in the cost of driving due to taxes and fees being included.

Line 69 is the sum of lines 70-77 and includes most (all?) driving related expenses.

National average passengers per vehicle is 1.59, calculated by dividing national passenger-miles by national vehicle-miles

[Click for more details](#)

[PDF of this Page](#)

www.DebunkingPortland.com

False Promises: Light Rail Reduces Congestion

Does Rail Reduce Congestion-1?

From the Oregonian [October 29, 1998](#) (just after the Westside line opened):

The debate about ridership on westside light rail and its effect on traffic continued Wednesday, with Tri-Met saying it has attracted 1,773 new bus and rail riders in the westside corridor

Tri-Met based its number on a count of bus riders between 6 and 9 a.m. on an average of five mornings in October 1997 compared with a similar count of bus and rail riders this month in the same corridor. The agency's transportation consultants counted 3,642 riders both directions in October 1997 and 5,415 this month.

Analysis: This is a real count, not a projection and is from the transit agency itself

Ridership went from 3,642 to 5,415 an increase of 1,773. Of the 5,415 total transit users, 3,642 (67%) were previous transit users and 1,773 (33%) were not. Typically light rail lines have more riders in the first month due to the hoopla surrounding their opening and before some riders realize that, for them, the rail is actually worse than the bus that it replaced so this number of new riders is probably an ABSOLUTE MAXIMUM

Conclusions

1. TriMet found that, over a three hour period, 1,773 people were removed from the freeway for a total of 591 people per hour.
2. A freeway lane has a capacity of around 1,800 cars per hour.
3. 591 people would occupy 492 cars at 1.2 people per car.
4. $492 / 1800 = 0.27$, or about 1/4 of one lane of freeway capacity.
5. **MAX removed ONE-QUARTER OF ONE LANE worth of traffic from the Sunset during rush hour.**

Does Rail Reduce Congestion-2 ?

A TriMet [Fact Sheet](#) (year 2006, 8 years after the Westside line opened) claims that

- "Westside MAX provides the transportation capacity equivalent to another 1.2 lanes in each direction on the Sunset Hwy."

Conclusion

1. 2/3 of MAX riders would be on a bus if MAX had not been built (as shown above: "Of the 5,415 total transit users, 3,642 (67%) were previous transit users...")
2. Therefore MAX carries a number of people equal to 1/3 of the number of people on 1.2 lanes of the freeway. $1/3 \times 1.2 = 40\%$ The number of cars removed is 40% of one lane / 1.3 people per car = 31% of one lane of US-26
3. **MAX only reduces traffic by 31% of one lane of freeway, according to TriMet's own data.**

Comment

1. Those 3 lanes of the Sunset, also carry trucks and buses along with a share of commuter equal to MAX.
2. 18 miles of MAX cost \$963 million or \$53.5 million per route mile of double track (\$26.75 million per track-mile).
3. Freeways typically cost \$5-10 million per lane-mile
4. The cost was 267% - 535% that of a freeway lane for removing 31% of one freeway lane of traffic - **a cost of 950% - 1900% above that of a freeway per usefulness.**

Does Rail Reduce Congestion-3?

The [Portland/Vancouver I-5 Transportation and Trade Partnership](#) used 18% and 31% as the percentage of rail riders that would be in cars if light rail wasn't built [See here for the method used.](#)

Conclusion :

The above two methods produce answers consistent with the [Portland/Vancouver I-5 Transportation and Trade Partnership](#) and we can be fairly confident that Portland's MAX only removes less than 1/3 of one lane worth of traffic from a three lane freeway. LRT costs about 10-19 as much as freeways for the same capacity.

Final Conclusion: LIGHT RAIL COSTS TOO MUCH AND DOES TOO LITTLE

False Promises: Copying Europe Will Reduce Driving/Increase Transit Usage

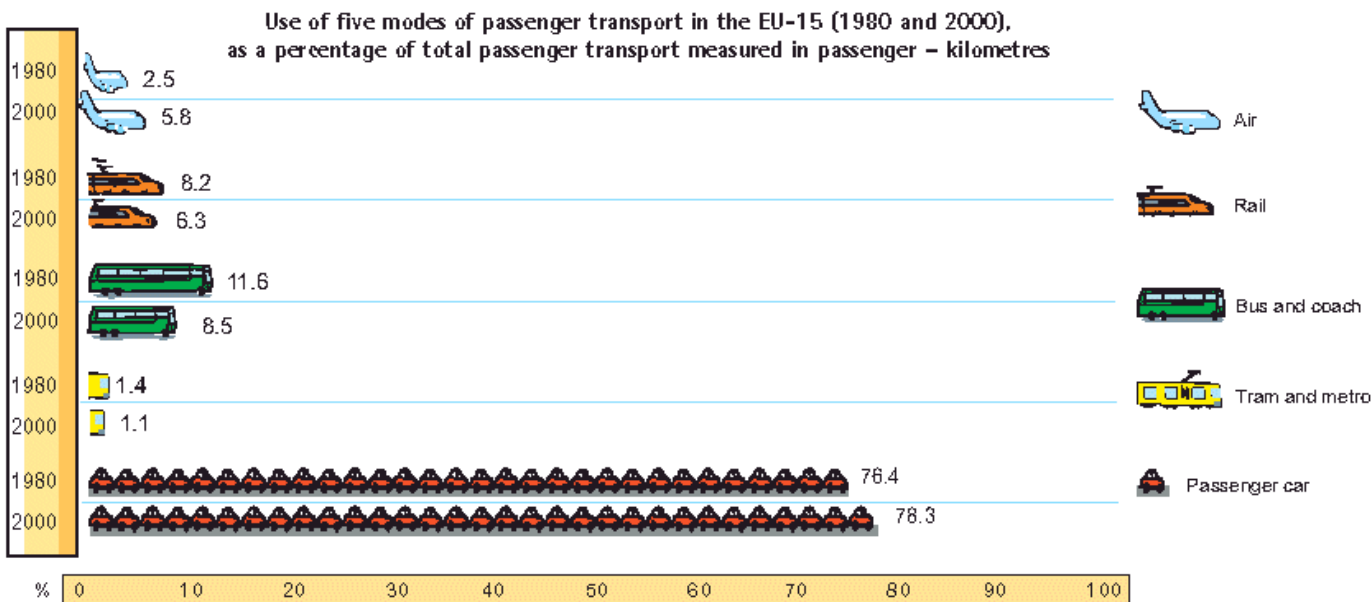
Planners have noticed that Europeans drive less than Americans and then decided that we should do things like the Europeans do. However they failed to realize that Americans are richer than Europeans and that as Europeans incomes catch up, their driving would increase. The chart below is from the European Union and shows that driving and flying are increasing and transit usage ("Rail", "Bus and coach" and "Tram and Metro") is decreasing, **just like in the USA**:

From below: Air = +132% Passenger Car = +2.5% Rail = -23% Bus&Coach = -27% Tram & Metro = -21.4%

Chart from the European Union Shows Transit Decrease and Automobile Increase:

Air transport has also increased rapidly over the last two decades, creating congestion at Europe's airports. To tackle this problem, the EU is working towards a unified European system of air traffic control (the 'Single European Sky').

To ease congestion on the roads, the EU is encouraging transport firms to get as much freight as possible onto trains, barges and ships. It is also backing local authorities in their efforts to promote and improve public transport, especially in Europe's crowded cities.

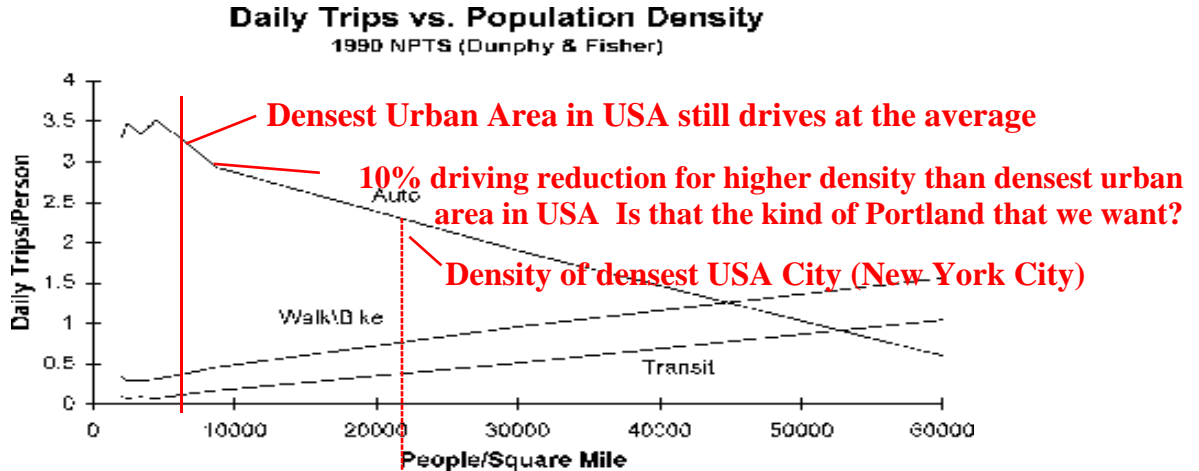


Source: European Commission.

[Download full document from the EU](#) [Download same document from this web site](#)

How Density Causes Congestion

Most of us have seen this chart of how driving per capita decreases with increasing population density, but there is more to the story.

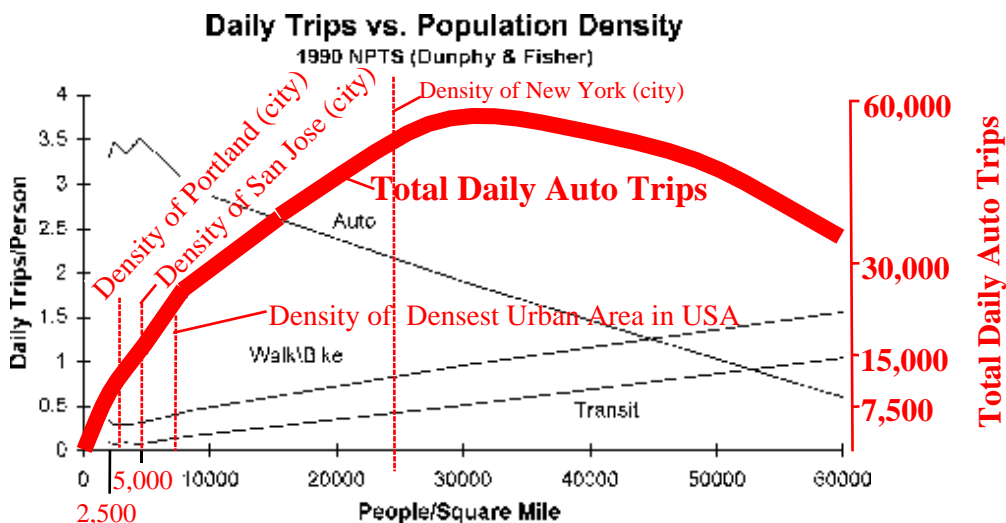


Note that driving only decreases slightly until density approaches that of New York City Do we want to be more like New York? Why don't we just move to New York? (Red text are our additions.)

The Secret Missing Line

They don't tell you that increased population density means that there are more people in each square mile, **and few use transit**, so the number of car trips per square mile increases as the number of people increase. That is the secret they hid from you --- **increased trips per square mile increases congestion - more trips in the same space as shown by the red line:**

(Red line is Daily Trips/Person multiplied by People/Square Mile)



Original Chart with **added information**

What Does Sprawl Really Look Like?

Aren't You Glad That You Don't Have to Live in Sprawl Like This?

When You can Live Here





Most of the planner's dream homes are along the East Side light rail line, except the top picture which is infill in what was a nice N.E. neighborhood, the third row down brick giant is in the Pearl (Waterfront Urban Renewal District) and the fifth row down is a beautiful hurd of row houses in St. Johns.

All of the ugly sprawl pictures are from Southwest Porland, between the Sellwood bridge and Lake Oswego.

More at www.PortlandFacts.com