

Metro™ QUARTERLY

SUMMER 2008



Linked Together

Reducing congestion transcends local borders.



Metro™



Chief Executive Officer
Roger Snoble

The Metro Board of Directors in July approved a new half-cent sales tax measure for the November ballot. Measure R would finance dozens of transportation projects for the region from fixing potholes to major highway construction, buying clean-fueled buses and building new rail lines spread throughout the county in a concerted effort to keep pace with major population and job growth.

Whenever we embark on new projects like those in Measure R, we realize the decisions we make have ripple effects across the region. A freeway adjustment on the Westside can impact commutes miles away, for instance, while easier goods movement could create more jobs throughout Los Angeles County.

When you turn to the center spread of this issue of MQ, you'll find an interactive game that helps to illustrate how complex and interconnected our transportation system really is. The game called "Let's Get Moving!" lets you decide how to meet everyone's transportation needs in a fictional place called Everycounty. Your vision and decisions will impact local residents as well as neighboring cities. But watch out! There are a few hidden obstacles along the way.

Unlike Everycounty, it takes longer to play this game in the real world. Those of you who have asked me why crucial transportation projects take years rather than months to complete will be interested in the article "Anatomy of a Project," which describes the many steps required to reach the Metro Gold Line Eastside Extension opening in 2009.

As we face soaring gas prices and ever-increasing congestion, the solutions for many of our transportation challenges are closer than we think. Victory is possible with simple changes to our lifestyles, and past successes help point the way.

But the options are many. So try your hand and see how you'd fit the puzzle pieces together.

Sincerely,

Roger Snoble

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THE RIPPLE EFFECT

Whether it's economic downturn or job growth or an increase in automobiles, what happens in one section of Los Angeles County radiates throughout the region.

Improving a Tightly Connected Transportation Network

Given our widespread metropolis, this ripple effect is especially true when it comes to transportation. An accident on the I-210 can pinch traffic, affecting the flow to the I-605 southbound, which can choke movement on the I-10 freeway and adjacent roads miles away.

Conversely, relieving a pinch point at a crucial LA County highway interchange can improve mobility throughout the Southern California transportation system and demonstrate just how connected the system really is.

Eliminating the Biggest Freeway Bottleneck

According to agencies that track such things, the I-405 is the most heavily traveled freeway in the United States. Additionally, the I-405 connects with two of the country's top 10 busiest freeway interchanges – the I-405/I-10 interchange and the I-405/US-101 interchange.

Yet for decades, commuters on Sepulveda and Ventura boulevards looking to merge onto the northbound I-405 have had to struggle across two lanes of traffic when making the transition from the I-405 to the US-101. The congestion was so severe that the interchange was considered the worst bottleneck in the United States by the American Highway Users Alliance.

The recently completed \$46 million US-101/I-405 interchange project, however, aims to change that. Not only does it enhance commuter safety, but it also improves traffic flow at the most congested freeway interchange in the United States – one that carries more than 580,000 vehicles every day.

The project, a partnership among Caltrans, Metro and the Los Angeles Department of Transportation, extends the auxiliary lane on the northbound I-405 past the Greenleaf offramp to the US-101 connector. The loop onramp from the eastbound Ventura Boulevard has been closed, but a bypass of the Ventura Boulevard/Sepulveda Boulevard intersection (using Dickens Street) has been added.

Additional improvements within the project are separate onramps from Sepulveda Boulevard to the US-101 and I-405 freeways. These new entrances separate the US-101 freeway connector from the northbound I-405 onramp. This greatly enhances safety by eliminating the need for drivers to cross several lanes of traffic to access the US-101 freeway.

Even better for commuters – and for improving the region's mobility – drivers heading northbound on the I-405 will be able to travel 2.5 times faster than before, and travel speeds should increase by 30 miles per hour. **This project also will save drivers an estimated 211,000 hours of delay each year.**

Beyond the obvious congestion reduction benefits, the project will ease local traffic flowing along Sepulveda and Ventura boulevards. Restaurants and retail establishments near the interchange should benefit from patrons' easier access to them, illustrating the economic benefits of improving traffic flow.



Issues that Transcend the Region

Air quality, goods flow and economic development cannot be addressed by one city or neighborhood.

If you commute on the I-405, the removal of the I-101/I-405 interchange bottleneck would likely save you time—even if you live nowhere near the interchange. The fact is, what happens in one part of Los Angeles County affects the movement, goods flow and air quality—even economic opportunities—of all areas.

With an ever-increasing population hungry for affordable housing, suburbs continue to grow inland to Riverside County, San Bernardino County and northeast Los Angeles County—ever farther from the region's major business centers and increasing the use of Los Angeles County's transportation infrastructure.

Escalating gasoline prices—now more than \$4 a gallon—will do more than frustrate drivers. Residents may refuse to commute. Companies may find it increasingly difficult to recruit and retain key employees to stay globally competitive. People and businesses may decide to leave the area altogether—moving out of state to more affordable, commuter-friendly cities. A migration of jobs would affect Los Angeles County's economy, resulting in lower tax revenues and reduced patronage at some businesses, as well as decreased discretionary spending.

Local transportation issues do not remain local.

Goods Movement Transcends a Single City

In addition to Los Angeles and Orange counties, Ventura, Riverside, San Bernardino, Imperial and San Diego counties serve as major gateways for our nation's trade. A third of all international container cargo imported into the United States passes through Southern California ports. And freight volumes are expected to double within 20 years.

The effects of the more than \$200 billion worth of goods moving from the ports can be felt statewide: they generate more than \$15 billion in state and local taxes, as well as provide an estimated 700,000 jobs in the trucking, railroad and warehousing industries. Yet the strain that goods movement puts on the County's transportation system transcends any one city. The strain must be addressed on a system-wide basis.

Projects such as the Alameda Corridor, a 20-mile-long rail cargo expressway linking the ports of Long Beach and Los Angeles to the transcontinental rail network near downtown Los Angeles, are one solution. Metro is a funding partner of the estimated \$922 million project, of which nearly \$400 million has already been secured.

Concerns Blowing in the Wind

What happens at the ports—the emissions resulting from loading and unloading freight, the high volume of trucks and rail entering and leaving—has a direct effect on air quality. Just as with pollution generated by freeways, the soothing coastal breezes and the unique shape of the Southern California basin mean that unhealthy air in one point in the County, soon migrates to other areas.

To address this countywide issue, the ports' commissioners approved the \$2 billion San Pedro Bay Ports Clean Air Action Plan. The plan encompasses all port-related emission sources—ships, trains, trucks, terminal equipment and harbor craft—to significantly reduce health risks posed by air pollution. In the next five years, the aggressive plan aims to reduce pollution by at least 45 percent.

The challenge of moving billions of dollars in goods through congested highways and major surface streets, however, will remain.

How to Play the Game

Your game pieces are inside! Remove this insert carefully to start playing.

1. Choose your projects on the game board.
Choose wisely, there are not enough Metro Dollars or Problem Solvers to complete all the projects.
2. Cover each step of your selected projects with a Metro Dollar sticker; cover problems with a Problem Solver sticker.
3. When all your steps are covered, top off each project path with its corresponding Achievement Seal which will identify how much you've moved.



METRO DOLLARS to cover spaces with:

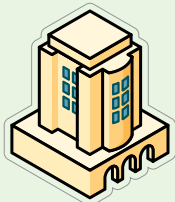
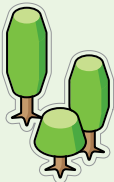
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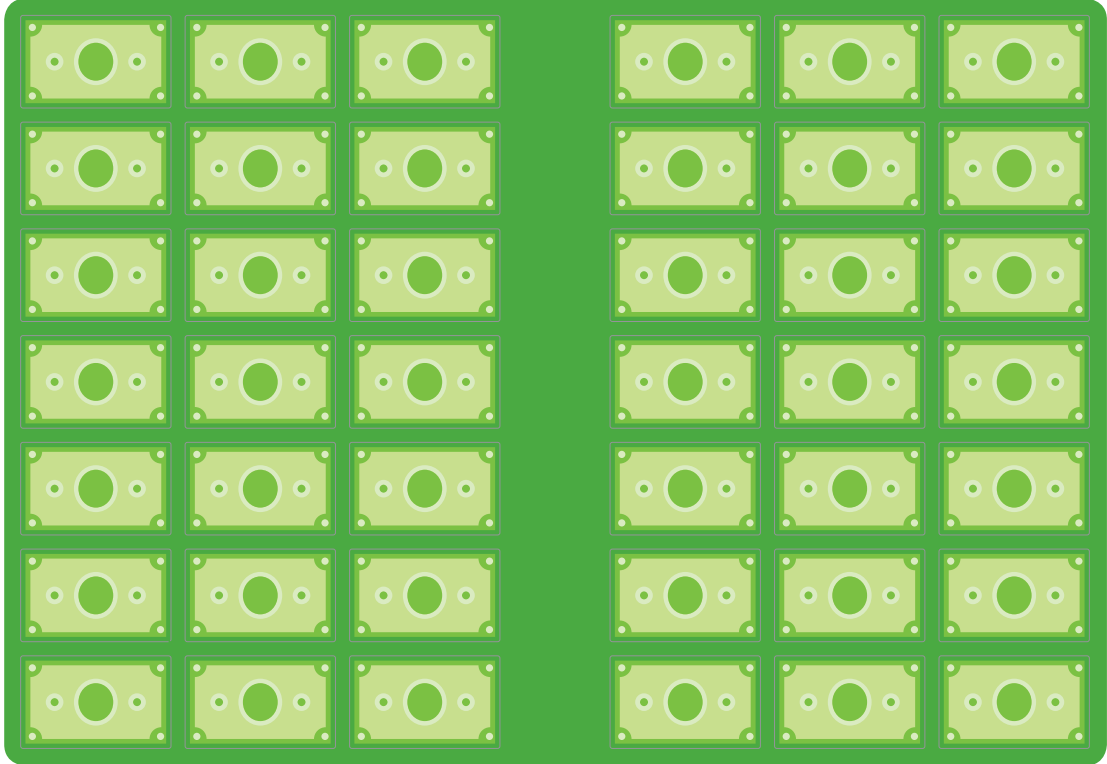
PROBLEM SOLVERS to cover **PROBLEM** spaces with each project's challenges.



ACHIEVEMENT SEALS to cover the project's final space when you've completed the entire path.



SOME FOR FUN



METRO DOLLARS

ACHIEVEMENT SEALS

2,000
PEDESTRIAN/
BIKE PATH

26,000
FREEWAY/
INTERCH.

30,000
LIGHT RAIL

25,000
GOODS
CORRIDOR

20,000
BUS RAPID
TRANSIT

50,000
FREEWAY/
CARPOOL

100,000
HEAVY RAIL



PROBLEM SOLVERS

Let's Get Moving!

A GAME OF TRANSPORTATION

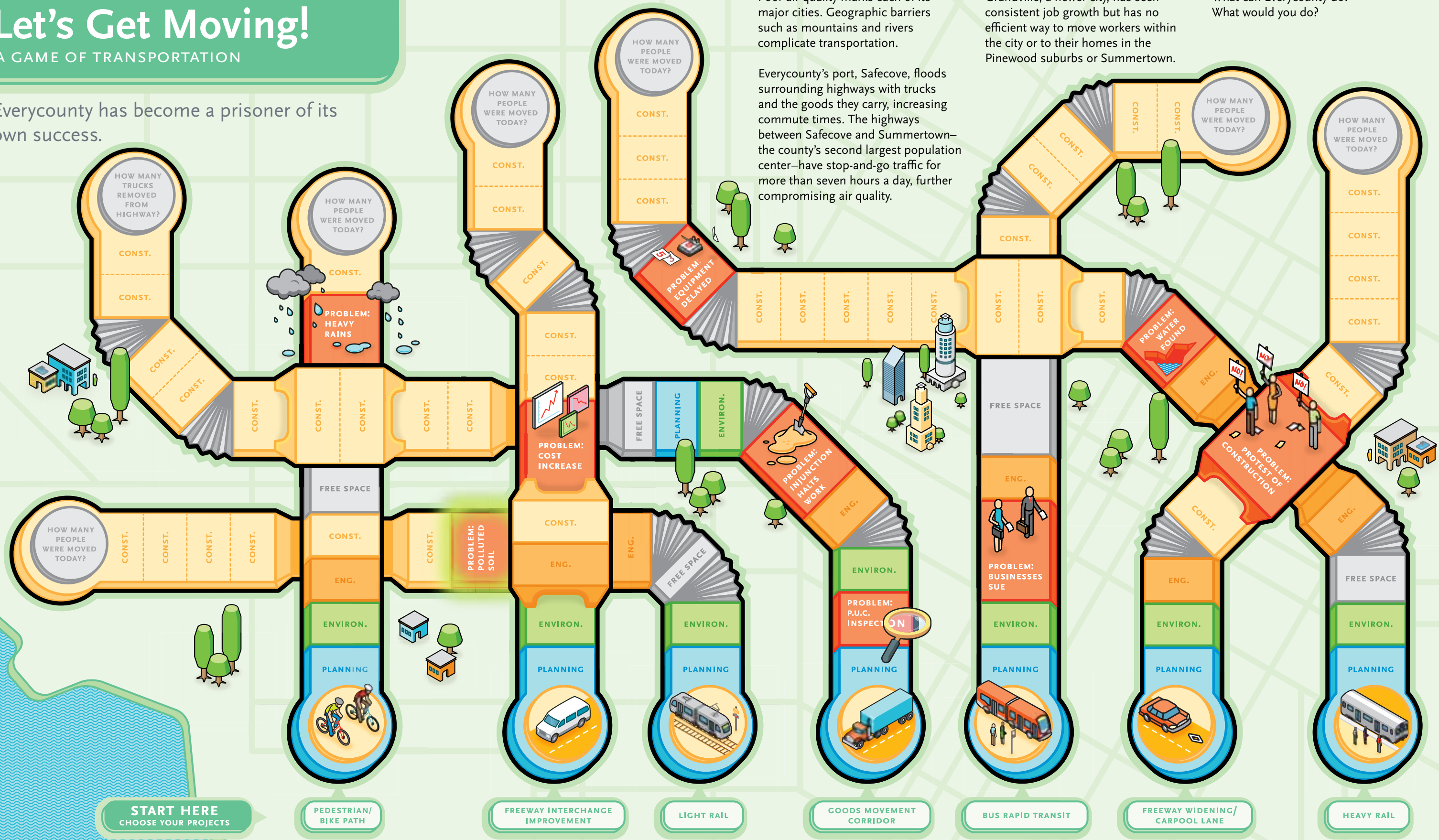
Everycounty has become a prisoner of its own success.

Poor air quality marks each of its major cities. Geographic barriers such as mountains and rivers complicate transportation.

Grandville, a newer city, has seen consistent job growth but has no efficient way to move workers within the city or to their homes in the Pinewood suburbs or Summertown.

What can Everycounty do?
What would you do?

Everycounty's port, Safecove, floods surrounding highways with trucks and the goods they carry, increasing commute times. The highways between Safecove and Summertown—the county's second largest population center—have stop-and-go traffic for more than seven hours a day, further compromising air quality.



START HERE
CHOOSE YOUR PROJECTS

PEDESTRIAN/
BIKE PATH

FREEWAY INTERCHANGE
IMPROVEMENT

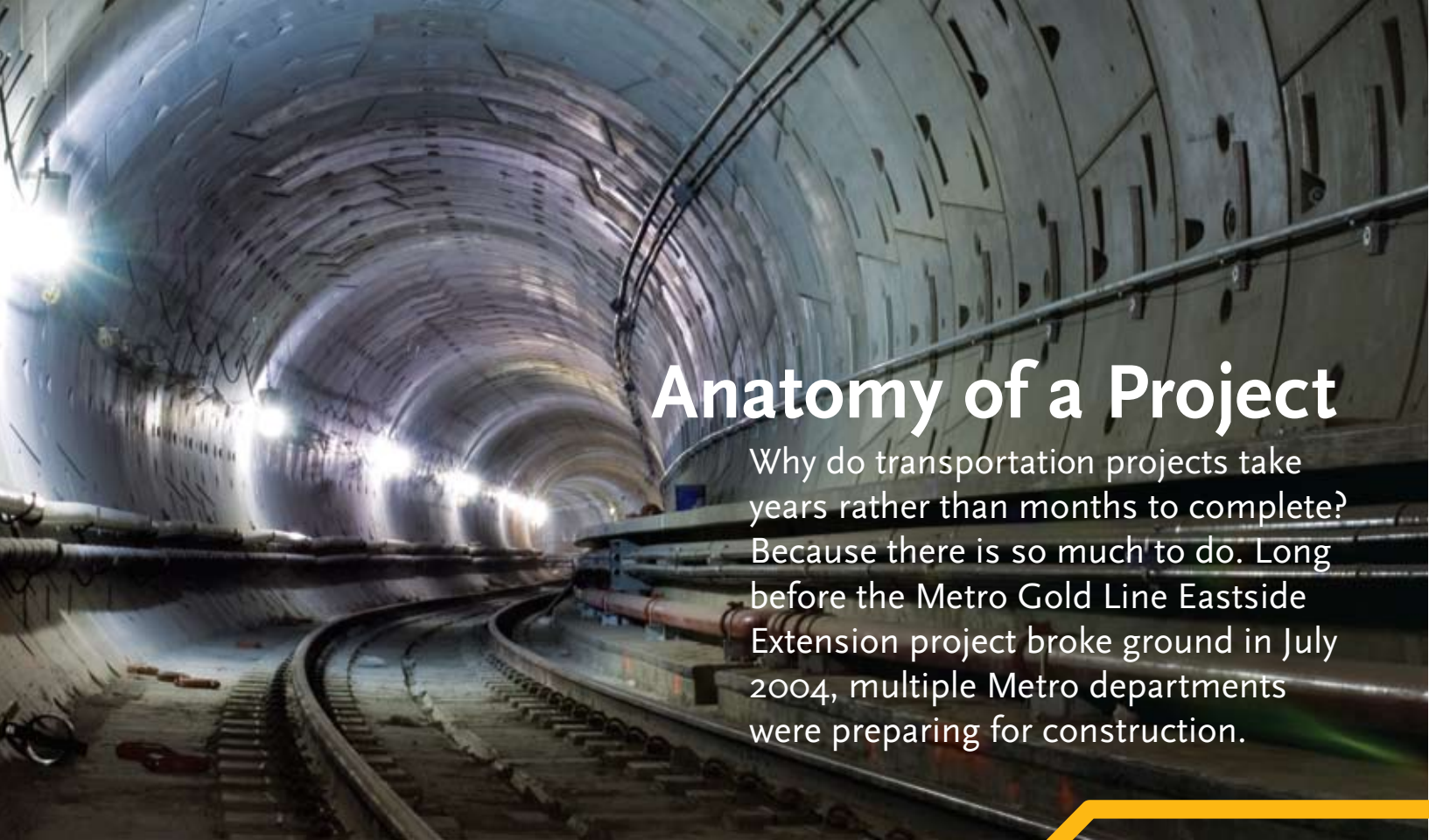
LIGHT RAIL

GOODS MOVEMENT
CORRIDOR

BUS RAPID TRANSIT

FREEWAY WIDENING/
CARPOOL LANE

HEAVY RAIL



Anatomy of a Project

Why do transportation projects take years rather than months to complete? Because there is so much to do. Long before the Metro Gold Line Eastside Extension project broke ground in July 2004, multiple Metro departments were preparing for construction.

1980s

The Metro Red Line to East Los Angeles, a six-mile subway extension of the Metro Red Line to North Hollywood, takes shape.

1992

The Metro Red Line to East LA receives \$20 million for Fiscal Year 1993 from the federal government.

1993

The Review Advisory Committee is formed to provide support and community input for the development of the project.

- Metro's extensive "to-do" list included:
- > Developing requests for federal, state and local funding
 - > Planning rail routes
 - > Performing environmental impact studies
 - > Preparing affected communities for construction
 - > Selecting qualified contractors
 - > Purchasing necessary equipment
 - > Coordinating utility relocations with city departments
 - > Planning mitigating measures for affected businesses and residents

Here's a closer look at the steps required to build Metro's newest light rail line.

1994

Metro Red Line to East LA is environmentally cleared, approved and underway with preliminary engineering.

1995

Preliminary engineering on the Metro Red Line to East LA completed.

2001

The draft environmental reports required by state and federal governments are approved.

2000

A Major Investment Study considers 47 alternatives to the Metro Red Line to East LA.

1998

Metro's Board suspends construction of the Metro Red Line to East LA. Studies begin to determine a more cost-efficient project.

Mid-2009 – project completion expected.

2009

WINTER – Eastside LRT Constructors continues to reconstruct sidewalks and make street improvements. Overhead power supply poles installed. Construction of east and west portal tunnels and the two underground stations at 1st/Boyle and 1st/Soto are underway.

2008



2002

FEBRUARY – Metro's Board unanimously approves an environmental impact report on a six-mile-long project connecting to the existing Metro Gold Line to Pasadena.

JUNE – Environmental review of the project completed. Property acquisitions are authorized.

JULY – Preliminary engineering is completed.

OCTOBER – The Federal Transit Administration (FTA) issues permission to enter final design. Demolition of several buildings begins.

2003

OCTOBER 2002 AND APRIL 2003 – The FTA allows Metro to proceed with utility relocation and purchase of rail vehicles.

FEBRUARY – Preconstruction activities begin.

OCTOBER – Using photos and video, project team completes preconstruction documentation of structures along the route.

DECEMBER – Metro evaluates bids from construction contractors.

2007

SUMMER – Mariachi Plaza Station at Bailey Street excavated. Soto Station entrance completed. Utility lines repositioned and 1st Street Bridge widened.

WINTER – 1.7-mile-long, 21-foot-diameter tunnels under Boyle Heights completed.



2004

JUNE – Metro awards prime contract to Eastside LRT Constructors.

JULY – Project groundbreaking.



2006

SUMMER – Eastbound tunnel boring machines reach Soto Station. Completed bridge structure spans US-101 freeway. Metro and contractors celebrate working 1 million injury-free man hours.

FALL – Eastbound tunnel boring machines complete task. Construction begins at the Little Tokyo/Arts District Station.

2005

EARLY 2005 – Metro Art's selection panel commissions three large-scale murals for the construction staging walls.

APRIL – Mariachi Plaza Station design presented.

MAY – Construction of bridge to span US-101 freeway begins.

SUMMER – Metro Gold Line Eastside Extension celebrates one year of construction. Underground construction begins at 1st and Boyle streets.

SEPTEMBER – Tunnel boring machines arrive. Excavation for two underground stations completed.

DECEMBER – "Vicki" and "Lola" tunnel boring machines are lowered into the ground.

Victory Is Possible

We need not renounce our cars to reduce Los Angeles County's congestion. During weekday holidays such as Memorial Day, for example, the 25 to 30 percent reduction in the number of people commuting to work on highways significantly decreases traffic.

- These options can make a dent in traffic any day of the year:
- > **EMPLOY FLEXIBLE WORK HOURS.** Businesses that offer employees telecommuting, compressed work weeks or other flexible work arrangements can take people off the roads at peak hours and help improve regional mobility.
 - > **RIDE WITH OTHERS.** Increasing the number of riders in each automobile to an average of only 1.1 persons per vehicle would decrease freeway traffic.
 - > **USE TRANSIT A FEW TIMES A WEEK.** In Los Angeles' car-oriented society, riding a bus or rail line even once or twice a week would make a difference. A December 2005 study by UC Berkeley found an LA County example of transit reducing the strain on a crucial highway. Following the Metro Orange Line opening, the US-101 highway saw:
 - > Southbound traffic flow improved 7 percent
 - > Northbound traffic flow improved 6 percent
 - > Time spent in congestion dropped 14 percent
 - > Congestion started 11 minutes later

- > **SAVE TIME AND MONEY BY VANPOOLING.** Commuters in new or existing vanpools can receive a \$400-per-month subsidy to lower the leasing cost of a vanpool vehicle and, consequently, the fare to each rider. Metro has added more than 600 new vanpools – the program averages 50 new vanpools a month – making it one of the fastest growing public vanpool programs in the country. More than 5,500 Los Angeles County commuters now vanpool daily with Metro.
- > **TRANSITWAYS SPEED RIDERS TO THEIR DESTINATIONS.** On the El Monte Busway, for example, a person taking a bus or a multi-person vehicle would save one minute per mile traveled during morning and evening peak hours.

Looking for Solutions

Reducing the county's transportation problems is difficult because solutions change as quickly as the region's mobility needs, but **with greater use of public transportation, careful planning and realistic funding, victory is possible.**



L RTP VS. STRATEGIC PLAN

Charting a Path Toward Future Victory

Metro must plan the most efficient way to use a limited number of resources for today and for tomorrow.

It must also weigh the value and cost of transportation options—carpool lanes, eliminating highway bottlenecks, vanpooling, the bus network and the Metro Rail system.

Metro must forecast which projects most help the region, not just a single community.

To do this type of forecasting, Metro develops a Long Range Transportation Plan and a Strategic Performance Plan. What's the difference between the two?

Long Range Transportation Plan

Although many use the terms interchangeably, strategic planning and long-range planning differ in their emphasis on an assumed future environment. Metro's Long Range Transportation Plan (LRTP) looks ahead about 20-25 years.

The Draft 2008 LRTP, once approved by the Metro Board, will update the 2001 LRTP with new information and realities. It recommends transportation projects that can be implemented through 2030 and other projects that could be funded if new revenue becomes available.

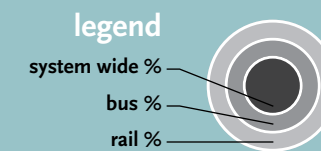
Strategic Performance Plan

The Strategic Performance Plan aids county residents by focusing resources on key projects outlined in the Long Range Transportation Plan.

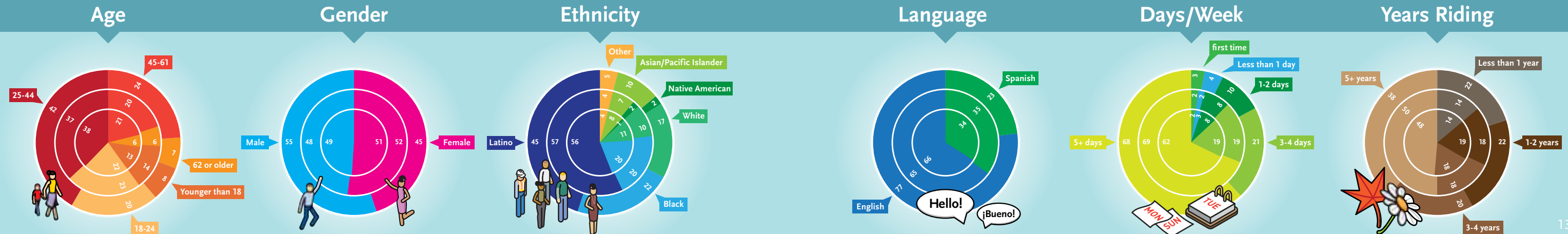
Metro's Strategic Performance Plan, a required document for receiving federal funding, summarizes Metro's goals, objectives, strategies and action plans. It is developed to help Metro speak with one voice and establish accountability for individual and organizational performance.

Metro's Diverse Ridership Reflects County Populations

Metro's ridership is as diverse as the Los Angeles area it serves. Overall, system-wide ridership is evenly split between men and women, with the majority of riders between 18 and 61 years of age. Latinos make up the largest segment, mirroring Los Angeles' large Latino population. Additionally, the majority of the 15,144 riders surveyed between May 5 and July 26, 2007 take some form of Metro transportation five or more times a week and have been doing so for five or more years.



Metro Ridership Demographics as of July 2007. Because of rounding, not all categories total 100 percent.



Board Takes Critical Step in Placing Half-Cent Sales Tax on Ballot

In a historic vote on July 24, the Metro Board of Directors took a critical step in placing on the November ballot a new half-cent sales tax measure for Los Angeles County that would finance dozens of transportation projects.

The tax measure also would fix potholes, fund major highway construction, buy clean-fueled buses and build new rail lines spread throughout the county in a concerted effort to keep pace with major population and job growth.

Metro directors approved an ordinance including an expenditure plan that details how the sales tax – estimated to generate \$40 billion over 30 years – would be spent. These monies could be leveraged with state, federal and private sector funding.

The Board also passed a resolution formally requesting the Los Angeles County Board of Supervisors to place the ordinance on the ballot for the Nov. 4, 2008 countywide general election. If the measure garners

at least a two-thirds vote, it would become law in January.

The ballot measure is contingent on passage of state legislation, AB 2321 (Feuer), which would give Los Angeles County authority to levy the tax if voters approve it.

Folding Bike Ends This Commuter's Automobile Dependence



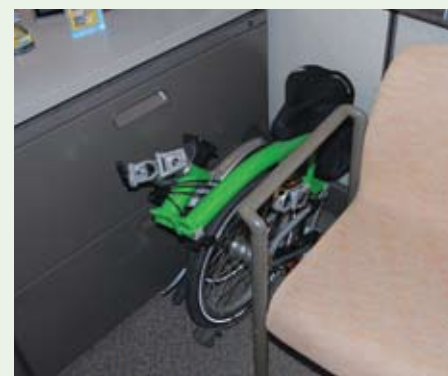
In March, Dave Sotero, a senior communications officer in Media Relations, imagined life without a car and then did something about it.

"I decided to buy a folding bike to solve my short bike-to-transit commute," said Sotero, who traces his moment of truth to reading Metro's Long-Range Transportation Plan. "It said the single most effective action a household can take to cut its carbon footprint is to replace one car in a two-car family with biking and transit."



Sotero's folding commuter bike, a bright apple green, weighs a modest 25 pounds. It was love at first sight.

Sotero says that folding bikes are the missing link to reaching critical mass for bicycle commuting. For starters, folding bikes are a commuter's dream on the Metro System. "They fit easily inside a crowded rush hour bus or train," he said. "No need to compete for space on a bike rack. And you don't have to worry about leaving them inside a bicycle locker or stored some place where they might get stolen."



In his first month using his folding friend, Sotero estimates he has saved \$100 on gasoline.

"Commuters are astonished when they see my folding bike on Metro Rapid or a Red Line train. Most never knew such a bike was available. They want to know how it works, how much it costs and where to get one. The demand is there. The bike raises awareness every time I take it on the system."

For Subway Customers, the Ride Just Got Smoother

Little do passengers know that the smooth train ride along the 17.4 miles of subterranean tracks traversing the City of Los Angeles is running on a new system called Automatic Train Operations (ATO).

"Putting ATO in service is a major milestone and one that is improving vehicle reliability, maintenance, ride comfort, and on-time performance," said Rail GM Mike Cannell of the 480,000-pound subway train.

After five months of studies, tests and evaluations, Rail Operations began to use the new ATO system in March, putting the 104 heavy rail cars in automatic mode for the first time since the debut of the A650 Breda cars in 1993.

It was a seamless transition from the more taxing, manual mode to the ATO system. The propulsion and brake systems were designed to be

controlled electronically, enabling the trains to run more consistently and efficiently in automatic, Cannell said.

That efficiency translates to a significant reduction in trouble calls, fewer manpower hours spent to respond to problems on the main line and fewer costs to attend to propulsion and brake lockup, which were occurring as often as three times a day.

On-time performance has noticeably increased. "Those stubborn propulsion and brake problems have now been reduced by approximately 80 percent and that is huge," Cannell said.

Back in early October 2007, Cannell asked his team to reevaluate the need for the ATO system.

"We wanted to take another look and use the technology that's available today to bring the system up

safely and efficiently, providing our customers with more reliable and efficient service," he said.

Brake and propulsion problems would decrease dramatically in the ATO mode, reported George Kennedy, Director of Rail Vehicle Acquisition and Maintenance Operations.

In automatic mode, the ATO generates propulsion commands electronically, he said, "meaning the system accelerates, maintains track speed, decelerates and gently brakes the train to the proper location alongside the station platforms."

Undetectable to passengers, but important to operators, is the ATO equipment – a massive, intricate computerized system that is fronted by a simple mode selector knob on the operator's control board.

Metro's Pool Vehicles Grow Considerably Greener



Nearly 150 of the oldest sedans in Metro's pool vehicles will soon be replaced with new Toyota Camry gas/electric hybrids. The new hybrids will replace Ford Taurus sedans more than six years old or with more than 100,000 miles traveled.

The Camry is a full hybrid, meaning it can run entirely on gas, entirely on electricity or a combination of both. Short trips between divisions or to relief stops, for example, can be made solely in electric mode only.

"It's good for the environment in terms of miles per gallon,"

said Michael Stange, equipment maintenance superintendent in Quality Assurance. "The initial cost is a few thousand dollars more, but in the interest of being a good steward of the environment, that's the cost of doing business."

The maintenance savings aren't the only benefit Metro will see from the hybrids, which generally use about half as much gasoline as the average non-hybrid vehicle. The Camry gets an estimated 33 miles per gallon (city). The present fleet gets an estimated 18 miles per gallon (city).

TRANSIT FACTOIDS

The 2008 report, "The Transportation Challenge: Moving the US Economy," charts the interconnectivity of healthy businesses and healthy transportation infrastructure, including the critical role of moving people in urban areas.

- > Congestion threatens employers and area economic development.
- > If the US continues to under-invest in its transportation system and fails to meet the transportation needs of its key industry sectors, the US economy will become less productive and less globally competitive.
- > Low-cost, reliable transportation helps manufacturers and retailers keep production costs down, increase productivity, and deliver quality products to their customers.
- > Economic productivity is directly linked to access to the labor force within an urban area; this is especially relevant in the service sector.
- > Investments that reduce traffic delays benefit businesses and households alike.

From Transportation Challenge: Moving the US Economy, a report prepared for the National Chamber Foundation of the US Chamber of Commerce.



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