

Summerville to Charleston: Making rail a reality

By Neal Peirce and Curtis Johnson
Sunday, September 23, 2007

OK. You've studied it — twice. Now it's time to write checks and try it out. The track exists, with the owner, Norfolk Southern, open to a track-sharing arrangement.

Sure, there are issues. Some track upgrading and better signaling at cross streets are needed, and at the downtown Charleston end, a fix for that last fifth of a mile to the Visitors Center where the track was ripped out and one business must be bought and cleared.

The good news is that a rail corridor with track exists. It runs right along the most congested transportation route in the region — Interstate 26. And matching the Visitors Center at the south, Summerville has a great spot for park-and-ride that offers shared parking for downtown shoppers and commuters.

The latest "feasibility" study, completed in 2006, says commuter rail would attract riders in this corridor. Commuter rail does what its name implies. It runs train cars on freight tracks several trips in the morning and afternoon, serving people commuting to major job centers.

The biggest job centers in the region are in North Charleston and downtown Charleston. Worker travel worries are a growing threat to employers. The president of the Medical University of South Carolina told us commuting and parking issues were the principal reason for high turnover in his nursing staff.

Commuter rail enjoys a major cost advantage: the study showed the costs of track upgrades, signal improvements, cars and engines could be as low as \$48 million. Yearly operating costs would be around \$3 million, or \$1.66 a passenger if riders were charged \$3 a trip.

It's amazing — Even when modest numbers like those are published, the critics emerge railing about giveaway subsidies. OK, what do the roads cost?

The truth is that no state has ever combined the courage and acumen to calculate the per-driver per-trip subsidy for its roadways. Our guess is that if road construction, maintenance, and replacement, plus all the road-related services, emergency assistance and environmental impacts were added up, there's be a massive road subsidy figure — even after gas tax receipts are subtracted. And the critics would go home

Trains in the morning could leave from Summerville, making limited stops, headed to North Charleston, then ending up in Charleston. The trip would take 29 minutes at an expected average speed of 40 miles per hour. That would beat most motorists making their way through traffic on I-26.

At other times, the trains could serve tourists, conventioners, people headed downtown for theater or a great meal or young people enjoying a lark on metal instead of rubber wheels. Remember: Almost every transit trip means one fewer on the crowded roadways.

Some organizations, such as the Coastal Conservation League, say they prefer light rail, which runs on or near roadways, features more modern cars and reaches more locations. It's the choice in such cities as Dallas and Salt Lake City. But light rail costs much more and requires specialized tracks and overhead electric service. Our guess is the Lowcountry will be smarter to start with a commuter rail — to learn to roll on rails before it opens its wallet to lay down new ones.

Road Rage and the future of transit across the Lowcountry

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Nick Salvucci is a young man with a family and a good job in the Charleston region. But nearly every day, he has to do battle with the transportation trap that the Charleston region has become.

Salvucci works for an advertising firm in West Ashley, and up until last spring he worked at the ABC television station in Mount Pleasant. When he looked for housing his family liked, he found it in the communities where Dorchester and Charleston counties come together. Now he can see an additional 5,000 houses being built just across the road. And his daily commute? "Sometimes it takes two hours to get to work, and it's not really that far."

Dorchester County Council Chairman Larry Hargett hears this all the time. "People buy homes without knowing whether adequate roads will be built, or school capacity available. Developers don't tell them. Then problems come and traffic builds," he said.

The more people we talked to, the more the story was told. The housing that people want near the better schools now seems mostly far away from major employment centers. So the traffic on Dorchester Road, on U.S. Highway 17, and especially on Interstate 26, is no mystery. But it is maddening. And just last week, Charleston's traffic congestion was reported worst among small U.S. metro regions by the authoritative Texas Transportation Institute.

The sorry truth is that it's going to get worse. The region's been discovered. The population predictions suggest even more people moving to the Lowcountry. Traffic, today merely irritating, will become a major barrier to the good life. And not just from new subdivisions sprouting on open space in Berkeley and Dorchester counties. The scheduled expansion of the Port of Charleston at the former Navy Base site is poised to deliver thousands of heavily loaded trucks onto the same I-26 stretches that are already stop-and-go every morning and evening.

So ask yourself: Will a roads-only strategy solve the Charleston region's traffic nightmares? Our answer: Given the kind of congestion already present, plus the funding and environmental

restraints of these times, the clear answer is "no."

Just take the already-approved additional 135,000 Charleston-region homes that The Post and Courier has been able to locate, based on local government records. Using the average number of people who live in one housing unit today, that translates into some 327,000 additional people. The net population gain likely will be that high because some of the buyers for the new units are already here; other newcomers likely will snap up the homes they vacate.

So pause for a moment and think about 327,000 more people — a 50 percent gain in the region's current population. These new people, if averages hold, will have at least 250,000 vehicles that will have to be stored at multiple destinations. The added vehicles will require 12 square miles of paved-over surface for parking. Even if one in every six additional vehicles is used during rush hours, the region will need more than 400 additional lane-miles of interstate-grade highway capacity and up to 10 times that much for other roads.

Assume a perfect Lowcountry future, including a transportation budget so generous that anything the public wants can be built. As long as we're dreaming, assume everyone has a BMW. But still, do you want to see such a gargantuan expansion of today's regional road system — a transformation arguably turning the Lowcountry into a set of Atlanta-style asphalt spaghetti bowls?

Put another way: If the region could tap some state or national transportation treasury for a quick billion dollars, how would you want to spend it? What investment do you really think would pay off in a stronger economy and sustainable quality of life?

The public money for all this expansion likely is nonexistent. But assume it does exist. If the cash was all for roads, you know the decisions wouldn't be made on any kind of rational basis that calculates costs against benefits or carefully protects the environment. It would be more of the same way decisions are generally made today: one project at a time, driven by same-old politics. In fact, South Carolina's stubbornly good ol' boy ways could make things a lot worse, after the money's spent. Most people we interviewed told us as much.

Seeing past the symptoms

Jim McGraw, a retired executive who moved to this area from the Midwest, remembers a meeting sponsored by the Summerville newspaper's editor. All the people in the land-use argument were there, he recalls, including officials from CHATS, the region's transportation planning organization; the Coastal Conversation League representatives, local government officials and property owners.

"They all agreed that we cannot reduce congestion much through road-building, but only by planning to put homes in some areas and not others," he said. "Now I go to council meetings and ask what is the urgency that is driving these new real estate developments — and there's no answer."

Summerville attorney and former state senator Mike Rose reserves the harshest criticism for public officials who don't see (or purposely ignore) the connections between land use and traffic. "It's as if we conducted the Normandy invasion saying 'Get in your boats, go over there, and see what happens,' " he says, drawing on his military background for metaphors. Rose says he thinks the public is catching on to the consequences of no planning or planning with no teeth, and now "the jig is up." He adds: "Enough people sitting in traffic, and kids in overcrowded schools ... angry people are now demanding concurrency."

Concurrency? What's that? It just means making sure that roads and schools for the emerging population are in place, just like water and sewer, before new developments are approved.

Rose, Dorchester County Councilman Jamie Feltner and many others we talked to are pushing something called an Adequate Facilities Ordinance for Dorchester County. It would subject every development proposal to a fiscal-impact study before any contracts are negotiated. Rose would go even further to have state law forbid approval of projects until the necessary roads, schools and water and sewer facilities are built or on their way.

At a minimum, others told us, let the sun shine on new development deals. A prudent buyer orders a professional inspection report to identify any material defects in a house he or she is buying. So shouldn't local governments (which will be collecting taxes from the new owner) be obliged to inform the buyer in a new development just when roads will be extended or widened, adequate water and sewer services available and school space expanded to accept more students without overcrowding?

Developers and builders often take a rosy view of when these improvements are coming. But people are going to feel ripped off if government knows the schedule and isn't talking.

And shouldn't each locality, as it tries to hold costs and taxes in check, be expected to consider whether proposed new development will be reasonably compact or not? As Rose notes, the region has lots of territory it might develop. "Either we spread it out with lots of driving, or we make it compact so people can more often walk. There's enormous difference in roads, schools, infrastructure and time wasted if development is

sprawled out versus a compact form."

Phil Griffin's a retired DuPont executive living in Summerville. He wonders how long people will be patient when "you can sit for 45 minutes in the afternoon just trying to get through one intersection." Griffin doesn't see much evidence of planning.

Of course, every county, city and town does have a plan. But ongoing planning is another matter. Staffing is thin in most communities and staffers carrying the title of "planner" often are consumed with managing zoning and subdivision regulations.

And with those plans not reaching over town, city, or county lines, who's really responsible when spread-out growth results in clogged roads around the region? Who's responsible to add up all those local decisions? The Berkeley-Charleston-Dorchester Council of Governments has the capacity, but not the authority, to make regional judgments.

In the meantime, projects such as the extension of the Mark Clark Expressway across Johns Island go forward, notwithstanding the fervid resistance of many islanders fearful of the road's likely sprawl impact, plus lack of debate on where else, or for what mode of travel, the roadway's \$420 million price might better be expended.

Meanwhile the region's county school districts plan as though they were sovereign nations, with no apparent regard for how school-siting decisions affect other land uses or transportation requirements. The enormous Wando High School built on what was then the very edge of Mount Pleasant is all the evidence anyone could ask for. All by itself, it's a major generator of traffic.

The citizen panels we met in all three counties seemed to have quite a different attitude; to this sample of people living in the region — old-timers and newcomers alike — planning's not a dirty word but an overdue necessity. Meantime, roads get worse.

No roads-only solution

Everyone's first thought about congestion is obvious enough: Add more roadways, or widen the ones we have. And in fact, for a year or two, in some corridors, more roadway might solve the problem.

But too much roadway, in the long run, might be a very bad idea — not a solution.

Why? First, what attracts people to the region is all these rivers, streams, creeks, marshes, oceanfront properties and historic forests. Too many roads, and roads in the wrong places, would surely rupture the delicate fabric of the region's unusual geography. And even if government could afford unlimited road- and bridge-building, the wars over acquiring rights of way would be fierce and expensive.

Plus, the single most-powerful way to reduce congestion is to get at root causes, to reduce demand in the first place. That means giving people ready and close access to the places they need to go — if not to reach work (actually a clear minority of trips), then to get groceries, to access schools and medical clinics, and to get to places to dine. It means locations close enough to walk to, or if one is fit, use a bicycle. But that's an attractive option only with a "grid" form of development, with lots of streets connecting to lots of destinations.

Don't expect many people to mount a bicycle to risk life and limb navigating through the lanes of cars and trucks on major roads. And note, even where sidewalks are provided on big, traffic-clogged streets, people mostly avoid them.

Maybe telecommuting, working from home, will have a truly significant long-term impact. But looking at the region's growth curve, we wouldn't bet the bank on it.

Giving people choices

So what's to be done? Congestion is fast reaching the point at which no single solution will do the job. The region needs a full package of remedies, including road improvements, networks of walkable streets and transit.

Recent months have seen a controversy over whether and when to widen I-26 as part of the deal to provide capacity for the new port expansion. It's obvious that if thousands of additional trucks (the expected figure is 7,000 daily) are to be poured into this stretch of interstate, something has to be done. The ideal would be a rail alternative or separating cars from trucks.

But there is a way to manage demand for the roads that's catching on around the United States. Any freeway can produce more capacity if electronic tolling is introduced for some preferred (less-clogged) lanes. Not the old-fashioned system of lining up to hand money to a clerk or toss it into a basket, but a system reading transponders in cars as they whiz by.

The actual amount of the toll is adjusted according to demand — perhaps as little as a quarter in slack periods, up to a few dollars when demand's at peak during rush hours. Where this kind of tolling has been introduced, people have a choice of a lane with a reliable speed by paying the toll. Because motorists can choose the tolled lanes when they need the reliable trip time, tolling's become quite popular.

A transit alternative?

How about public transit? Could Charlestonians be persuaded to make it a real alternative?

We were amazed to see how retrograde the region is on this front. The Charleston Area Regional Transportation Authority's system doesn't cover the entire region. It's chronically starved for revenue. It's barely survived through public referendums. It's seen almost exclusively as a low-income people's choice.

So stop. Let's be serious. One can count on the fingers of one hand the other significant U.S. areas without a regional bus system, and at least a robust debate about adding rail service, going on right now.

Any formula for reducing road congestion includes a transit element. Last year Americans took more than 10 billion trips on public transit; ridership is up 30 percent since 1995, much of it for middle class people fed up with fighting traffic. Many regions would be approaching gridlock without transit, as each rider takes a vehicle off crowded roadways.

What could CARTA do next? It has done well expanding its fleet by way of picking up surplus buses at bargain prices from other regions. It's real challenge now is regional. CARTA has been trying out an express service to Charleston from North Charleston, James Island, Mount Pleasant and West Ashley — with at least limited success. If Dorchester and Berkeley counties aren't ready to become CARTA members, couldn't they at least contract with it for express service from such targets as Summerville, Goose Creek and Moncks Corner?

Then there's the rail option, especially the proposed commuter rail service from Summerville. The past decade has seen a dramatic move to rail in U.S. cities. Dallas, once famously contemptuous of transit, is building and planning hundreds of miles of interconnected rail, along with improved bus service. Salt Lake City, arguably America's most politically conservative region, has discovered that rail transit is reducing congestion and pleasing citizens with lifestyle choices.

No region's doing more to diversify mobility opportunities than Denver, where six more rail lines are being built over the next dozen years — and largely with homegrown money.

Charlotte is trying too, wading through a minefield of political barriers, to create a regional rail network. The goal, which Charlestonians might heed, is not to imitate Atlanta's gruesome traffic jams.

Experience across the country shows that once rail service starts, areas around the stations take on new life — sprouting a variety of services and stores such as day care, dry cleaning, groceries and hardware, sharing

the parking area with rail commuters. Where developers see a permanent commitment to service, a ring of densely built housing at affordable prices often follows. So rail ends up being powerful anti-congestion tool.

Taming traffic, in other words, requires many solutions. Which makes us wonder why, in this Lowcountry of so many waters, there's nearly no way to navigate from place to place with water transit. The only water taxi service is operated by the Hilton hotel in downtown Charleston. We heard about interest in a tourist ferry up the Wando, plus others from Sullivan's Island and Shem Creek in Mount Pleasant. We saw a marina developing on the east side of Daniel Island. And what about up and down the Ashley River from James Island?

One more curiosity: Why, in a region that's earned a right to boast of great year-round weather, would we not have seen protected bicycle lanes along all major streets? We saw people riding bikes, bravely, with little support.

The longer the tri-county Charleston region treads water on smarter land use and new and varied transportation options, the more desperate its traffic congestion will become, throwing a long shadow over its economy and good life.

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Solving the transportation puzzle that the port presents

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Sunday, September 23, 2007

It should be the Charleston region's worst transportation nightmare — the Port of Charleston completes its new Navy Base terminal, the special connector road to Interstate 95 is constructed and the trucks start to roar through — 7,000 daily, one every six seconds during a 12-hour day. From the intimidation of the big rigs to sheer roadway congestion to air quality perils from the diesel fumes, there is a lot to fear.

But breathe easier: There might be a rail way out — or a better truck way out — or both!

First, rail

A soon-to-be released study will show that it is possible to untangle the puzzle of rail tracks in the vicinity of the port expansion, so that trains could take a big share of the load. The study, requested by the mayors of Charleston and North Charleston, was conducted by the major transportation consulting firm Wilbur Smith and paid for by an interested but well-respected party: Robert Clement, developer of Magnolia and a major investor in North Charleston properties including the Macalloy rail yard.

It's far from a done deal. Two separate and highly competitive railroad companies — CSX and Norfolk Southern — own tracks in this zone, and they'd probably have to agree to share some sections of track. But both carriers likely would realize higher profits with cargo moving out on their rail beds — a point Clement stresses with them.

For the community, benefits could be stunning. The study will reportedly show how to eliminate the at-grade rail crossings over Meeting and King streets, constant sources of motorists' irritation. Rerouting would open the door to a gradual restoration of these two historic corridors, letting them be major boulevards entering downtown Charleston, connecting to a revitalizing Neck. And the more that's shipped by rail, the less pollution from auto and truck emissions of vehicles stuck in chronically bad traffic jams.

If fewer trucks than planned today had to pile on to the already overcrowded I-26, does this mean the new port access road is not needed? No, says Ron Mitchum, executive director of the Berkeley-Charleston-Dorchester Council of Governments. "That's a given at this point," he said. But Mitchum told us he's pleased to see this study and that the COG would be studying it as part of its master plan for development of the Neck.

Second, trucks

And there might be a way to keep all the added big trucks from the port off local roads — a concept developed by Paul Nelson, the now-retired founding head of the College of Charleston's Global Logistics and Transportation Center.

Nelson suggests another kind of "train" — a tractor as the locomotive, a series of standard truck trailers in tow. No one would want that mixing with cars, so Nelson would build a dedicated road for freight-grade trucks.

"They're going to build a connector road anyway," he told us, "so why not just continue that road with its elevation and flyover right into the center median of the interstate?" Within the median, there'd be lanes for

the truck-trailer rigs, plus shoulders, going each way, with side walls separating trucks from car traffic. These "truck-trains" would go straight to an intermodal center where cargo could be loaded onto smaller trucks or on rail for longer hauls.

Trucks coming from the existing Wando Welch Terminal use I-526. Nelson suggests they could ramp off at the interchange with I-26 and merge into the truck lane with a similar flyover.

But wouldn't this approach invite double-handling of cargo — a definite "no-no" for a port famous for avoiding delays?

"No," says Nelson, "it might actually be more efficient."

Today, he explained, a ship is off-loaded onto a chassis, where large containers rest in stacks. Under his proposal, those containers would be off-loaded onto chassis that would then be hooked together and pulled by strong "yard horse" tractors capable of getting them to the existing intermodal center or all the way to some inland port facility.

Nelson notes that Rep. James Clyburn has long preferred to have an inland terminal near the intersection of I-95 and I-26, from which cargo could efficiently be directed wherever it needs to go. There's no need to have all that land-consumptive activity in an urbanized Neck area where good land is scarce and pricey.

Nelson admits that his scheme has never been analyzed for cost. But clearly it's an intriguing possibility. One wonders whether electronic tolling of trucking companies' individual loads couldn't cover a significant part of the cost — the companies would be avoiding lots of time lost in highway jams. And if the "yard horse" tractors were built with low-emission engines, the public could be spared dangerous diesel pollution — a critical public health factor.

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