National Infrastructure Considerations

Nationally, our essential public infrastructure – transportation, security, water and waste, energy, parks and recreation, schools, libraries – is deteriorating. According to a 2006 Jim Hightower report, the 1960s federal and state/local government infrastructure outlays were equal, but by 2006 local outlays were three times the federal outlays, while federal investment shrunk to 0.7% of the Gross Domestic Product (GDP is a measure of national income, widely used by economists to gauge the health of an economy). Meanwhile, America’s $286 billion infrastructure bill ($1 of $1.4 were special interest projects) was $30 billion short of the bare minimum needed to bring America’s highway system up to an adequate standard. America’s road and bridge conditions had hidden costs amounting to $54 billion a year in car/truck repairs and excess operating costs, forcing drivers to spend 47 hours a year stuck in traffic burning 2.3 billion gallons of gasoline in idling vehicles, and causing some 13,000 highway deaths each year.

According to the American Society for Civil Engineers, 27% of American bridges are now structurally deficient or functionally obsolete, requiring $9.4 billion every year for the next twenty years to repair the deficiencies. With the price of gas approaching $4 a gallon, more commuters are abandoning their cars and taking the train or bus instead to meet basic needs.

Infrastructure is the key to a functioning society – to attaining good jobs, supporting a middle class, producing a high quality of life, and achieving the common good. Essential government infrastructure must be maintained at a minimum level of service.

ASCE recommends that America invest $1.6 trillion just to improve basic infrastructure from a C and D grade to a B grade condition. According to Hightower, American needs to use grass-roots ingenuity, can-do spirit, and commitment to the common good in order to update and extend our infrastructure into the new age. A network of renewable energy systems is needed to achieve energy independence for ourselves and future generations. A public, information-age infrastructure is needed that provides high-speed broadband connections in computers for every American.

Resources
www.asce.org/reportcard American Society of Civil Engineers
www.csis.org Center for Strategic and International Studies, Commission on Public Infrastructure
www.hightowerlowdown.org monthly newsletter by Jim Hightower
www.nrde.org Natural Resources Defense Council

# # #
Transportation Planning Considerations

Demographics: Population, people over 65, people under 50, racial diversity, residents with higher education, household income, affordable housing, substandard housing, diversity of jobs, no. of jobs, unemployment rate.

Issues and needs: Access to local centers, access to jobs, access to regional centers, access for tourists, local road traffic concerns, driver safety (cars and trucks), bike/pedestrian safety, water/air safety, open space, scenic land, environmentally sensitive land, historic/cultural character, sedentary lifestyle concerns.

Barriers to success: Lack of public input, lack of political support, lack of political authority, limited public funding, lack of private investment, lack of staff (i.e. planning, engineering), lack of information and/or technical expertise, community leaders resistant to change, difficulty coordinating with state government, difficulty coordinating with regional planning agencies.

Transportation and land use: Roadway improvements, new roads, widening existing roads, paving unpaved roads, "spot" improvements (i.e. turn land, sight distance), traffic calming, street connectivity improvements.

Traffic management: Installing traffic signals, intelligent transportation system, limiting turns on commercial streets, directing through-traffic away from community centers, rerouting rail traffic out of community centers, improving warning signs, signals, or barriers.

Multi-modal transportation: Fixed route transit service, demand-response transit (i.e. on-call vans, cars, etc), rail transit (i.e. commuter rail, light rail), rideshare programs (i.e. carpools), bicycle routes, bicycle amenities (i.e. bike lockers), sidewalks, pedestrian amenities (i.e. lighting, signage), trails and greenways.

Design: Pedestrian friendly streets, environmental sensitive/scenic highway design, community design standards or guidelines, architectural review board, historic/cultural preservation program.

Growth management: Policies directing growth toward existing developed areas, transit oriented development (TOD), policies directing transportation to growth areas, mixed-use development, clustered housing in rural subdivisions, large lot zoning, transfer/purchase of development rights, rural land preservation.

The Washington State long-range transportation plans at the headquarters and regional levels plans (WTP, RTP) and priority lists (STIP, RTIP) include goals, policies, and projects: 1) congestion management projects, 2) operations maintenance, preservation, special needs projects, 3) freight movement projects, 4) transit and bike/pedestrian projects, 5) rural character and economic opportunities projects. STIP projects are fully funded (with secured funds) for purposes of accessing federal and state funds. RTIP projects are fully and partially funded (with secured funds), and unfunded.

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Resources

www.trb.org Transportation Research Board
www.icma.org/ruraltransportation International City/County Management Association

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Traffic Safety Considerations

EXHIBIT I-1
The Four Es of Transportation Safety

Emphasis areas: Older person’s safe mobility, pedestrian collisions, aggressive driving, unlicensed drivers, signalized intersections, un-signalized intersections, run-off-road collisions, head-on collisions, horizontal curves, tree collisions, utility pole collisions, occupant protection, heavy truck collisions, work zone collisions, drowsy or distracted driving, rural emergency medical services, alcohol- or drug-related collisions.

Older person’s safe mobility.
- The U.S. population of older adults will double over the next thirty years. By 2030, one in five Americans will be age 65 or older.
- Aging affects a variety of skills needed for safe driving. In particular, the aging population experiences deterioration in physical, perceptual, and cognitive skills.
- When crash rates are calculated on the basis of miles traveled, older adults are at increased risk. Drivers age 85 and older have about the same high-crash rate per mile driven as 20- to 24-year-olds.
- Older drivers have an increased likelihood of being injured or killed in a crash. Compared with an overall fatality rate of 2 per 1,000 crashes, persons ages 65-74 have a fatality rate of 3.2. For those 74 to 84, the rate is 5.3, and at 85 or older the rate climbs to 8.6.
- The likelihood of being at fault in a crash also has been shown to increase with age: nearly 70% of drivers ages 75 and older involved in fatal two-vehicle crashes were at fault, compared with fewer than 40% for drivers aged 45 to 64. Specific crash types for which older drivers are increasingly likely to be found at fault
include angle collisions, turns across traffic collisions, and slowing or stopping collisions, indicating that older drivers may be more challenged by intersection situations than younger drivers.

- 90% of trips taken by older adults are in a personal vehicle. Of those trips, 70% involve the older person driving the vehicle.

Unlicensed drivers.

- It is estimated that as many as three-fourths of drivers with suspended or revoked licenses continue to drive.
- A recent report analyzing five years of Fatality Analysis Reporting System (FARS) data found that one out of five fatal crashes involves at least one driver who is not properly licensed (unlicensed, suspended/revoked, expired, canceled or denied, or unknown).
- According to a California study, drivers who have never sought a proper license, many of whom are illegal immigrants, are reported to be even more overrepresented in crashes than drivers with suspended/revoked licenses by a factor of 4.9 to 1.
- Suspended/revoked drivers are predominantly male and younger than the average age of drivers (on the average more than eight years younger in a California study). They also are more likely to have convictions for non-traffic offenses, including violent offences.

Occupant protection.

- More than one-half (55%) of passenger vehicle occupants killed were unrestrained in 2005, according to NHTSA.
- Vehicle occupants were about 50% more likely to be hospitalized from crash-related injuries if they were not wearing safety belts at the time of the crash.
- 73% of the people survived who were in a 2001 fatal crash and were restrained; of those who were not restrained, only 44% survived.
- 85% of child seats were misused according to a 1999 study by the National Safe Kids Campaign.
- Per vehicle mile traveled, motorcyclists are about 32 times more likely than passenger car occupants to die in motor vehicle traffic crashes and six times more likely to be injured.
- According to NHTSA’s National Occupant Protection Use survey, motorcycle helmet use declined by 13% over 4 years, from 17% in 2000 to 58% in 2004.
- Helmets are estimated to be 37% effective in preventing fatal injuries to motorcyclists. This means that for every 100 motorcyclists killed in crashes while not wearing a helmet, 37 of them could have been saved had all 100 worn a helmet.

Alcohol-related collisions.

- About 30% of persons involved in an alcohol-related fatal crash have been previous convicted of DWI or comparable alcohol-related offense.
- Recent estimates suggest that, on average, individuals may make anywhere from 50 to 200 impaired trips before being arrested.
- Males, motorcyclists, and persons between that age of 21 and 35 are more likely than others to drive while impaired by alcohol.

Resources: http://tsp.trb.org/assets/FR_Safety%20Planner_1_17_07FINAL.pdf

# # #
Reservation roads suffer

By NOELLE STRAUB
Star-Tribune Washington bureau

WASHINGTON -- With the fatality rate on reservation roads four times the national average and two-thirds of the roads unpaved, tribal leaders and federal officials agreed Thursday that the government has dangerously underfunded transportation needs in Indian Country.

"You drive in parts of this country and drive onto an Indian reservation, and you see third-world conditions with respect to their roads," said Senate Indian Affairs Chairman Byron Dorgan at an oversight hearing.

"Frankly, it's impossible to maintain the roads at safe levels with the tools we currently have," testified Jerry Gidner, deputy bureau director for Indian Services at the Bureau of Indian Affairs.

Nearly a quarter of the 4,500 bridges in Indian Country are classified as deficient, federal officials said.

About 76 percent of the 27,000 miles of BIA roads are dirt or gravel, federal officials testified. More than 66 percent of the entire Indian reservation roads system, which includes 82,000 miles of roads, are unimproved earth and gravel, they said.

The BIA spends less than $500 in maintenance per mile each year, a fraction of the $4,000 to $5,000 per mile spent each year on maintenance of state roads, Dorgan and tribal witnesses said.

Gidner said the administration gives BIA a target budget each year and that road maintenance must compete with all the other Indian Country priorities. He said some tribes have a "woefully insufficient" police presence, so law enforcement wins out over roads in the competition for funding.

"If I have to choose between suggesting more money for social workers to get children out of houses where they're being sexually abused, versus more road maintenance, I'll go with the children every time," Gidner said.

Budget requests and funding for road maintenance have been flat or declining, Gidner said. "Many of the roads are unsafe and deteriorating," he testified.

Sen. Jon Tester, D-Mont., told Gidner he should be "screaming, screaming, screaming" for more funding.

Asked by Dorgan if the BIA has internal debates over the funding levels, Gidner again noted competing priorities.
"We don't particularly like being in that situation ourself, but that's where we are," Gidner said. "If I use the word aggressive to describe our debates, it would be downplaying their intensity, to be honest."

Asked about solutions to the problem, Gidner said, "We all understand the amount of money is insufficient."

Four tribal leaders from across the country also testified, praising changes that have already been made in federal law and outlining efforts they are making to take on responsibility for the roads. But they all said government red tape and lack of funding have prevented them from making all the improvements they need.

Pete Red Tomahawk of the Standing Rock Sioux Tribe described many successful efforts by tribes to improve roads on their lands and expressed thanks for congressional efforts. But he called road maintenance a "silent killer" and said the annual $26 million in BIA road maintenance funding is a "national disgrace."

Tomahawk, who serves as chairman of the Indian Reservation Roads Program Coordinating Committee, asked for at least $150 million annually for road maintenance programs. He also encouraged Congress to make tribes eligible for other national highway safety programs, streamline the funding award process and carry out other reforms.

Tester asked Baxter why the mortality rate on reservation roads is four times the national average.

Baxter said the condition of roads, speeding, pedestrians near roads and long emergency response times in rural areas are all factors, along with lower seat belt use and higher rates of fatality from driving under the influence in Indian Country. Seat belt usage is 55 percent in Indian Country compared with 81 percent nationally, he said.