



Improving Transportation Through
Innovative Engineering



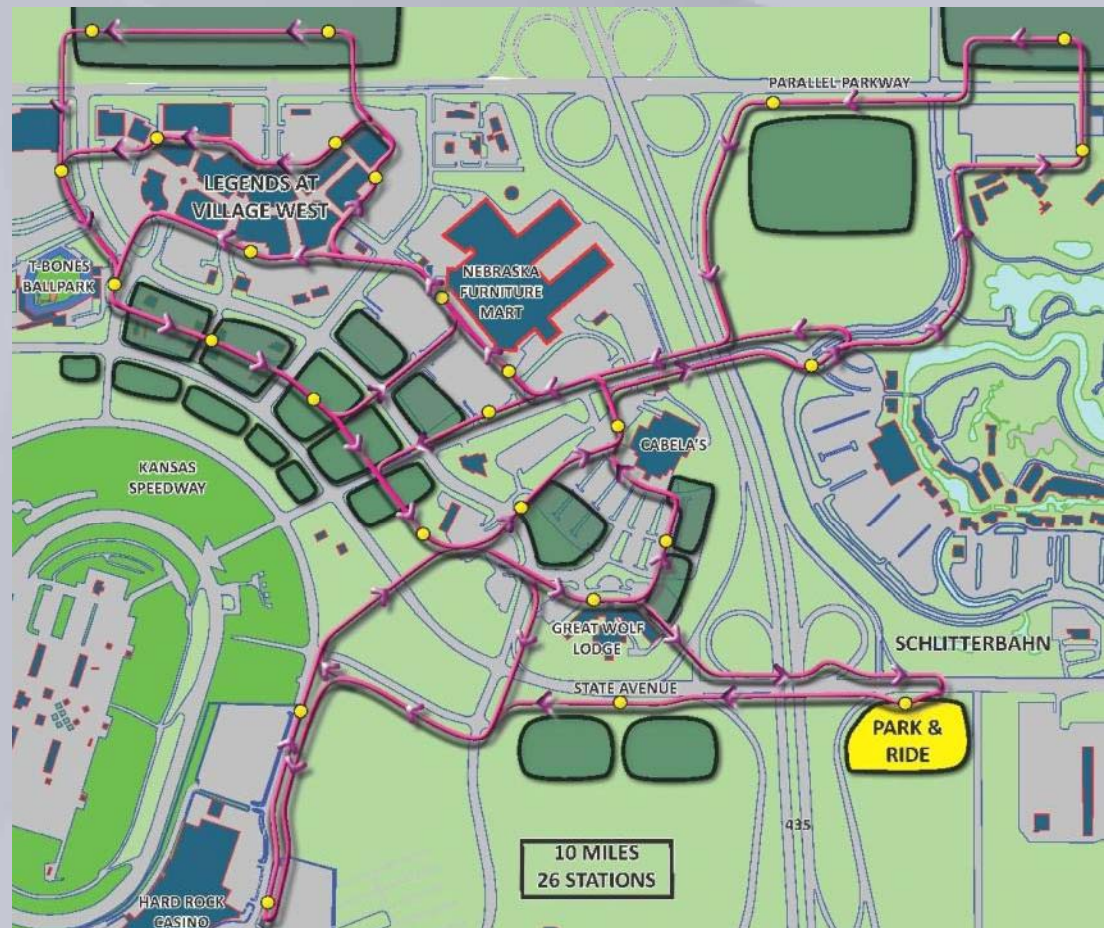
PRT Consulting, Inc.

Qualifications, Capabilities & Experience



Outline

- Core values
- Key staff
- Capabilities
 - Services offered
- Experience
 - Key projects
- Why we are unique



Core Values

- Dedicated to improving transportation through innovative engineering
- Committed to providing personalized, responsive service resulting in smoothly executed projects
- Focused on consulting services for personal rapid transit (PRT)
- History of finding solutions to problems thought intractable by others

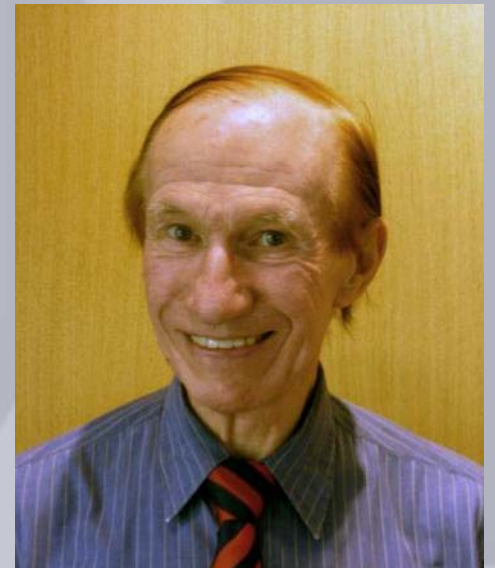
Key Staff

- Peter Muller, P.E., President
- Bachelor's (summe cum laude) and master's degrees in civil and environmental engineering
- Over 30 years of civil engineering and planning experience in transportation including roads, freeways, airports, railroads
- Ten years PRT experience



Key Staff (2)

- Raymond MacDonald, P.E., Consultant
- Worked for two different PRT vendors
- Responsible for all aspects of PRT design and planning
- 500-page book, titled “21st Century PRT”



Key Staff (3)

- Prof. Ingmar Andréasson, PhD, Consultant
- 20 years of experience in PRT systems design, control and modeling
- Developed PRT modeling suite which has been applied in over 30 locations in Europe and the Middle East



Key Staff (4)

- Nick Ford, Consultant
- 40 years experience in product development and business strategy
- 5 years PRT experience



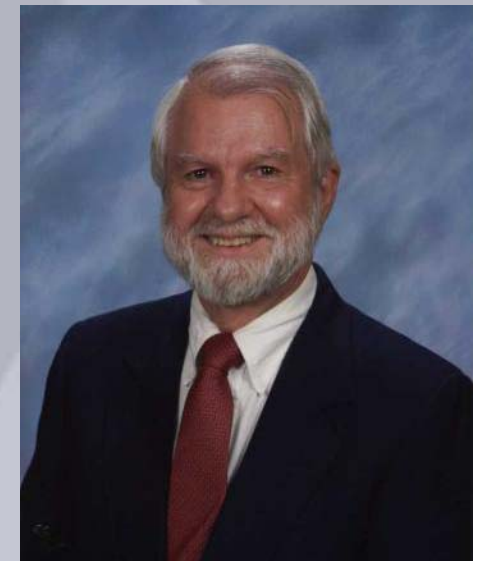
Key Staff (5)

- Marek Kubesa, Senior Project Manager
- Bachelor's degree in civil engineering
- More than ten years experience in land development and airports
- Five years PRT experience



Key Staff (6)

- William A. Wilde, P.E.,
Consultant
- Well versed in traffic engineering
for bus and light rail transit
surface operations in congested
urban areas, pedestrian facility
design, and in regional
transportation planning
- PRT experience in Seattle and
Chicago



Key Staff (7)

- William Smith, Consultant
- More than 15 years experience in simulation, modeling and controls with specialties in automotive powertrain system design and modeling
- 2 years PRT experience



Capabilities

- PRT consulting assists owners deal with issues such as:
 1. Public concerns/participation
 2. Costs vs. benefits
 3. Capacity
 4. Weather impacts
 5. Scalability
 6. Funding/financing
 7. Vendor capabilities



Services Offered

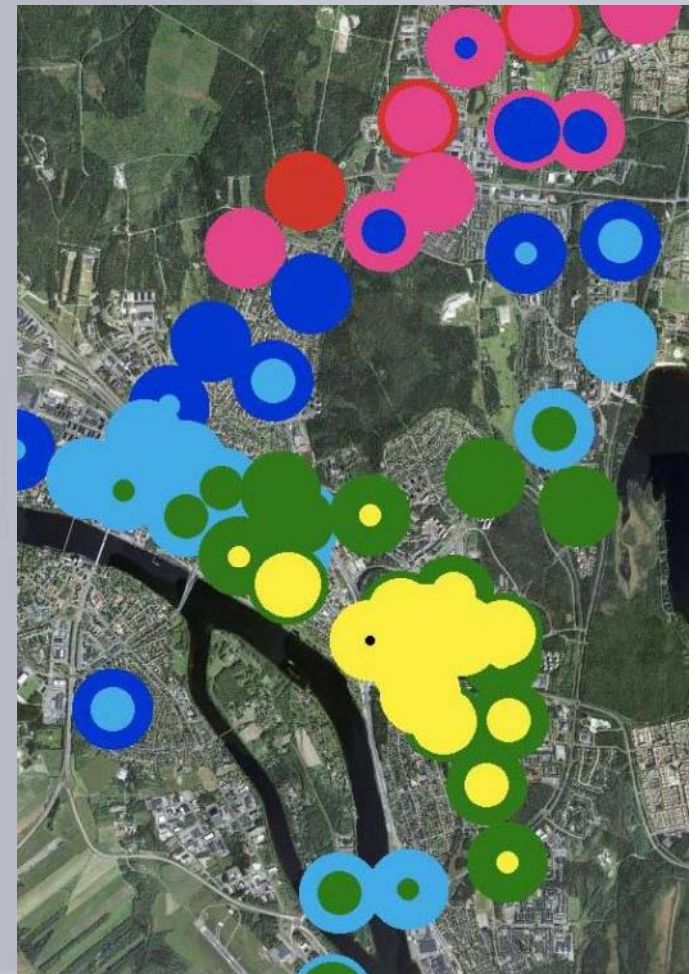
- Planning
- Public participation
- Simulation/verification
- Engineering
- Facilities design
- Contract management
- System implementation
- Program management



Related to PRT

Planning

- Community participation
- Feasibility studies
- Environmental assessment
- Alternatives analysis
- Benefit/cost analysis
- Technology assessments
- Ridership demand
- Operations analysis



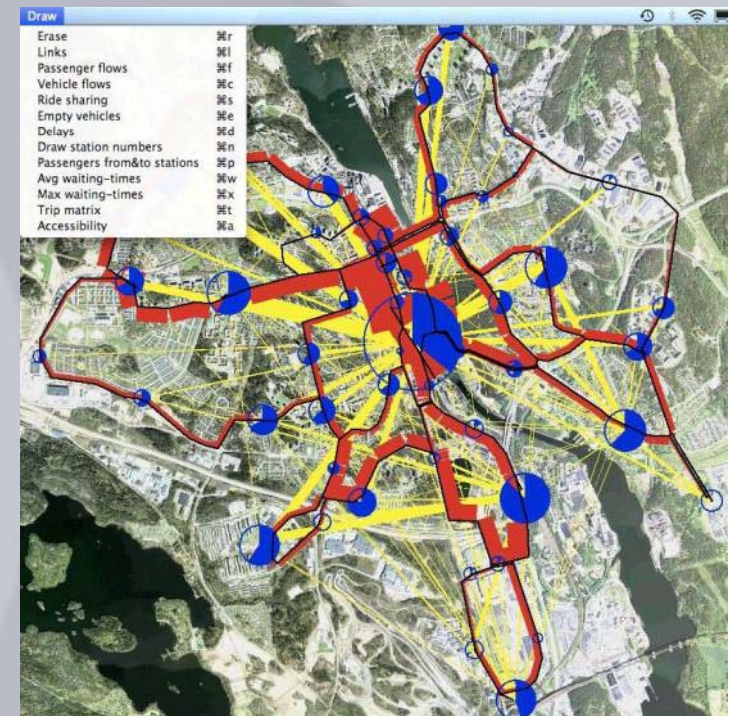
Planning (continued)

- Simulation modeling
- Facility planning
- Renderings and animations
- Capital and O&M cost estimates
- Master planning
- Procurement strategies



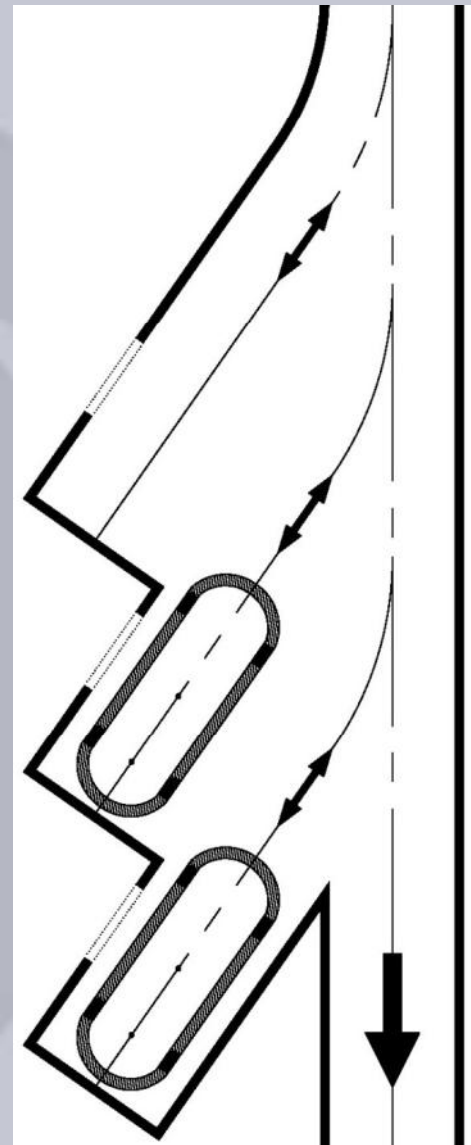
Simulation/Verification

- PRT station simulation
- PRT systems simulation
- Scalability verification
- PRT comparison analysis
- Operational characteristic development
- Trip demand matrix analysis
- Verification reporting



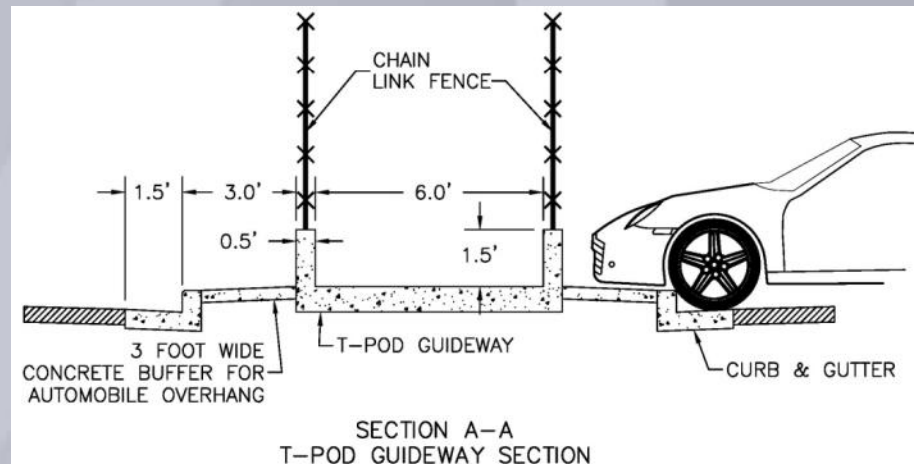
Engineering

- Preliminary design
- Constructability reviews
- Vehicle design
- Control/communications systems
- Safety analysis and certification
- Value engineering
- Incident investigation
- Reliability, availability & maintainability analysis
- System integration



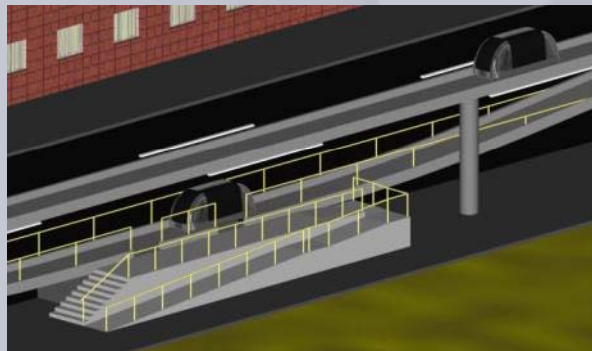
Facilities Design

- Conceptual design
- Preliminary engineering
- Final design
- Facilities design criteria
- Guideway alignment and alternatives analysis
- Station layout



Facilities Design (Continued)

- Architectural design
- Graphics and signage design
- Operational simulations
- Interfaces with other facilities/systems
- Fleet, capacity and services analysis
- Facility requirements, locations and concepts



Contract Management

- Procurement strategies
- Proposal solicitation
- Tender solicitation documents
- Results-based technical specifications
- Contract documents
- Supplier proposal evaluation and selection recommendation



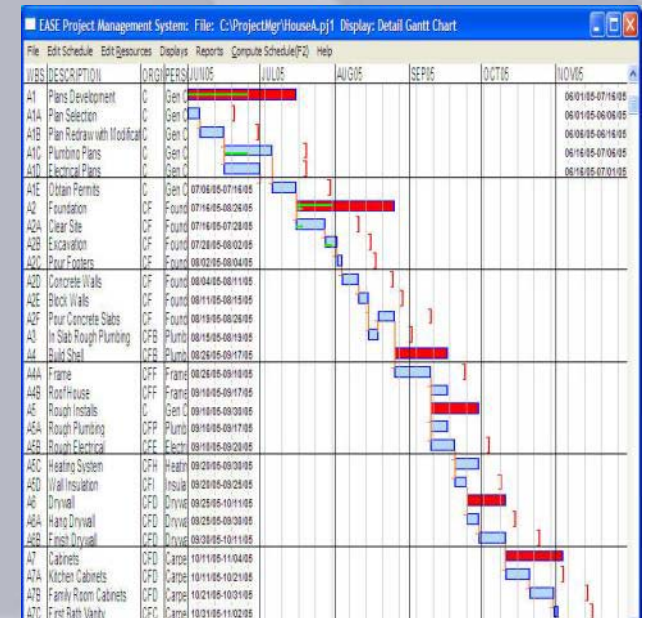
System Implementation

- Design review
- Manufacturing inspection
- Construction inspection
- Quality testing
- Installation oversight
- Test plans, procedures and witnessing
- Operations and maintenance oversight
- Performance compliance & improvement



Program Management

- Strategic planning
- Financial management
- Scheduling
- Budgeting
- Team member management
- Conflict resolution



A horizontal collage of five circular images: a bridge at sunset, two men in suits talking, a train on tracks, a highway interchange, and a yellow excavator at a construction site.

Experience

- In addition to PRT
 - runways, taxiways, terminals, aircraft parking aprons, roads, freeways, parking lots and railroads.
- Client list includes airports, universities, counties, state departments of transportation, consultants, developers and PRT vendors.

Selected Projects

- PRT Safety & Security Research
 - Kansas Department of Transportation
 - Safety & security research of an automated small vehicle transportation system on a university campus
 - Evaluation of threats & vulnerabilities as well as means of mitigation

Finding: PRT is about 100 times safer than conventional modes

Selected Projects (2)

- Conceptual PRT Feasibility Analysis
 - Large US Airport (confidential)
 - Feasibility of a PRT system linking 2 long-term parking lots to terminal
 - Preliminary guideway routing & station locations
 - Capital & operating cost comparisons



Selected Projects (3)

- Adverse Weather Testing
 - PRT Vendor (confidential)
 - Full-scale testing on elevated and at-grade track
 - Natural & manufactured precipitation
 - Determination of dynamic friction
 - Evaluation of mitigating measures



Selected Projects (4)

- PRT Vendor Comparison Study
 - Confidential client
 - Analysis of business and technical capabilities of 4 PRT vendors

Vectus



Taxi 2000



2getthere

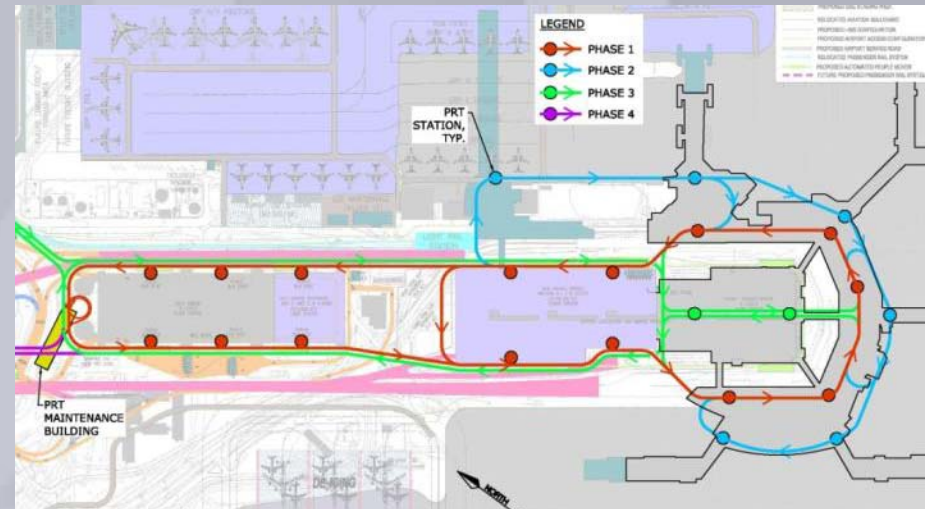


ULTra



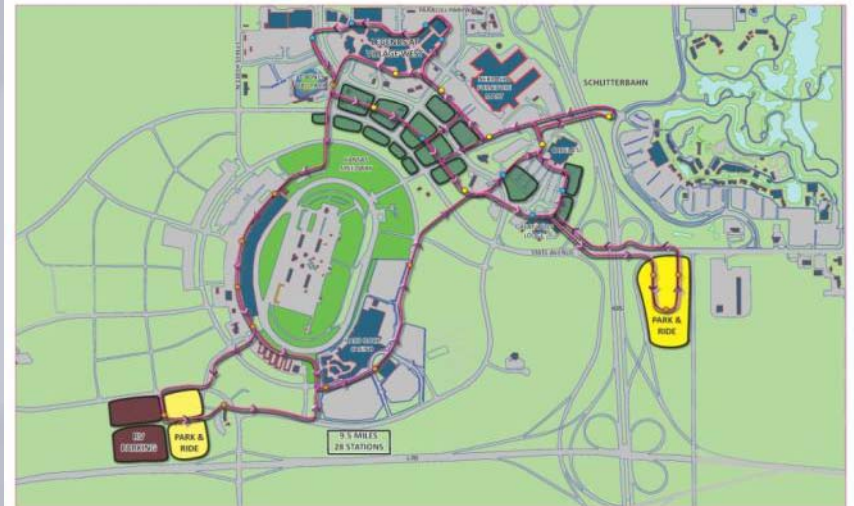
Selected Projects (5)

- Airport Master Plan PRT Analysis
 - Maryland Aviation Administration
 - Overview of leading PRT systems
 - Four-phased PRT system
 - 3.6 miles of dual-lane guideway, 7.7 miles of single-lane guideway, 37 stations, 60,000 daily passengers



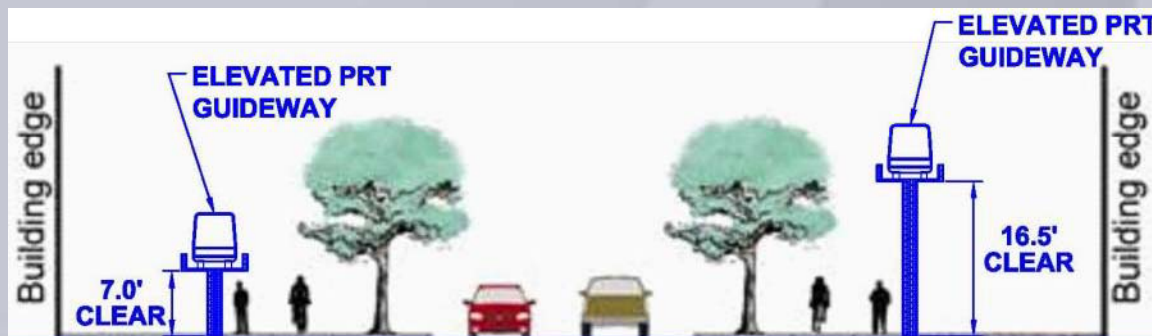
Selected Projects (6)

- Automated Small Vehicle Transport Study
 - Kansas Department of Transportation
 - PRT linking retail businesses, speedway, ballpark, casino, water park and transit
 - 5M annual passengers,
10 miles of guideway,
26 stations



Selected Projects (7)

- Army Post PRT Feasibility Study
 - Stakeholder & public participation
 - Alternatives analysis, trip demand matrices, simulations, benefit/cost analyses, financial modeling
 - 19.5M annual passengers, 23 miles of guideway, 35 stations, 800 T-Pods



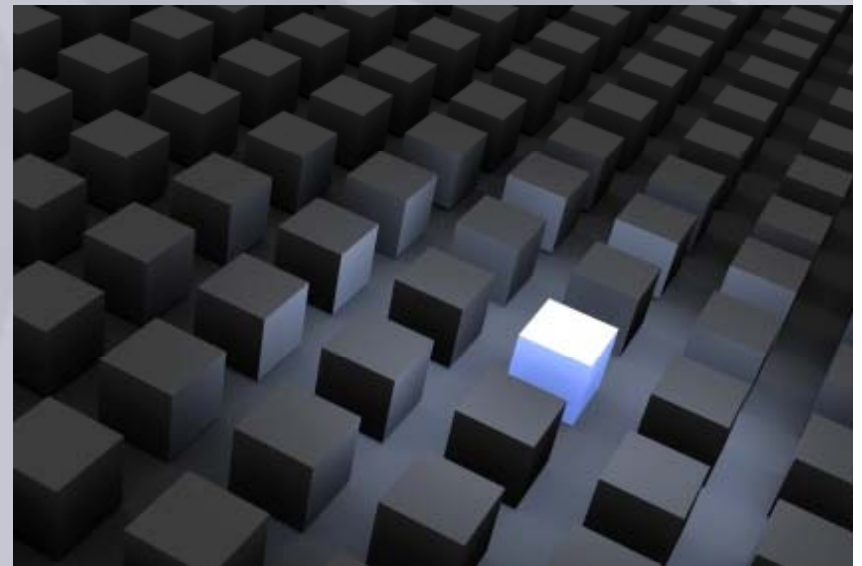
Selected Projects (8)

- Army Post PRT Feasibility Study Ph. II
 - Expansion into surrounding cities
 - 115 miles of guideway, 227 stations



Why We Are Unique

- The only consultancy of professional engineers & planners specializing in PRT
- Independent of all PRT vendors
- Our own simulators provide vendor-neutral results





Improving Transportation Through
Innovative Engineering



Contact Information

Peter Muller
PRT Consulting, Inc.
1340 Deerpath Trail, Ste 200
Franktown, CO 80116
Ph: 303-532-1855
Cell: 720-318-4795
Fax: (303) 309-1913
www.prtconsulting.com

