EQUINE TRANSPORTATION

William C. Patterson, Ph.D. 2016

EQUINE TRANSPORTATION KEY ADVANTAGES

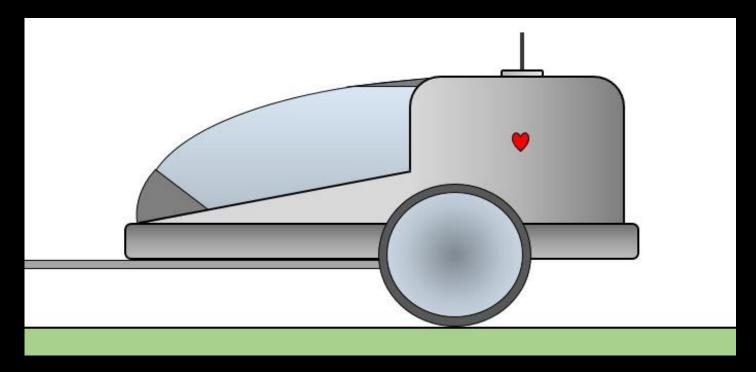
- Less Expensive Than Automobile to Own & Operate
- Relieves Energy Crisis Never Again a Shortage of Fuel
- Relieves Global Warming, Climate Adversity
- Requires No Road Building or Road Maintenance Expense
- Saves Lives

EQUINE TRANSPORTATION CHALLENGE

- Can it be reformed to substitute for the family automobile regarding comfort, elegance, convenience?
- Redefine Equine Control for greater ease and safety
- Redesign the Equine Travel Experience for quality similar to the automobile

TWO-PERSON EQUINE TRAVEL

- Sweetheart Carriage: The Love Cup
- Affordable Two-Person Equine Transportation promoting courtship & marriage

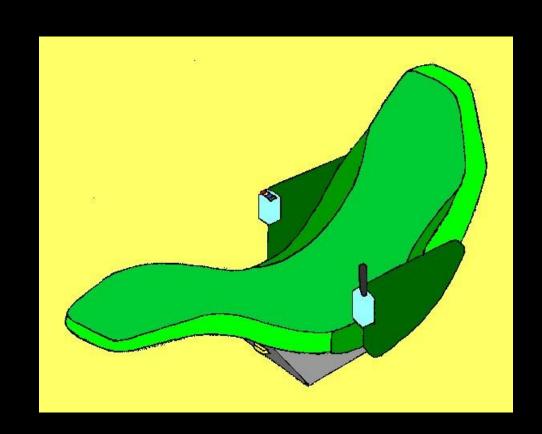


LOVE CUP APPOINTMENTS

- Solar Powered Instruments & HVAC
- Wheel-Driven Generator for Interior & Exterior Lighting
- Lift-Canopy Ventilation
- Removable Tinted Canopy (Convertible)
- Day-Night Forward & Rearward Video Screen
- Hand-Held Horse Controller: Invisible Reigns
- Quad-Sound Audio System
- WiFi Computer Support
- Happy Trails GPS
- Fold-Down Dining & Desk Trays
- Privacy Curtains

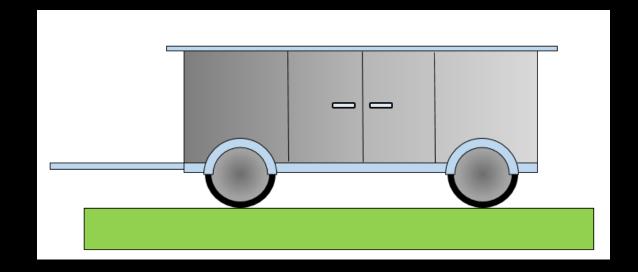
MORE LOVE CUP APPOINTMENTS

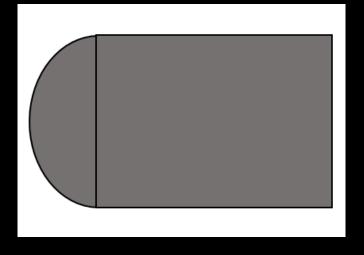
- Supine Leatherette Seating
- LED Running Lights
- Interior LED Dynamic Lighting
- Battery
- Blankets
- Horse & Buggy Parking Lock
- Storage Compartment
- Oats & Strap-On Oat Bag
- Equine Water Canteen & Spray
- Short & Long Horse Raincoat
- Perfumed Horse Diaper (No Road Droppings)
 - Recycle into compost to fertilize yard/pasture
- Rubber Hoof Wear & Dress Anklets



FAMILY EQUINE TRAVEL

- Family of Four Sits Comfortably Surrounded by Window Walls on Nature
- Forward Window Wall has 180-Degree Curvature for Better Aerodynamics
- Solar Panel Roof & Wheel-Driven Generators Furnish Accessory Power





Top View Solar Roof

MORE FAMILY EQUINE TRAVEL

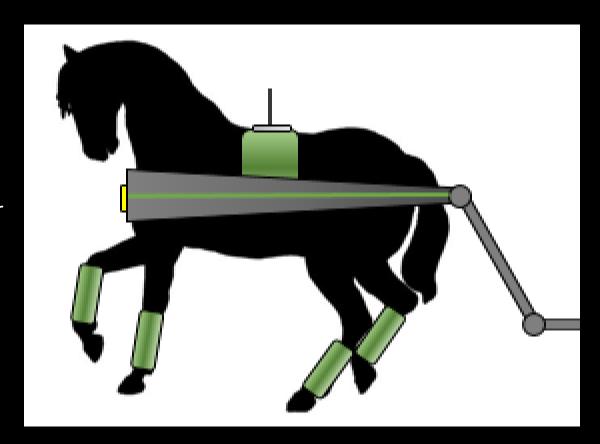
- Rotating Pedestal Seating Permits 360-Degree View of Environment
- Style is Owner's Choice
- Engage Ergonomic & Comfort Traditions of Home & Office





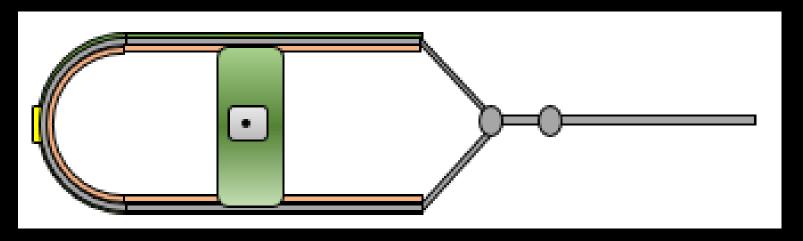
"KIND-TO-THE-HORSE" POWER

- No Leather Harness or Bit
- Colorful Foam-Cushioned Aluminum Draw
- Headlight & Night Vision Camera
- Lateral LED Running Lights
- Torsion Joints Cushion Start Shock
- Yoke Safety Rotator Prevents Cabin Turnover
- Colorful Protective Foam Stockings
- Speed-of-Light Telemetry Controls
 - Invisible Reins
 - Vibro-Pat Guidance (no spurs, no whips)
- Forward Speaker to Relay Driver's Familiar Live or Recorded Voice Commands



BRIGHT & LIGHT ALUMINUM HARNESS

- Top View of Conforming Metal "Harness"
- Interior is Foam Rubber for Total Equine Cushioning Superior to Saddle Blankets
- Two Rear Nodes are Pneumatic/Mechanical Joints to Cushion Start-Up Shock & Afford Roll-Over Protection
- Metal Harness Can Have Rapid Disconnect in Event of Runaway Horse



QUIET HORSE SHOES

- Thick Color-Coordinated Rubber Shoes
- Healthy Footing on All Terrain, Including Concrete
- Green Anklets Protect, Warm, Integrate Control Telemetry
- Horse Receives Best Ever Ambulation Reinforcement for Helping Mankind Sustain Mobility Amidst Greatest Ever Transportation Terminators (Energy Crisis, Climate Crisis)
- Rubberizing Hoofs Eliminates Clip-Clop from Equine Travel, Making it Quieter than Automobile, Bus, Rail, Motorbike, Motorcycle. Peace on the Road!



SAFETY HOOFS

- Safety Hoofs: Apply Reflective Tape or Paint to Front Hoofs or All Hoofs to Enhance Night Visibility Forward & Laterally
- Art Hoofs: Decorate Hoofs After The Fashion of Women's Nail Salons to Elevate Safety Visibility AND Artistically Enhance the Horse.
- Gradient Gold Sparkle Décor Shown at Right is But One of LIMITLESS Artistic Enhancements to Those Special Equestrian Legs That Can Move America and Other Nations Safely Forward Towards a Peaceful Environmental Equilibrium.



EQUINE TRANSPORTATION COST RE-CAP

- Draw Horse: \$200-\$2,000
- NOTE: By owner breeding, a mobility horse eventually can be acquired for FREE
- Typical Monthly Maintenance: Hay \$300 Grain \$150 Farrier \$30 Vet \$17
- NOTE: One horse can meet its food need FREE from one acre of pasture
- NOTE: Well-managed grazing can eliminate owner's landscape lawn mowing expense
- Overall: \$5,200/Yr or \$435/Mo
- Average Car: \$8,698/Yr (AAA) or \$725/Mo 40% more than equine travel
- Motorcycle: \$4,122/Yr or \$344/Mo 20% less than equine travel
- Bicycle, Scooter, Electric Bike, Electric Scooter, Moped: <\$1,000/Yr or <\$83/Mo
 - None of these can match the comfort & utility of auto or reformed equine travel

EQUINE TRANSPORTATION WEIGHT RE-CAP

- Automobile 4,000 Lb American Transportation Standard
- Amish Buggy 1,000 Lb (75% weight savings)
- Motorcycle 800 Lb (80% weight savings)
- Love Cup (Aluminum Body) 325 Lb (92% weight savings)

EQUINE TRANSPORTATION TIME RE-CAP

- Horse should be cared for 365 days a year, up to 1 hour each day (365 hours/Yr)
- Expect to spend 30 minutes daily for feeding, watering, cleaning stall, hoof maintenance, pasturing, checking for illness or injury
- Expect another 30 minutes daily to groom, train, hitch, exercise, etc.
- Equine Care: a unifying family affair where more helpers shorten the time burden
- A family can fully care for a horse. A family cannot discharge all care obligations for an automobile using only family labor and know-how

EQUINE TRANSPORTATION ASSOCIATED BENEFITS

- Eliminate Road Building or Maintenance Expense
- Modern Expressways Cost Over \$1 M/Lane-Mile To Build
- The Nation Spends \$50 B/Yr on Highway Building and Upkeep
- Eliminate Lawn Mowing Expense
- Warm Season Service Mowing Costs About \$60/Acre, nearly \$1,000/Yr
- Eliminate Traffic Deaths, Injuries, Damages
- Automobiles cause 5.25 million accidents annually
- Automobiles kill 43,000 travelers and pedestrians annually
- Automobiles kill a child every 3 seconds
- Automobile injure 2.9 million travelers and pedestrians annually
- Automobiles cause more than \$871 billon damage annually

EQUINE TRANSPORTATION ASSOCIATED BENEFITS

- Favorable Cost of Living Impact
- Financial effect of switch to equine transportation could lower American cost of living by ONE FOURTH.
- No other single function-preserving change in American Life Style relieves family expense to that degree.
- Eternal Beauty & Motion Grace
- The horse is a classic, unchanging beauty statement from God's creation
- The auto industry must alter style yearly to sustain owner eye approval (\$\$\$)
- Divine Automatic Worry-Free Maintenance
- The horse is a self-maintenance design, freeing the owner of traditional auto upkeep responsibilities for heating system, cooling system, braking system, steering, electrical system, battery, drivetrain, lubrication, body repair, etc.

SPIRITUAL MERIT OF THE HORSE

- The horse rode Christ across Early America (Spiritual Triple Crown)
- The horse is reliable "living" transportation, more durable than an automobile
- The horse is an endearing friend of man, abiding object of admiration & art
- A horse can keep stranded passengers alive & warm in winter
- A trained horse can faithfully bear an incapacitated owner safely home
 - Divine GPS works even if driver injured or unconscious
- The horse can calm the dooming storms of global climate deterioration
- The horse can brings peace to the global petroleum war

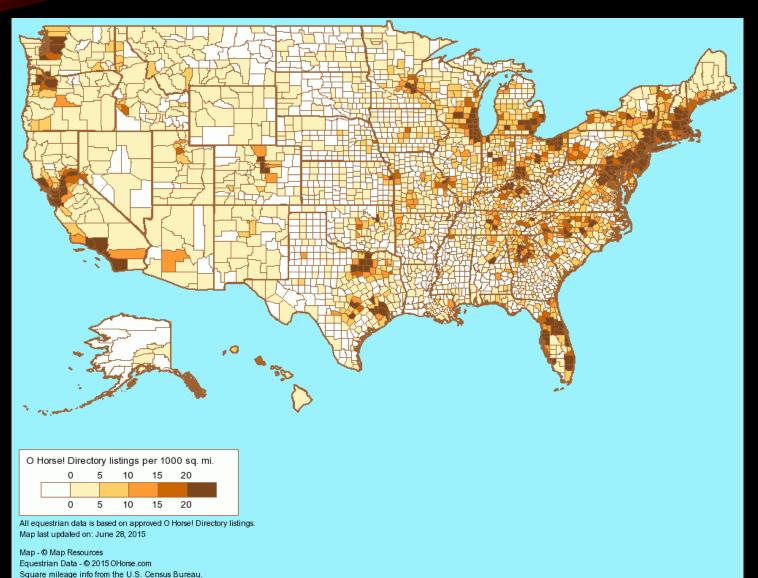
SPIRITUAL MERIT OF THE HORSE

- Bible Prophecy: Christ Rides a White Horse on Judgement Day
- And I saw heaven opened, and behold a white horse; and he that sat upon him
 was called Faithful and True, and in righteousness he doth judge and make war.
- His eyes were as a flame of fire, and on his head were many crowns; and he had a name written, that no man knew, but he himself.
- And he was clothed with a vesture dipped in blood: and his name is called The Word of God.
- And the armies which were in heaven followed him upon white horses, clothed in fine linen, white and clean.
- And out of his (Christ's) mouth goeth a sharp sword, that with it he should smite the
 nations: and he shall rule them with a rod of iron: and he treadeth the winepress of
 the fierceness and wrath of Almighty God. Revelation:19.11-15

EQUINE CHALLENGE

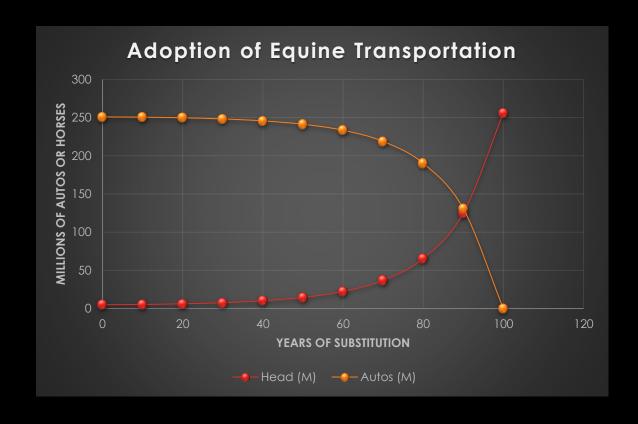
- There are 5 million horses alive in the USA
- There are 256 million auto vehicles registered in the USA
- There is only 0.7%/yr horse-for-automobile substitution rate opportunity at present
- This is not enough to materially change the U.S. transportation equation
- There is wide open opportunity to formulate a Century Equine Transportation Strategy that can make a difference
- Key Success Factor: impart good equine management skills to the more transportation-flexible youth of the nation
- Key Success Factor: design & build infrastructure compatible with equine mobility
- Key Success Factor: design, manufacture, and test advanced equine technology (some was illustrated in this slide review) that would accelerate adoption rate of equine mobility

WHERE 5 MILLION HORSES ROAM



EQUINE CHALLENGE

- Century Scenario: Equine Replaces Automobile Fleet of 256 Million Vehicles in 100 Years via 0.72% Annual Rate of Substitution.
- No More Transportation Climate Damage

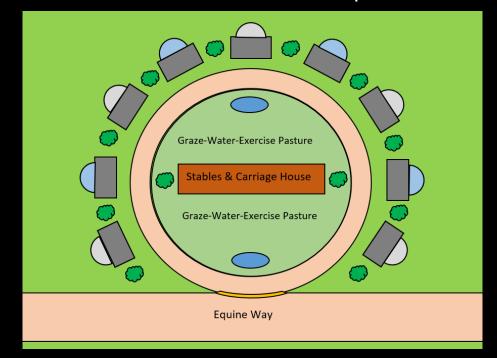


EQUINE CHALLENGE WINNER CIRCLE COMMUNITIES

- Develop Neighborhood Clusters of Equine-Mobile Families to Celebrate Natural Living and Teamwork the Shift to Equine Transportation.
- Equine Maintenance Custodian Can Be Given Free Winner Circle Home in Exchange for Services.

• Green Life Possibilities: Solar Roof, Pool & Patio, Food Fish Ponds, Central Livery, Fountains, Liberal Pasturable Lawnscape, Food Garden, Gated

Community



EQUINE TRANSPORTATION SEED

- Original Concepts & Designs for Equine Transportation Illustrated in this Presentation are from William C. Patterson, Ph.D. They are intended to Seed a Christian Initiative in Transportation to Relieve Fuel Shortages & Climate Adversity.
- You are Free to Use This Information to Collaborate in Safe & Sound Re-Adaptation of Horses to Widespread Service in the U.S. Transportation System.
- Successful Transition Towards an Equine Transit Model Will Require Implementation Efforts That Are Creative, Pioneering, Cooperative, and Exemplary Before a Watching World.
- Americans and the World Appear to have Loved Automobiles Too Much. Love of Horses, However, Has Much Room to Grow, and Promises to Bring a State of Universal Mobility Safer, Easier, and Happier Than Ever Known Before. Share The Vision!

... and Thanks, Dad, for the Hint (Posthumous Gratitude to Father, Joseph Orr Patterson, Who Spent Many of His Last Years Raising and Showing Horses as a Resident of the New West.